Usenet Newsgroup Archive: rec.radio.amateur.antenna

2001-01 - 2001-03

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Date span: 2001-01-01 through 2001-03-31

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 6,475

Message records with no readable body available in the source text: 1

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:05:42 UTC
From: paul <paul@nospam.com>
Message-ID: <3A4FC9D6.2A9D@nospam.com>
Source record: 173375

Andy Brinkley wrote:
>
> Looking to purchase and install a Discone Antenna in the near future,
> and would like any comments on the quality of the ones on the market. I
> have seen prices from $39.99 up to $179.99 for what appears to be the
> same style antenna.
>
> TNX
>
> Andy NC4AB

All discones are the "same style antenna" (duh) ;)

The difference is in the lowest frequency that they will cover. Most
will go up to 10 times the lowest frequency as their highest frequency.

I have two of the Radio Scrap models - which are really just good for
108 Mhz up. They use a vertical whip to extend the low frequencies down
to the 6 meter band but in these frequencies, you are using a narrowly
tuned vertical whip - NOT the discone part of the antenna (the discone
is actually working as a ground plane in this frequency band.

I have just verified this with an MFJ-259 antenna analyzer. There is a
sharp dip in the SWR at around 50 Mhz (a good thing) and then it is shit
- above and below until about 105 Mhz where the SWR drops below 2:1 and
then stays there as high as the meter will read (170 Mhz).

Other factors with other discones would be more power handling and a
"TRUE" low frequency tuning down to 30 Mhz or below - I've seen an old
Army model at a hamfest that was around 6 ft tall (sitting on it's camo
green skirt radials).

Keep in mind that all discones are "negative gain antennas". You'll
actually lose a dB or two over a dipole tuned for a partical band. It's
that gain vs. bandwidth thing again.

They do make really nice receiving antennas with an amplifier in line.
I used one of mine for TV reception for a few months and was supprised
at the relatively small amount of ghosting for an omni.

Good luck.

Paul
KD4GNU

2. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:05:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ohku$o30$0@208.206.142.76>
Source record: 173374

Fractenna wrote:
>
>
> Thanks for the reality check Mary. Sometimes the obvious needs to get stated.
>
> RIP
>
> Phil
> de N1ZKT

Actually most people seem to recognize the obvious without having to
have it flung into their faces.

3. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:13:51 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92oi3v$o30$1@208.206.142.76>
Source record: 173379

```
Jim Pennino wrote:
>
> Prof. Beaker <beaker@pim.com> wrote:
> > You take YOUR prozac Pennino. Do you think everyone has
> > their eyes glued to the TV all day long like yourself?
>
> Do you still beat your wife? The question assumes a whole lot.
>
> It is obvious Prof. Beaker isn't a professor of logic.
>

Indeed, it would seem that he's another incarnation of Profusser
Freaktenna himself.
```

4. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:15:22 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92oi6q$o30$2@208.206.142.76>
Source record: 173376

KB9WFK wrote:
>
> "Prof. Beaker" <beaker@pim.com> wrote in message
> news:3A4CD246.F0672DD0@pim.com...
>
> > Stick it up you ass.
> >
>
> Another PhD shows their talents.

What you mean "another"? Try the same one.

5. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:17:16 UTC
From: Hassen Ben Sober <HassenBenSober@kumputer.net>
Message-ID: <g0Q36.11649$cW3.424229@newsread1.prod.itd.earthlink.net>
Source record: 173377

Prof. Beaker, You engage integrated interfaces with streamline sticky web-readiness that embrace wireless functionalities which will forever utilize B2B bandwidth and enable dot-com relationships in spite of incentivize dynamic relationships on incubate turn-key systems to deliver ubiquitous supply-chains to facilitate frictionless infrastructures which will drive bricks-and-clicks e-markets.

"Prof. Beaker" <beaker@pim.com> wrote in message news:3A4E3196.DE54A35C@pim.com...
> Stick it up your gay ass Hambrecht. And you are correct.. I
> command the English language and you look foolish... AT WILL.
> So run along in defeat fag.
>
>
>
> Fred Hambrecht wrote:
>
> > One is always pleased to see a learned Professor who has such a command of
> > the English language. Your limited use of the English language is more in
> > line with some of the uneducated morons that drop by from time to time, or
> > perhaps you are over stating your qualifications.
> >
> > "Prof. Beaker" <beaker@pim.com> wrote in message
> > news:3A4D23F8.D9B683D6@pim.com...
> > > You are sure a nutcase aren't you Pennino?
> > > Just what is your real problem?
> > > Wife beating? Wow that really came out of left field.
> > > I bet YOU ARE the one with a domestic abuse conviction.
> > > Have a happy new year Pennino you fucking loser.
> > > Are you a spick or Italian?
> > >
> > >
> > >
> > > Jim Pennino wrote:
> > >
> > > > Prof. Beaker <beaker@pim.com> wrote:
> > > > > You take YOUR prozac Pennino. Do you think everyone has
> > > > > their eyes glued to the TV all day long like yourself?
> > > >
> > > > Do you still beat your wife? The question assumes a whole lot.
> > > >
> > > > It is obvious Prof. Beaker isn't a professor of logic.
> > > >
> > > > Since the story was a head line story on the Los Angeles Times,
> > > > the Orange County Register, and every little local paper around, it
> > > > would be hard to miss if you EVER read a newspaper or just glance at

> > > > a news stand in passing.
> > > >
> > > > Oh, sorry, PIM is in the bay area; it was also big news in the Mercury
> > > > News and Contra Costa Times.
> > > >
> > > > You might try reading a newspaper once in a while.
> > > >
> > > > It was on every news segment of every radio station of all formats;
> > rock,
> > > > oldies, talk, easy listening, etc.
> > > >
> > > > You might try listening to the radio on the way to and from work once
> > > > in a while.
> > > >
> > > > It was on every news broadcast of all the TV networks.
> > > >
> > > > Since you don't seem to know much about what's happening in the world,
> > > > you might also be interested to know Bush is now officially President
> > > > Elect, Elian is back in Cuba and Elvis is still dead.
> > > >
> > > > Jim Pennino
> > >
> > >
> > >
>
>
>
>

6. Re: J - Pole question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:18:15 UTC
From: paul <paul@nospam.com>
Message-ID: <3A4FCCC7.5D89@nospam.com>
Source record: 173378

Emptor Phriesadommazille wrote:
>
> Raise the connection point of the center cond. and the shield, up or down as
> necessary. It's usually about 1 1/2 inches for a J pole and up to twice
> that for a super J pole.
>
> Ken wrote in message ...
> > Can someone help me out with the specifics on how to tune the feed
> >line that connects to
> >the main element? I have the unit built, but am not sure how to tune it .
> >Raise the driver element up or down, or the feed line up or down on the
> >driver element?
> >Thanks,
> >Ken
> >
> >
> >
> >

That's not exactly true.

You do raise (or lower) the center cond. and shield together to tune for
lowest SWR but the height (you quoted 1.5") is kind of ambiguous as
frequency of operation is not known. You can make J-poles over a wide
range of frequencies and bands (amateur or others). Once the lowest SWR
is achieved, tune (crop) the long element (radiator)for the desired
frequency.

Paul

7. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:18:22 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ecio29.rom.ln@mail.specsol.com>
Source record: 173381

Fractenna <fractenna@aol.com> wrote:
>>If, indeed, Mr. McDermott of Bartlett St. in Haverhill is KB1EVA, it's sad
>>that he has been stereotyped by Dr. Cohen, a man who ought to know better.

> Mr. Littlefield--

> I demand that you retract this statement. It is maliciously incorrect.

> The only comment I made about McDermott is that there was an apparent
> discrepancy between dates and e-mail addresses (re: KB1EVA), and thus it was
> premature to assume they were the same fellow.

> I have NO additional information; have not had an interest or desire to pursue
> it; and have no idea WHY you have made this outrageous statement.

> This is your last chance to just DROP ME from your repertoire of people to
> harrass. Tomorrow is more than just another day. I have publicly made it clear
> what happens--legally--in the new year.

> Rick--JUST--FOCUS--ON SOMETHING--ELSE==> NOT me.

> OK?

> 73
> Chip N1IR

"This is your last chance..."

Sounds like another threat to get even from a marginally stable personality
to me.

Jim Pennino

8. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:20:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92ojb0$ob9$1@plutonium.btinternet.com>
Source record: 173383

Jim, have you tried laying your antenna along the bottom of straight trench about 18" deep. It will be at least 10dB quieter and well worth the hard labour if its quietness you are looking for. Double-screened coax works even better especially when Nichrome wire is used for the inner conductor.

A peaceful and prosperous New Year to all.

Reg.

9. Re: Happy New Year

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:23:23 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A4FCDFB.7152145A@mwci.net>
Source record: 173380

Fractenna wrote:

> I wish to thank the many people who have offered friendship, information, and
> good camaraderie in the last year on this NG.
>
> As Dickens said--'it was the best of times, it was the worst of times'.
>
> Here's to a happy, civil, and fun NG in the year of the space odyssey -- and
> new millenium!
>
> 73
> Chip N1IR

Very fine, Chip. Same also to you.

Bill W0IYH

10. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:33:52 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <3A4FD070.6E04A5B2@berkshire.net>
Source record: 173382

Richard Harrison wrote:
>
> To allow universal CW access is akin to allowing horsemen to excercise
> their hobby on any public trail, pathway, or road, because there have
> almost always been horsemen around, though now superseded by motorists.

but they are allowed almost everywhere, and for the most part cars must yeild to them. try to take a car on a horse trail and see what happens to you! try some vhf contesting some time and watch what happens when you can't quite copy that weak signal on ssb, quite often the will switch to cw to finish the contact... and that is in bands that no-code techs have had access to for years! it would be a real bummer to not allow the simplest form of communication on some bands or parts of bands... it almost always makes a good backup when you can't get through on voice.

>
> Morse is now obsolete and quickly started to become so with the first
> practical voice modulation. Just as the telephone replaced telegraph for
> practical purposes, voice modulation makes CW obsolete.

don't tell the thousands of operators who participate in various cw operating events and contests!

>
> Face it! It`s mostly over. Too many cell phones are around in most
> emergencies for a ham to be indispensable. Anyone can use wireless with
> no license, just pay the monthly fee.

so, go ahead, pay your fee and take what you get. just don't come to my area, your cell phone won't work most of the time. and let one cell tower go down from a storm and it won't work for quite a large area. and i'm sure you won't raise anyone on those new family radios unless you bring along someone to talk to. you might get lucky finding someone in skipland on a cb to talk to.

>
> Ham radio is a hobby, and CW is just a niche within this hobby which
> deserves no more than encouragement for its preservation. People need
> fun and CW is fun for some. It is also nice to have demonstrations of
> how it used to be. It makes you appreciate the present. Horsemanship is
> similar in its status as a hobby. It is fun and profitable for some, but
> doesn`t deserve first consideration in accommodations. There are too
> many other users of the facilities who want to use other equipment.

cw is still useful and worthy of protection on the bands. it is often used where signals are too weak for other modes. it also allows a higher concentration of stations per khz than ssb... tune through the bottom 5khz of

20m during a contest and count how many stations are calling cq, then try to imagine that many calling cq on ssb in the same bandwidth! i will agree with anyone who wants to expand the phone bands, but i still think there is a need for cw only segments on all bands.

horsemanship is also a necessary skill for not only 'cowboys' who still use them in rough terrain, but also for law enforcement in many cities. just try to touch a police horse and see where it lands you.

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

11. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:38:01 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A4FD15E.D9A6BFB1@home.com>
Source record: 173384

Peter Bertini wrote:

> Doug DeMaw did a feature on the coaxial snake antenna for QST magazine some
> decades back. It is a low noise receive only antenna, like a Beverage, and
> is not for transmitting. I beleive it was intended for 160 meters, and also
> perhaps 80 meters. The coax is laid on the ground in as straight a line as
> possible.
>
> Pete
>
> "Irv Finkleman" <finkirvNOSPAM@home.com> wrote in message
> news:3A4FA457.DF85B62B@home.com...
> > Jim wrote:
> >
> > > i have been using a "snake" antenna (snipped)
> >
> > > Ouch! owww! my head hurts! opinions please......
> >
> > Never heard of this one. Where did you get the information on it? Do you
> > use it for transmitting -- if so, on what frequencies please?
> >
> >
> >
> > --
> >
> > Please hit 'REPLY TO' e-mail address before sending. Thanks.
> > Irv Finkleman,
> > Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> > Calgary, Alberta, Canada
> >
> >

I should have figured as much -- I am an antenna afficionado and have read lots
of antenna articles/threads/books as I could get my hands on -- but that one
slipped my
mind. I found some info on a net search -- I recall it now, and was not
impressed or
I think I would have remembered it. Alzheimer's perhaps? Anyway...

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

12. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 00:48:39 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ok57$o30$3@208.206.142.76>
Source record: 173385

"Prof. Beaker" wrote:
>
> Go Fuck yourself you pathetic asshole.
> You've "demonstrated" how much of a limpdick a man
> can be. Congratulations dumgheap.
> Thanks for making me important enough to do a search on... loser.
>

Fracky you are really near the end of your string........

13. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:03:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4FD750.DB855CD7@eznec.com>
Source record: 173387

Wes Stewart wrote:
>
> On Sun, 31 Dec 2000 12:51:21 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:
>
> >Tectronix used to supply silver solder on little bobbins that formed a part
> >of the osciloscope in order to solder components onto the ceramic tag boards
> >that they used in their equipment.
> >Silver solder can be soldered with a number 9 curie point tip.
> >
> >Of course some of us have been around long enough to have done it;
> > not just read about it.
>
> I have done it too. However, I used *silver-bearing solder*, not silver solder
> like I use to solder copper pipe with a MAPP torch.
>
> Wes N7WS

Yes, this is the 2 or 3% Ag solder I mentioned in an earlier post.
Without the small amount of silver, the metalization on the ceramic
terminal strips would dissolve in the solder, and would be gone from the
strips the first or second time you soldered them. But the silver has
only a small effect on the melting point. Sn63/Pb37 solder is turns
solid and liquid at 183 degrees C; Sn62/Pb36/Ag02 turns solid at 179 and
liquid at 189.

Roy Lewallen, W7EL

14. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:05:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4FD7D8.7C27A0C@eznec.com>
Source record: 173386

Cecil wrote:
>
> Bob Miller wrote:
> > Maybe I missed some of the original argument, but I still think the
> > arrl handbook is a bargain at $32. Some may disagree. Whatever.
>
> It was a better bargain at $3.50 when I got mine. :-)
> --
> http://www.mindspring.com/~w6rca

Just out of curiosity, what was your hourly wage back then? How much did a house cost?

Roy Lewallen, W7EL

15. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:25:16 UTC
From: k1bqt@aol.com
Message-ID: <20001231202516.15705.00000059@ng-fm1.aol.com>
Source record: 173388

Hi Chip--

Got your E-mail--and I see it's also posted on here. I presume you are saying that you or Phil Salkind (writing on your fractenna account) did not compose the line:

>Not all of us hams are 300 pound-grizzly adams-- loner- man mountains who go and shoot people<

...and that someone else writing on a totally different account originated that line. If that is the case (and the archive will show it), then--of course--I stand corrected and apologize publicly for making the wrong attribution. It's easy to miscount arrows in posts containing multiple entries, and perhaps I did that. Meanwhile, I'll be sure to check the archive and confirm who DID write that dispicable line so I can go chide them instead.

>This is your last chance to just DROP ME from your repertoire of people to harrass. Tomorrow is more than just another day.<

If you must continue threatening me and others on the NG, then for crying out loud, please spell "harass" correctly.

>Rick--JUST--FOCUS--ON SOMETHING--ELSE==> NOT me.<

The focus of my editorial comment was, of course, on Mr. McDermott, his situation, and a very unfortunate stereotypical comment SOMEBODY wrote about large unmarried people wearing beards. If you or Phil (writing on your AOL account) didn't write it, then you have, once again, my sincere apology for suggesting you did.

Rick K1BQT

16. Re: [HELP] vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:31:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92omk6$15e$1@neptunium.btinternet.com>
Source record: 173389

Pascal, the most effective groundplane is a system of
shallow-buried radial wires of random length.

You may find program ENDFEED interesting. This will allow
you to model a vertical antenna (set the length of the
horizontal top section to zero) above any number of radials
of any length. It will also compute the L and C component
values for an L or T-network matching unit to 50 ohms to
enable the antenna to be used on other than the 1/4-wave
resonant frequency. Or you may elect to use a 3/8ths wave
vertical on 14 MHz.

Download program ENDFEED from the website below in a few
seconds. Not zipped up. Run immediately.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Pascal <fr0dh@wanadoo.fr> wrote in message
news:92c40d$qh5$1@wanadoo.fr...
> Hello,
>
> What is the better ground plane for a 1/4 wave length
monopole - monobande
> (14 MHz), mounted at the ground level.
>
> Have you a URL for more information ?
>
> Many Thanks and sorry for my english
>
> Pascal
>
>

17. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:34:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A4FDEA0.C50F70F0@eznec.com>
Source record: 173390

Fractenna wrote:
> . . .
> This is your last chance to just DROP ME from your repertoire of people to
> harrass. Tomorrow is more than just another day. I have publicly made it clear
> what happens--legally--in the new year.
> . . .

I'm well acquainted with Chip's public pronouncements of what will happen legally.

For the benefit of people who haven't been following Chip's antics -- In the latter part of 2000, Chip (first as a representative and officer of Fractenna, Inc. and later apparently representing only himself) posted far and wide (multiple postings on multiple newsgroups and mailing lists) false and unsubstantiated accusations that I had committed piracy and had appropriated material for which Fractenna, Inc. or he owned the copyright. In these postings, he flatly stated that he would take legal action against me, with various deadlines in 2000. Several times he stated positively that he would send me a formal letter to initiate legal action. Later, he stated that the letter had been sent. (This can be easily be verified with a deja search.)

All the deadlines have come and gone. The letter he or his alleged lawyer allegedly sent never arrived. (I'm franky disappointed. I was looking forward to it.)

His threats are empty. He freely slanders others but is constantly accusing others of slandering him and darkly threatening legal action. He doesn't tell the truth.

One thing he really does seem to have followed through on, though, is to hire private investigators to dig up dirt on people he has a dislike for. I'm sure I'm in this category, so I assume he's had a PI checking up on me. If so, can I get a copy of the report? There are a few periods in my past that are awfully vague. . .

Relax, ignore him, and have a better year for it.

Chip, you really need help. I hope you can see your way clear to seek it out in the coming year.

Roy Lewallen, W7EL

18. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:51:58 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92onqrssj1@slb7.atl.mindspring.net>
Source record: 173391

Rick:

Heh, heh. I heartily support your last contention. It's dammed hard to make a profit serving the amateur radio market!

Being engaged in the commercial "for profit" electronics and communications business for the last xx years or so... I can readily testify that in comparison to the commercial possibilities... [cfr Cisco Systems, et al... listed on NASDAQ]...

Serving the amateur radio marketplace with either equipment or publications is not an attractive business!

I often shudder when I hear folks saying that some of our hobby's manufacturers and publishers are ripping us off!

Heh, heh. Even though I could do that, by choice I participate in the far more lucrative professional commercial markets.

Take it from me, no one, repeat no one... is getting rich serving the amateur radio community. The volumes are far too small, and the willingness to pay is far too low!

Especially considering that one can make "real money" serving other areas of the electronics and communications markets using basically the same technical and business qualifications as one needs to serve the amateur market.

For those so-called, "for profit" organizations currently continuing to serve our hobby community, I say...

THANKS... and well done for what is essentially a labor of love. Keep it up, and I for one will continue to try to support y'all with frequent purchases...

-Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20001229205310.05325.00000213@ng-fl1.aol.com...
> Sorry, in a way, I ever started this flap. Nobody--including the ARRL's
"for
> profit" pulication department--is getting rich off ham radio. It was a
> somewhat unfair of me to overplay the devil's advocate and suggest the
League
> is parlaying a fat profit by scaring the beeejezuz out of hamdom by
> disseminating technical information about RF exposure. They aren't. The
whole
> industry is struggling to survive right now, and any ham with a kid in

> engineering school knows the ARRL Handbook remains a "best buy".
>
> Rick K1BQT

19. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:57:12 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a4fdf69.1182974@news.azstarnet.com>
Source record: 173392

On Sun, 31 Dec 2000 12:39:06 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Bigdad wrote:
>"---I don`t think Morse is the measure of the man and should not hamper
>the growth of our hobby.
>
>As all citizens deserve equal rights, benefits, and treatment under the
>law, these should be regulated only in the public interest, convenience,
>and necessity, (PICON) as shown in the old communications act of 1934.
>Most of the act was in the spirit of public safety. Humans shouldn`t
>interfere with vital communications. Commercial monopolies which are
>natural results of restricting access to a limited resource also had to
>be regulated.
>
>Access to radio frequencies should be as unregulated as is practical.
>
>Ruling CW permissible on any ham band, anywhere, at anytime is nonsense.
>Emergency access is already allowed to anyone on any frequency in dire
>emergencies. You don`t have to be a ham to try to save a life with
>radio.
>
>To allow universal CW access is akin to allowing horsemen to excercise
>their hobby on any public trail, pathway, or road, because there have
>almost always been horsemen around, though now superseded by motorists.

In Arizona, horses have the right-of-way.
>
>Morse is now obsolete and quickly started to become so with the first
>practical voice modulation. Just as the telephone replaced telegraph for
>practical purposes, voice modulation makes CW obsolete.

I have worked dozens of stations on CW on 2 meter EME. I have *one* SSB contact; (W5UN) of Mighty Big Antenna fame. With the "Obsolete" mode I can communicate, with the here-and-now mode, I can't. This is progress?
>
>In the early days of radio, sinking ships gave radio and its
>telegraphers fame and celebrity. They deserved it.
>
>Hams at times provided the only communications available, by CW, in
>early times, and they were the only game in town. They too gained
>celebrity, and deserved it.
>
>Face it! It`s mostly over. Too many cell phones are around in most
>emergencies for a ham to be indispensable. Anyone can use wireless with

>no license, just pay the monthly fee.

I live 5 miles (airline) from a major interstate highway (I-10, exit 248) off ramp. My wife and I each have analog cell phones and I was shopping for a digital replacement for her for Christmas. I figured to get some included long distance minutes to offset the landline charges. I talked to the service technician at Alltel (formerly Cellular One) about service in my area and he laughted and told me I better not give up the wired service. I can sometimes make a cell phone call from here (and pay roaming charges) and sometimes not. If it rains (yes it does rain in Tucson) I can expect poor to non-existent wired telephone service. Please tell me how in an emergency any amount of money can overcome this situation.
>
>Ham radio is a hobby, and CW is just a niche within this hobby which
>deserves no more than encouragement for its preservation. People need
>fun and CW is fun for some. It is also nice to have demonstrations of
>how it used to be. It makes you appreciate the present. Horsemanship is
>similar in its status as a hobby. It is fun and profitable for some, but
>doesn`t deserve first consideration in accommodations. There are too
>many other users of the facilities who want to use other equipment.
>
>Best regards, Richard Harrison, KB5WZI

I know I'm a week late but Bah Humbug<g>

Happy New Year
dah dah di di dit di di di da dah di di di da di dah

Wes

>

20. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 01:58:17 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92oo6kusl1@slb7.atl.mindspring.net>
Source record: 173393

Safety Factors, heh, heh:

If such conservative safety factors as we find in the EMI/RFI world today now, were applied to other areas of human endeavor, why then...

Airplanes would not be able to fly, all would be grounded...

Rivers would not be crossed by bridges, all bridges would be declared unsafe...

Automobiles would not be allowed on the roads...

We would all have to raise our own produce, for the grocery stores would not be allowed to sell us commercially produced vegetables...

etc... etc...

Face it... those RFI/EMI/EMC standards are a scaremonger's dream.... let's all try to work to set them to be more realistic!!!

-Peter K1PO

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message news:WOp26.283$e5.731181@news.ntplx.net...
>
> Jake Brodsky <frussle@erols.com> wrote:
>
> > >The threshold is based on a specific absorbtion rate of 4 W/kg of body
> mass.
> > >It is at this level that various studies show unwanted health effect.
> (None
> > >of these effects have been tied in to long-term health hazards; they
are
> > >indeed short-term and thermal in nature.) From that level, the
> standards
> > >committee added safety factors -- 1/10 for controlled/occupational
> exposure
> > >and 1/50 for uncontrolled/general-public exposure.
>
> > ...and this is the kind of BS that gets people like me riled up.
>
> > Where do these "safety factors" come from?
>
> Clearly, the standard should be set at a level that is below that
> demonstrated to cause unwanted effects. The general reasons given for the
> 10X safety factor is that the modeling and testing that was used to derive
> the 4 W/kg threshold are not perfect, the correlation between some of the

> methods used and human beings is not completely understood and, as I
started
> this paragraph, the standard should be set at a level that is below that
> demonstrated to cause unwanted effects. The 10X level was the one for
which
> concensus was reached by a committee of about 150 people.
>
> The 50X factor for general public exposure is less clearly defined. There
> are those (among them the members of the now-defunct ARRL Bioeffects
> Committee) that believe that there are "non thermal" effects to RF safety
> below the levels demonstrated to cause harmful effects. The studies that
> support this belief are not well understood or generally accepted by most
of
> the scientific community, but such studies and ongoing discussion about
them
> continues. The 50X factor was included as the only way to get concensus
to
> get the standard in place at all. The present SCC-28 members are very much
> considering that one level should be appropriate and that if the
controlled
> level is safe, then it should allply to all.
>
> > I'm not arguing with the 4 W/kg part of the standard. What I really
> object to is the notion that
> > for *occupational* limits that we aren't supposed to approach even one
> tenth of that amount.
> > Who are we protecting and what are we protecting them from?
>
> I would very much argue against setting the standard to 4 W/kg -- this is
> the level that caused demonstrated unwanted effects. Clearly, the level
> needs to be set lower than that. There may even be some justification for
> setting a level even lower than 400 mw/kg. This level is a thermal load
> equivalent to putting on a light sweater. No problem for most people most
> of the time, but would it be appropriate to do so if one was already at
> maximum thermal load, perhaps outdoors in the sun at 115 F? Under
> controlled conditions, the person being exposed has knowledge of the
> exposure and presumably the training to know that if it is hot, he or she
> should limit exposure below the 400 mw/kg level.
>
> How about those who are not aware of RF exposure and/or who do not know
what
> factors apply under what conditions? Most of the time, you could "put a
> sweater on" your neighbors safely, but what about that 110 degree day,
with
> a neighbor who is ill, perhaps running a fever of 103 degrees, just as an
> example? Can you say unconditioanally that adding additional thermal load
> to a person under those circumstances is safe? I cannot.
>
> I think I would have significant reservations about the uncontrolled
> exposure levels except for the fact that virtually all amateur stations

meet
> them easily. Those that run 1500 watts and indoor antennas do not.
>
> > The problem is that when such specialists get together, nobody really
> > tries to look at the big picture.
>
> Do you really believe that those who had spent literally years of their
> lives to develop the standards did not try to look at the big picture?
>
> > I rest my case.
>
> I wish I had all the answers so that I could rest my case, too. I am sure
> that those continuing to do research and continuing to put a lot of
> themselves into the development of the next versions of the standards wish
> they had all the answers, too.
>
> If you really do have the expertise to reach such a conclusion, I am sure
> you would be welcome to participate on the commmittee.
>
> 73,
> Ed Hare, W1RFI
>
>
>

21. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 02:08:23 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <guVPOix9gFliABp76tNvTdIUP2y2@4ax.com>
Source record: 173394

Roy Lewallen <w7el@eznec.com> wrote:

>Cecil wrote:
>>
>> Bob Miller wrote:
>> > Maybe I missed some of the original argument, but I still think the
>> > arrl handbook is a bargain at $32. Some may disagree. Whatever.
>>
>> It was a better bargain at $3.50 when I got mine. :-)
>> --
>> http://www.mindspring.com/~w6rca
>
>Just out of curiosity, what was your hourly wage back then? How much did
>a house cost?
>
>Roy Lewallen, W7EL

I recall that my brother bought a brand new Mercedes Benz sedan in
1965 with a deisel engine, air conditioning and a Becker-Mexico stereo
for $4,500.

The first Ferrari GTO, from the Sixties, sold, new, for $14,500.

Anybody recall what a Collins S-line sold for?

Bob
k5qwg

22. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 02:24:16 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <kTR36.853$8r2.97034@newshog.newsread.com>
Source record: 173395

For VHF and above, good old Radio Shack woks quite well and I thin they are
around $50, give or take a bit.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Andy Brinkley" <andy@brinkleyelectronics.com> wrote in message
news:3A4F6F74.C49806E5@brinkleyelectronics.com...
> Looking to purchase and install a Discone Antenna in the near future,
> and would like any comments on the quality of the ones on the market. I
> have seen prices from $39.99 up to $179.99 for what appears to be the
> same style antenna.
>
> TNX
>
> Andy NC4AB
>
>
>

23. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 02:45:15 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a4fea5a.3984967@news.azstarnet.com>
Source record: 173396

On Sun, 31 Dec 2000 17:05:28 -0800, Roy Lewallen <w7el@eznec.com> wrote:

>Cecil wrote:
>>
>> Bob Miller wrote:
>> > Maybe I missed some of the original argument, but I still think the
>> > arrl handbook is a bargain at $32. Some may disagree. Whatever.
>>
>> It was a better bargain at $3.50 when I got mine. :-)
>> --
>> http://www.mindspring.com/~w6rca
>
>Just out of curiosity, what was your hourly wage back then? How much did
>a house cost?
>
>Roy Lewallen, W7EL

My rule of thumb use to be that a car cost 1/2 the annual salary and a house was twice the annual salary. Unfortunately, I I just learned that is out of wack, at least after visiting my daughter who lives in the (far) eastern suburbs of SF, CA. They paid a nearly a third of a million bucks for a stucco-box tract house on a postage stamp sized lot.

My mother-in-law gave me a pullover shirt for Christmas that still had an $80 price tag on it. I remember when 80 bucks was my clothing allowance for a year.

BTW, the old gal also gave me 10 years worth of "QST View" CDs that cost $80 plus nearly $30 in shipping charges to get them to me by Christmas. My daughter ordered some too but didn't pay enough shipping charges to get them here before sometime in the next millennium.

Here is a disappointment and a perceived lack of value. The images are pretty poor and the reader/indexer is real clunky. But I'm freeing up shelf space. Might even have room for a new Handbook.

73,

Wes N7WS

24. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 02:52:10 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <uhS36.854$8r2.97253@newshog.newsread.com>
Source record: 173397

For me to place any faith in the standards, I'd need to see the criteria for the studies, the unprocessed results, and the detailed methods used to both get the data and how it was processed.

Having any group tell me "we did a study and this is our recommendation" had no more validity than had my neighbor told me that every time he uses his cell phone he gets a headache so there must be a connection.

I've spent too many years working with corporations and labs to place much faith in "new studies" where there are no existing and proven standards.

So, all I can say is that if some one asks me if RF exposure can be dangerous I'd have to say yes, but...The level at which is becomes a problem has been determined by methods that I view as shaky at best. Meaning I have no idea as to what level it becomes dangerous. That is why I believe there is such a range between the two allowable levels. I sincerely do not believe that as of yet, industry knows where it does become dangerous. They only have a rough idea.

For instance using a 5 Watt HT with the antenna only an inch or two from a persons face is not considered dangerous as the time is limited, but the field strength is orders of magnitude greater than we get from running the legal limit into a large VHF array.

As to the limited exposure, it is not all that uncommon for a user to spend enough time making 50% (2 min on and 2 min off) transmissions, to end up with an ht almost too hot to hold and a dead battery in short order.

Given what little I've seen of the studies, I have to view their results as antidotal rather than complete, objective, and comprehensive.
--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:92oo6kusl1@slb7.atl.mindspring.net...
> Safety Factors, heh, heh:
>
> If such conservative safety factors as we find in the EMI/RFI world today
> now, were applied to other areas of human endeavor, why then...
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> Airplanes would not be able to fly, all would be grounded...
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> Rivers would not be crossed by bridges, all bridges would be declared
> unsafe...
>

> Automobiles would not be allowed on the roads...
>
> We would all have to raise our own produce, for the grocery stores would
not
> be allowed to sell us commercially produced vegetables...
>
> etc... etc...
>
> Face it... those RFI/EMI/EMC standards are a scaremonger's dream....
let's
> all try to work to set them to be more realistic!!!
>
> -Peter K1PO
>
>
> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
> news:WOp26.283$e5.731181@news.ntplx.net...
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> > Jake Brodsky <frussle@erols.com> wrote:
> >
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> > mass.
> > > > >It is at this level that various studies show unwanted health effect.
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> > > > >of these effects have been tied in to long-term health hazards; they
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> > > > >committee added safety factors -- 1/10 for controlled/occupational
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> > > > >and 1/50 for uncontrolled/general-public exposure.
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There
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> > get the standard in place at all. The present SCC-28 members are very
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> > level is safe, then it should allply to all.
> >
> > > I'm not arguing with the 4 W/kg part of the standard. What I really
> > object to is the notion that
> > > for *occupational* limits that we aren't supposed to approach even one
> > tenth of that amount.
> > > Who are we protecting and what are we protecting them from?
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> > needs to be set lower than that. There may even be some justification
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> > equivalent to putting on a light sweater. No problem for most people
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> > of the time, but would it be appropriate to do so if one was already at
> > maximum thermal load, perhaps outdoors in the sun at 115 F? Under
> > controlled conditions, the person being exposed has knowledge of the
> > exposure and presumably the training to know that if it is hot, he or
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> > How about those who are not aware of RF exposure and/or who do not know
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> > factors apply under what conditions? Most of the time, you could "put a
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> > a neighbor who is ill, perhaps running a fever of 103 degrees, just as
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> > exposure levels except for the fact that virtually all amateur stations
> meet
> > them easily. Those that run 1500 watts and indoor antennas do not.
> >
> > > The problem is that when such specialists get together, nobody really
> > > tries to look at the big picture.
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> > Do you really believe that those who had spent literally years of their
> > lives to develop the standards did not try to look at the big picture?
> >
> > > I rest my case.
> >
> > I wish I had all the answers so that I could rest my case, too. I am
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> > that those continuing to do research and continuing to put a lot of
> > themselves into the development of the next versions of the standards
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> > they had all the answers, too.
> >
> > If you really do have the expertise to reach such a conclusion, I am
sure
> > you would be welcome to participate on the commmittee.
> >
> > 73,
> > Ed Hare, W1RFI
> >
> >
> >
>
>

25. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 03:13:01 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <1BS36.855$8r2.97337@newshog.newsread.com>
Source record: 173399

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:92onqrssj1@slb7.atl.mindspring.net...
> Rick:
>
> Heh, heh. I heartily support your last contention. It's dammed hard to
> make a profit serving the amateur radio market!

At one time it was not a bad buisness, but that was prior to 1980.

In the 60s and early 70s it was apretty good business, but from the mid 70s
it was a steep down hill slide.

Back in those days you could take a trailer load of gear to a swap and go
home with a lot of cash. People paid with the long green, not checks or
credit cards and not much was on credit.

Many a time I took all I could to a swap, or convention and brought home
only cash. The problem with the bigger swaps and conventions was being able
to take "enough" to last through the day as we'd usually run dry shortly
past noon.

Now days, by shortly past noon, every one has gone home.
>
> Being engaged in the commercial "for profit" electronics and
communications
> business for the last xx years or so... I can readily testify that in
> comparison to the commercial possibilities... [cfr Cisco Systems, et
al...
> listed on NASDAQ]...

True, but only a tiny percentage are the Ciscos of the world.

I found that consulting in specialized areas can be extremely lucrative,
IF the individual is willing to put in the hours and days and weeks and
months...

Working in computers and Laboratory Information Management Systems (LIMS)
for the medical industry (with FDA Valadation) in particular is almost as
specialized as programming directly in machine code. Man! Talk about
documentation and change control <:-))

Compareing these jobs with amateur radio sales and service is almost
impossible. It's not that they are not in the same league, they are in a
different world.

The only thing they have in common is that they require dedication and long, very long hours. Often 7 days a week and little time for yourself.

There the simularity ends with one almost requiring a second job and the other paying near the top of the individual pay scales.

Roger (K8RI)
> Serving the amateur radio marketplace with either equipment or publications
> is not an attractive business!
>
> I often shudder when I hear folks saying that some of our hobby's
> manufacturers and publishers are ripping us off!
>
> Heh, heh. Even though I could do that, by choice I participate in the far
> more lucrative professional commercial markets.
>
> Take it from me, no one, repeat no one... is getting rich serving the
> amateur radio community. The volumes are far too small, and the willingness
> to pay is far too low!
>
> Especially considering that one can make "real money" serving other areas of
> the electronics and communications markets using basically the same
> technical and business qualifications as one needs to serve the amateur
> market.
>
> For those so-called, "for profit" organizations currently continuing to
> serve our hobby community, I say...
>
> THANKS... and well done for what is essentially a labor of love. Keep it
> up, and I for one will continue to try to support y'all with frequent
> purchases...
>
> -Peter K1PO
>
>
> "Rick Littlefield" <k1bqt@aol.com> wrote in message
> news:20001229205310.05325.00000213@ng-fl1.aol.com...
> > Sorry, in a way, I ever started this flap. Nobody--including the ARRL's
> "for
> > profit" pulication department--is getting rich off ham radio. It was a
> > somewhat unfair of me to overplay the devil's advocate and suggest the
> League
> > is parlaying a fat profit by scaring the beeejezuz out of hamdom by
> > disseminating technical information about RF exposure. They aren't.
The
> whole
> > industry is struggling to survive right now, and any ham with a kid in
> > engineering school knows the ARRL Handbook remains a "best buy".

> >
> > Rick K1BQT
>
>

26. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 03:39:02 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ou4mvo0@208.206.142.76>
Source record: 173400

You didn't really expect to get away with such a piece of non-accuracy
did you Rich? :-) You spoke as a ham who truly has no knowledge or
experience regarding radiotelegraphy. The latter I can understand, the
first I cannot, given the length or your tenure in radio.
There are times when nothing else is applicable or workable. Someday it
may be otherwise, or maybe not. But not yet. It doesn't all depend on
just the current state of technology.

73 anyway, Dick W0EX

Richard Harrison wrote:
>
> Bigdad wrote:
> "---I don`t think Morse is the measure of the man and should not hamper
> the growth of our hobby.
>
> As all citizens deserve equal rights, benefits, and treatment under the
> law, these should be regulated only in the public interest, convenience,
> and necessity, (PICON) as shown in the old communications act of 1934.
> Most of the act was in the spirit of public safety. Humans shouldn`t
> interfere with vital communications. Commercial monopolies which are
> natural results of restricting access to a limited resource also had to
> be regulated.
>
> Access to radio frequencies should be as unregulated as is practical.
>
> Ruling CW permissible on any ham band, anywhere, at anytime is nonsense.
> Emergency access is already allowed to anyone on any frequency in dire
> emergencies. You don`t have to be a ham to try to save a life with
> radio.
>
> To allow universal CW access is akin to allowing horsemen to excercise
> their hobby on any public trail, pathway, or road, because there have
> almost always been horsemen around, though now superseded by motorists.
>
> Morse is now obsolete and quickly started to become so with the first
> practical voice modulation. Just as the telephone replaced telegraph for
> practical purposes, voice modulation makes CW obsolete.
>
> In the early days of radio, sinking ships gave radio and its
> telegraphers fame and celebrity. They deserved it.
>
> Hams at times provided the only communications available, by CW, in
> early times, and they were the only game in town. They too gained
> celebrity, and deserved it.

>
> Face it! It`s mostly over. Too many cell phones are around in most
> emergencies for a ham to be indispensable. Anyone can use wireless with
> no license, just pay the monthly fee.
>
> Ham radio is a hobby, and CW is just a niche within this hobby which
> deserves no more than encouragement for its preservation. People need
> fun and CW is fun for some. It is also nice to have demonstrations of
> how it used to be. It makes you appreciate the present. Horsemanship is
> similar in its status as a hobby. It is fun and profitable for some, but
> doesn`t deserve first consideration in accommodations. There are too
> many other users of the facilities who want to use other equipment.
>
> Best regards, Richard Harrison, KB5WZI

27. Re: Cushcraft A3S Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 03:47:35 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A4FFDD7.B02C31B9@dvol.com>
Source record: 173401

Donald Campbell wrote:

> I am seriously considering the purchase of a Cushcraft A3S tri-bander.
> I would appreciate feedback from users of this antenna in terms of
> reliability of the traps and other hardware. Also performance
> experiences.
>
> Thanks and 73, Don W6QEY

>
Not exactly "on topic" but going back a helluva lot of years the only trap antenna I ever owned and used was an old Cush 10/15 "Duobander" which was installed 80 ft AGL and I didn't take a back seat to ANYBODY in the dx contests or pileups on 10 & 15, the thing kicked some serious butt with nothing more than an SB-200. I pulled it down after 30 years in the air in a polluted heavy industrial area a couple years ago. The four driven element thermoset plastic standoff insulators should be replaced, otherwise it's good to go for another thirty.
>
w3rv

28. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 03:52:23 UTC
From: inagaddadavida@webtv.net
Message-ID: <27457-3A4FFEF7-1@storefull-115.iap.bryant.webtv.net>
Source record: 173404

ok guys, i am not kidding. this antenna works great even though everyone says it wont work at all. it is for receive only and is laid right on the ground. it is very low noise (even if it is low gain i need all the noise rejection i can get) i use it for listening to shortwave with my portable radio. in my circumstance it is far superior than several "better" antennas that i have available, and it is very convenient to lay out anywhere its needed. i just thought i would run some ideas past you, i didnt mean to spill any "snake oil"

29. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 03:57:26 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <92ov7tvmr1@slb7.atl.mindspring.net>
Source record: 173402

Hassen Ben Sober <HassenBenSober@kumputer.net> wrote in message
news:g0Q36.11649$cW3.424229@newsread1.prod.itd.earthlink.net...
> Prof. Beaker, You engage integrated interfaces with streamline sticky
web-readiness that
> embrace wireless functionalities which will forever utilize B2B bandwidth
and enable
> dot-com relationships in spite of incentivize dynamic relationships on
incubate turn-key
> systems to deliver ubiquitous supply-chains to facilitate frictionless
infrastructures
> which will drive bricks-and-clicks e-markets.
>

I love that website. For more fun search for BSBingo and download it to your
handheld. Then have fun at the next meeting.

73,Corry
Buzzword Compliance Officer
--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/
"Alabama - the jackhammer state!" -Dan Rather, 11/07/2000

30. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 03:57:48 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <0fT36.67555$A06.2230223@news1.frmt1.sfba.home.com>
Source record: 173403

The problem with the 4815 probe is that it uses very difficult to obtain p
channel FETs.
The current model that Agilent makes has a similar probe, only with n
channel FETs.
In any event, you would be FAR better off rebuilding an existing probe,
rather than
trying to invent your own or build a copy of the Agilent one.

If anything, the 4815 in now MORE exotic than when it was in production both
due
to obsolete thru hole parts and the fact that there are very few engineeers
around who
understand analog instruments these days. Even at Agilent, few engineers
are versed
in such theory.

Rick Karlquist N6RK
(employed by Agilent Labs)

Dr. Vecchio <104204.707@compuserve.com> wrote in message
news:92iq42rtn1@nnrp1.deja.com...
>
>
> Well, if anyone has a schematic & parts list for the 4815A probe I'd
> like to take a stab at building one.
> Even if a homebrew version doesn't have the accuracy of the original
> it would still make a usefull device.
> If I get a circuit to work I'll be sure to post the results.
>
> - Chris, KB3FWA
>
>
> > Hi OM,
> >
> > I would re-evaluate the need for "special facilities" given that
> > technology has progressed since these were constructed. What I mean
> > by this is that the circuitry is undoubtedly simple, but the parts
> > "were" exotic at the time of manufacture.
> >
> > What was exotic back then is typical today. I would guess that
> > surface mount components would meet every technical challenge (if you
> > can reasonably find replacement values for the semiconductors
> > (probably matched - and probably your greatest challenge)).
> >
> > 73's

> > Richard Clark, KB7QHC
> >
>
>
> Sent via Deja.com
> http://www.deja.com/

31. counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 04:09:19 UTC
From: inagaddadavida@webtv.net
Message-ID: <27453-3A5002EF-91@storefull-115.iap.bryant.webtv.net>
Source record: 173405

ok, ignore the snake for now. someone take me to school on making an artificial ground or a counterpoise. does it have any relationship in size or length to the antenna element? is one wire all thats needed or is several wires laid out like radials more effective? what can be expected of the effectiveness of this scheme as compared to a good earth ground rod? and what is the comparison of a random wire with a counterpoise as compared to an equal amount of wire in a balanced format such as a dipole?

32. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 04:17:30 UTC
From: Jim Jerzycke <kq6ea@amsat.org>
Message-ID: <3A5004DE.5536EE3F@amsat.org>
Source record: 173406

Didn't expect so many people to jump in with other ideas. All we did was insert a Radio Shack 273-1374 as an isolation transformer between the sound card inout and rig audio output. The noise problem went away, and we never bothered to "Engineer" it to death.
Jim

33. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 05:24:23 UTC
From: fractenna@aol.com
Message-ID: <20010101002423.28247.00000575@ng-ff1.aol.com>
Source record: 173408

>All the deadlines have come and gone. The letter he or his alleged
>lawyer allegedly sent never arrived. (I'm franky disappointed. I was
>looking forward to it.)

Mr. Lewallen--

This is your last opportunity to remove the copyrighted MI2 file from your web site. You have pirated this file, which belongs to me.

As of today, any and all copyright violations will initiate legal actions.

Nathan Cohen. Ph.D.

34. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 05:25:00 UTC
From: richardharrison@webtv.net
Message-ID: <16062-3A5014AC-83@storefull-114.iap.bryant.webtv.net>
Source record: 173410

Dick Carrol wrote:
"There are times when nothing else is applicable or workable." (Other than Morse, I suppose.)

We can choose to ignore better digital modes, but they abound and they are more efficient and effective than Morse.

Telegraph. The word implies a written or drawn item sent or received over a long distance. This is what Morse intended. He was seeking a system which recorded its output on paper. As I recall the story, his father-in-law was funding development of the telegraph and the man with the money persuaded Morse to go to market with what was already working, and not wait for perfection of the printed message development. It seems this was a case of father knows best.

Telex and Teletype came later. There are many other digital data transmission codes and architectures. Most beat Morse efficiency by starting with code elements of equal lengths for the mark and space (zero and one) durations.
Effectiveness is improved by error detection and correction along with automatic retransmission of garbled reception segments. Data transmission rates can be automatically adjusted to fit the condition of the transmission medium so as to optimize transmission efficiency.
Trying to use Morse to compete with modern data transmission is equivalent to showing up at a gun fight with a knife.

There was an American Cavalry General who advised his troops to dismount should their horse be shot from under them. Seems the coders have been beating a dead horse for years.

Best regards, Richard Harrison, KB5WZI

35. Re: Whats this about the Wakefield killer?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 05:25:58 UTC
From: fractenna@aol.com
Message-ID: <20010101002558.28247.00000576@ng-ff1.aol.com>
Source record: 173407

>
>
>
>"Prof. Beaker" wrote:
>>
>> Go Fuck yourself you pathetic asshole.
>> You've "demonstrated" how much of a limpdick a man
>> can be. Congratulations dumgheap.
>> Thanks for making me important enough to do a search on... loser.
>>
>
>
> Fracky you are really near the end of your string........
>
>

Excuse me?

I don't understand the allusion. What does it have to do with antennas, on any case?

73
Chip N1IR

36. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 05:41:43 UTC
From: fractenna@aol.com
Message-ID: <20010101004143.21518.00000353@ng-cr1.aol.com>
Source record: 173409

>
>
>Fractenna wrote:
>>
>>
>> Thanks for the reality check Mary. Sometimes the obvious needs to get
>stated.
>>
>> RIP
>>
>> Phil
>> de N1ZKT
>
>
> Actually most people seem to recognize the obvious without having to
>have it flung into their faces.
>

Mary expressed a very human and heartfelt concern and empathy. I , for one, do not find it in bad taste to have some here reminded of the frailty of human life and the tragedy of its loss, especially all too soon and all too sudden and all so pointless.

One of the victims lived in Belmont-- a friend of a friend. His funeral was at St Joseph's Church. The town is in shock.

You have no idea what effect this has had in the Boston area.

Chip N1IR

37. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 05:41:53 UTC
From: Keith K5WX <keithz_nozpam@austin.rr.com>
Message-ID: <3A5018A0.9742887C@austin.rr.com>
Source record: 173412

My 1929 edition of the Handbook shows a cover price of $1.00. That was probably a lot of money back then...especially after the crash.

73,

Keith K5WX

Wes Stewart wrote:

> On Sun, 31 Dec 2000 17:05:28 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>
> >Cecil wrote:
> >>
> >> Bob Miller wrote:
> >> > Maybe I missed some of the original argument, but I still think the
> >> > arrl handbook is a bargain at $32. Some may disagree. Whatever.
> >>
> >> It was a better bargain at $3.50 when I got mine. :-)
> >> --
> >> http://www.mindspring.com/~w6rca
> >
> >Just out of curiosity, what was your hourly wage back then? How much did
> >a house cost?
> >
> >Roy Lewallen, W7EL
>
> My rule of thumb use to be that a car cost 1/2 the annual salary and a house was
> twice the annual salary. Unfortunately, I I just learned that is out of wack,
> at least after visiting my daughter who lives in the (far) eastern suburbs of
> SF, CA. They paid a nearly a third of a million bucks for a stucco-box tract
> house on a postage stamp sized lot.
>
> My mother-in-law gave me a pullover shirt for Christmas that still had an $80
> price tag on it. I remember when 80 bucks was my clothing allowance for a year.
>
> BTW, the old gal also gave me 10 years worth of "QST View" CDs that cost $80
> plus nearly $30 in shipping charges to get them to me by Christmas. My daughter
> ordered some too but didn't pay enough shipping charges to get them here before
> sometime in the next millennium.
>
> Here is a disappointment and a perceived lack of value. The images are pretty
> poor and the reader/indexer is real clunky. But I'm freeing up shelf space.
> Might even have room for a new Handbook.
>

> 73,
>
> Wes N7WS

38. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 05:55:48 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A501BE4.8FBF9DDC@oio.net>
Source record: 173411

Jim,
A counterpoise is basically a 1/4 wave wire for whatever band
you want to work. Multiple bands, use multiple counterpoise.
'Doc

39. Re: Antenna help PLEASE??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 06:28:11 UTC
From: NC <chickenhawk@softhome.net>
Message-ID: <92p85q$l48$1@corolla.OntheNet.com.au>
Source record: 173413

Thanks everyone for all your help yes I am in Australia
Once Again thanks for all your help
73's
Nathan
Richard Clark <rwclark@seanet.com> wrote in message
news:3a6fa737.700038922@news.seanet.com...
> On Sun, 31 Dec 2000 14:02:39 GMT, Bob Miller <bamiller@texas.net>
> wrote:
>
> >
> > >Get an antenna for the 440 mhz ham band, and snip off a half-inch or
> > >so, or whatever it takes to resonate slightly higher at 477 mhz.
> > >
> > >I didn't know there was a CB band on 477 mhz... something new?
> > >
> > >Bob
> > >k5qwg
> >
> > Hi Bob,
> >
> > Good start, but 0.5 inch may be too aggressive. I would suggest 0.25
> > inch (or 5 mm) at a time.
> >
> > 73's
> > Richard Clark, KB7QHC

40. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 07:28:14 UTC
From: Mike Frye <km6ab@pacbell.net>
Message-ID: <3A50318E.3C03195B@pacbell.net>
Source record: 173416

I would agree with another post about the Diamond having a more robust construction. I have owned 4 Radio Shack Discones and the elements are all a little loose. If you want to impress the troops, get a Discone from Kreco (www.krecoantennas.com). I have used them for over 20 years and they seem to be THE standard in commercial Discones.

41. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 07:35:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A50335A.8A9B2939@eznec.com>
Source record: 173414

Fractenna wrote:
>
> >All the deadlines have come and gone. The letter he or his alleged
> >lawyer allegedly sent never arrived. (I'm franky disappointed. I was
> >looking forward to it.)
>
> Mr. Lewallen--
>
> This is your last opportunity to remove the copyrighted MI2 file from your web
> site. You have pirated this file, which belongs to me.
>
> As of today, any and all copyright violations will initiate legal actions.
>
> Nathan Cohen. Ph.D.

Sorry, Chip. You've used up what remaining credibility you had. Too many "last opportunities" have come and gone, and your threatened legal actions are nothing but bluster.

I do not have, nor have I ever had, any material on my web site for which you hold the copyright. If you did have the fortitude to sue me, I'd be glad to let you try to prove otherwise. But you don't.

Roy Lewallen, W7EL

42. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 07:43:29 UTC
From: John LeMay <jlemay@nospam.njmc.com>
Message-ID: <92pcdd$h4j$1@news.monmouth.com>
Source record: 173415

In article <3A4F6F74.C49806E5@brinkleyelectronics.com>, "Andy Brinkley" <andy@brinkleyelectronics.com> wrote:

> Looking to purchase and install a Discone Antenna in the near future,
> and would like any comments on the quality of the ones on the market. I
> have seen prices from $39.99 up to $179.99 for what appears to be the
> same style antenna.
>

I had the *old* (about 10 years ago) Radio Shack discone that had no vertical element. After about 2 yrs on a mast in upstate NY year round I was missing a few elements, others were bent, but it still worked pretty well for a $60 antenna.

About 8 months ago I put a Diamond J-130 in the attic of my new home and connected it (RG-6) to my Pro-2005. Compared to the extendable whip, this antenna is doing a great job. Even while assembling the antenna (in the kitchen when my wife came home at about the half way point), I could tell there was a big difference - more than just a vertical element! It's a solid antenna that I would not hesitate to put out in the weather if not for the objection of my wife.

It comes down to cost. If money isn't an object and you want something that will last for a while, the Diamond is the way to go. If you are on a budget and not real serious about adding this type of antenna, go for the Radio Shack discone, or even the smaller antenna they offer if you only need RX. I think that one is about $30.

--
John LeMay Jr.
Senior Enterprise Consultant
NJMC, LLC.

Sent with PAN 0.9.3cvs running on Mandrake Linux 7.2 with kernel 2.4.0-test11.

43. Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 08:00:35 UTC
From: Phil <philvdk@pandora.be>
Message-ID: <DOW36.33598$MA1.787437@afrodite.telenet-ops.be>
Source record: 173417

Hello,

Does anyone has URL that points to very small antenna tuner/matcher.
I want to take a very small model along in my luguage on holidays.
I need to tune rondom wire against RF ground ...

Thanks !
Phil
ON4BAW@pandora.be

44. Re: Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 08:31:23 UTC
From: Phil <philvdk@pandora.be>
Message-ID: <vfX36.33970$MA1.787420@afrodite.telenet-ops.be>
Source record: 173418

My SGC-230 performs very well in poor and restricted antenna limitations.
I made a rectangle 'loop' antenna on my balcony with the SGC in the
middle-base.
works well on 10 down to 40 (80 bit less)

Pics or idea's on http://users.pandora.be/on4baw
Phil

"Rud Merriam" <rmerriam@usa.net> wrote in message
news:92dsso$om4@atlas.lcc.net...
> I'm in a deed restricted area - also a bit XYL restricted - so looking for
> ideas on an HF antenna. My current focus is the attic of the garage. Not
> much height but it is an open area I can use. I can access it easily from
> the shack with 50' or so of coax.
>
> The problem with the house attic is the amount of intercom and alarm
system
> wires roaming around. Those are just going to be RFI magnets. I already
> switched the 6m dipole to the garage because it kept getting into the
> intercom.
>
> Basically the garage is 20' square with a joist to peak height of about
8'.
> It slopes in from all sides up to the peak. I can put an auto-tuner out
> there since there is power. Biggest question I have there is keeping RF
out
> of the tuner. If needed I could put a ground rod next to the garage.
>
> I'm not trying to work the world but would like local and some
> national/international capability.
>
> Any suggestions?
>
> --
> Rud Merriam
> KD5DTV
>
>
>
>

45. Re: wtd: info on building a simple short wave antanna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 08:52:01 UTC
From: The English Patient <mrhuntnpeckEXTRALETTERS@home.com>
Message-ID: <prg05tggm13momofcbgl160ojtngbja1tp@4ax.com>
Source record: 173319

I just wanted to thank all who replied to this thread, it has been a great help to me .

I have a question pertaining to gray's reply :

" I also float the radio and
anything connected to it by using an AC ground lifter with the ground terminal unconnected."

did he mean AC ground filter? would this be like an isolation transformer, or a filter consisting of a capacitor like in a power supply, or a ground fault breaker?
did he mean leaving unconnected, the separate ground wire, the one that usually is found hanging out the back, along with the antanna wire ? or the common wire, meaning the wire that is connected to ground (not the third prong)

this is of great interest to me in my plans, as I do get alot of noise from nearby computers, tv's motors etc.

I read another comment in another thread about connecting to more than one radio, someone suggested that it was a bad idea to have more than one connected to the same antanna, that the signal would be reduced by half if it were connected to more than one. is this true? I was thinking of using a piece of cablevision wire, and outlets to run to two or three locations, just because it would be neat and the connectors are readily available. perhaps I should include a selector switch if doing so?

46. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 08:57:34 UTC
From: paul <paul@nospam.com>
Message-ID: <3A50467E.6EB2@nospam.com>
Source record: 173320

John LeMay wrote:
>
> In article <3A4F6F74.C49806E5@brinkleyelectronics.com>, "Andy Brinkley"
> <andy@brinkleyelectronics.com> wrote:
>
> > Looking to purchase and install a Discone Antenna in the near future,
> > and would like any comments on the quality of the ones on the market. I
> > have seen prices from $39.99 up to $179.99 for what appears to be the
> > same style antenna.
> >
>
> I had the *old* (about 10 years ago) Radio Shack discone that had no
> vertical element. After about 2 yrs on a mast in upstate NY year round I
> was missing a few elements, others were bent, but it still worked pretty
> well for a $60 antenna.
>
> About 8 months ago I put a Diamond J-130 in the attic of my new home and
> connected it (RG-6) to my Pro-2005. Compared to the extendable whip, this
> antenna is doing a great job. Even while assembling the antenna (in the
> kitchen when my wife came home at about the half way point), I could tell
> there was a big difference - more than just a vertical element! It's a
> solid antenna that I would not hesitate to put out in the weather if not
> for the objection of my wife.
>
> It comes down to cost. If money isn't an object and you want something
> that will last for a while, the Diamond is the way to go. If you are on a
> budget and not real serious about adding this type of antenna, go for the
> Radio Shack discone, or even the smaller antenna they offer if you only
> need RX. I think that one is about $30.
>
> --
> John LeMay Jr.
> Senior Enterprise Consultant
> NJMC, LLC.
>
> Sent with PAN 0.9.3cvs running on Mandrake Linux 7.2 with kernel 2.4.0-test11.

I had the old RS discone, too. They didn't have a top vertical element
but the 5/16" threaded "nub" is there for one. I've just built a
vertical element for it - out of PVC and some all thread. It hasn't
gone out in the wind yet.

Paul

47. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 09:03:32 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ph54nmt0@208.207.71.141>
Source record: 173321

Richard Harrison wrote:
>
> Dick Carrol wrote:
> "There are times when nothing else is applicable or workable." (Other
> than Morse, I suppose.)
>
> We can choose to ignore better digital modes, but they abound and they
> are more efficient and effective than Morse.
>

Rich, you just don't understand, and that is something that I *can* understand since you haven't experienced working Morse, at least to any extent.
There is a letter to the editor in the new issue of QST which illustrates what I'm speaking of. Describing how he'd heard that "CW gets through when other modes can't", the ham said he had finally saw it it action. He was in SSB QSO with a ham friend on 40 meters when the other station faded to where he lost copy and could't tell what was being said at all. At that point he heard the other station on the frequency on CW, weak but readable, sending "3990, 3990". So he switched to 75 meters on 3990 khz and there his friend was, on SSB, and they then completed their contact.
So - what other mode would have accomplished the same thing in the same way? RTTY? PACTOR? CLOVER? SSTV? PSK31? MFSK16? Don't think so. With no preset arrangements that dictate what other mode they should go to, and no time to make them,(even if equal gear was present on both ends) only a quickly implemented, universally understood media could serve. Any other signal that appeared wouldn't have been understood and copied. Certainly it wasn't anything earthshaking, just a clear illustration of one of the unique characteristics of radiotelegraph communications. When it is widely known it can quickly and easily be used. No other mode is so elegant in its simplicity and flexibility.
There's no question that other modes are more efficient and for most uses in most cases, better suited. That's progress. But progress doesn't change the attributes of CW.

73, Dick W0EX

48. Re: Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 09:08:57 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92phf9nmt1@208.207.71.141>
Source record: 173322

Phil, try http://www.alphalink.com/au/~parkerp/lma.gif

It's about as small as they get.

73, Dick W0EX

Phil wrote:
>
> Hello,
>
> Does anyone has URL that points to very small antenna tuner/matcher.
> I want to take a very small model along in my luguage on holidays.
> I need to tune rondom wire against RF ground ...
>
> Thanks !
> Phil
> ON4BAW@pandora.be

49. Re: Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 09:34:17 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3A504E5B.6194E04A@earthlink.net>
Source record: 173323

Phil,

What power level do you want to use? For QRP, a home-made solenoid or toroid inductor mounted on a multi-pole rotary switch, and tuned as an L-match with a receiving capacitor, will tune almost any wire you cam throw out the window, within reason. With two caps, as a pi-match, this is also suitable when you need only tune out small mismatches or reactances even at the 100 watt level. The size for such a tuner will perhaps run around 5 by 8 by 8 cm. A higher voltage output capacitor will of course be needed at the 100 watt level with high-impedance antennas, and increases the size. However, using transmission-line transformers to match impedance, and coil and cap to match only reactance, might shrink the capacitor required.

Cortland

Phil wrote:

> Hello,
>
> Does anyone has URL that points to very small antenna tuner/matcher.
> I want to take a very small model along in my luguage on holidays.
> I need to tune rondom wire against RF ground ...
>
> Thanks !
> Phil
> ON4BAW@pandora.be

50. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 11:42:49 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92pvsn$21l$1@lure.pipex.net>
Source record: 173326

"Wes Stewart" wrote
> >Of course some of us have been around long enough to have done it;
> > not just read about it.
>
> I have done it too. However, I used *silver-bearing solder*, not silver
solder
> like I use to solder copper pipe with a MAPP torch.

Sorry that was not directed at anyone in particular Wes,
just one of those generalities.
Only the names have been changed to protect the innocent.
I thought it was the three wise men that came bearing gifts. ;)

Of course you are quite correct about my slack use of the words
"Silver-Solder", I'm afraid you'll have to put that down to the common usage
of that time, a sort of jargon/ shorthand used by insiders and taken to mean
"Silver Baring Solder".

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

51. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 11:54:29 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92pvsp$21l$2@lure.pipex.net>
Source record: 173327

Thanks Bill nice informative post,

> As to the 'Lead poisoning', I may have been more at risk than you- at
> one time- MANY years ago, I used white lead in some activities.
> We were very ignorant, and I now find that scary.

Well Bill you'll have an excuse, unlike me a bit ecentric,
(runs in the family I'm afraid), but the less charitable might say,
"just plain barmy". ;)
As for being ignorant back then, what about the open wide mouthed bottles of
Benzine and Carbon Tet that used to adorne our work benches.
The Certification that NASA required was for all Technical personelle even
if they rarely did any bench work. This happened one day aftera conversation
with my Boss and a few other engineers. I casually said that although I had
been permitted to design things in the aerospace Industry they were wise
enough to not lket me loose with a soldering Iron even thoughh I had passed
the RAF Workshops p[ractices with flying colours. About three weeks elapsed
and all personell were sent on courses a few at a time for a week each. It
made a nice break from the inevitable shift work that goes along with
tracking spacecraft in interplanetary space.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

52. vertical antenna phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 12:31:29 UTC
From: "Larry D. Clark" <me@nowwhere.com>
Message-ID: <3A5078A1.D12958A3@swbell.net>
Source record: 173324

hi

wonder if someone could point out a
url that has a practical discussion on
how to properly connect a pair of
vertical antennas so that the result is
as uni-directional as possible.

tnx

73
kd5foy
em12

53. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 12:32:17 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92qqc0$4l2$1@neptunium.btinternet.com>
Source record: 173282

Jim, I'm not joking. Try my suggestion. It really does
work.

Reg
http://www.btinternet.com/~g4fgq.regp

****
Jim wrote ..
> ok guys, i am not kidding. this antenna works great even
though everyone
> says it wont work at all. it is for receive only and is
laid right on
> the ground. it is very low noise (even if it is low gain i
need all the
> noise rejection i can get) i use it for listening to
shortwave with my
> portable radio. in my circumstance it is far superior than
several
> "better" antennas that i have available, and it is very
convenient to
> lay out anywhere its needed. i just thought i would run
some ideas past
> you, i didnt mean to spill any "snake oil"
>

54. W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 13:09:32 UTC
From: fractenna@aol.com
Message-ID: <20010101080932.03760.00000128@ng-cd1.aol.com>
Source record: 173325

>
>Fractenna wrote:
>>
>> >All the deadlines have come and gone. The letter he or his alleged
>> >lawyer allegedly sent never arrived. (I'm franky disappointed. I was
>> >looking forward to it.)
>>
>> Mr. Lewallen--
>>
>> This is your last opportunity to remove the copyrighted MI2 file from your
>web
>> site. You have pirated this file, which belongs to me.
>>
>> As of today, any and all copyright violations will initiate legal actions.
>>
>> Nathan Cohen. Ph.D.
>
>Sorry, Chip. You've used up what remaining credibility you had. Too many
>"last opportunities" have come and gone, and your threatened legal
>actions are nothing but bluster.
>
>I do not have, nor have I ever had, any material on my web site for
>which you hold the copyright. If you did have the fortitude to sue me,
>I'd be glad to let you try to prove otherwise. But you don't.
>
>Roy Lewallen, W7EL
>

Mr. Lewallen--

You will be receiving two legal notices.

The first concerns your pirating and of copyright material held by me and the second is for libel and malicious harrassment.

Your assertion that I have NO credibility is a direct and focused public attack, malicious libel to undermine my abililty to practice in the applied physics field, specifically in antenna design and electromagnetics.

You will be served with legal and public notices within the next two weeks, unless you now STOP ALL malicious libel and harrassment and REMOVE the MI2 file from your commercial web site.

Nathan Cohen, Ph.D.

55. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 13:25:31 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A50854B.9010306@hiwaay.net>
Source record: 172826

Fracky- How is your lawyer going to file against Lewallen, when he is busy preparing the suit against me, for similar charges, that you promised in off-NG posts to me. I would appreciate learning the name of your lawyer (not Kaufmann, surely) so I can streamline the response of my team.
Frankly, we are looking forward to the action, because we stand to win $$$ in our counter suit. The evidence is pretty clear, and we only need a real filing on your part to proceed.

Have a good year- Hope this helps.

Bill-W4BSG

Fractenna wrote:

>> Fractenna wrote:
>>
>>>> All the deadlines have come and gone. The letter he or his alleged
>>>> lawyer allegedly sent never arrived. (I'm franky disappointed. I was
>>>> looking forward to it.)
>>>
>>> Mr. Lewallen--
>>>
>>> This is your last opportunity to remove the copyrighted MI2 file from your
>>
>> web
>>
>>> site. You have pirated this file, which belongs to me.
>>>
>>> As of today, any and all copyright violations will initiate legal actions.
>>>
>>> Nathan Cohen. Ph.D.
>>
>> Sorry, Chip. You've used up what remaining credibility you had. Too many
>> "last opportunities" have come and gone, and your threatened legal
>> actions are nothing but bluster.
>>
>> I do not have, nor have I ever had, any material on my web site for
>> which you hold the copyright. If you did have the fortitude to sue me,
>> I'd be glad to let you try to prove otherwise. But you don't.
>>
>> Roy Lewallen, W7EL
>>
>
>

>
> Mr. Lewallen--
>
> You will be receiving two legal notices.
>
> The first concerns your pirating and of copyright material held by me and the
> second is for libel and malicious harrassment.
>
> Your assertion that I have NO credibility is a direct and focused public
> attack, malicious libel to undermine my abililty to practice in the applied
> physics field, specifically in antenna design and electromagnetics.
>
> You will be served with legal and public notices within the next two weeks,
> unless you now STOP ALL malicious libel and harrassment and REMOVE the MI2 file
> from your commercial web site.
>
> Nathan Cohen, Ph.D.

56. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 13:35:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A50878C.E35A138D@IEEE.org>
Source record: 173328

Richard Harrison wrote:
> Trying to use Morse to compete with modern data transmission is
> equivalent to showing up at a gun fight with a knife.

Can you imagine r.r.a.a implemented using Morse code?
--
http://www.mindspring.com/~w6rca

57. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 13:46:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A508A50.BE6855D@IEEE.org>
Source record: 173329

Dick Carroll wrote:
> Certainly it wasn't anything earthshaking, just a clear illustration
> of one of the unique characteristics of radiotelegraph communications.

I've done the same thing that guy did, switching to CW when SSB failed. If I had never known Morse code, would my life have turned out any differently? Not appreciably. If Morse code had not been fun for me, would it have been worth it over the past 50 years? Nope.

I've had PACTOR II QSOs when CW QSOs would have been impossible. That's not earthshaking either. It's simply freedom of choice of modes within amateur radio. Seems the argument is a lot like abortion - either pro-choice or pro-Morse with the pro-Morse side relying primarily on emotions.
--
http://www.mindspring.com/~w6rca

58. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 14:11:25 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A509012.D439F157@att.com>
Source record: 173330

Jim Jerzycke wrote:
>
> Didn't expect so many people to jump in with other ideas. All we did was
> insert a Radio Shack 273-1374 as an isolation transformer between the
> sound card inout and rig audio output. The noise problem went away, and
> we never bothered to "Engineer" it to death.
> Jim

Thanks for the suggestion Jim. Looks like radio shack will sell another
transformer today... if they're open today. ;-)

Later

59. Suits by Fracky

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 14:38:22 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A50965E.6060204@hiwaay.net>
Source record: 173331

I am not sure how Cohens legal assistants are going to hold up, this year. He has promised several suits, if certain actions are either not stopped, or stopped, (depending on the sue-ee). It looks like a full calendar, with the promised suits, and the certain counter-suits (could be a real cash-cow).
busy-busy-busy.

Bill

60. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 14:45:59 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92q560$q15$1@slb7.atl.mindspring.net>
Source record: 173332

Counterpoise:

Another name for "the other half of the antenna".

As "The Bard" wrote centuries ago...

"A rose by any other name".

A counterpoise can be made of approximately 1/4 electrical wave of wire, or of some lumped elements, or some, or any combination thereof. It should really be placed as high as possible since... it will radiate. Many just lay it "on the ground".

Heh, heh. But anything works if it gets you "on the air".

By whatever means, just make the counterpoise, electrically speaking, as much like the "missing" half of the antenna as you can.

All else is a compromise!

-Peter K1PO, Cary, NC

"Jim" <inagaddadavida@webtv.net> wrote in message
news:27453-3A5002EF-91@storefull-115.iap.bryant.webtv.net...
> ok, ignore the snake for now. someone take me to school on making an
> artificial ground or a counterpoise. does it have any relationship in
> size or length to the antenna element? is one wire all thats needed or
> is several wires laid out like radials more effective? what can be
> expected of the effectiveness of this scheme as compared to a good earth
> ground rod? and what is the comparison of a random wire with a
> counterpoise as compared to an equal amount of wire in a balanced format
> such as a dipole?
>

61. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 14:55:45 UTC
From: richardharrison@webtv.net
Message-ID: <5397-3A509A71-2@storefull-118.iap.bryant.webtv.net>
Source record: 173336

Dick Carroll wrote:
"He was in SSB QSO with a ham friend on 40 meters when the other station faded to where he lost copy and couldn`t tell what was being said at all. At that point he heard the other station on the frequency on CW, weak but readable, sending "3990, 3990".

Interesting because it is atypical. These guys just waited too long to make their move. It`s their fault they didn`t recognize deteriorating band conditions and make their move sooner.

First, losing contact is usually no big deal because ham conversations are limited to trivia by the rules except for emergency traffic.

Second, fading is usually a come and go situation during the transitional period until a more stable open or closed band period is reached. There are usually opportunities to agree on where to go to continue the conversation, without ever resorting to a different mode.

If maintaining contact is important to the operators, they can prearrange a fall-back strategy for a complete cover-up or fade-out.

Best regards, Richard Harrison, KB5WZI

62. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 14:58:36 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92qb8f$6pt$1@lure.pipex.net>
Source record: 173343

```
"Richard Harrison" wrote
> Jerry, W7WPX wrote:
> "Why is it then most (all) commercial HF sites use 120 radials?"
>
> Broadcasters on the medium-waves use 120 radials because it is
> economical for them to seek perfection and avoid FCC problems. HF sites
> rarely use radials because nearly all use horizontal antennas. HF users
> aim at the sky, not the horizon.
>
> Brown, Lewis, and Epstein tested the effects of numbers of radials at 3
> MHz. This was about 70 years ago.
>They tried various lengths of radials and various heights of antennas.
> Ed Laport summarized their results in
> "Radio Antenna Engineering" on pages 119 and 120.
>
> Ed concludes that 1/2-wavelength from the antenna base
> is far enough to extend radials.
> In fact, he says that 0.4 wavelength and 120 radials are
> points of diminishing returns.
```

Which the data confirms. What he might have given in the 1930s for some of
our modern precision instrumentation. Though the experimenters rigor seems
to have improved inversly to the precision of the available instrumentation.
I guess we have all become a little blas .

```
> From one of Laport`s graphs, here are data for a 1/4-wave vertical
> antenna at 3 MHz using different numbers of 0.412-wavelength radials.
> Field strengths in millivolts per meter were measured at one mile.
>
> n mv
> 2 120
> 15 155
> 30 170
> 60 180
> 113 185

Very interesting looking at those figures in a slightly different way could
be useful as to why all observers experience was not identical.

| | improvement |
n | signal | inc. | total |
2 | 120 mV | 0.0 dB | 0.0 dB |
15 | 155 mV | 2.2 dB | 2.2 dB |
30 | 170 mV | 0.8 dB | 3.0 dB |
60 | 180 mV | 0.5 dB | 3.5 dB |
```

113 | 185 mV | 0.2 dB | 3.8 dB |

Obviously the observer that increased the number of radials from the basic two current sink to 15, was immediately rewarded by observing an increase of 2.2 dB

But as the process continues the observed improvement starts to diminish below the precision of measurement.

How recently was this experiment repeated using modern instrumentation?

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

63. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 14:58:45 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92q5rt$t1a$1@slb6.atl.mindspring.net>
Source record: 173333

Roger:

Amen.

-Peter K1PO, Cary, NC

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:1BS36.855$8r2.97337@newshog.newsread.com...
> Roger Halstead (K8RI) www.RogerHalstead.com
> N833R World's Oldest Debonair? s# CD-2
>
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> news:92onqrssj1@slb7.atl.mindspring.net...
> > Rick:
> >
> > Heh, heh. I heartily support your last contention. It's dammed hard to
> > make a profit serving the amateur radio market!
>
> At one time it was not a bad buisness, but that was prior to 1980.
>
> In the 60s and early 70s it was apretty good business, but from the mid
70s
> it was a steep down hill slide.
>
> Back in those days you could take a trailer load of gear to a swap and go
> home with a lot of cash. People paid with the long green, not checks or
> credit cards and not much was on credit.
>
> Many a time I took all I could to a swap, or convention and brought home
> only cash. The problem with the bigger swaps and conventions was being
able
> to take "enough" to last through the day as we'd usually run dry shortly
> past noon.
>
> Now days, by shortly past noon, every one has gone home.
> >
> > Being engaged in the commercial "for profit" electronics and
> communications
> > business for the last xx years or so... I can readily testify that in
> > comparison to the commercial possibilities... [cfr Cisco Systems, et
> al...
> > listed on NASDAQ]...
>
> True, but only a tiny percentage are the Ciscos of the world.
>

> I found that consulting in specialized areas can be extremely lucrative,
> *IF* the individual is willing to put in the hours and days and weeks and
> months...
>
> Working in computers and Laboratory Information Management Systems (LIMS)
> for the medical industry (with FDA Valadation) in particular is almost as
> specialized as programming directly in machine code. Man! Talk about
> documentation and change control <:-))
>
> Compareing these jobs with amateur radio sales and service is almost
> impossible. It's not that they are not in the same league, they are in a
> different world.
>
> The only thing they have in common is that they require dedication and
long,
> very long hours. Often 7 days a week and little time for yourself.
>
> There the simularity ends with one almost requiring a second job and the
> other paying near the top of the individual pay scales.
>
> Roger (K8RI)
> >
> > Serving the amateur radio marketplace with either equipment or
> publications
> > is not an attractive business!
> >
> > I often shudder when I hear folks saying that some of our hobby's
> > manufacturers and publishers are ripping us off!
> >
> > Heh, heh. Even though I could do that, by choice I participate in the
far
> > more lucrative professional commercial markets.
> >
> > Take it from me, no one, repeat no one... is getting rich serving the
> > amateur radio community. The volumes are far too small, and the
> willingness
> > to pay is far too low!
> >
> > Especially considering that one can make "real money" serving other
areas
> of
> > the electronics and communications markets using basically the same
> > technical and business qualifications as one needs to serve the amateur
> > market.
> >
> > For those so-called, "for profit" organizations currently continuing to
> > serve our hobby community, I say...
> >
> > THANKS... and well done for what is essentially a labor of love. Keep
it

> > up, and I for one will continue to try to support y'all with frequent
> > purchases...
> >
> > -Peter K1PO
> >
> >
> > "Rick Littlefield" <k1bqt@aol.com> wrote in message
> > news:20001229205310.05325.00000213@ng-fl1.aol.com...
> > > Sorry, in a way, I ever started this flap. Nobody--including the
ARRL's
> > "for
> > > profit" pulication department--is getting rich off ham radio. It was
a
> > > somewhat unfair of me to overplay the devil's advocate and suggest the
> > League
> > > is parlaying a fat profit by scaring the beeejezuz out of hamdom by
> > > disseminating technical information about RF exposure. They aren't.
> The
> > whole
> > > industry is struggling to survive right now, and any ham with a kid in
> > > engineering school knows the ARRL Handbook remains a "best buy".
> > >
> > > Rick K1BQT
> >
> >
>
>

64. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 15:03:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A509C45.7EB18C91@eznec.com>
Source record: 173334

I apologize to the newsgroup for my earlier posting. I should have continued to ignore him. I hate to see him continue his idle threats to others, given his unconsummated tirade against me, so in a moment of weakness and poor judgment I responded. And so now here we go again, and it's my fault. Sorry. I'll try not to weaken again.

We now return to our regularly scheduled programming. . .

Roy Lewallen, W7EL

Fractenna wrote:
>
>
> Mr. Lewallen--
>
> You will be receiving two legal notices.
>
> The first concerns your pirating and of copyright material held by me and the
> second is for libel and malicious harrassment.
>
> Your assertion that I have NO credibility is a direct and focused public
> attack, malicious libel to undermine my abililty to practice in the applied
> physics field, specifically in antenna design and electromagnetics.
>
> You will be served with legal and public notices within the next two weeks,
> unless you now STOP ALL malicious libel and harrassment and REMOVE the MI2 file
> from your commercial web site.
>
> Nathan Cohen, Ph.D.

65. Re: Suits by Fracky

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 15:07:11 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <o5146.5453$jl6.20511@newsfeed.slurp.net>
Source record: 173335

I get mine from MensWearHouse.

K3BHJ

66. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 15:21:23 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92qb8g$6pt$2@lure.pipex.net>
Source record: 173344

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:17805-3A4BB1D4-76@storefull-116.iap.bryant.webtv.net...
> Richard Clark, KB7QHC wrote:
> "Hmmm, on reflection, the logic above would suggest just the opposite
> insofar as "pushing" the distance out."
>
> Nice touch (on reflection). Richard was right the first time. It may be
> confusing as the angle the ray makes with the tower and the angle the
> ray makes with the ground must add to 90 degrees as long as the tower
> remains vertical.
>
> At the surface of the ground, the angle of incidence is equal to the
> angle of reflection, which is the take off angle for the ionosphere.
>
> My take off angle of 30 degrees needs a ray that makes an angle of 60
> degrees with the tower and this strikes the soil at an angle of 30
> degrees. So, it must depart, on reflection, at the same 30-degree angle.
>
> The greater the distance to be covered in one hop, the lower the angle
> that needs to be made with the ground at the launching. This means the
> tower is farther away from the reflection point than for shorter
> distance paths.

Are you suggesting that the tower should be tiltable and tipped in a certain
manner to obtain preferential radiation in a given direction at a given
angle? (where the Dx lurks)

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

67. Eggbeater Design????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 15:48:12 UTC
From: KF4LAT <kf4lat@hotmail.com>
Message-ID: <0F146.13385$Q9.3518826@ratbert.tds.net>
Source record: 173337

Are there any homebrew eggbeater designs out there? Primarily for 70cm, to be used for Satellite use.

Alex
KF4LAT
Nashville, TN, USA

68. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:00:44 UTC
From: richardharrison@webtv.net
Message-ID: <11129-3A50A9AC-10@storefull-112.iap.bryant.webtv.net>
Source record: 173338

Jim wrote:
"Is one wire all that is needed or is several wires laid out like
radials more effective?"

Perhaps the difference between a "radiating" wire and a counterpoise is that a radiating wire may induce a current in a receiving antenna.

Suppose you have a VHF ground plane (GP) transmitting antenna up high. A receiving antenna may be excited by the vertical element of the GP, but not by the radials of the transmitting antenna. Why? Because the displacement current in the transmitting GP is between the vertical and horizontal elements of the GP. It flows into and out of the various radials at the same times. That is, current is towards or away from the drivepoint simultaneously in all the radials. Seen from a distant vertical receiving antenna, the effects of various radial currents cancel. Currents from the right cancel currents from the left in producing external fields.

Replace the GP transmitting antenna with a vertical dipole. The lower half of the dipole is a radiating element and not a counterpoise. Displacement current flows away from one terminal of the feedpoint while flowing into the other feedpoint terminal. That means current flows in the same direction in both halves of the dipole. In the vertical dipole, the current in both halves is either up or down simultaneously. Seen from a distance, it could just as well be an end-fed wire. Both halves of the center-fed dipole equally contribute to the radiation total.

Happy New Year!

Best regards, Richard Harrison, KB5WZI

69. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:14:09 UTC
From: richardharrison@webtv.net
Message-ID: <11129-3A50ACD1-15@storefull-112.iap.bryant.webtv.net>
Source record: 173349

Someone wrote:
"If you must continue threatening me and others on the NG, then for crying out loud, please spell "harass" correctly."

You mean "harass" is not two words?

Happy New Year!

Best regards, Richard Harrison, KB5WZI

70. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:21:21 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <58246.73169$nM5.11922601@news02.optonline.net>
Source record: 173339

Jim,

I use one as well and they do work. The main discussion on them seems to revolve around a couple of points:

1) Do you terminate the far end or short it ? This probably changes the directional properties of the antenna and obviously changes it's impedance.

2) Do you break the shield at some point ? This is by analogy with a magnetic loop and I have not seen any real data on it's advantages.

3) Real good coax or crummy stuff ? Aluminum wall hardline is one extreme, foil jacket LAN coax is probably the other extreme. One group seems to like the "leaky line" effect of the foil jacket the other group seems to like the improved shielding.

Right now I have mine terminated, with an unbroken shield using fairly good coax. Next up will be a couple of hundred feet of hardline ....

Enjoy!

Bob

KB8TQ

"Jim" <inagaddadavida@webtv.net> wrote in message news:27457-3A4FFEF7-1@storefull-115.iap.bryant.webtv.net...
> ok guys, i am not kidding. this antenna works great even though everyone
> says it wont work at all. it is for receive only and is laid right on
> the ground. it is very low noise (even if it is low gain i need all the
> noise rejection i can get) i use it for listening to shortwave with my
> portable radio. in my circumstance it is far superior than several
> "better" antennas that i have available, and it is very convenient to
> lay out anywhere its needed. i just thought i would run some ideas past
> you, i didnt mean to spill any "snake oil"
>

71. Learning Morse Code opinion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:21:30 UTC
From: Pete <pete@etep.com>
Message-ID: <e8246.51583$36.1776511@news1.rdc1.il.home.com>
Source record: 173340

I know this is the so-called digital age and code is old-fashioned, but it still is fun to fool around with.
A lot of you have a great fear of learning code. I really can't understand why. It doesn't brother me that they did away with it on tests and I don't begrudge any of you for not wanting to learn it, that's your business. I have been a ham for over 20 years and I enjoy fooling around with it. I am still not real good at it, but I think it's fun to connect with someone out in Tim Buckto who's running 2 watts. I don't care for the speed jockeys out there who try to impress us all with their lighting speed. They don't impress me at all, and all they are doing is showing off when they contact you. I stick to the Novice bands when I use code.
At your convenience, you ought to think about learning it. It really is fun to experiment with it. There are translating programs available that will print out on the code you receive your PC monitor.
My 2 cents worth on this ongoing code controversy. 73's - Pete
WD9ALM

72. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:23:35 UTC
From: fractenna@aol.com
Message-ID: <20010101112335.11817.00000872@ng-cd1.aol.com>
Source record: 173341

>I apologize to the newsgroup for my earlier posting. I should have
>continued to ignore him. I hate to see him continue his idle threats to
>others, given his unconsummated tirade against me, so in a moment of
>weakness and poor judgment I responded. And so now here we go again, and
>it's my fault. Sorry. I'll try not to weaken again.
>
>We now return to our regularly scheduled programming. . .
>
>Roy Lewallen, W7EL
>
>Fractenna wrote:
>>
>>
>> Mr. Lewallen--
>>
>> You will be receiving two legal notices.
>>
>> The first concerns your pirating and of copyright material held by me and
>the
>> second is for libel and malicious harrassment.
>>
>> Your assertion that I have NO credibility is a direct and focused public
>> attack, malicious libel to undermine my abililty to practice in the
>applied
>> physics field, specifically in antenna design and electromagnetics.
>>
>> You will be served with legal and public notices within the next two
>weeks,
>> unless you now STOP ALL malicious libel and harrassment and REMOVE the MI2
>file
>> from your commercial web site.
>>
>> Nathan Cohen, Ph.D.
>
>
>
>
>
>
>

Now you need to remove the MI2 file.

NC

73. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:26:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A50AFAE.313EE5CE@dvol.com>
Source record: 173342

Reg Edwards wrote:

> Jim, have you tried laying your antenna along the bottom of
> straight trench about 18" deep. It will be at least 10dB
> quieter and well worth the hard labour if its quietness you
> are looking for. Double-screened coax works even better
> especially when Nichrome wire is used for the inner
> conductor.

>
Reginald, you're being Reg again . . .

>
>
> A peaceful and prosperous New Year to all.

>
In THIS newsgroup? You jest of course.

>
> ---
> Reg

>
w3rv.

74. Re: Need UHF TV Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:31:11 UTC
From: bzd9 <bzd9@yahoo.com>
Message-ID: <3A50AFD5.D2D0CB82@yahoo.com>
Source record: 173345
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.electronics.basic

Couple of things to try.

You don't state whether or not you have a rotator or where you the the stations are located. Either install a rotator or rotate the antenna to improve this channel. You will have to determine the sacrifice for the other channels.

Try a mast mounted pre-amp, but go to a TV Parts and supply house. The AMPs will be better quality than Radio Shack, but Radio Shacks' are OK. This is less massive to install than a larger antenna.

Last, if possible, bump it up another 5-10 feet (1.5-3 meters). Sometimes additional height will help. Again, I don't know if you are in a deed restrict development limiting you to 6 feet above the tallest peak of the house.(FCC preemption)

Finally try a better antenna. But be careful and have help or have it done professionally. Standing on a roof and trying to manage a bulky antenna can be more than one person can handle.

Good luck and 73's

Dennis WB3KUM/9

75. Re: Eggbeater Design????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:34:23 UTC
From: Ash <abuse@gravitywell.org>
Message-ID: <3A50B22C.BF26105B@gravitywell.org>
Source record: 173346

Yeah, http://members.aol.com/k5oe/index.htm

http://members.aol.com/k5oe/eggbeater.htm
http://members.aol.com/k5oejerry/eggbeater2.htm

I made the eggbeater2 for 137mhz and it worked great...

KF4LAT wrote:

> Are there any homebrew eggbeater designs out there? Primarily for 70cm, to
> be used for Satellite use.
>
> Alex
> KF4LAT
> Nashville, TN, USA

76. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:36:39 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <rm246.5832$0s3.410322@typhoon.columbus.rr.com>
Source record: 173348

The "snake" works as well as any wire laying on the ground,
and sometimes that's better at defeating noise problems
than any conventional antenna you might have available.

There's nothing magical about it.

It doesn't need the terminating resistor. It doesn't need to be made
of coax. Just lay an insulated wire in the grass in a straight line
as long as possible. Keep it as far away from the transmit antenna
and other vertical antennas as possible.

If long enough, it acts as a "very low bi-directional Beverage".
It will provide far weaker signals to the receiver than a
Beverage which is off the ground 3 to 12 feet.

When my Beverages are down for the season, I have laid
such a wire on the grass for a DXpedition and had it make
the difference between hearing and not hearing the DX.

In low band recieiving, more receiving antennas is better. Try
everything. Sometimes the 10m yagi will receive a 160m
station better than the 160m transmit antenna or a short Beverage.

73/HNY
--
Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
USPSA # L-1192 NROI/CRO Amateur Radio K8ND
Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass

"Jim" <inagaddadavida@webtv.net> wrote in message
news:29958-3A4F7EEA-33@storefull-116.iap.bryant.webtv.net...
> i have been using a "snake" antenna made of 100 feet of coax, terminated
> with a 75 ohm resistor. the termination is supposed to keep a resistive
> load no matter what the frequency presented. the use of coax shield as
> the element is supposed to act as some sort of impedance transformer.
> the shield picks up signal but yet it is its own transmission line at 75
> ohms. this holds the impedance to 75 ohms when the random length of
> antenna should be thousands of ohms. is this all crap? most people tell
> me that it is crap, but this antenna works very well for rx. i have
> several antennas to use but i only seem to use the snake anymore. (i
> have a severe noise problem here) essentially i have a random wire with
> coax shield as the element. it works better with a earth ground but
> thats not portable. so i thought about a counterpoise, to improve ground
> but no need to drive a rod.......then i thought "what is a random wire
> with a counterpoise? its a dipole!" a snake dipole? hmmmmmm. what do you
> guys think of all of this? is there any benefit or difference between

> the counterpoise and element design (unbalanced hertz type?) or the
> dipole, with both elements being equal coax elements? (balanced antenna)
> what impedance at the feed point? (2 elements at 75 ohms each, connected
> to a feedline. 37 ohms? 150 ohms?) will the dipole be as wide band as
> the random wire? ouch! owww! my head hurts! opinions please......
>

77. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:36:40 UTC
From: richardharrison@webtv.net
Message-ID: <7382-3A50B218-41@storefull-117.iap.bryant.webtv.net>
Source record: 173350

Fractenna wrote:
"Bernard Goetz and god knows who else and how many ham killers. It`s scary."

To be expected from members of ARRL, founded by H.P. Maxim, an international arms dealer who invented the single-barrel machine gun.

Bernard Goetz should have been awarded a medal and big prize. It was time for defense.

Happy New Year!

Best regards, Richard Harrison, KB5WZI

78. Re: Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:42:18 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A50B36A.CA238E04@dvol.com>
Source record: 173347

Dick Carroll wrote:

> Phil, try http://www.alphalink.com/au/~parkerp/lma.gif

>
Link doesn't work here Dick.

79. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:49:14 UTC
From: HHoover <jponkey@mediaone.net>
Message-ID: <ey246.33605$ZC4.1299071@typhoon.mw.mediaone.net>
Source record: 173351

to the best of my knowledge, all of about 6 months worth now, a counterpoise for a vertical antenna is an attempt to "convince" the antennait has a vehicle underneath it, as a car is a counterpoise on a cb antenna. the study book "Now You're Talking" has the discussion that i found most benneficial.

"Jim" <inagaddadavida@webtv.net> wrote in message news:27453-3A5002EF-91@storefull-115.iap.bryant.webtv.net...
> ok, ignore the snake for now. someone take me to school on making an
> artificial ground or a counterpoise. does it have any relationship in
> size or length to the antenna element? is one wire all thats needed or
> is several wires laid out like radials more effective? what can be
> expected of the effectiveness of this scheme as compared to a good earth
> ground rod? and what is the comparison of a random wire with a
> counterpoise as compared to an equal amount of wire in a balanced format
> such as a dipole?
>

80. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:51:48 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A50B5A4.6050504@hiwaay.net>
Source record: 172827

Why should Mr. Lewallen do that? The file he hosts is not your
copyrighted file. You have no rights there, at all. I have seen yours
and I have seen his, and they are not the same, unless you have copied
his into your site, since I looked.
Fractenna wrote:

> Now you need to remove the MI2 file.
>
> NC

81. Re: Learning Morse Code opinion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 16:56:12 UTC
From: richardharrison@webtv.net
Message-ID: <7383-3A50B6AC-12@storefull-117.iap.bryant.webtv.net>
Source record: 173357

Pete wrote:
"I know this is the so-called digital age and code is old-fashioned, but
it still is fun to fool around with."

Enjoy!

I can do code around 20 wpm but find no fun in it.

Happy New Year!

Best regards, Richard Harrison, KB5WZI

82. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:01:27 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <HJ246.69682$A06.2295599@news1.frmt1.sfba.home.com>
Source record: 173352

A short snake story:

A couple of months ago I put up a new Beverage antenna and went into the shack to check it
out. It didn't seem to work normally, but in listening around, I got really great reception on
one particular station compared to the 90 foot vertical. Turns out the coax was shorted at
the far end; I had accidentally created a snake antenna! I later determined that by lowering
my Beverage antennas to 2 feet (instead of 10 feet) I could get snake like performance
consistently, but without the extremely low signal levels of the snake. As other posters
have pointed out, there is nothing magic about coax and you could just as well use hook up
wire to make a snake.

Rick Karlquist N6RK

Bob Camp <bob@cq.nu> wrote in message
news:58246.73169$nM5.11922601@news02.optonline.net...
> Jim,
>
> I use one as well and they do work. The main discussion on them seems
> to revolve around a couple of points:
>
> 1) Do you terminate the far end or short it ? This probably changes
> the directional properties of the antenna and obviously changes it's

83. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:01:33 UTC
From: k1bqt@aol.com
Message-ID: <20010101120133.19231.00000641@ng-fm1.aol.com>
Source record: 173353

Chip--

I checked the archives. The "mountain man" statement was, in fact, authored by fractenna and posted on the 28th. Of course, you knew that all along!

Perhaps Suskind wrote it, perhaps you wrote it, and perhaps your dog wrote it. It really doesn't matter because there's no way you can prove to me or anyone else you weren't the real author. This ambiguity has less to do your voracity than with the irresponsible way you manage your fractenna account.

Suppose Suskind DID compose it, as you may claim? Even if true, did you not offer, pay for, and condone his use of your account, company name, and keyboard without regard for content or restriction?

The fact is, without your complicity, encouragement, and possibly even direct authorship, the "mountain man" message would never have been posted on this newsgroup in association with you. In the end, you were ultimately responsible for its appearence, you should have know better, you DO know better, and I retract nothing.

Mr. McDermott's story should warn us all that persuing an adversarial solution to set things right most often yields bitter fruit for the person who persues it. In the new year, you might wish to reflect upon Roy's sage advice...and heed it.

73 and Happy New Year

Rick K1BQT

84. i hope this is a simple one...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:07:42 UTC
From: HHoover <jponkey@mediaone.net>
Message-ID: <yP246.33611$ZC4.1301740@typhoon.mw.mediaone.net>
Source record: 173355

my wife is scared of me knocking down wires with my r-5 mounted to a 15'
mast on a tripod.
i plan on mouting it in the backyard til spring until i can get on the roof.
my question is, how do i mount the tripod to the ground? safley of course
so that it can withstand, say. a 45 mph breeze.

thanks in advance
Joe
KC8PBN

85. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:08:25 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qdi9$k4h$0@208.207.71.152>
Source record: 173354

Cecil wrote:
>
> Dick Carroll wrote:
> > Certainly it wasn't anything earthshaking, just a clear illustration
> > of one of the unique characteristics of radiotelegraph communications.
>
> I've done the same thing that guy did, switching to CW when SSB failed.
> If I had never known Morse code, would my life have turned out any
> differently? Not appreciably. If Morse code had not been fun for me,
> would it have been worth it over the past 50 years? Nope.
>
> I've had PACTOR II QSOs when CW QSOs would have been impossible. That's
> not earthshaking either. It's simply freedom of choice of modes within
> amateur radio. Seems the argument is a lot like abortion - either pro-
> choice or pro-Morse with the pro-Morse side relying primarily on
> emotions.
>

So then you support criticism of CW on "the facts" when the speaker
really doesn't know enough about it nor have the experience to know how
it really works? That surely is an odd position for one who purports to
be a scientist who deals in facts.
No one has said that people who don't like code must use it. Not even
the FCC. What we do insist on is that they not assert as fact positions
which are not factual. When the assertion is made that just because CW
is old and better modes are often available, that no one ever needs it
or finds it useful for real, live communications, that is simply not
factual. And not just by amateurs.
The Interstate Police Communications Network used HF radiotelgraphy
into the early 70's for longhaul traffic handling even though RTTY had
been around for decades. I was a part of the technical crew that removed
the CW gear from the State HQ station in 1975 after it was finally
completely phased out. Even though our state had not used it internally
since 1965, we still relayed for other states which did, into the early
70's. If anyone is interested references are available
If you hadn't noticed, there has been an awful lot of that sort of
criticism taking place in recent years, aided and abetted by the likes
of you. I guess you've got to protect your professionmal reputation as a
techie, if you were viewed by your peers as a supporter of "Luddite"
systems it just wouldn't do your technical reputation much good. I can
understand that.
But facts are facts.

86. Lubricating Galvanized Aircraft Cables

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:10:07 UTC
From: Donald Campbell <castles@jps.net>
Message-ID: <3A50B9DB.A8A88B0D@jps.net>
Source record: 173356

I just installed new winch cables on my US Tower. Should I lubricate the galvanized cables or leave them dry?

Thanks, Don W6QEY

87. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:23:55 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92qefp$e2t$1@iac5.navix.net>
Source record: 173358

And I thought this may be the year you grow up and quit acting like a two year old, better luck in 2002.

If you sue everyone on this newsgroup that thinks you have no credibility, the line is long and illustrious. You best get started.

--
We don't need guns against an oppressive government, because the Constitution has internal safeguards, and we should ban and seize all guns, therefore violating the 2nd, 4th, 5th and 9th Amendments of that Constitution, thereby becoming an oppressive government.

"Fractenna" <fractenna@aol.com> wrote in message news:20010101112335.11817.00000872@ng-cd1.aol.com...
> >I apologize to the newsgroup for my earlier posting. I should have
> >continued to ignore him. I hate to see him continue his idle threats to
> >others, given his unconsummated tirade against me, so in a moment of
> >weakness and poor judgment I responded. And so now here we go again, and
> >it's my fault. Sorry. I'll try not to weaken again.
> >
> >We now return to our regularly scheduled programming. . .
> >
> >Roy Lewallen, W7EL
> >
> >Fractenna wrote:
> >>
> >>
> >> Mr. Lewallen--
> >>
> >> You will be receiving two legal notices.
> >>
> >> The first concerns your pirating and of copyright material held by me and
> >the
> >> second is for libel and malicious harrassment.
> >>
> >> Your assertion that I have NO credibility is a direct and focused public
> >> attack, malicious libel to undermine my abililty to practice in the
> >applied
> >> physics field, specifically in antenna design and electromagnetics.
> >>
> >> You will be served with legal and public notices within the next two
> >weeks,
> >> unless you now STOP ALL malicious libel and harrassment and REMOVE the

MI2
> >file
> >> from your commercial web site.
> >>
> >> Nathan Cohen, Ph.D.
> >
> >
> >
> >
> >
> >
>
> Now you need to remove the MI2 file.
>
> NC

88. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:25:56 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qej4$o0h$0@208.207.71.152>
Source record: 173359

Richard Harrison wrote:
>
> If maintaining contact is important to the operators, they can
> prearrange a fall-back strategy for a complete cover-up or fade-out.

Yep, and if they haven't done that, and most ham contacts have not made those prearrangements since they're rarely needed, it sure is beneficial to be able to easily fall back on a mode that handily and quickly fills the need. And, of course, if it can be used at all it can be used for serious things, too. One doesn't always get to choose he mode or conditions under which one operates.
If someone calls a SSB station using CW with urgent traffic should he just ignore it since he didn't choose the mode?
Will CW ever "save the day"? Probably not, for sure not if all hams abandon learning it. But to deny its communications potential just because later modes exist is to ignore reality. Cessnas still play a transportation role even though 747's haul the big numbers.

73 Dick W0EX

89. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:30:10 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qer2$o0h$1@208.207.71.152>
Source record: 173360

If he's fool enough to follow through, I urge you to go after him,
legally.

Roy Lewallen wrote:
>
> I apologize to the newsgroup for my earlier posting. I should have
> continued to ignore him. I hate to see him continue his idle threats to
> others, given his unconsummated tirade a

90. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:33:36 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qf1g$o0h$2@208.207.71.152>
Source record: 173361

Richard Harrison wrote:
>
> Fractenna wrote:
> "Bernard Goetz and god knows who else and how many ham killers. It`s
> scary."
>
> To be expected from members of ARRL, founded by H.P. Maxim, an
> international arms dealer who invented the single-barrel machine gun.

Correction, Rich. It was ARRL founder H P Maxim's father who invented a machine gun, intending to make a weapon so terrible that war would be banned. As if.

>
> Bernard Goetz should have been awarded a medal and big prize. It was
> time for defense.

For sure.
> Happy New Year!
>
> Best regards, Richard Harrison, KB5WZI

91. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:36:39 UTC
From: richardharrison@webtv.net
Message-ID: <7382-3A50C027-42@storefull-117.iap.bryant.webtv.net>
Source record: 173362

Gary7SLL wrote:
"How recently was this experiment repeated using modern
instrumentation?"

I don`t know.

Richard Clark is probably as well qualified as anyone recently posting to this NG on the subject of measurements and may comment on probable accuracy the old guys got with the instrumentation available at the time. He surely knows a lot more than I do.

Logically, during the last 70 years, many would have verified the data or challenged them. That the work of Brown, Lewis, and Epstein has not been superseded by broadcasters trying to save a dollar, or make mischief for their competitors, says something about its accuracy.

Happy New Year.

Best regards, Richard Harrison, KB5WZI

92. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:48:19 UTC
From: just lil ole me <jponkey@mediaone.net>
Message-ID: <Dp346.33619$ZC4.1307024@typhoon.mw.mediaone.net>
Source record: 173363

sorry
the page number is 9-13

"HHoover" <jponkey@mediaone.net> wrote in message
news:ey246.33605$ZC4.1299071@typhoon.mw.mediaone.net...
> to the best of my knowledge, all of about 6 months worth now, a
counterpoise
> for a vertical antenna is an attempt to "convince" the antennait has a
> vehicle underneath it, as a car is a counterpoise on a cb antenna. the
> study book "Now You're Talking" has the discussion that i found most
> benneficial.
>
>
>
>
> "Jim" <inagaddadavida@webtv.net> wrote in message
> news:27453-3A5002EF-91@storefull-115.iap.bryant.webtv.net...
> > ok, ignore the snake for now. someone take me to school on making an
> > artificial ground or a counterpoise. does it have any relationship in
> > size or length to the antenna element? is one wire all thats needed or
> > is several wires laid out like radials more effective? what can be
> > expected of the effectiveness of this scheme as compared to a good earth
> > ground rod? and what is the comparison of a random wire with a
> > counterpoise as compared to an equal amount of wire in a balanced format
> > such as a dipole?
> >
>
>

93. Re: Need UHF TV Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:53:47 UTC
From: Lenny <captainvideo46@hotmail.com>
Message-ID: <3A50C42B.708F@hotmail.com>
Source record: 173364
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.electronics.basic

bzd9 wrote:
>
> Couple of things to try.
>
> You don't state whether or not you have a rotator or where you the the
> stations are located. Either install a rotator or rotate the antenna to
> improve this channel. You will have to determine the sacrifice for the
> other channels.
>
> Try a mast mounted pre-amp, but go to a TV Parts and supply house. The
> AMPs will be better quality than Radio Shack, but Radio Shacks' are OK.
> This is less massive to install than a larger antenna.
>
> Last, if possible, bump it up another 5-10 feet (1.5-3 meters).
> Sometimes additional height will help. Again, I don't know if you are
> in a deed restrict development limiting you to 6 feet above the tallest
> peak of the house.(FCC preemption)
>
> Finally try a better antenna. But be careful and have help or have it
> done professionally. Standing on a roof and trying to manage a bulky
> antenna can be more than one person can handle.
>
> Good luck and 73's
>
> Dennis WB3KUM/9
You might try a yagi type of antenna. I used an eight bay years ago and
the gain characteristics on uhf are better with the yagi. The more
elements the better the gain. It is also more directional. A good preamp
with a LOW noise factor is also essential. Less than 3db would ba a good
choice as is a good quality double shield RG6U coax. All this leaves
Radio schlock COMPLETELY out of the picture. Winegard makes some
excellent commmercial antenna equipment.

94. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:54:25 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qg8heb0@208.207.71.152>
Source record: 173365

Jim wrote:
>
> ok, ignore the snake for now. someone take me to school on making an
> artificial ground or a counterpoise. does it have any relationship in
> size or length to the antenna element? is one wire all thats needed or
> is several wires laid out like radials more effective?

Here's the way I see it in lay language, not engineeringese.
The best possible counterpoise for a 1/4 wave vertical antenna would be
a
metallic disk a halfwave in diameter with the vertical element mounted
exactlhy in the center. From that, it goes downhill, but not fast at
all. Broadcasters use 260 quarterwavelength radials, but experts posting
here say that less than half that meny would do just as well, and the
extras are just insurance against
loss due to breakage, corrosion etc. When you've seen an AM BC radial
field that has been there for years, you see what they mean. Corrosian
is a way of life.
As a practical matter, most hams use four quarter wave radials. More is
better. Some investigators have said that more, shorter ones will work
nearly as well. Do the best you reasonably can.
Bottom line, install the best ground plane you can considering your
site, budget, interest and communications goals.

what can be
> expected of the effectiveness of this scheme as compared to a good earth
> ground rod?

It is surprising how nany hams sjust drive a ground rod at the base of
their vertical and go on the air with good success. NOT with maximixed
field strength.

and what is the comparison of a random wire with a
> counterpoise as compared to an equal amount of wire in a balanced format
> such as a dipole?

In my camping rig I use a 60 ft random wire, never above about 10 feet
high, tuned with an automatic tuner and use a 40 foot piece of magnet
wire lying on the ground for the counterpoise. (I have hooked to the
frame of the motorhome but got to thinking about the 40 gallons of
gasoline in the tank, and decided against it since it's not possible to
know just what voltages develop where, particularly with a
frequency-agile allband system).
I have no problem at all making all the contacts I want, in fact I get
reports comparible with my 50 ft dipoles I use at home.

Dick W0EX

95. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 17:56:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qgcreb1@208.207.71.152>
Source record: 173366

I believe it. Signal-to-noise ratio is much more important in your
circumstamces that signal levels, if there is enough signal to receive.
Plainly the snake antenna gives you an attractive s/n ratio.

Dick

Jim wrote:
>
> ok guys, i am not kidding. this antenna works great even though everyone
> says it wont work at all. it is for receive only and is laid right on
> the ground. it is very low noise (even if it is low gain i need all the
> noise rejection i can get) i use it for listening to shortwave with my
> portable radio. in my circumstance it is far superior than several
> "better" antennas that i have available, and it is very convenient to
> lay out anywhere its needed. i just thought i would run some ideas past
> you, i didnt mean to spill any "snake oil"

96. Re: Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:16:24 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qhho$443$0@208.207.71.152>
Source record: 173367

Brian Kelly wrote:
>
> Dick Carroll wrote:
>
> > Phil, try http://www.alphalink.com/au/~parkerp/lma.gif
>
> >
> Link doesn't work here Dick.

Yup, I blew it. Should be
http://www.alphalink.com.au/~parkerp/lma.gif

Tnx Brian. I know beteter than to fail to test one after I post it. :=)
(egg on face)

Dick

97. Re: i hope this is a simple one...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:21:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92qhqg$443$1@208.207.71.152>
Source record: 173368

Go to Home depot (or equvalent) and get three screw anchors, the sort
used to tie kids swing sets to the ground. They screw into the ground
and should do the job.

Dick

HHoover wrote:
>
> my wife is scared of me knocking down wires with my r-5 mounted to a 15'
> mast on a tripod.
> i plan on mouting it in the backyard til spring until i can get on the roof.
> my question is, how do i mount the tripod to the ground? safley of course
> so that it can withstand, say. a 45 mph breeze.
>
> thanks in advance
> Joe
> KC8PBN

98. Re: Cushcraft A3S Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:24:43 UTC
From: sweeneyj@voicenet.com
Message-ID: <3a50c95a.5551510@netnews.voicenet.com>
Source record: 173269

On Sun, 31 Dec 2000 03:25:29 GMT, Donald Campbell <castles@jps.net>
wrote:

>I am seriously considering the purchase of a Cushcraft A3S tri-bander.
>I would appreciate feedback from users of this antenna in terms of
>reliability of the traps and other hardware. Also performance
>experiences.
>
>Thanks and 73, Don W6QEY
>
Don: I also have the A3S and it has been up for several years. It
does fine, use it on 20, 15, and 10M. Consistently provides 1-3 S
units better signal than the trapped dipoles I also have for same
bands. Haven't checked SWR in so many years I can't comment
on that (guess it's time to check them). Antenna is only up about
45 feet but country count stands at 275, mostly worked on A3S.
73, Jim

99. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:36:46 UTC
From: fractenna@aol.com
Message-ID: <20010101133646.06630.00000566@ng-mb1.aol.com>
Source record: 173270

>
>Chip--
>
>I checked the archives. The "mountain man" statement was, in fact, authored
>by
>fractenna and posted on the 28th. Of course, you knew that all along!
>

Your statement ascribes the quote to "Dr. Cohen". Fractenna@aol.com is NOT a person. It is an ADDRESS. You know this well.

Repeat: I did NOT make this statement; I do not, in fact, agree with it; and your CONTINUED malicious assertion--posed publicly to deliberately make me look bad--
will lead to legal action.

Repeat: I did NOT make this statement. If I do not receive a retraction from you, immediately, I will proceed with legal notice, and then whatever else is needed to stop your endless, malicious harrassment.

Nathan Cohen, Ph.D.

100. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:38:23 UTC
From: fractenna@aol.com
Message-ID: <20010101133823.06630.00000567@ng-mb1.aol.com>
Source record: 173271

>Fractenna wrote:
>"Bernard Goetz and god knows who else and how many ham killers. It`s
>scary."
>
>To be expected from members of ARRL, founded by H.P. Maxim, an
>international arms dealer who invented the single-barrel machine gun.
>
>Bernard Goetz should have been awarded a medal and big prize. It was
>time for defense.
>
>Happy New Year!
>
>Best regards, Richard Harrison, KB5WZI
>

Uhhh.. don't blame the son for the sins of the father; you got the wrong
'Maxim', Richard.

Happy New Year in any case:-)

73
Chip N1IR

101. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:58:45 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92qk1j$h2n$1@iac5.navix.net>
Source record: 173272

Sure you made it! Everyone knows that you are really Phil, and simply use his name as an alter ego when you want to make an idiotic statement. Usually supporting some other idiotic statement made by yourself.

You are responsible for the account, now you can disavow all you like, but! unless you fire Phil for making unauthorized statements on behalf of Fractal Antennas, we must assume you support the statement.

--
We don't need guns against an oppressive government, because the Constitution has internal safeguards, and we should ban and seize all guns, therefore violating the 2nd, 4th, 5th and 9th Amendments of that Constitution, thereby becoming an oppressive government.

"Fractenna" <fractenna@aol.com> wrote in message news:20010101133646.06630.00000566@ng-mb1.aol.com...
> >
> >Chip--
> >
> >I checked the archives. The "mountain man" statement was, in fact, authored
> >by
> >fractenna and posted on the 28th. Of course, you knew that all along!
> >
>
> Your statement ascribes the quote to "Dr. Cohen". Fractenna@aol.com is NOT a
> person. It is an ADDRESS. You know this well.
>
> Repeat: I did NOT make this statement; I do not, in fact, agree with it; and
> your CONTINUED malicious assertion--posed publicly to deliberately make me look
> bad--
> will lead to legal action.
>
>
> Repeat: I did NOT make this statement. If I do not receive a retraction from
> you, immediately, I will proceed with legal notice, and then whatever else is
> needed to stop your endless, malicious harrassment.
>
> Nathan Cohen, Ph.D.

102. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 18:59:45 UTC
From: Keith K5WX <keithz_nozpam@austin.rr.com>
Message-ID: <3A50D3A2.8B8685B9@austin.rr.com>
Source record: 173273

Just for the record, Hiram Percy made contributions to explosives technology, too. I had forgotten that he was a MIT fellow!

"Hiram Percy Maxim, 1869ï¿½1936, son of Sir Hiram, was born in Brooklyn, N.Y., and remained in the United States. After graduation from the Massachusetts Institute of Technology, he held many positions as a mechanical engineer and created several inventions, among them an automobile. The most spectacular was the Maxim silencer for explosive weapons (1908), but perhaps more useful were silencers for gasoline engines and the like." The Columbia Encyclopedia: Sixth Edition. 2000
http://www.bartleby.com/65/ma/Maxim.html

All the best in the New Year, Dr. Cohen.

73,

Keith, K5WX

Fractenna wrote:

> >Fractenna wrote:
> >"Bernard Goetz and god knows who else and how many ham killers. It`s
> >scary."
> >
> >To be expected from members of ARRL, founded by H.P. Maxim, an
> >international arms dealer who invented the single-barrel machine gun.
> >
> >Bernard Goetz should have been awarded a medal and big prize. It was
> >time for defense.
> >
> >Happy New Year!
> >
> >Best regards, Richard Harrison, KB5WZI
> >
>
> Uhhh.. don't blame the son for the sins of the father; you got the wrong
> 'Maxim', Richard.
>
> Happy New Year in any case:-)
>
> 73
> Chip N1IR

103. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 19:10:33 UTC
From: richardharrison@webtv.net
Message-ID: <11129-3A50D629-31@storefull-112.iap.bryant.webtv.net>
Source record: 173276

Gary7SLL wrote:
"Are you suggesting that the tower should be tiltable and tipped in a certain manner to obtain preferential radiation at a certain angle?"

Don`t go tilting towers. It isn`t practical.

I was just noting that low-angle radiation used a reflection point farther from the tower than high-angle radiation needs. I agree with other posters that radial lengths are not usually extended to make a good reflector for low-angle rays. It isn`t much needed by the low-angle ray because a more grazing incidence produces a better reflection than a sharply angled strike on the reflector.

The way to low radiation angles is tall towers. The way to horizontal directivity is multiple towers.

Happy New Year!

Best regards, Richard Harrison, KB5WZI

104. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 19:18:43 UTC
From: rwclark@seanet.com
Message-ID: <3a50c40d.155151@news.seanet.com>
Source record: 173274

On Mon, 01 Jan 2001 07:03:33 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I apologize to the newsgroup for my earlier posting. I should have
>continued to ignore him. I hate to see him continue his idle threats to
>others, given his unconsummated tirade against me, so in a moment of
>weakness and poor judgment I responded. And so now here we go again, and
>it's my fault. Sorry. I'll try not to weaken again.
>
>We now return to our regularly scheduled programming. . .
>
>Roy Lewallen, W7EL
>
>Fractenna wrote:
>>
>>
>> Mr. Lewallen--
>>
>> You will be receiving two legal notices.
>>
>> The first concerns your pirating and of copyright material held by me and the
>> second is for libel and malicious harrassment.
>>
>> Your assertion that I have NO credibility is a direct and focused public
>> attack, malicious libel to undermine my abililty to practice in the applied
>> physics field, specifically in antenna design and electromagnetics.
>>
>> You will be served with legal and public notices within the next two weeks,
>> unless you now STOP ALL malicious libel and harrassment and REMOVE the MI2 file
>> from your commercial web site.
>>
>> Nathan Cohen, Ph.D.

Hi Roy,

This cavalcade of comedy capers continues cavorting ceaselessly.
Cudos.

The only apology necessary is for when you started getting weepy about
not getting love letters from back east (C'Mon now, you don't really
expect they will ever a arrive do you? Oh - I guess that was the
point.). The amusing response was worth the cost of such public
humiliation (you were one-upped even here by Fraudtenna's self
debasement and humiliation about credibility).

We've been regaled by the denial of being a public figure. That too is so obvious it really doesn't require repeating (but leads to an obvious conflict in the claimant in that it is a desire unfufilled - don't cry for him Argentina). But in the best of all possible lights, this lack of public-figure-hood is a blessing in disguise.

Not a public figure? Sure, how else could any "professional" make fraudlent claims (the notorious "protected by patents pending") that his peers would howl at in derision if they were aware? Imagine how goggle-eyed they'd get if they understood he made them within days of the publication of patents that clearly reveal Fraudtenna had no claims coverage for? They would be in all likelihood amazed that someone would offer such a transparent lie. Apparently Fraudtenna barely makes a ripple in the "professional" circles and is thereby protected by anonymity from the exposure of such foolish pronouncements. Of course we get to hear them here with full gusto, but our circle is a small one and hardly the world stage. In other words, we should enjoy these gaffs knowing that responding to them in an amateur venue will hardly injure anyone's "professional" status.

One of the more wry observations here is that across the country libel laws have varied. In some jurisdictions it is a libel to expose the TRUTH, where in other venues it is a libel to state a LIE. Given the extent of this list of "possible legal actions" that "could be" brought (spread across many states), Fraudtenna certainly could pick and choose a venue to satisfy ego. Our amusement comes from the fact that nothing has come of nothing ("King Lear"). Apparently if this were a frustration for Fraudtenna, then the obvious problem would be in the quality of legal advice obtained (this is, of course, simply a presumption - that is, legal advice having been offered, or more importantly, understood). Given the quality of patent work (ego certificates) issued this is doubly damning.

If there are any actions that could be taken to court AND WON, it would be to recover damages for professional disrepute Fraudtenna's lawyers have suffered at the hands of their client.

To others who e-mail me about these abuses, note the following phrase:
>within the next two weeks
may be commonly accepted as being before the 15th of Jan 2001, but typically employed here simply means that there are some two weeks in the future (always true) that come next (again true) but do not necessarily mean what we expect it to mean(SOP).

One such pronouncement that was to inspire me was the prospect that (three months ago) I would be contacted in "the new month." I of course recognized that immediately to mean sometime around Fractember (the "new" month) or Frauduary, but my calendar hasn't caught up to these "new" months yet - and yes, I pine for my love letters too Roy! Oh the bitter pain of broken promises. ;->

All: enjoy the comedy and lower the thermostat.

73's
Richard Clark, KB7QHC

105. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 19:37:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A50DC64.52D6@wt.net>
Source record: 173275

Richard Harrison wrote:
>
> Dick Carrol wrote:
> "There are times when nothing else is applicable or workable." (Other
> than Morse, I suppose.)
>
> We can choose to ignore better digital modes, but they abound and they
> are more efficient and effective than Morse.

And boring too.

> Effectiveness is improved by error detection and correction along with
> automatic retransmission of garbled reception segments.

My brain handles cw in much that exact manner. My error correction is quite good. And I don't even have to drag an extra digi box around with me.

Data
> transmission rates can be automatically adjusted to fit the condition of
> the transmission medium so as to optimize transmission efficiency.

So can cw.

> Trying to use Morse to compete with modern data transmission is
> equivalent to showing up at a gun fight with a knife.

Maybe, but I'd be carrying a pretty sharp knife. Kinda like Croc Dundees...

>
> There was an American Cavalry General who advised his troops to dismount
> should their horse be shot from under them. Seems the coders have been
> beating a dead horse for years.

Well, I dunno, All I do is use the mode. I haven't really concerned myself if anyone else uses it or not. All the other modes are pretty old too. AM, SSB, SSTV, RTTY, all are fairly old and arguably lame also. I've tried them all just about, and still go back to CW as my favorite mode when not in a large group of people talking. Why? Cuz it's the funnest mode to use. Here anyway. I hate keyboard radio. Booooorrrrriiiiiinnnnggggg. I tried the rtty, etc, bit on 20m, and almost to put me to sleep. I'd rather work cw any day. Gives me more to do. Working a digi mode is like logging onto the net and getting my e-mail. Yawn....I'll stick with my old desrepit, but "fun" mode. Of course, what anyone else wants to do is up to them, but to say a mode is obsolete when they don't even use it to make a valid comparison, is like

me saying that PSK31 is worthless because I can't decode it by ear. My argument wouldn't really flush either. I've never had a real problems with the lowering of the cw testing standards, because I realize nothing will stay the same and the abilty to use code has become much less important. But when I hear people say code is nearly useless for modern use just because it's old, I have to laugh. I guess we better get rid of all the other old modes too then I guess. AM and SSB would have to be the first to go the way I see it. A horse is only dead when it can't be ridden anymore. There are still alot of people riding that old horse called cw. So it's not close to being dead yet. MK
--
http://web.wt.net/~nm5k

106. Mini Quad Antenna 10-15-20m UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 20:05:27 UTC
From: Antenna <antenna@attcanada.net>
Message-ID: <2q546.12855$t3.28101@tor-nn1.netcom.ca>
Source record: 173277

We have completed additional testing and wish to share this data with you.

Unfortunately our independent tester did not get the chance to do his testing, however we have had some extensive contacts and trials in the past month.

Snow, Ice, Winds and several times up and down the rof for demonstrations and still going strong.

Details of the antenna.

This is a true tri-band two elemnet mini-quad antenna on the 10m, 15m and 20m bands. It has a single feed point and no switching is required. It is portable for field trials.

Dimensions.

Open approx. 3.4m x 3.4m with a 2.44m boom (135" x 135" x 96").

Folded approx.30cm x 30cm x 2.44m (12" x 12" x 96")

Wt approx.14kg (30lbs) without crate.

Turning Radius approx. 2.1m (83")

Performance almost identical to a full size quad (details to follow on Web Page).

Availability......Soon!

Price.......To follow.

The antenna is called the BABY BOOMER QUAD by Degen Designs.

Our web page is not yet set up but expect to see soon it at www.degendesigns.com

If you wish to be updated as our product and page comes online please drop me an email at info@degendesigns.com

Regards,

Guenther

107. Wanted:

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 20:18:03 UTC
From: kb2sin <kb2sin@stny.rr.com>
Message-ID: <%B546.113789$7I.11545068@typhoon.nyroc.rr.com>
Source record: 173278

I am looking for a Gin-Pole or Gin-Pole bracket to fit a Rohn 45-G. This
does NOT have to be new, it can be used or even home made. If you have such
item, please e-mail me at kb2sin@stny.rr.com
thanks and 73's
de KB2SIN

--
Caution... NEVER drive Faster than your Angels can Fly!!!

108. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 20:29:14 UTC
From: fractenna@aol.com
Message-ID: <20010101152914.21518.00000446@ng-cr1.aol.com>
Source record: 173279

>Sure you made it! Everyone knows that you are really Phil, and simply use
>his name as an alter ego when you want to make an idiotic statement. Usually
>supporting some other idiotic statement made by yourself.
>
>You are responsible for the account, now you can disavow all you like, but!
>unless you fire Phil for making unauthorized statements on behalf of Fractal
>Antennas, we must assume you support the statement.
>
>
>--
>We don't need guns against an oppressive government, because the
>Constitution has internal safeguards, and we should ban and seize all guns,
>therefore violating the 2nd, 4th, 5th and 9th Amendments of that
>Constitution, thereby becoming an oppressive government.
>
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20010101133646.06630.00000566@ng-mb1.aol.com...
>> >
>> >Chip--
>> >
>> >I checked the archives. The "mountain man" statement was, in fact,
>authored
>> >by
>> >fractenna and posted on the 28th. Of course, you knew that all along!
>> >
>>
>> Your statement ascribes the quote to "Dr. Cohen". Fractenna@aol.com is NOT
>a
>> person. It is an ADDRESS. You know this well.
>>
>> Repeat: I did NOT make this statement; I do not, in fact, agree with it;
>and
>> your CONTINUED malicious assertion--posed publicly to deliberately make me
>look
>> bad--
>> will lead to legal action.
>>
>>
>> Repeat: I did NOT make this statement. If I do not receive a retraction
>from
>> you, immediately, I will proceed with legal notice, and then whatever else
>is
>> needed to stop your endless, malicious harrassment.
>>

>> Nathan Cohen, Ph.D.
>

I did not make that statement.

I have asked you to STOP harrassing me--this is a public statement to render that fact as confirmed and publicly archived.

Nathan Cohen, Ph.D.

109. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 20:47:35 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-0101011247350001@a3a05603.sympatico.bconnected.net>
Source record: 173281

In article <3A50878C.E35A138D@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Can you imagine r.r.a.a implemented using Morse code?

Might be a good idea.

I used to copy about 55 wpm in my head, but could only manage about 35 wpm
with a Vibroplex. I was a lot more concise, and careful about what I said,
when using CW as compared with talking.

This newsgroup could use a little more conciseness and carefulness.

Happy New Year!

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

110. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 20:48:16 UTC
From: rwclark@seanet.com
Message-ID: <3a71e93a.782473727@news.seanet.com>
Source record: 173280

On Mon, 1 Jan 2001 11:36:39 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Gary7SLL wrote:
>"How recently was this experiment repeated using modern
>instrumentation?"
>
>I don`t know.
>
>Richard Clark is probably as well qualified as anyone recently posting
>to this NG on the subject of measurements and may comment on probable
>accuracy the old guys got with the instrumentation available at the
>time. He surely knows a lot more than I do.
>
>Logically, during the last 70 years, many would have verified the data
>or challenged them. That the work of Brown, Lewis, and Epstein has not
>been superseded by broadcasters trying to save a dollar, or make
>mischief for their competitors, says something about its accuracy.
>
>Happy New Year.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Yah looped me into this one for sure.

Accuracy is not always a function of newer, better, more resolution. In fact these last characteristics are generally indicators of the illusion of a false security.

Techniques rather than equipment count far more for the accuracy of a test. The techniques may have been supplanted with others employing "state of the art" gear, but that doesn't necessarily mean more accuracy either - simply more productivity.

The techniques of yore can be as accurate, or more so than present day methods. The technique of distinguishing 0.2 dB is not that very difficult, even for the tests performed more than 50 years ago. It does call for some ingenuity, but those fellows drew on ingenuity far more than we do now.

The simplest method to achieve accuracy is to employ a transfer standard along with a technique that uses ratios. Almost anyone here can bootstrap themselves into a very accurate measure of nearly any phenomenon by observing this rule. Coming up with that transfer

standard is the real task, but it should be noted that every important measurement that a Ham would be interested in, has a method that was originated more than half a century ago (or even 100 years ago) to an accuracy far in excess of any Ham's expectation.

73's
Richard Clark, KB7QHC

111. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:00:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A50EFFB.6707219@IEEE.org>
Source record: 173284

Dick Carroll wrote:
> So then you support criticism of CW on "the facts" when the speaker
> really doesn't know enough about it nor have the experience to know how
> it really works?

When on earth have I done that? I responded to your posting, not to
someone else's.

> I was a part of the technical crew that removed
> the CW gear from the State HQ station in 1975 after it was finally
> completely phased out.

And you will never forgive them for that atrocity. (If you can accuse
me of things I don't think and never said, why am I prohibited from
doing the same thing to you?)

> But facts are facts.

Yep, and the fact is that the FCC seems to support freedom of choice
of modes for members of the ARS. You are one of only a handful of
hams who disagree.
--
http://www.mindspring.com/~w6rca

112. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:07:56 UTC
From: rwclark@seanet.com
Message-ID: <3a72edb0.783615829@news.seanet.com>
Source record: 173283

On Mon, 01 Jan 2001 03:57:48 GMT, "Richard Karlquist" <rick@area.com>
wrote:

>The problem with the 4815 probe is that it uses very difficult to obtain p
>channel FETs.
>The current model that Agilent makes has a similar probe, only with n
>channel FETs.
>In any event, you would be FAR better off rebuilding an existing probe,
>rather than
>trying to invent your own or build a copy of the Agilent one.
>
>If anything, the 4815 in now MORE exotic than when it was in production both
>due
>to obsolete thru hole parts and the fact that there are very few engineeers
>around who
>understand analog instruments these days. Even at Agilent, few engineers
>are versed
>in such theory.
>
>Rick Karlquist N6RK
>(employed by Agilent Labs)
>

Hi Rick,

While it may be difficult to come up with these exotic components, the problem should not be one of acquisition, but rather substitution.

There are many OP-AMPs available that could easily replace these components and eclipse their frequency response. Such substitution is not for the faint-of-heart certainly, because those same OP-AMPs could easily turn into free running oscillators if not handled correctly (thus supporting your contention about the difficulty of linear design). I have many designs that employ 60 MHz wide baseband amplifiers with nanowatt sensitivity (using 1 GHz amps) that consume less than 1 square inch of real estate. These designs are now 10 years old, I'm sure that the state of the art would allow me to design ever higher frequency applications (with ever higher chances of loss of stability - but even here advances improve my chances), but perhaps not for the intended application.

I offer substituting OP-AMPs over discrete components exactly for this reason of stability and realizing a useful design. The probe is not a mysterious black box, it is a technical challenge. For an amateur, it is worth the small expenditure of cash (say less than $20) to attempt a kitchen table coupe instead of shelling out (say more than $100) for

instant gratification. Others may say that the $20 approach steeply discounts the worth of my (or their) time - that too is a worthy consideration.

73's
Richard Clark, KB7QHC

113. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:09:33 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A50F20D.FA145BFA@IEEE.org>
Source record: 173286

Dick Carroll wrote:
> Will CW ever "save the day"? Probably not, for sure not if all hams
> abandon learning it. But to deny its communications potential just
> because later modes exist is to ignore reality.

CW has exhausted its communications *potential*. There is nothing
new to be learned about CW. If CW were a serious communications mode,
commercial interests would not have abandoned it. Any ham is free
to learn Morse code and I encourage all hams to do so. It is fun
and may accidentally come in handy some day. In fact, any citizen
is free to learn Morse code. However, this is a free country and it
should be a choice, not a federal regulation. We have too many
federal regulations.
--
http://www.mindspring.com/~w6rca

114. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:14:04 UTC
From: k1bqt@aol.com
Message-ID: <20010101161404.10423.00001784@ng-ff1.aol.com>
Source record: 173285

>Fractenna@aol.com is NOT a
person. It is an ADDRESS.<

Fractenna is more than "an address", Chip, it's YOUR address. You pay for it, you control access to it, and you're accountable for it. A crack house is "an address" too, but that doesn't absolve the owner from full responsibility for what goes on there.

>I did NOT make this statement<

At the moment, I don't see how you can prove that.

> I do not, in fact, agree with it;<

If other alleged "persons" using your account are making you look bad and casting doubts on your authenticity, the solution is simple. Change your password and keep it to yourself. That's how the system's supposed to work.

> If I do not receive a retraction from
you, immediately, I will proceed with legal notice<

If you can offer me convincing proof you didn't write it, I'll immediately change my attribution from "Dr. Cohen" to "fractenna". But, a mere "say so" followed up with a nasty threat hardly constitutes reasonable proof, does it?

Rick K1BQT

115. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:15:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A50F354.E62EC93C@IEEE.org>
Source record: 173287

Mark Keith wrote:
> I've tried them all just about, and still go back to CW as my favorite
> mode when not in a large group of people talking. Why? Cuz it's the
> funnest mode to use. Here anyway. I hate keyboard radio.
> Booooorrrrriiiiiinnnngggg.

What about all the hams who don't share your likes and dislikes?

> I guess we better get rid of
> all the other old modes too then I guess.

No need for that. Why not just live and let live? Why not just allow hams to choose and use their own personal favorite modes? Would it be fair for the feds to shove your least favorite mode down your throat?
--
http://www.mindspring.com/~w6rca

116. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:20:30 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <uasq29.t64.ln@mail.specsol.com>
Source record: 173290

Fractenna <fractenna@aol.com> wrote:
>>
>>Chip--
>>
>>I checked the archives. The "mountain man" statement was, in fact, authored
>>by
>>fractenna and posted on the 28th. Of course, you knew that all along!
>>

> Your statement ascribes the quote to "Dr. Cohen". Fractenna@aol.com is NOT a
> person. It is an ADDRESS. You know this well.

> Repeat: I did NOT make this statement; I do not, in fact, agree with it; and
> your CONTINUED malicious assertion--posed publicly to deliberately make me look
> bad--
> will lead to legal action.

> Repeat: I did NOT make this statement. If I do not receive a retraction from
> you, immediately, I will proceed with legal notice, and then whatever else is
> needed to stop your endless, malicious harrassment.

> Nathan Cohen, Ph.D.

Since everyone and their dog seems to have access to the fractenna@aol.com
account, you will be hard pressed to PROVE who did, or did not, make
the statement in question.

Seems to me you brought the whole thing on yourself by allowing this
access to the fractenna@aol.com account instead of doing what people with
common sense do; have individual accounts for each individual.

Jim Pennino

117. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:22:00 UTC
From: marsgal42@hotmail.com
Message-ID: <92qsdj$h9o$1@nnrp1.deja.com>
Source record: 173288
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <3A4FB675.70BB9CEE@att.com>,
Pervert_Extraordinaire <valued_customer1@att.com> wrote:

> Will the scanner allow me to narrow down the potential poles? In
other words,
> will the noise change volume as I approach the offending pole? Or
must I
> hammer on all poles within a mile of my house? ;-)

Standard foxhunt/DF stuff: I improvised a dipole and used
the null off the end to find the offending pole. If it was
good enough to track down spies in WW2 it should be good
enough to find bad power line insulators in 2001...

My solution to ground loop problems is to run all the RF
stuff off a battery. YMMV.

Laura Halliday VE7LDH "Que les nuages soient notre]
Grid: CN89mg pied a terre..." - Hospital/Shafte

Sent via Deja.com
http://www.deja.com/

118. Interlaced Yagi for 10 and 15

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:23:46 UTC
From: lucascom <lucascom@email.msn.com>
Message-ID: <OvSM8kDdAHA.274@cpmsnbbsa09>
Source record: 173289

Anyone have a design for an interlaced 10 and 15 Yagi that they would be willing to share? I'd like to consolidate some tubing to gain space on the mast for other projects.
All of my efforts seem to model great on 15, but 10 suffers from interaction in EVERY
parameter. I'm not willing to lay out cash for a Force-12 off-the-shelf design. Cheap is better!

Mike Lucas W5CHR
Memphis, Tenn.

119. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:41:53 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <1jtq29.i7a.ln@mail.specsol.com>
Source record: 173293

Cecil <Cecil.A.Moore@ieee.org> wrote:
> Mark Keith wrote:
>> I've tried them all just about, and still go back to CW as my favorite
>> mode when not in a large group of people talking. Why? Cuz it's the
>> funnest mode to use. Here anyway. I hate keyboard radio.
>> Booooorrrrriiiiiinnnnggggg.

> What about all the hams who don't share your likes and dislikes?

>> I guess we better get rid of
>> all the other old modes too then I guess.

> No need for that. Why not just live and let live? Why not just allow
> hams to choose and use their own personal favorite modes? Would it
> be fair for the feds to shove your least favorite mode down your
> throat?
> --
> http://www.mindspring.com/~w6rca

Sure it would be fair, as long as it is mine.

Mine happens to be PSK.

Jim Pennino

120. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:51:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A50FBE8.30C3@wt.net>
Source record: 173291

David or Jo Anne Ryeburn wrote:
>
> In article <3A50878C.E35A138D@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
> > Can you imagine r.r.a.a implemented using Morse code?

Well I guess, but the posts would twindle to a trickle.

> I used to copy about 55 wpm in my head, but could only manage about 35 wpm
> with a Vibroplex. I was a lot more concise, and careful about what I said,
> when using CW as compared with talking.

Almost the same exact speed and reasons here. I got to about 55-60 wpm,
but couldn't send any faster than that with my bencher paddle. And even
at just 50 wpm with the paddle , I'd be blowing a few mistakes here and
there. I'd get sloppy. It's something you have to do often to keep the
rhythm in your fist timed to what your brain is thinking. Being as most
don't go that fast, you speed down for a while, and then when you go
back to a 50 wpm guy, my timing would be outa whack for a few min. All
the real speed dogs use keyboreds, "pun intended", but I hate those, so
my limit ended up about the same as yours. And I'm slowing sinking year
by year as I work less than I used to. I'm probably only good for 35-40
right now. But I could practice over a weekend "say field day" and jump
right back up. I can go to a field day doing 30 wpm to start, and end up
20 wpm faster by the time I leave. But then it slowly bleeds off again
till next year .:(MK
--
http://web.wt.net/~nm5k

121. Re: Learning Morse Code opinion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 21:52:08 UTC
From: jason_hsu@my-deja.com
Message-ID: <92qu67ijl1@nnrp1.deja.com>
Source record: 173292

In article <e8246.51583$36.1776511@news1.rdc1.il.home.com>,
"Pete" <pete@etep.com> wrote:
<<A lot of you have a great fear of learning code. I really can't
understand why.>>
Believe it or not, not everyone knows about the Code Quick system. Why
bother with the drudgery of memorizing dits and dahs when you can use
the cutesy, silly, AND effective Code Quick system. You use sound-
alikes ("Catch it, catch it!" for C) to learn the RHYTHM of the code.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

122. WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:00:29 UTC
From: jason_hsu@my-deja.com
Message-ID: <92qulr$j1j$1@nnrp1.deja.com>
Source record: 173295
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

http://www.io.com/~n5fc/notebk_ant.htm
http://www.io.com/~n5fc/dctl_ant.htm
http://home.earthlink.net/~mwattcpa/antennas.html

Can anyone here comment on the compact HF antenna designs at the above web pages? How can the notebook antenna have a high radiation resistance (and thus high efficiency) from 40m to 10m?

How does one figure out the radiation resistance for a particular antenna design?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

123. Re: Suits by Fracky

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:04:45 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A50FEFD.75E@wt.net>
Source record: 173294

Bill Aycock wrote:
>
> I am not sure how Cohens legal assistants are going to hold up, this
> year. He has promised several suits, if certain actions are either not
> stopped, or stopped, (depending on the sue-ee). It looks like a full
> calendar, with the promised suits, and the certain counter-suits (could
> be a real cash-cow).
> busy-busy-busy.
>
> Bill

Maybe David is on to something. With all the suits handling all these suits, all the suits at the Mens warehouse should be suiting all. With the likely 2 fer 1 suit specials I see on the boob tube, I guess that could be a definite plus for the bean counting suits at Suitenna. Maybe they have it wrong in Arkansas.Instead of Sooooooooeeeeeeeeeee pigs!, maybe they should be shouting sooooooommmmmmmeeee pigs!(*)...Duuno, would suit me I guess...Oink.. MK
--
http://web.wt.net/~nm5k

124. Re: Interlaced Yagi for 10 and 15

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:21:42 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5102F6.508BCA77@dvol.com>
Source record: 173296

lucascom wrote:

> Anyone have a design for an interlaced 10 and 15 Yagi that they would be
> willing to share? I'd like to consolidate some tubing to gain space on the
> mast for other projects.
> All of my efforts seem to model great on 15, but 10 suffers from interaction
> in EVERY
> parameter. I'm not willing to lay out cash for a Force-12 off-the-shelf
> design. Cheap is better!
>
> Mike Lucas W5CHR
> Memphis, Tenn.

>
Try modeling back-to-back 10 & 15 Yagis on the same boom instead of interlacing
them. Boom gets longish but it's been done many times.
>
w3rv

125. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:23:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A510344.36DD@wt.net>
Source record: 173297

Cecil wrote:
>
> Mark Keith wrote:
> > I've tried them all just about, and still go back to CW as my favorite
> > mode when not in a large group of people talking. Why? Cuz it's the
> > funnest mode to use. Here anyway. I hate keyboard radio.
> > Booooorrrrrriiiiiinnnngggg.
>
> What about all the hams who don't share your likes and dislikes?

They can do what they like. I'm not stopping them, or complaining about their choice of modes. Just as long as they don't get on my frequency to do it , that is...g Make sure the frequency is not in use first!
>
> > I guess we better get rid of
> > all the other old modes too then I guess.
>
> No need for that. Why not just live and let live? Why not just allow
> hams to choose and use their own personal favorite modes? Would it
> be fair for the feds to shove your least favorite mode down your
> throat?

But all that is fairly moot now. Being as the FCC has lowered the cw requirements to the min level as stated by the international regs, I can't see how they are shoving anything down anyones throat. You can get a ticket with no code, and you can get the rest at a speed that is so slow as to be useful in the real world. When the international regs do away with the code, I'm sure the FCC will drop in line real fast. Anyway, for me I never saw any real distinction between code or any other part of the test. "theory". It was just a part of what I had to do to get a ticket. I'm sure some people could do without the theory tests for the same reasons some don't like the code tests. MK

--
http://web.wt.net/~nm5k

126. Re: Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:33:34 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5105BE.ABDC0D8D@dvol.com>
Source record: 173298

Dick Carroll wrote:

> Brian Kelly wrote:
> >
> > Dick Carroll wrote:
> >
> > > Phil, try http://www.alphalink.com/au/~parkerp/lma.gif
> >
> > >
> > Link doesn't work here Dick.
>
> Yup, I blew it. Should be
> http://www.alphalink.com.au/~parkerp/lma.gif
>
> Tnx Brian. I know beteter than to fail to test one after I post it. :=)
> (egg on face)

>
I've done worse . . yeah, the basic tuner design is ancient and it should
work quite well.

>
>
> Dick

>
b.

127. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:42:06 UTC
From: rwclark@seanet.com
Message-ID: <3a74fbf5.787268542@news.seanet.com>
Source record: 173299

On Mon, 1 Jan 2001 13:20:30 -0800, Jim Pennino <jimp@mail.specsol.com>
wrote:

>Fractenna <fractenna@aol.com> wrote:
>>>
>>>Chip--
>>>
>>>I checked the archives. The "mountain man" statement was, in fact, authored
>>>by
>>>fractenna and posted on the 28th. Of course, you knew that all along!
>>>
>>
>> Your statement ascribes the quote to "Dr. Cohen". Fractenna@aol.com is NOT a
>> person. It is an ADDRESS. You know this well.
>
>> Repeat: I did NOT make this statement; I do not, in fact, agree with it; and
>> your CONTINUED malicious assertion--posed publicly to deliberately make me look
>> bad--
>> will lead to legal action.
>
>
>> Repeat: I did NOT make this statement. If I do not receive a retraction from
>> you, immediately, I will proceed with legal notice, and then whatever else is
>> needed to stop your endless, malicious harrassment.
>
>> Nathan Cohen, Ph.D.
>
>Since everyone and their dog seems to have access to the fractenna@aol.com
>account, you will be hard pressed to PROVE who did, or did not, make
>the statement in question.
>
>Seems to me you brought the whole thing on yourself by allowing this
>access to the fractenna@aol.com account instead of doing what people with
>common sense do; have individual accounts for each individual.
>
>Jim Pennino

Hi Jim,

Note the outrage:
>> Repeat: I did NOT make this statement. If I do not receive a retraction from
>> you, immediately, I will proceed with legal notice, and then whatever else is
>> needed to stop your endless, malicious harrassment.
does not go to the source of the statement, but rather to the source
of the comment of the statement. Apparently the mis-ascription of the

quote is more heinous than the quote itself. Truly a strange system of morality going on here.

If we were to take this seriously, then this is yet another workplace related confrontation that remains to be resolved through any other mechanism than the current denial and placing the blame outside of the two parties involved at work. Given the history of work related mis-haps that have been reported here (trashed files in a list server, mysterious emails, all stemming from an insider) it is not a mystery to even the most casual observer that parallels exist.

There is another answer that is more likely and benign. Its a joke! Lighten up! I am enjoying it. :-)

Has anyone received one notice from Fraudtenna? No. Why? Its a joke man! Albeit in poor taste, but consistent nonetheless. So let's defuse my opening comment about outrage. The quoted statement is obviously an invention for comic effect. This is also called irony or sardonic humor. I'm sure many here can appreciate the irony of claims of sincerity and noble effort coming from Fraudtenna. ;->

The list of pratfalls grows. The one I love is the unregistered Lottery held last autumn (wonder where the $1000 went?). I'm sure at least one legal counsel is blushing with the hope that it is forgotten. That joke was as old as three card monty or the shell game. Remember - just a joke. You can't get serious with someone who can't deliver a punchline or stumbles through the card switch - accept it for being a pathetic attempt which counts for nothing in the long run. Everyone should recognize it is not the quality of the comic content that counts so much as the delivery. Credit should be given for the attempt, and we can all enjoy the fumbles (something like that found in the English comedy Mr. Bean - or should that now be Mr. Boston Bean?).

Why doesn't this joke work any better? It was played out with DekeWhy. Re-runs seldom evoke belly laughs the second (third, fourth, fifth,... n'th) time 'round. At least that comic invention was somewhat original (Ah Deke, we barely knew ye!), but only once. To continue the English comedy metaphor, perhaps a more compelling character would be found in Black Adder's Baldrick. OK, so 90% of you were lost on this last reference - dry comedy is rare (and we don't have that much evidence of it here).

Hopefully, the comic line-up will improve in the new year. :-)

73's
Richard Clark, KB7QHC

128. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:46:32 UTC
From: n2ey@aol.com
Message-ID: <20010101174632.18498.00000808@nso-mh.aol.com>
Source record: 173300

In article <16062-3A5014AC-83@storefull-114.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Dick Carrol wrote:
>"There are times when nothing else is applicable or workable." (Other
>than Morse, I suppose.)
>
>We can choose to ignore better digital modes, but they abound and they
>are more efficient and effective than Morse.

That depends on who defines "more efficient and effective", and how they define it. I can do Morse with just a simple rig/antenna and a key. No computer, TNC, or other stuff. Those other modes require extra equipment. Some of them require proprietary stuff. I carry a pretty good Morse encoder/decoder with me all the time.

And yes, they do abound. That's the trouble - there are too many of them. Digital tower of Babel. None of them are universal, like Morse.
>
>Telegraph. The word implies a written or drawn item sent or received
>over a long distance.

The word is a lot older than Morse. Before electrical telegraphs there were optical ones. The term is not meant to be taken literally.

> This is what Morse intended. He was seeking a
>system which recorded its output on paper.

He was trying to invent the teletype, but the technology of the time wasn't up to it.

> As I recall the story, his
>father-in-law was funding development of the telegraph and the man with
>the money persuaded Morse to go to market with what was already working,
>and not wait for perfection of the printed message development. It seems
>this was a case of father knows best.

Perhaps. He had people working for him who began to be able to understand the noises of the decoding machines directly. Eventually they sold him on the idea to get rid of the complexity, since a human was needed to work the machine anyway.

Radio used Morse from the very beginning. More than 100 years later, it's still going strong. Gotta love it.
>
>Telex and Teletype came later. There are many other digital data
>transmission codes and architectures. Most beat Morse efficiency by

>starting with code elements of equal lengths for the mark and space
>(zero and one) durations.

They require much more elaborate machines to encode and decode. And their "efficiency" is often a myth. Here's why:

The standard way of computing wpm is to see how many times a standard word can be transmitted in a minute. For plain language, the word "PARIS" is used.

In International Morse, the word "PARIS" (five letters and a wordspace) is exactly 50 time units long. In 5 level Baudot asynchronous RTTY, it's 42 time units long if equal length stop and start bits are used. In any code that's 8 bits/character or more, it takes even more time.

To do a fair comparison, the test to use is "wpm in a given bandwidth at a given S/N".

Morse uses "Hoffmann coding" - the most common characters are shorter. PSK31 uses Hoffmann coding too.

>Effectiveness is improved by error detection and correction along with
>automatic retransmission of garbled reception segments.

Sure - which takes even more time.

>Data
>transmission rates can be automatically adjusted to fit the condition of
>the transmission medium so as to optimize transmission efficiency.

Sure - IF both ends of the transmission are similarly equipped. Otherwise it's Tower time again.

Can you do ANY of the digital modes in complete darkness? Or while driving? Decent ops can do Morse under either condition.

>Trying to use Morse to compete with modern data transmission is
>equivalent to showing up at a gun fight with a knife.

Who is trying to compete? We do this for fun.

Your argument reminds me of powerboaters telling sailboaters to "get with it". Or people driving RVs making fun of backpackers.
>
>There was an American Cavalry General who advised his troops to dismount
>should their horse be shot from under them.

Why are all your analogies about fighting and death?

> Seems the coders have been
>beating a dead horse for years.
>
Not at all. We LIKE it. It's FUN. That's the idea. Do you yell insults out the car window at bicyclists and runners?

Despite decades of having "digital modes" pushed on the ham community, they make up only a small part of HF ham radio. Far less than Morse use. Why?

I cannot recall how many articles on digital modes I've read in QST - RTTY, packet, AMTOR, PACTOR, PACTOR 2, G-TOR, PSK31, Feld-Hell, and now MFSK16. To name just a few - there are lots more. When was the last time you saw an article pushing Morse as a mode? Yet it is more popular on the HF/MF ham bands than all of the digital modes put together.

Because we like it.

73 de Jim, N2EY

129. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:46:33 UTC
From: n2ey@aol.com
Message-ID: <20010101174633.18498.00000809@nso-mh.aol.com>
Source record: 173301

In article <3a4f89b5.8609511@news>, jflanders2@home.com (Jerry Flanders) writes:

>My 1963 ARRL Handbook is marked $3.50
>
>My 1968 ARRL Antenna book is marked $2.50

Here's a partial list of Handbook sizes and softback prices:

1948 - $2.00 - 614 pages text, 144 pages catalog (ads)

1955 - $3.00 - 619 pages text, 144 pages catalog (ads)

1957 - $3.50 - 627 pages text, 136 pages catalog (ads)

1962 - $3.50 - 640 pages text, 104 pages catalog (ads)

1964 - $3.50 - 640 pages text, 80 pages catalog (ads)

1967 - $4.00 - 648 pages text, 50 pages catalog (ads)

1969 - $4.00 - 656 pages text, 526 pages catalog (ads)

1971 - $4.50 - 642 pages text, 30 pages catalog (ads)

1976 - $6.00 - 678 pages text, no catalog

1978 - $8.50 - 678 pages text, no catalog

In 1979 the Handbook changed to the larger format, and enlarged. There was also a move toward hardcover.

A 1980 Handbook was $10 soft cover and $15.75 hard cover. By 1990 it was up to $23 hardcover only. The size increased to over 1000 pages in this era, and is now 1200 pages.

>When I first started buying QST at newsstands in about 1949, the
>Lifetime ARRL membership fee was a whopping $20 total. Somebody with
>some of these old issues could look back and see just when it started
>up - I think it was within a year or two of that.

You are mistaken.

Life Membership started in the late 1960s - 1969, as I recall. The price was fixed at 20 TIMES the annual membership, not $20.

Here's a quick view of membership prices (full membership, USA resident):

1950: $4

1960: $5

1970: $6.50

1980: $18

1990: $25

Note, however, that sometime in the 1980s the League began to offer discounts for multiple year renewals, senior citizens, and young people. For example, in 1990, one year was $25, two years was $47, and three years was $65. Senior citizens paid only $20 for one year, $37 for two years and $50 for three years. Licensed amateurs 13-17 who were the oldest hams in their households paid only $12.50 year. Those 12 and under who were the oldest hams in the house paid only $6.50!
>
>Just shows how we no longer have dollars - they are now dollarettes.

Look up what a typical wage was in those days. In the late sixties, a single $10,000/year annual income would support a family of four in solid middle-class comfort. For many back then, $10K/year would have been the lap of luxury. To live the same way today takes seven to ten times that much or more, depending on where you live.

73 de Jim, N2EY

130. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:46:34 UTC
From: n2ey@aol.com
Message-ID: <20010101174634.18498.00000810@nso-mh.aol.com>
Source record: 173302

In article <guVPOix9gFliABp76tNvTdIUP2y2@4ax.com>, Bob Miller
<bamiller@texas.net> writes:

>Anybody recall what a Collins S-line sold for?
>
Hello Bob,

That depends on what type S-line and what era (they were made from 1959 until
the late 1970s).

Here are 1960 prices (all without shipping or tax):

75S1: $495
500 cycle mechanical filter for above: $50
32S1: $590
516F2 power supply for above: $105
312B-3 speaker: $27.50
312B-4 speaker/station console: $185
30S-1 amplifier: $1470

A typical "S-line" of a 75S1 with CW filter, 32S1 with 516F2 power supply and
312B-4 speaker/station console totals up to $1425. A lot of money back then -
and the prices went nowhere but up from these numbers.

But a round emblem 75S3B with the W2VCZ mods will outdo almost all modern
receivers in actual receiver performance. See

http://www.sherweng.com/table.html

for an interesting comparison.

73 de Jim, N2EY

131. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:50:12 UTC
From: richardharrison@webtv.net
Message-ID: <29022-3A5109A4-20@storefull-113.iap.bryant.webtv.net>
Source record: 173306

Richard Clark wrote:
"The simplest method to achieve accuracy is to employ a transfer standard along with a technique that uses ratios."

I think that means we could have a 100-ohm resistor guaranteed under standard conditions to be 0.1% accurate and we could compare a 200-ohm resistor to the 100-ohm resistor by use of a 2:1 potential transformer. An impedance bridge operates directly between resistance ratios which are the same but may contain higher or lower resistance values in one side of the bridge, no transformer required. By comparison, we should get pretty good accuracy.

I remember working for a Ford dealer in the early 40`s and he had an assortment of Johansen sp? machined blocks of guaranteed accuracy. We used them to check the accuracy of our micrometers. Ford distributed those standard blocks.

Richard Clark also said something like, it is as important to make the right measurements as it is to make the measurements right. Makes sense to me!

Happy New Year.

Best regards, Richard Harrison, KB5WZI

132. QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 22:52:16 UTC
From: jason_hsu@my-deja.com
Message-ID: <92r1mu$l9q$1@nnrp1.deja.com>
Source record: 173303

Do fractal antennas work? Would they be useful in an apartment?

Has anyone here made or used a fractal antenna?

Why are fractal antennas so controversial?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

133. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:01:36 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A510C50.DA6A045B@dvol.com>
Source record: 173304

>
> equivalent to showing up at a gun fight with a knife.
>
> There was an American Cavalry General who advised his troops to dismount
> should their horse be shot from under them.

>
Did they have other options?
>

> Seems the coders have been
> beating a dead horse for years.
>
> Best regards, Richard Harrison, KB5WZI

>
You're the dead horse beater sir. I'm not about to launch off into any
diatribes on the subject beyond the obvious fact that you're just going to
have to learn to get comfortable with the fact that for a number of quite
valid reasons cw will continue to be heavily used on the ham bands well into
your OF days and probably beyond. Save your teeth, quit gnashing them over
the continued use of cw, you do your ham radio and we'll do ours and there
ain't a damned thing you can do about that.
>
w3rv

134. Re: Interlaced Yagi for 10 and 15

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:04:49 UTC
From: lucascom <lucascom@email.msn.com>
Message-ID: <unynHdEdAHA.271@cpmsnbbsa09>
Source record: 173309

Brian Kelly wrote in message <3A5102F6.508BCA77@dvol.com>...
>
>Try modeling back-to-back 10 & 15 Yagis on the same boom instead of
interlacing
>them. Boom gets longish but it's been done many times.
>>
The forward stagger works, of course, but space constraints limit me to
a 26 ft. boom. If I had room to swing a 48 ft boom, the design is trivial!
Surely if Force 12 can make the interlaced thingamabobs work, I can too!
Obviously my enthusiasm exceeds my antenna design knowledge (at this
point!). So I'll plod along with the hope that someone, somewhere has a
declassified AO-format file to share. I'd much rather tweak antennas on the
'puter and then build them, but if no one can help, I can always engage Dr.
Conehead in a meaningful series of usenet discussions.

Mike Lucas W5CHR
Memphis, Tenn.

135. oops

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:09:35 UTC
From: mrhuntnpeckextraletters@home.com
Message-ID: <3a510e02.1430400@24.2.10.79>
Source record: 173305

after my last post I found that the name field was wrong,
(after reloading software) the english patient.... should have been
mrhuntnpeck

mrhuntnpeck

136. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:23:56 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A51118D.F18E3661@att.com>
Source record: 173307
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

marsgal42@hotmail.com wrote:
>
> In article <3A4FB675.70BB9CEE@att.com>,
> Pervert_Extraordinaire <valued_customer1@att.com> wrote:
>> Will the scanner allow me to narrow down the potential poles? In
>> other words, will the noise change volume as I approach the offending pole? Or
>> must I hammer on all poles within a mile of my house? ;-)
>
> Standard foxhunt/DF stuff: I improvised a dipole and used
> the null off the end to find the offending pole. If it was
> good enough to track down spies in WW2 it should be good
> enough to find bad power line insulators in 2001...

Can you elaborate a bit more? I understand you propose a dipole
antenna and a scanner. However, I don't follow the "null off
the end" term. Does the dipole offer a directional indicator
which produces nulls (drop in scanner audio output ??) when
the offending pole is at a right angle to the dipole?
(Jeez, I hope this limb doesn't break)

Thanks
> My solution to ground loop problems is to run all the RF
> stuff off a battery. YMMV.

Indeed. Next weekend I plan to "battery-power" my receiver and
laptop. This should rule out alot.

137. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:30:56 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92r401pth1@iac5.navix.net>
Source record: 173308

I have made and tested two of them. There are simpler ways to get the same gain in a given form factor. The reason they engender such a range of opinions is the fact that the "Dr." that "invented" them has no idea as to how to relate to the rest of humanity. He will tell you how wonderful he is, then if you disagree he will threaten to sue you. That's about the long and the short of it. For further entertainment, go to Deja and do a search for messages from Fractenna@aol.com

<jason_hsu@my-deja.com> wrote in message news:92r1mu$l9q$1@nnrp1.deja.com...
> Do fractal antennas work? Would they be useful in an apartment?
>
> Has anyone here made or used a fractal antenna?
>
> Why are fractal antennas so controversial?
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com
> http://www.deja.com/

138. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:44:45 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <dp4r29.t95.ln@mail.specsol.com>
Source record: 173311

jason_hsu@my-deja.com wrote:
> Do fractal antennas work? Would they be useful in an apartment?

> Has anyone here made or used a fractal antenna?

> Why are fractal antennas so controversial?

> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/

> Sent via Deja.com
> http://www.deja.com/

Do they work, in general, yes. Are they useful for ham applications? Who knows; there doesn't seem to be any definitive information. They seem to be a nitch application, like the quadrafiliar helix and other specialized antennas.

For some files on fractal antennas for ham use and comparisons thereof, see ftp://eznec.com/pub/MI2. I'm not sure if the demo version of eznec will handle these files, but it can be found at www.eznec.com if you don't have it.

There are other comparisons available on the net.

The controvery is not about fractal antennas, it is about the main proponent on this newsgroup. Many, including myself, consider him to be to be a mental case that will threaten to sue you if you post anything he disagrees with.

There is also a discussion group on www.egroups.com/group/fractalantenna that is moderated by the above mentioned person. Join if you wish, but don't expect answers to critical questions (my opinion).

Personally, I was really interested in the subject until the main propenent gave me a real blast of crap in response to a query on this newsgroup.

Oh yes, he has said he will not answer questions on this newsgroup; much the better in my opinion.

All the above, except for the links, is my personal opinion. You may find wonderfull things about fractals; if you do, please write an article for the ham world for the rest of us to see.

Jim Pennino

139. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-01 23:54:52 UTC
From: ik7565@erols.com
Message-ID: <3A5118CC.845BFD1F@erols.com>
Source record: 173310

"Worked All Neighbors" Award ?

'Doc wrote:
>
> "David R.Gemmer",
> Once upon a time, when I was still gainfully employed,
> I had lots of time to play with antennas at work. Due to
> my employers restrictions, what was available to play with,
> and the amount of $$ I had in my pocket, some of the "make-
> do" antennas were a bit unusual. A chain-link fence was
> one of those that I played with.
> I had/have a tuner that would 'handle' just about any-
> thing. This tuner along with a set of 'jumper-cables' for
> 'delta' matching, made a short fence next to the station
> load on 20 meters like a charm! It didn't 'talk' worth a
> hoot, but was very quiet on receive. (The same set of
> jumper-cables, coax, and tuner also loaded a R.R. track.)
> I wouldn't recommend using a fence, but if your really
> desperate enough, it'll work. One reason I wouldn't
> recommend it is because if your fence is connected to your
> neighbor's fence, you're going to be producing RFI all
> over the neighborhood!
> 'Doc

140. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:01:34 UTC
From: marsgal42@hotmail.com
Message-ID: <92r5osodf1@nnrp1.deja.com>
Source record: 173316
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <3A51118D.F18E3661@att.com>,
Pervert_Extraordinaire <valued_customer1@att.com> wrote:

> Can you elaborate a bit more? I understand you propose a dipole
> antenna and a scanner. However, I don't follow the "null off
> the end" term. Does the dipole offer a directional indicator
> which produces nulls (drop in scanner audio output ??) when
> the offending pole is at a right angle to the dipole?
> (Jeez, I hope this limb doesn't break)

Every radio-related book published in at least the past 60
years will provide the information you need. There is still
a time and a place for such things.

If you're not prepared to splash out for something like the
ARRL Handbook (which answers your questions), please consult
a local public library. They usually have books on the
subject.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..." - Hospital/Shafte

Sent via Deja.com
http://www.deja.com/

141. FS:: Alum. Tilt Over Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:02:48 UTC
From: Randy <rbkb8iii@erinet.com>
Message-ID: <3a511aa9$0$1510$53a6afc1@news.erinet.com>
Source record: 173313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

I have For Sale a Heights Aluminum motor screw driven Tilt Over Tower 48' tall. I'm asking $600.00 plus shipping prefer pick-up near Dayton,Ohio. For more details or any question you can call me at 937-372-2492 or E-mail me at rbkb8iii@erinet.com

142. Re: VX5R supplied antena

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:04:24 UTC
From: ik7565@erols.com
Message-ID: <3A511B08.64EA2CFF@erols.com>
Source record: 173312

The supplied rubber-duck has 0db gain for a reason - the wide receiver
on the VX-5R will subject you to a lot of intermod with any kind of gain
antenna. If you don't live in a noisy RF environment (big city - lots
of pagers) try a tri-band MH-510. It's kind of long (20") but it's a
good antenna with some gain on 70cm.

KG4JLK

bkk411@hotmail.com wrote:
>
> Hi !
>
> I would like to use my VX5Rs for two way comm. What is
> the best frequency to use with the supplied antena to get
> max distance ?
> Or should I really get a after market antena ? (If yes wich ?)
>
> Thanks for any help !!!
>
> bkk411
>
> Sent via Deja.com
> http://www.deja.com/

143. Re: Need UHF TV Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:06:40 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <kY846.1851$iK.212840@monger.newsread.com>
Source record: 173314
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.electronics.basic

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Lenny" <captainvideo46@hotmail.com> wrote in message
news:3A50C42B.708F@hotmail.com...
> bzd9 wrote:
> >
> > Couple of things to try.
> >
> > You don't state whether or not you have a rotator or where you the the
> > stations are located. Either install a rotator or rotate the antenna to
> > improve this channel. You will have to determine the sacrifice for the
> > other channels.
> >
> > Try a mast mounted pre-amp, but go to a TV Parts and supply house. The
> > AMPs will be better quality than Radio Shack, but Radio Shacks' are OK.
> > This is less massive to install than a larger antenna.
> >
> > Last, if possible, bump it up another 5-10 feet (1.5-3 meters).
> > Sometimes additional height will help. Again, I don't know if you are
> > in a deed restrict development limiting you to 6 feet above the tallest
> > peak of the house.(FCC preemption)
> >
> > Finally try a better antenna. But be careful and have help or have it
> > done professionally. Standing on a roof and trying to manage a bulky
> > antenna can be more than one person can handle.
> >
> > Good luck and 73's
> >
> > Dennis WB3KUM/9
> You might try a yagi type of antenna. I used an eight bay years ago and
> the gain characteristics on uhf are better with the yagi. The more
> elements the better the gain. It is also more directional. A good preamp
> with a LOW noise factor is also essential. Less than 3db would ba a good
> choice as is a good quality double shield RG6U coax. All this leaves
> Radio schlock COMPLETELY out of the picture.

I built up a quadature array of UHF Yagis and use a Radio Shack antenna
mounted preamp. It works fine on stations well over a 100 miles distant. It
was also the only thing readily available on short notice. There is about
230 feet of RG-6 between the amp and the TV set.

The whole thing is relatively close to my UHF/VHF ham antennas, but I've had
no trouble with them so far.

> Winegard makes some
> excellent commmercial antenna equipment.

Yes, I too would prefer the Winegard, but the RS stuff has proven
sufficient.

Roger (K8RI)

144. Re: Lubricating Galvanized Aircraft Cables

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:08:41 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <d_846.1853$iK.212820@monger.newsread.com>
Source record: 173315

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Donald Campbell" <castles@jps.net> wrote in message
news:3A50B9DB.A8A88B0D@jps.net...
> I just installed new winch cables on my US Tower. Should I lubricate the
> galvanized cables or leave them dry?

I'd leave them dry as a little lubrication can pick up lots of dirt which
can do a lot of damage in a hurry.

Galvanized aircraft cable??
I've never seen aircraft cable that wasn't stainless steel.

Roger (K8RI)

>
> Thanks, Don W6QEY
>

145. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:08:56 UTC
From: "Joe S." <w4hh@my-deja.com>
Message-ID: <92r66moos1@nnrp1.deja.com>
Source record: 173317

In article <92r1mu$l9q$1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> Do fractal antennas work? Would they be useful in an apartment?
>
> Has anyone here made or used a fractal antenna?
>
> Why are fractal antennas so controversial?
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com
> http://www.deja.com/
>

Define what you mean when you say "Does XXXXX antenna work?"

Once upon a time, during a six-meter band opening in 1960, I connected the inner conductor of my coax to the screen on one window and the outer braid to the screen on the adjoining window and, within thirty minutes, I worked six states, Mexico, and Cuba on six meters. Would I recommend two window screens as a six meter antenna?

While I was stationed in Japan, I lived on a US military base where the base commander disliked amateur radio operators; we were prohibited from putting up antennas. I built an invisible dipole -- 65 feet of #26 wire, end-fed, 10 feet off the ground. I worked all Japanese prefectures and 30 countries on 40 CW using this antenna. Do I recommend that everyone use 75 feet of #26 wire, end fed, 10 feet off the ground?

Most anything that will conduct and that is some portion of a wavelength long will radiate. The question is not "Will XXX work as an antenna," rather, "What do I want to accomplish with my station and, in the entire pantheon of antennas, what does this for the most people?"

There must be a reason why most amateurs run dipoles and yagis. And the reason is not that most amateurs do not understand fractal antennas. If the fractal antenna did 10 percent of what it's maker claims, the dumpsters would be filled with yagis, tri-banders, quads, half-wave dipoles, and 135-foot-ladder-line-fed dipoles. Tradition is not all bad.

--
Regards,
Joe Schlatter

Sent via Deja.com
http://www.deja.com/

146. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:23:15 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A511F73.9020605@hiwaay.net>
Source record: 173219

Jason- they work- but only as a small antenna is expected to work- not very well, compared to a real antenna.
There have been several made, according to reports I have seen. No big surprises.
the Controversy is NOT over the antenna, it is about the jerk who pushes them so hard, and is a constant (irritant/source of amusement) [select one] here on the NG. He is here, because he has been banned from several moderated lists. He can't be kicked off here, very easily.

Just read and enjoy- hope this helps
Bill-W4BSG

jason_hsu@my-deja.com wrote:

> Do fractal antennas work? Would they be useful in an apartment?
>
> Has anyone here made or used a fractal antenna?
>
> Why are fractal antennas so controversial?
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com
> http://www.deja.com/

147. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:24:34 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A511FC2.7FF217F4@dvol.com>
Source record: 173318

N2EY wrote:

>
> Despite decades of having "digital modes" pushed on the ham community, they
> make up only a small part of HF ham radio. Far less than Morse use. Why?
>
> I cannot recall how many articles on digital modes I've read in QST - RTTY,
> packet, AMTOR, PACTOR, PACTOR 2, G-TOR, PSK31, Feld-Hell, and now MFSK16. To
> name just a few - there are lots more. When was the last time you saw an
> article pushing Morse as a mode? Yet it is more popular on the HF/MF ham bands
> than all of the digital modes put together.

>
. . . you forgot the digital mode to end 'em all, Spread Rectum.
>
The digital Tower of Babble is not a bad thing in itself at all because it's hams doing what hams should be doing, developing radio communications technology. But expecting any significant number of hams to gallop into what amounts to a plethora of early-stage laboratory toys is simply not about to happen. Typical techhie inability to understand what actually goes on outside their intense little boxes.
>

>
> Because we like it.

>
. . . or if you only have a hundred bucks to spend on an HF xcvr cw is the only way you'll get on the air.
>

>
>
> 73 de Jim, N2EY

148. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:37:30 UTC
From: fractenna@aol.com
Message-ID: <20010101193730.22328.00001107@ng-fy1.aol.com>
Source record: 173220

Yes; quite well. In fact, for example, there is no better small Yagi than the FQY described at

http://www.n1ir.com (up soon).

Its efficiency, gain, F/B, and 50 ohm match are unsurpassed by any other small Yagi design of similar size.

Two weeks ago, I came in second in the US on the 10M Contest (SSB SO LP according to 3830 'score rumors') using the 10M FQY.

In 2 1/2 years I have worked 295 countries on 10M with it, with very casual, and almost only weekend, operation.

I typically have EU QSO runs with rates of well over 200 Q/hr outside of contests and I feel like rare DX:-)

This antenna costs about 20-50 bucks to build, and is easily constructed.

In addition to the web site mentioned above (recently transferred from http://www.fractenna.com) some more detailed mechanical descriptions can be found in October 99 73 magazine, where KF7BS had the cover article with his 10M FQY.

There are several other ham magazines which have also published them. In fact, the only main one, worldwide, which has NOT published a fractal antenna article is QST/ARRL. I have declined their repeated invitations to assist, the latest being three weeks ago from WA1LOU (a nice guy put in a tough spot)

The best (and only) good web site to ask questions is:

fractalantenna-subscribe@egroups.com

I'm sorry I can't answer questions here due to the maicious nature of a few hams on this NG. There is no one else here who has experience with fractal antennas. You will find claims to the contrary but never any data or valid model results.

Happy hamming in the new millenium!

73
Chip N1IR

149. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:42:37 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A5123FF.B0ADFF82@att.com>
Source record: 173221
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

marsgal42@hotmail.com wrote:
> In article <3A51118D.F18E3661@att.com>,
> Pervert_Extraordinaire <valued_customer1@att.com> wrote:
> > Can you elaborate a bit more? I understand you propose a dipole
> > antenna and a scanner. However, I don't follow the "null off
> > the end" term. Does the dipole offer a directional indicator
> > which produces nulls (drop in scanner audio output ??) when
> > the offending pole is at a right angle to the dipole?
> > (Jeez, I hope this limb doesn't break)
>
> Every radio-related book published in at least the past 60
> years will provide the information you need. There is still
> a time and a place for such things.
>
> If you're not prepared to splash out for something like the
> ARRL Handbook (which answers your questions), please consult
> a local public library. They usually have books on the
> subject.

Given I'm new to this field, I've yet to hear about any ARRL Handbook.

Nevertheless, I'll take your advice and get one.

Sorry if I bothered you. Trust me, it won't happen again.

150. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:45:11 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A512497.1D58F685@dvol.com>
Source record: 173222

Cecil wrote:

> to learn Morse code and I encourage all hams to do so. It is fun
> and may accidentally come in handy some day. In fact, any citizen
> is free to learn Morse code. However, this is a free country and it
> should be a choice, not a federal regulation. We have too many
> federal regulations.

>
When some start mumbling about *eliminating* Morse on the bands, and they
are out there, they're talking about treading on *my* freedom of choice.
>

> --
> http://www.mindspring.com/~w6rca

>
w3rv

151. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 00:59:37 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <FSBROj01Cqf6x+qGQxlGA3KGjPx8@4ax.com>
Source record: 173223

On Mon, 01 Jan 2001 22:52:16 GMT, jason_hsu@my-deja.com wrote:

>Do fractal antennas work? Would they be useful in an apartment?
>
>Has anyone here made or used a fractal antenna?
>
>Why are fractal antennas so controversial?

Hi Jason,

The remarkable feat of a fractal is the number of flavors it comes in.

Do they work? Yes.

As for the utility within or around an apartment, that is found in the small size and match offered. The benefits include nearly identical gain to the full size antenna, and a bandwidth that is broader than would be found in other small designs. In short, a better small antenna than examples of other small antennas.

How much better? Well for some examples of small antennas, quite good but not so much better as to beat the standard sized antenna and certainly no where near as good as a beam. That, unfortunately, is a strawman comparison. Browse the links I offer below to determine for yourself.

One controversy (for the antenna) is found in the braggin' rights that comes with one optimization over another. If you care to visit my page at:
http://www.qsl.net/kb7qhc/antenna/fractal/
you will find a survey of different designs where I show that comparing ANY fractal standing the same height as a standard quarter wave results in more signal towards the horizon. However, take this generality with a huge grain of salt and review my pages for the constant height models:
http://www.qsl.net/kb7qhc/antenna/fractal/Constant%20Height%20Comparisons.htm

Given that you are apartment confined, though, those pages may not interest. However if you browse
http://www.qsl.net/kb7qhc/antenna/fractal/Constant%20Wire%20Comparisons.htm
you will find a table containing thumbnail size pictures of various fractal forms. Click on any, and you will be taken to a larger picture of the fractal form actually modeled (the thumbnail is first order iteration, the larger is second order iteration). Here you may observe the complexity of design (complexity of the physical layout that is) which many consider to be a major impediment (about the only true, technical, controversy). You will also be able to compare

iterations to observe how a fractal grows.

73's
Richard Clark, KB7QHC

152. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:08:41 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <92r9jd$5ns$1@slb6.atl.mindspring.net>
Source record: 173224

"Fractenna" <fractenna@aol.com> wrote in message
news:20010101152914.21518.00000446@ng-cr1.aol.com...
> >Sure you made it! Everyone knows that you are really Phil, and simply use
> >his name as an alter ego when you want to make an idiotic statement.
Usually
> >supporting some other idiotic statement made by yourself.
> >
> >You are responsible for the account, now you can disavow all you like,
but!
> >unless you fire Phil for making unauthorized statements on behalf of
Fractal
> >Antennas, we must assume you support the statement.
> >
> >
> >--
> >We don't need guns against an oppressive government, because the
> >Constitution has internal safeguards, and we should ban and seize all
guns,
> >therefore violating the 2nd, 4th, 5th and 9th Amendments of that
> >Constitution, thereby becoming an oppressive government.
> >
> >"Fractenna" <fractenna@aol.com> wrote in message
> >news:20010101133646.06630.00000566@ng-mb1.aol.com...
> >> >
> >> >Chip--
> >> >
> >> >I checked the archives. The "mountain man" statement was, in fact,
> >authored
> >> >by
> >> >fractenna and posted on the 28th. Of course, you knew that all along!
> >> >
> >>
> >> Your statement ascribes the quote to "Dr. Cohen". Fractenna@aol.com is
NOT
> >a
> >> person. It is an ADDRESS. You know this well.
> >>
> >> Repeat: I did NOT make this statement; I do not, in fact, agree with
it;
> >and
> >> your CONTINUED malicious assertion--posed publicly to deliberately make
me
> >look
> >> bad--

> >> will lead to legal action.
> >>
> >>
> >> Repeat: I did NOT make this statement. If I do not receive a retraction
> >from
> >> you, immediately, I will proceed with legal notice, and then whatever
else
> >is
> >> needed to stop your endless, malicious harrassment.
> >>
> >> Nathan Cohen, Ph.D.
> >
>
>
> I did not make that statement.
>
> I have asked you to STOP harrassing me--this is a public statement to
render
> that fact as confirmed and publicly archived.
>
> Nathan Cohen, Ph.D.

While you may not have personally written it, it is there for all to see that it is the viewpoint and opinion of the company (Fractenna). I do believe I saw on your oft noted web page that Phil was a "company spokesman" or some such thing. Since I have read on your site where Phil has the right to speak for the company and has done so to the press in the past, I can only assume that when he is using the screen name "Fractenna" that he is speaking for you and the company.

153. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:16:32 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A512BF0.8030801@hiwaay.net>
Source record: 172833

Jason, etal- apologies- the 'jerk' I made reference to was NOT mr. Clark. He has, indeed, one of the best sources of real data with regard to fractal antennas.
The jerk I made light of was the resident of the 'Fractenna@aol.com' address.
Sorry about the ambiguity.

Bill

Bill Aycock wrote:

> Jason- they work- but only as a small antenna is expected to work- not
> very well, compared to a real antenna.
> There have been several made, according to reports I have seen. No big
> surprises.
> the Controversy is NOT over the antenna, it is about the jerk who pushes
> them so hard, and is a constant (irritant/source of amusement) [select
> one] here on the NG. He is here, because he has been banned from several
> moderated lists. He can't be kicked off here, very easily.
>
> Just read and enjoy- hope this helps
> Bill-W4BSG

154. Re: Interlaced Yagi for 10 and 15

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:27:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A512E9F.FE26F3CF@dvol.com>
Source record: 173225

lucascom wrote:

> Brian Kelly wrote in message <3A5102F6.508BCA77@dvol.com>...
> >
> >Try modeling back-to-back 10 & 15 Yagis on the same boom instead of
> interlacing
> >them. Boom gets longish but it's been done many times.
> >>
> The forward stagger works, of course, but space constraints limit me to
> a 26 ft. boom. If I had room to swing a 48 ft boom, the design is trivial!

>
Not forward stagger, back-to-back. 15 pointing east, 10 pointing west, etc.
>
So get practical/pragmatic and try a 3-el 15 on 14 ft.of a 26 ft boom, a foot between reflectors and 3 el for 10 on the remaining 10 ft. I had a Cushcraft 10/15 on a lousy little 13 ft. boom at 80 feet, the thing was a bonecrusher in the pileups on both bands.
>

> Surely if Force 12 can make the interlaced thingamabobs work, I can too!
> Obviously my enthusiasm exceeds my antenna design knowledge (at this
> point!). So I'll plod along with the hope that someone, somewhere has a
> declassified AO-format file to share.

>
AO is ancient history, departed with DOS. You can bet F12 doen't design with silly AO.
>

> I'd much rather tweak antennas on the
> 'puter and then build them,

>
Then treat yourself to some decent modeling software like EZNEC or NEC Win Plus.
>

>but if no one can help, I can always engage Dr. Conehead
>in a meaningful series of usenet discussions.
>
. . . yeah, go for it . .
>
Mike Lucas W5CHR

> Memphis, Tenn.

>
w3rv

155. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:33:36 UTC
From: n2ey@aol.com
Message-ID: <20010101203336.18339.00003611@nso-fa.aol.com>
Source record: 173226

In article <3A508A50.BE6855D@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>I've had PACTOR II QSOs when CW QSOs would have been impossible.

So?

I've had tens of thousands of CW QSOs when PACTOR II would have been
impossible.

> Seems the argument is a lot like abortion - either pro-
>choice or pro-Morse with the pro-Morse side relying primarily on
>emotions.

Nonsense.

The arguments are simply ones of opinion - nothing more or less.

73 de Jim, N2EY

156. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:33:36 UTC
From: n2ey@aol.com
Message-ID: <20010101203336.18339.00003610@nso-fa.aol.com>
Source record: 173228

In article <3A4FD7D8.7C27A0C@eznec.com>, Roy Lewallen <w7el@eznec.com> writes:

>Just out of curiosity, what was your hourly wage back then? How much did
>a house cost?

Well, here are some data points to consider....

Back about 1954, my uncle bought a nice 3 bedroom twin home in the town where B&W used to be for $12,000. He went into hock up to his ears to buy it, too - took every cent for a while, because it exceeded the "2 years gross salary" rule of the time. 20 year mortgage at 4%, which was considered almost usury then.

In 1979 I bought a very similar house four doors down for $47,000. I, too, went into hock up to my ears to buy it. 30 year mortgage at 10.5%, which was considered pretty good at the time.

Several years ago we both moved away. He went first and got about 8.5 times his purchase price. I got about twice my purchase price. His house was nicer ;-)

Compared to decent real estate, ham radio gear is dirt cheap.

73 de Jim, N2EY

157. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:33:37 UTC
From: n2ey@aol.com
Message-ID: <20010101203337.18339.00003612@nso-fa.aol.com>
Source record: 173227

In article <3A50DC64.52D6@wt.net>, Mark Keith <nm5k@wt.net> writes:

>All the other modes are pretty old
>too. AM, SSB, SSTV, RTTY, all are fairly old and arguably lame also.

Good point!

AM - on the air by Fessenden as early as 1906. Hams were using it by 1920.

SSB - on the air for transatlantic telephone (AT&T) by 1923. Hams (W6DEI and others) using it by 1934.

SSTV - on the air by hams in the late 1950s (Cop Macdondald and others)

RTTY - on the air some time before WW2, used by hams as soon as machines became available (late 1940s)

The NEWEST of the group are 40+ years old. SSB is pushing 80 years old.

73 de Jim, N2EY

158. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:33:38 UTC
From: n2ey@aol.com
Message-ID: <20010101203338.18339.00003613@nso-fa.aol.com>
Source record: 173229

In article <3A50F20D.FA145BFA@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Dick Carroll wrote:
>> Will CW ever "save the day"? Probably not, for sure not if all hams
>> abandon learning it. But to deny its communications potential just
>> because later modes exist is to ignore reality.
>
>CW has exhausted its communications *potential*.

Nonsense. Do you think AO-40 doesn't support CW?

>There is nothing new to be learned about CW.

Sure there is. I learn something new about it with every use.

>If CW were a serious communications mode,
>commercial interests would not have abandoned it.

More nonsense. Utterly untrue. You rally are good at telling whoppers, Cecil.

Commericial interests have largely given up on CW because they can get more for
their money with other modes. Their bottom line is different than ours.

Just because something isn't done commercially doesn't mean its not serious.

> Any ham is free
>to learn Morse code and I encourage all hams to do so.

Same here. Why all the badmouthing of the mode?

> It is fun
>and may accidentally come in handy some day.

It's fun for many - but for it to be fun, it has to be learned.

>In fact, any citizen
>is free to learn Morse code. However, this is a free country and it
>should be a choice, not a federal regulation.

It IS a choice. Nobody is "forced" to learn it at all. What's left of the code
tests barely qualify as learning it at all.

And the regulation exists because of the ITU treaty.

>We have too many
>federal regulations.
>--
Have you read them all?

73 de Jim, N2EY

159. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:38:07 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92rbeg$1gk$1@iac5.navix.net>
Source record: 173230

No-code licenses are like masturbation, others find it offensive but! you sure enjoy it.

"Brian Kelly" <kelly@dvol.com> wrote in message news:3A512497.1D58F685@dvol.com...
>
> Cecil wrote:
>
> > to learn Morse code and I encourage all hams to do so. It is fun
> > and may accidentally come in handy some day. In fact, any citizen
> > is free to learn Morse code. However, this is a free country and it
> > should be a choice, not a federal regulation. We have too many
> > federal regulations.
>
> >
> When some start mumbling about *eliminating* Morse on the bands, and they
> are out there, they're talking about treading on *my* freedom of choice.
> >
>
> > --
> > http://www.mindspring.com/~w6rca
>
> >
> w3rv
>
>

160. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 01:49:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A5133C4.D890DDD8@eznec.com>
Source record: 173231

Jim Pennino wrote:
> . . .
> For some files on fractal antennas for ham use and comparisons thereof,
> see ftp://eznec.com/pub/MI2. I'm not sure if the demo version of eznec
> will handle these files, but it can be found at www.eznec.com if you
> don't have it.
> . . .

Sorry, the demo version won't run calculations on these files. However, you can still open them with the demo version and view the antennas. You can also print the view, or view or print out a table of wire coordinates (Outputs/Show Description).

Roy Lewallen, W7EL

161. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:03:26 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5136EE.AFDDF274@dvol.com>
Source record: 173232

Richard Harrison wrote:

> (cw) is fun and profitable for some, but
> doesn`t deserve first consideration in accommodations. There are too
> many other users of the facilities who want to use other equipment.

>
When was the last time the existence of cw or the regs regarding cw "limited
the use of other equipment"??
>

>
> Best regards, Richard Harrison, KB5WZI

>
w3rv

162. 10M ground plane question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:15:07 UTC
From: paul <paul@nospam.com>
Message-ID: <3A5139AB.7B9E@nospam.com>
Source record: 173234

Hello,

I want to make a homebrewed 10 meter ground plane antenna. I've got most everything together but have a question on the radials.

Is it possible to physically shorten the lengths of the radials by adding a loading coil to each one? I think that the radials (on a homebrewed antenna) would really be the only unattractive part as they would take up most of the roof. Any idea of what size to make the coil /whip combination? Any idea if this would improve, degrade, or be the same in terms of performance?

Thanks

Paul
KD4GNU

163. Re: WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:18:14 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A513A66.C4947BBB@oio.net>
Source record: 173235
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Jason,
The first antenna appears to be a shortened, loaded dipole.
Used with a tuner, and depending on the tuner used, It could
probably be loaded on bands 40 - 10 meters.
The second and third antennas, again depending on the tuner
used, probably could be used on 40 - 10 meters.
Would any of these three antennas work well? Depends on
what you call 'well'. Better than nothing, yes. Better than
anything approaching a 1/4 wave or 1/2 wave antenna, not even
in your dreams. It would be nice to 'discover' a very small
antenna for the lower HF bands, but these don't qualify.
'Doc

164. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:20:40 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <YVa46.76366$nM5.12518327@news02.optonline.net>
Source record: 173236

Reg,

Ok, I give up ..... what's the advantage of nicrome wire for the
center conductor.

Bob
KB8TQ

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:92qqc0$4l2$1@neptunium.btinternet.com...
> Jim, I'm not joking. Try my suggestion. It really does
> work.
> ---
> Reg
> http://www.btinternet.com/~g4fgq.regp
>
> **********
> Jim wrote ..
> > ok guys, i am not kidding. this antenna works great even
> though everyone
> > says it wont work at all. it is for receive only and is
> laid right on
> > the ground. it is very low noise (even if it is low gain i
> need all the
> > noise rejection i can get) i use it for listening to
> shortwave with my
> > portable radio. in my circumstance it is far superior than
> several
> > "better" antennas that i have available, and it is very
> convenient to
> > lay out anywhere its needed. i just thought i would run
> some ideas past
> > you, i didnt mean to spill any "snake oil"
> >
>
>

165. TV yagi for 6M???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:25:00 UTC
From: paul <paul@nospam.com>
Message-ID: <3A513BFB.37DE@nospam.com>
Source record: 173237

Hello,

I have a rather large Television antenna and I wonder if I could take the longest two rear elements and add a little length to them (or maybe a coil) and get them to resonate in the 50-54 Mhz band. I know that TV channel 2 is 60-66 Mhz (or something like that). I proved this resonance with an MFJ-259 analyzer. It is my theory that everything in front would act like some sort of director elements.

I would of course feed it with 75 ohm coax to the 300 ohm balun on the antenna. I know that baluns are lossy and wouldn't handle much more than a watt but it seems a simple, cheap way to have a QRP beam. We don't have a channel 2 in the area so I doubt if it would mess up my TV reception much (when used as a regular TV antenna).

Any thoughts would be greatly appreciated.

Thanks.

Paul
KD4GNU

166. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:28:53 UTC
From: fractenna@aol.com
Message-ID: <20010101212853.12731.00001177@ng-cr1.aol.com>
Source record: 173238

>While you may not have personally written it, it is there for all to see
>that it is the viewpoint and opinion of the company (Fractenna). I do
>believe I saw on your oft noted web page that Phil was a "company spokesman"
>or some such thing. Since I have read on your site where Phil has the right
>to speak for the company and has done so to the press in the past, I can
>only assume that when he is using the screen name "Fractenna" that he is
>speaking for you and the company.
>
>

Excuse me;

You are confusing two things:

XXX@fractenna.com

and fractenna@aol.com

Phil speaks for himself on aol and he ID's as Phil.

73
Chip N1IR

167. metal roof as ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:39:01 UTC
From: paul <paul@nospam.com>
Message-ID: <3A513F45.3F58@nospam.com>
Source record: 173239

Hello,

I am in the process of putting up a number of antennas on a metal roof. I see no need to use radials with such a perfect ground plane already provided. The roof is about 100 feet by 150 feet and we are working somewhere near the middle. It is a sloping roof 35 ft high on the one side and 20 ft on the other. We're fashioning brackets to make the elements vertical. I wonder if anyone has any ideas on what the roof's slope would do to the polar pattern of the antenna? Would it "steer" the pattern towards the lower side or have no consequence at all?

Thanks.

Paul
KD4GNU

168. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:40:36 UTC
From: fractenna@aol.com
Message-ID: <20010101214036.27079.00000331@ng-cr1.aol.com>
Source record: 173240

>
>In article <3A4FD7D8.7C27A0C@eznec.com>, Roy Lewallen <w7el@eznec.com>
>writes:
>
>>Just out of curiosity, what was your hourly wage back then? How much did
>>a house cost?
>
>Well, here are some data points to consider....
>
>Back about 1954, my uncle bought a nice 3 bedroom twin home in the town where
>B&W used to be for $12,000. He went into hock up to his ears to buy it, too -
>took every cent for a while, because it exceeded the "2 years gross salary"
>rule of the time. 20 year mortgage at 4%, which was considered almost usury
>then.
>
>In 1979 I bought a very similar house four doors down for $47,000. I, too,
>went
>into hock up to my ears to buy it. 30 year mortgage at 10.5%, which was
>considered pretty good at the time.
>
>Several years ago we both moved away. He went first and got about 8.5 times
>his
>purchase price. I got about twice my purchase price. His house was nicer ;-)
>
>Compared to decent real estate, ham radio gear is dirt cheap.
>
>73 de Jim, N2EY
>

This is all very far away from the original thread.

The point(s) is/ (are):

1) the ARRL HANDBOOK's price does not represent the very cheapest it could be
and still turn a profit. I would guesstimate that price-point is of order $24
or so;
2) The ARRL HANDBOOK is designed to MAKE money to cover the extensive losses
incurred in operations at the League;
3) If the League didn't have the HANDBOOK then there would be a very severe cut
in many of the operations we have come to expect; I would speculate that things
which do not generate revenue and have low readership--such as contest results,
DXCC; and so on would suffer. And say goodbye to the percs such as the web
site; letters; bulletins; and so on.

What's the point(s)?

1) The League is a well run ship with no fat;
2) The League does have a cashcow--the HANDBOOK--that makes a lot of the other things possible;
3) Prices of items seldom reflect their costs. If you believe they do, then ask yourself how much money McDonald's makes on hamburgers (actually very little; of order a dime for a quarter pounder) compared to a coke (about 60-100+ cents per drink) and fries (about 20-30 cents per order).

So not everything scales as a KWM-2 ;-)

73
Chip N1IR

169. W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:47:45 UTC
From: fractenna@aol.com
Message-ID: <20010101214745.27079.00000332@ng-cr1.aol.com>
Source record: 173241

>Sorry, the demo version won't run calculations on these files. However,
>you can still open them with the demo version and view the antennas. You
>can also print the view, or view or print out a table of wire
>coordinates (Outputs/Show Description).
>
>Roy Lewallen, W7EL
>

This MI2 file is a copyright file to me.

Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file. Hams and others are warned that downloading said MI2 file is a further violation of federal copyright laws.

Mr. Lewallen will be served shortly with a cease and desist order. If he fails to stop this illegal distribution and publication of this copyright file, he will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC. If Mr. Lewallen does not remove the file immediately then litigation will also seek to determine who has sought to download this file illegally, through Lewallen's distribution and publication on the site www.eznec.com.

Nathan Cohen, Ph.D.

170. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:48:26 UTC
From: gmason <gmason@airmail.net>
Message-ID: <53D09A11C7A0C231.14FA8CDEEC18F628.7F4B0290E7040225@lp.airnews.net>
Source record: 173398

The buried snake antenna works best in rainy weather, low noise and not likely to receive lightning strikes. Does anyone have data on 'stacked snakes' or 'collinear snakes' ?
-Gene KZ5V
note-This might be almost as interesting a project as the beer can verticals, when I was a teenager ! As I recall it took sevaral weekends to obtain the 'components'
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:92ojb0$ob9$1@plutonium.btinternet.com...
> Jim, have you tried laying your antenna along the bottom of
> straight trench about 18" deep. It will be at least 10dB
> quieter and well worth the hard labour if its quietness you
> are looking for. Double-screened coax works even better
> especially when Nichrome wire is used for the inner
> conductor.
>
> A peaceful and prosperous New Year to all.
> ---
> Reg.
>
>
>

171. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 02:49:05 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <1jfr29.tn9.ln@mail.specsol.com>
Source record: 173243

Fractenna <fractenna@aol.com> wrote:
>>While you may not have personally written it, it is there for all to see
>>that it is the viewpoint and opinion of the company (Fractenna). I do
>>believe I saw on your oft noted web page that Phil was a "company spokesman"
>>or some such thing. Since I have read on your site where Phil has the right
>>to speak for the company and has done so to the press in the past, I can
>>only assume that when he is using the screen name "Fractenna" that he is
>>speaking for you and the company.
>>
>>

> Excuse me;

> You are confusing two things:

> XXX@fractenna.com

> and fractenna@aol.com

> Phil speaks for himself on aol and he ID's as Phil.

> 73
> Chip N1IR

Bzzzt. Wrong again.

The post that started this thread was from fractenna@aol.com, whoever
it may be since the owner of the account doen't have the common sense
to keep the password secure and to himself.

Jim Pennino

172. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 03:00:00 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <g7gr29.tn9.ln@mail.specsol.com>
Source record: 173242

Fractenna <fractenna@aol.com> wrote:
> Yes; quite well. In fact, for example, there is no better small Yagi than the
> FQY described at

> http://www.n1ir.com (up soon).

> Its efficiency, gain, F/B, and 50 ohm match are unsurpassed by any other small
> Yagi design of similar size.

> Two weeks ago, I came in second in the US on the 10M Contest (SSB SO LP
> according to 3830 'score rumors') using the 10M FQY.

> In 2 1/2 years I have worked 295 countries on 10M with it, with very casual,
> and almost only weekend, operation.

> I typically have EU QSO runs with rates of well over 200 Q/hr outside of
> contests and I feel like rare DX:-)

> This antenna costs about 20-50 bucks to build, and is easily constructed.

At least I had the decency of qualifying my opinions as opinions.

Since we (on this newsgroup) have yet to see any any hard numbers for the
above, other than your contest standing in a solar max, your statments
are also opinions.

> In addition to the web site mentioned above (recently transferred from
> http://www.fractenna.com) some more detailed mechanical descriptions can be
> found in October 99 73 magazine, where KF7BS had the cover article with his 10M
> FQY.

> There are several other ham magazines which have also published them. In fact,
> the only main one, worldwide, which has NOT published a fractal antenna article
> is QST/ARRL. I have declined their repeated invitations to assist, the latest
> being three weeks ago from WA1LOU (a nice guy put in a tough spot)

> The best (and only) good web site to ask questions is:

> fractalantenna-subscribe@egroups.com

That isn't a website, it's an e-mail address.

> I'm sorry I can't answer questions here due to the maicious nature of a few
> hams on this NG. There is no one else here who has experience with fractal
> antennas. You will find claims to the contrary but never any data or valid
> model results.

Nor any valid data or model results from fractenna@aol.com, hence the
"controversy".

> Happy hamming in the new millenium!

Jim Pennino

173. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 03:14:47 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92rh3p$4u5$1@iac5.navix.net>
Source record: 173244

Must be an absolutely fantastically successful antenna company if all the folks have to share an AOL account...

"Jim Pennino" <jimp@mail.specsol.com> wrote in message news:1jfr29.tn9.ln@mail.specsol.com...
> Fractenna <fractenna@aol.com> wrote:
> >>While you may not have personally written it, it is there for all to see
> >>that it is the viewpoint and opinion of the company (Fractenna). I do
> >>believe I saw on your oft noted web page that Phil was a "company spokesman"
> >>or some such thing. Since I have read on your site where Phil has the right
> >>to speak for the company and has done so to the press in the past, I can
> >>only assume that when he is using the screen name "Fractenna" that he is
> >>speaking for you and the company.
> >>
> >>
>
> > Excuse me;
>
> > You are confusing two things:
>
> > XXX@fractenna.com
>
> > and fractenna@aol.com
>
> > Phil speaks for himself on aol and he ID's as Phil.
>
> > 73
> > Chip N1IR
>
> Bzzzt. Wrong again.
>
> The post that started this thread was from fractenna@aol.com, whoever
> it may be since the owner of the account doen't have the common sense
> to keep the password secure and to himself.
>
> Jim Pennino
>

174. Re: 10M ground plane question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 03:50:51 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A51501B.41B4@wt.net>
Source record: 173245

paul wrote:
>
> Hello,
>
> I want to make a homebrewed 10 meter ground plane antenna. I've got
> most everything together but have a question on the radials.
>
> Is it possible to physically shorten the lengths of the radials by
> adding a loading coil to each one? I think that the radials (on a
> homebrewed antenna) would really be the only unattractive part as they
> would take up most of the roof. Any idea of what size to make the coil
> /whip combination? Any idea if this would improve, degrade, or be the
> same in terms of performance?
>
> Thanks
>
> Paul
> KD4GNU
Would degrade compared to full 1/4 wl radials. If you hate radials, make
a 1/2 wave vertical. It will work ok without radials. The number of
turns would depend where on the radial you placed the coil. The farther
out, the more turns needed, and also more loss in general. But you do
get better current distribution. 1/2 to 3/4 the way out about the best
place overall. You could use regs vertload to get a good idea of the
coil needed for such a setup. Just pretend the radial is any other
loaded 1/4 wl vertical. All the normal methods apply. MK
--
http://web.wt.net/~nm5k

175. Re: W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 04:12:30 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <efkr29.8np.ln@mail.specsol.com>
Source record: 173247

Fractenna <fractenna@aol.com> wrote:

>>Sorry, the demo version won't run calculations on these files. However,
>>you can still open them with the demo version and view the antennas. You
>>can also print the view, or view or print out a table of wire
>>coordinates (Outputs/Show Description).
>>
>>Roy Lewallen, W7EL
>>

> This MI2 file is a copyright file to me.

> Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
> Hams and others are warned that downloading said MI2 file is a further
> violation of federal copyright laws.

> Mr. Lewallen will be served shortly with a cease and desist order. If he fails
> to stop this illegal distribution and publication of this copyright file, he
> will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
> If Mr. Lewallen does not remove the file immediately then litigation will also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.

> Nathan Cohen, Ph.D.

One wonders why you continually threaten to sue Roy.

Could it be that a quick run of his modeling program shows your antenna
designs to be more gas than substance?

Jim Pennino

176. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 04:18:16 UTC
From: rwclark@seanet.com
Message-ID: <3a5155d6.6097330@news.seanet.com>
Source record: 173246

On Mon, 01 Jan 2001 17:49:56 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Jim Pennino wrote:
>> . . .
>> For some files on fractal antennas for ham use and comparisons thereof,
>> see ftp://eznec.com/pub/MI2. I'm not sure if the demo version of eznec
>> will handle these files, but it can be found at www.eznec.com if you
>> don't have it.
>> . . .
>
>Sorry, the demo version won't run calculations on these files. However,
>you can still open them with the demo version and view the antennas. You
>can also print the view, or view or print out a table of wire
>coordinates (Outputs/Show Description).
>
>Roy Lewallen, W7EL

Hi Jason,

You can find this design compared to half a dozen better performers
at:
http://www.seanet.com/~rwclark/antenna/fractal/Fractal%20Challenge%20Winner.htm

73's
Richard Clark, KB7QHC

177. Re: i hope this is a simple one...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 04:40:29 UTC
From: just lil ole me <jponkey@mediaone.net>
Message-ID: <1Zc46.325$3i7.29023@typhoon.mw.mediaone.net>
Source record: 173248

thank you to those who responded. seems the idea is to use guying. i thought it didn't need it. how do you tell if an antenna needs guying? what standards or guidelines are used?

thanks
Joe
KC8PBN

"HHoover" <jponkey@mediaone.net> wrote in message news:yP246.33611$ZC4.1301740@typhoon.mw.mediaone.net...
> my wife is scared of me knocking down wires with my r-5 mounted to a 15'
> mast on a tripod.
> i plan on mouting it in the backyard til spring until i can get on the roof.
> my question is, how do i mount the tripod to the ground? safley of course
> so that it can withstand, say. a 45 mph breeze.
>
> thanks in advance
> Joe
> KC8PBN
>
>

178. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 04:55:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A515F4C.9B0588D2@IEEE.org>
Source record: 173249

N2EY wrote:
>
> <Cecil.A.Moore@IEEE.org> writes:
> >I've had PACTOR II QSOs when CW QSOs would have been impossible.
>
> So?

My point exactly. What is wrong with live and let live?

> The arguments are simply ones of opinion - nothing more or less.

My point exactly - just like the abortion issue.
--
http://www.mindspring.com/~w6rca

179. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 04:57:29 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A515FB9.B5064438@IEEE.org>
Source record: 173250

Brian Kelly wrote:
> When some start mumbling about *eliminating* Morse on the bands, and they
> are out there, they're talking about treading on *my* freedom of choice.

People mumble about a lot of things. Morse is not going to be eliminated
except through attrition.
--
http://www.mindspring.com/~w6rca

180. Two Hamsticks as a Dipole???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:02:32 UTC
From: "James P. Rybak" <jrybak@mesastate.edu>
Message-ID: <Pine.LNX.4.21.0101012157190.29760-100000@mesastate.edu>
Source record: 173252

I know that it is possible to use two Hamstick antennas together as a dipole. A special mounting bracket is available for this purpose. Can anyone tell me how well this arrangement will work (say, compared to a single Hamstick with radials) for portable operation? I'm thinking of using two Hamsticks in this manner for 20 meters.

Thanks.

Jim Rybak W0KSD

181. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:10:19 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5162BB.B0B2DDBB@IEEE.org>
Source record: 173254

N2EY wrote:
> Nonsense. Do you think AO-40 doesn't support CW?

A0-40 doesn't give CW any more *potential*. CW is a 100% mature
communications mode.

> I learn something new about it with every use.

I'm not talking about individuals. I'm talking about the body of
knowledge concerning CW.

> Commericial interests have largely given up on CW because they can get more for
> their money with other modes.

My point exactly.

> Just because something isn't done commercially doesn't mean its not serious.

Commercial = functional = serious, amateur = hobby = fun.

> Why all the badmouthing of the mode?

I have never badmouthed the mode. I have badmouthed the regulation that
forces a single mode down the throat of every HF amateur radio operator.
--
http://www.mindspring.com/~w6rca

182. Alliance HD-73 Rotor - Need Info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:12:31 UTC
From: JSPS <jsps999@earthlink.net>
Message-ID: <c1o25t827sms740uqsnl6r7m6coaausduu@4ax.com>
Source record: 173251

I hope this is not off topic for this NG, I appologize if it is.

From an estate sale I recently acquired an Alliance HD-73 rotor &
control box.
I knew that these were in good working order and were in use until
the elderly Ham passed away recently.
Unfortunately, the persons(s) who took down the tower, etc
misplaced/lost the rotor control cable with it's what I believe to be,
but not entirely sure of, a **customized** 6-pin plug at the rotor end
of it.

I need to know this info:
To corrolate the control box's numbered terminal strip with
the color code of the length of 6-wire control cable "tail"
going into the HD-73 rotor housing.

Thanks in advance for any info.

--John k8js@arrl.net or jsps999@mailandnews.com

183. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:15:03 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92ro5a$9kj$1@iac5.navix.net>
Source record: 173253

The remark was posted from your account, the account is in your name, ergo you are responsible for the remark. QED

As to the lawsuit part, I am tired of this same old song, as the saying goes sue or get off the pot! I had hoped that as another year had passed you would finally gain some maturity. I suspect that you acting your age and no code international running a CW contest will occur in the same week.

"Fractenna" <fractenna@aol.com> wrote in message > >> Repeat: I did NOT make this statement. If I do not receive a retraction
> >from
> >> you, immediately, I will proceed with legal notice, and then whatever else
> >is
> >> needed to stop your endless, malicious harrassment.
> >>
> >> Nathan Cohen, Ph.D.
> >
>
>
> I did not make that statement.
>
> I have asked you to STOP harrassing me--this is a public statement to render
> that fact as confirmed and publicly archived.
>
> Nathan Cohen, Ph.D.

184. Re: Interlaced Yagi for 10 and 15

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:17:12 UTC
From: earlve3ab@igs.net
Message-ID: <3a5163d4.264876621@news.ott.igs.net>
Source record: 173233

I have seen a number of designs..noteworthy ARRL Handbook and/or ARRL
Antenna Manual and on the WEB...i saw a design..If yoiu like i can
look in my YAGI files..I have a tech file system here...73 Earl VE3AB
n Mon, 1 Jan 2001 15:23:46 -0600, "lucascom" <lucascom@email.msn.com>
wrote:

> Anyone have a design for an interlaced 10 and 15 Yagi that they would be
>willing to share? I'd like to consolidate some tubing to gain space on the
>mast for other projects.
>All of my efforts seem to model great on 15, but 10 suffers from interaction
>in EVERY
>parameter. I'm not willing to lay out cash for a Force-12 off-the-shelf
>design. Cheap is better!
>
>Mike Lucas W5CHR
>Memphis, Tenn.
>
>

185. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:18:49 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5164B9.25F768C3@IEEE.org>
Source record: 173255

Brian Kelly wrote:
> When was the last time the existence of cw or the regs regarding cw "limited
> the use of other equipment"??

It's doing it right now. My ex-boss is a tech in Colorado. I'm in Texas.
We can't legally talk to each other until he satisfies the code regs.
--
http://www.mindspring.com/~w6rca

186. Re: W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:30:27 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A516773.70808@hiwaay.net>
Source record: 173256

See clarification within Frackies post, below.

Fractenna wrote

> SNIP
> This MI2 file is a copyright file to me.

Poor wording, but, the last time I looked, this file is not the one
Fracky put on his site, so how can there be a copyright violation?

>
> Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
> Hams and others are warned that downloading said MI2 file is a further
> violation of federal copyright laws
SNIP

>
>
> litigation will also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.

Note the tortuous wording that makes it look like a big deal, but is
really as clear as mud. Apparently, if I did down load it, I am OK, only
if I only sought to, is he after me. Further, since the file in question
is NOT Frackies, then any download would not be illegal, so another
qualifier bites the dust.
I am having a hard time seeing just what he is after, since all the
things that bother him are not pertinent to the action he proposes.

For what it's worth- I have the file, I did not download it from the
EZNEC site, and I hope he comes for me- I am on a retirement income, and
could sure use the proceeds of my countersuit.

Hope this helps- Bill

>
> Nathan Cohen, Ph.D.

187. W7EL, etal, copyright flap

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:36:32 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A5168E0.6030007@hiwaay.net>
Source record: 173257

See clarification within Frackies post, below.

Fractenna wrote

> SNIP
> This MI2 file is a copyright file to me.

Poor wording, but, the last time I looked, this file is not the one
Fracky put on his site, so how can there be a copyright violation?

>
> Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing
this file.
> Hams and others are warned that downloading said MI2 file is a further
> violation of federal copyright laws
SNIP

>
>
> litigation will also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.

Note the tortuous wording that makes it look like a big deal, but is
really as clear as mud. Apparently, if I did down load it, I am OK, only
if I only sought to, is he after me. Further, since the file in question
is NOT Frackies, then any download would not be illegal, so another
qualifier bites the dust.
I am having a hard time seeing just what he is after, since all the
things that bother him are not pertinent to the action he proposes.

For what it's worth- I have the file, I did not download it from the
EZNEC site, and I hope he comes for me- I am on a retirement income, and
could sure use the proceeds of my countersuit.

Hope this helps- Bill

>
> Nathan Cohen, Ph.D.

188. Re: Two Hamsticks as a Dipole???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:40:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5169B8.53A68BE6@IEEE.org>
Source record: 173258

"James P. Rybak" wrote:
> I know that it is possible to use two Hamstick antennas together as a
> dipole. A special mounting bracket is available for this purpose. Can
> anyone tell me how well this arrangement will work (say, compared to a
> single Hamstick with radials) for portable operation? I'm thinking of
> using two Hamsticks in this manner for 20 meters.

It will work reasonably well 30ft high on 20m. It won't work
worth a darn on 75m.
--
http://www.mindspring.com/~w6rca

189. Re: W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:48:12 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <92rq34$3js$1@nntp9.atl.mindspring.net>
Source record: 173259

"Fractenna" <fractenna@aol.com> wrote in message
news:20010101214745.27079.00000332@ng-cr1.aol.com...
>
> >Sorry, the demo version won't run calculations on these files. However,
> >you can still open them with the demo version and view the antennas. You
> >can also print the view, or view or print out a table of wire
> >coordinates (Outputs/Show Description).
> >
> >Roy Lewallen, W7EL
> >
>
> This MI2 file is a copyright file to me.
>
> Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this
file.
> Hams and others are warned that downloading said MI2 file is a further
> violation of federal copyright laws.
>
>
> Mr. Lewallen will be served shortly with a cease and desist order. If he
fails
> to stop this illegal distribution and publication of this copyright file,
he
> will be sued and criminal charges will be brought against Lewallen D/B/A
EZNEC.
> If Mr. Lewallen does not remove the file immediately then litigation will
also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.
>
> Nathan Cohen, Ph.D.

Thanks. I didn't know his web address. I'll have to pop over and take a
look.

190. Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:51:56 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <92rqmu$1fjj$1@nntp1.ba.best.com>
Source record: 173260

Hi, and happy new year to the group -

I am considering putting up a wire antenna for casual
HF use (100W class). I would like to operate on as
many HF bands as possible. Available supports are
a 40 foot tree on one end, and an 8 foot fence post
on the other end; so this thing would be something
of a sloper. Can feed approximately in the middle,
with either ladder line or coax. I have a new antenna
tuner available (MFJ).

Any opinions out there as to whether a multiband dipole,
a windom, a G5RV, a random longwire, or ??? would
be best suited to this situation?

...Thanks, Old Ed

191. Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:54:57 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <92rqrr$1fnb$1@nntp1.ba.best.com>
Source record: 173261

Hi, and happy new year to the group -

I am considering putting up a wire antenna for casual
HF use (100W class). I would like to operate on as
many HF bands as possible.

Available supports are a 40 foot tree on one end, and
an 8 foot fence post on the other end; so this thing
would be something of a sloper. Available length is
about 100 feet. Can feed approximately in the middle,
with either ladder line or coax. I have a new antenna
tuner available (MFJ).

Any opinions out there as to whether a multiband dipole,
a windom, a G5RV, a random longwire, or ??? would
be best suited to this situation?

...Thanks, Old Ed

192. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 05:58:06 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <92rr1k$1fri$1@nntp1.ba.best.com>
Source record: 173262

OOPS! Forgot to mention that available length is about
100 feet. ...Ed

"Janice and Ed Senior" <senior@best.com> wrote in message
news:92rqmu$1fjj$1@nntp1.ba.best.com...
> Hi, and happy new year to the group -
>
> I am considering putting up a wire antenna for casual
> HF use (100W class). I would like to operate on as
> many HF bands as possible. Available supports are
> a 40 foot tree on one end, and an 8 foot fence post
> on the other end; so this thing would be something
> of a sloper. Can feed approximately in the middle,
> with either ladder line or coax. I have a new antenna
> tuner available (MFJ).
>
> Any opinions out there as to whether a multiband dipole,
> a windom, a G5RV, a random longwire, or ??? would
> be best suited to this situation?
>
> ...Thanks, Old Ed
>
>

193. What would be really nice.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 06:04:04 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <t6e46.8509$8Y.907921@nntp3.onemain.com>
Source record: 173263

What would be really nice and a good start to the new year? How about discussions about antennas? Did I miss something or is this not a news group for antennas? It seems everytime I read this news group there are legal briefs being displayed or so it seems..... Maybe a few of you need to GROW UP and GET A LIFE!

Pat

194. Re: W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 06:52:00 UTC
From: kk5yy@arrl.net
Message-ID: <3a517777.109742789@nntp.mindspring.com>
Source record: 173264

On 02 Jan 2001 02:47:45 GMT, the lying festering sack of insanity at fractenna@aol.com (Fractenna) whined:

>
>>Sorry, the demo version won't run calculations on these files. However,
>>you can still open them with the demo version and view the antennas. You
>>can also print the view, or view or print out a table of wire
>>coordinates (Outputs/Show Description).
>>
>>Roy Lewallen, W7EL
>>
>
>This MI2 file is a copyright file to me.

Bullshit you lying turd. This file was created from a publicly
available cartoon of the Frackcrap antenna. Your real issue is
that when modeled your piss poor excuse for an antenna
is easily shown for the pile of junk it really is.
>
>Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
>Hams and others are warned that downloading said MI2 file is a further
>violation of federal copyright laws.

What a load of nonsense you demonstrate les competence in the law
than you do in antenna design; frankly I didn't think that possible.
>
>
>Mr. Lewallen will be served shortly with a cease and desist order. If he fails
>to stop this illegal distribution and publication of this copyright file, he
>will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.

Bull perhaps you should seek Counsel or even better a mental health
professional. In my humble opinion you are delusional and seriously in
need of immediate mental health treatment. In my opinion if you are
not treated soon you may well become a danger to yourself and
others.

>If Mr. Lewallen does not remove the file immediately then litigation will also
>seek to determine who has sought to download this file illegally, through
>Lewallen's distribution and publication on the site www.eznec.com.

Give it a break idiot
>
>Nathan Cohen, Ph.D.

Please please stop using that title you are an embarrassment to PhDs everywhere. A survey of sane competent contributing PhDs indicates that they find you abhorrent.

I hope this helps.

195. Re: Two Hamsticks as a Dipole???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 07:02:47 UTC
From: Aaron Jones <nomail@nomail.com>
Message-ID: <d6v25t8uase8thpf6k6ch38hiupfg4epic@4ax.com>
Source record: 173265

"James P. Rybak" <jrybak@mesastate.edu> wrote:
>I know that it is possible to use two Hamstick antennas together as a
>dipole. A special mounting bracket is available for this purpose. Can
>anyone tell me how well this arrangement will work (say, compared to a
>single Hamstick with radials) for portable operation? I'm thinking of
>using two Hamsticks in this manner for 20 meters.

I live in a no antenna development. Because I have cathedral ceilings I have little space to put an attic antenna except in my garage, which is only about 22' long. I have put up 2 sets of Hamsticks (dipole configuration) in the garage attic, one for 40 and one for 20. They work well for my type of operation which is CW ragchewing only. I have yet to lose a contact in the 3 months I have been using them, and many chats have lasted well over an hour. I get about the same reports as I do when I use the Hamsticks CW mobile, which I guess is logical, generally 559 to 599. I was surprised that I have few RFI problems considering that the Hamsticks are within a few feet of power, cable TV, and phone lines. All my TVs except the one in the shack are completely clear. The phones have some very minor clicks when I key and are useable, and the only real problem was a GFI socket that kept tripping off and darkening my outside decorative plant lights. That was easy to fix, I just replaced it with the old fashioned kind. I'm hoping that the neighbors are as lucky as I am with my RFI, but I ain't asking... :-)

Anyway, I have digressed. To answer your question about portable operation, yes, Hamsticks should work just fine...

196. Re: W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 07:07:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A517E30.33D4B521@eznec.com>
Source record: 173266

The EZNEC files on my site at ftp://eznec.com/pub/MI2 were created solely by Steve Best, VE9SRB, except for 0notes.txt, which I wrote and which tells what the other files are. I have Steve's express permission to post them, and no one has rights to these files except Steve, who puts no restrictions on their copying and use. Fractenna, Inc. and Nathan Cohen Phd have both claimed to have copyrights for these works, but their claims are completely false. Anyone may download, copy, and use these files without violating any criminal or civil law. Good ethics and manners would be served by crediting Steve as the files' author when appropriate.

Anyone else with files to post in response to Chip's "1000 dollar MI2 challenge" are welcome to submit them. I'll be glad to post them with the same conditions under which I posted Steve's: You give me your express permission to do so, and please don't include any inappropriate editorial material in the accompanying text files.

I am solely responsible for all material on my web site http://eznec.com.

Roy Lewallen, W7EL

Bill Aycock wrote:
>
> See clarification within Frackies post, below.
>
> Fractenna wrote
>
> > SNIP
> > This MI2 file is a copyright file to me.
>
> Poor wording, but, the last time I looked, this file is not the one
> Fracky put on his site, so how can there be a copyright violation?
>
> >
> > Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
> > Hams and others are warned that downloading said MI2 file is a further
> > violation of federal copyright laws
> SNIP
>
> >
> >
> > litigation will also
> > seek to determine who has sought to download this file illegally, through

> > Lewallen's distribution and publication on the site www.eznec.com.
>
> Note the tortuous wording that makes it look like a big deal, but is
> really as clear as mud. Apparently, if I did down load it, I am OK, only
> if I only sought to, is he after me. Further, since the file in question
> is NOT Frackies, then any download would not be illegal, so another
> qualifier bites the dust.
> I am having a hard time seeing just what he is after, since all the
> things that bother him are not pertinent to the action he proposes.
>
> For what it's worth- I have the file, I did not download it from the
> EZNEC site, and I hope he comes for me- I am on a retirement income, and
> could sure use the proceeds of my countersuit.
>
> Hope this helps- Bill
>
> >
> > Nathan Cohen, Ph.D.

197. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 07:13:54 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A517FB2.E1AA8FE8@oio.net>
Source record: 173267

Janice and Ed,
Sounds like it ought to work, either end fed, or in the center
with ladder line.
'Doc

198. Re: Two Hamsticks as a Dipole???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 08:01:43 UTC
From: "James P. Rybak" <jrybak@mesastate.edu>
Message-ID: <Pine.LNX.4.21.0101020059260.775-100000@mesastate.edu>
Source record: 173268

Hi Joe,

Lakeview Co., the guys who sell the Hamsticks, have a bracket for mounting
two Hamsticks as a dipole. It costs about $13. See it at
www.hamstick.com

73,

Jim Rybak W0KSD

On 2 Jan 2001, Kr2v wrote:

> Hi Jim,
>
> Can you tell me where to find the mounting bracket for joining two hamsticks.
> I too have been thinking of experimenting with this for a portable setup. I
> have a 1995 QST article that describes this for 40 meters and can mail you a
> copy if you are interested.
>
> Thanks,
> Joe - KR2V
>
> <A special mounting bracket is available for this purpose.>
>

199. Re: TV yagi for 6M???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 10:41:09 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <n1c35t82dvfgsp6mof47ere2mg9jdp0a9p@4ax.com>
Source record: 173119

On Mon, 01 Jan 2001 21:25:00 -0500, paul <paul@nospam.com> wrote:
Paul, just some thoughts, down here ,San Antonio, Tx, we have a
channel two tv station, and I am on the ''fringe '', so I just bought
a antenna for channel two, it is a ten element, and it cost forty
dollars, I jokingly asked if I could have a """ham discount"" and they
knocked off ten percent. All the elements are for channel two, so
it """might""" work in line with what you are talking about.... the
weather here has been wet and cold , and so I am putting off
installing the thing for a while. Just my ''two cents'' . Chuck
Lorentson 73
>Hello,
>
>I have a rather large Television antenna and I wonder if I could take
>the longest two rear elements and add a little length to them (or maybe
>a coil) and get them to resonate in the 50-54 Mhz band. I know that TV
>channel 2 is 60-66 Mhz (or something like that). I proved this
>resonance with an MFJ-259 analyzer. It is my theory that everything in
>front would act like some sort of director elements.
>
>I would of course feed it with 75 ohm coax to the 300 ohm balun on the
>antenna. I know that baluns are lossy and wouldn't handle much more
>than a watt but it seems a simple, cheap way to have a QRP beam. We
>don't have a channel 2 in the area so I doubt if it would mess up my TV
>reception much (when used as a regular TV antenna).
>
>Any thoughts would be greatly appreciated.
>
>Thanks.
>
>Paul
>KD4GNU

200. Re: metal roof as ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 10:49:15 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A51B22B.F5BEBFE8@oio.net>
Source record: 173120

Paul,
The 'tilt' will have some affect, but probably it will
be very slight. I don't think I would worry too much about
it. Another point to think on is that if you use the roof
for a groundplane, you're affectively making the roof of your
building part of the antenna. Any wiring, etc, are going to
be in very near your antenna and will be subject to RFI. (I'd
have to try it too, though.)
'Doc

201. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 10:56:57 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Oti46.6461$jl6.23725@newsfeed.slurp.net>
Source record: 173121

Cec, you trivialize the abortion pogrom, which has cost the lives of
30-plus-million fellow Americans since 1973.

This 'emotion' is murderous.

I do hear murderously-poor CW from time to time ;-)

73, Dave, K3BHJ

202. Re: TV yagi for 6M???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 11:10:21 UTC
From: jefff_b@my-deja.com
Message-ID: <92scus$l2l$1@nnrp1.deja.com>
Source record: 173122

Hi Paul,

There are lots of instances where hams have used TV antennas for 6m. One guy here in Massachusetts has an old Radio Shack 13 element vhf tv antenna that he uses on both 6m and 2m. It works so well for him that a couple of other guys went out looking for that particular model from Radio Shack, but found that it was discontinued (figures, eh?). I've also used a "bat-wing" style tv antenna for both 6m and 2m with some slight directivity.

The baluns used on tv antennas can be used to tx low power, and work just fine. I don't know what pwr level they might break down at, but I know that the one being used on the Radio Shack antenna has been fed up to 30 watts carrier on AM on both 6m and 2m, and he's still having no problems with it.

It's a shame that your antenna doesn't show resonance down to 50mHz, though, as that would certainly make it a nice plug'n'play dual duty antenna. Since these are usually a log periodic dipole array design, it would probably be better to try to add elements onto the back end of the antenna, rather than making the last two elements longer, since that would disrupt the log periodic design. In other words, if you add length to the elements, they also need to be moved further back to maintain directivity.

At a guess, I'd say that the performance hit would be less if you simply loaded the antenna up on a tuner, rather than lengthening the last two elements.

Jeff
KA1OGM

In article <3A513BFB.37DE@nospam.com>,
newsgroup wrote:
> Hello,
>
> I have a rather large Television antenna and I wonder if I could take
> the longest two rear elements and add a little length to them (or
maybe
> a coil) and get them to resonate in the 50-54 Mhz band. I know that
TV
> channel 2 is 60-66 Mhz (or something like that). I proved this
> resonance with an MFJ-259 analyzer. It is my theory that everything
in
> front would act like some sort of director elements.
>

> I would of course feed it with 75 ohm coax to the 300 ohm balun on the
> antenna. I know that baluns are lossy and wouldn't handle much more
> than a watt but it seems a simple, cheap way to have a QRP beam. We
> don't have a channel 2 in the area so I doubt if it would mess up my
TV
> reception much (when used as a regular TV antenna).
>
> Any thoughts would be greatly appreciated.
>
> Thanks.
>
> Paul
> KD4GNU
>

Sent via Deja.com
http://www.deja.com/

203. W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 11:31:01 UTC
From: fractenna@aol.com
Message-ID: <20010102063101.03760.00000323@ng-cd1.aol.com>
Source record: 173123

>The EZNEC files on my site at ftp://eznec.com/pub/MI2 were created
>solely by Steve Best, VE9SRB, except for 0notes.txt, which I wrote and
>which tells what the other files are. I have Steve's express permission
>to post them, and no one has rights to these files except Steve, who
>puts no restrictions on their copying and use. Fractenna, Inc. and
>Nathan Cohen Phd have both claimed to have copyrights for these works,
>but their claims are completely false. Anyone may download, copy, and
>use these files without violating any criminal or civil law. Good ethics
>and manners would be served by crediting Steve as the files' author when
>appropriate.
>
>Anyone else with files to post in response to Chip's "1000 dollar MI2
>challenge" are welcome to submit them. I'll be glad to post them with
>the same conditions under which I posted Steve's: You give me your
>express permission to do so, and please don't include any inappropriate
>editorial material in the accompanying text files.
>
>I am solely responsible for all material on my web site
>http://eznec.com.
>
>Roy Lewallen, W7EL
>
>Bill Aycock wrote:
>>
>> See clarification within Frackies post, below.
>>
>> Fractenna wrote
>>
>> > SNIP
>> > This MI2 file is a copyright file to me.
>>
>> Poor wording, but, the last time I looked, this file is not the one
>> Fracky put on his site, so how can there be a copyright violation?
>>
>> >
>> > Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this
>file.
>> > Hams and others are warned that downloading said MI2 file is a further
>> > violation of federal copyright laws
>> SNIP
>>
>> >
>> >
>> > litigation will also

>> > seek to determine who has sought to download this file illegally, through
>> > Lewallen's distribution and publication on the site www.eznec.com.
>>
>> Note the tortuous wording that makes it look like a big deal, but is
>> really as clear as mud. Apparently, if I did down load it, I am OK, only
>> if I only sought to, is he after me. Further, since the file in question
>> is NOT Frackies, then any download would not be illegal, so another
>> qualifier bites the dust.
>> I am having a hard time seeing just what he is after, since all the
>> things that bother him are not pertinent to the action he proposes.
>>
>> For what it's worth- I have the file, I did not download it from the
>> EZNEC site, and I hope he comes for me- I am on a retirement income, and
>> could sure use the proceeds of my countersuit.
>>
>> Hope this helps- Bill
>>
>> >
>> > Nathan Cohen, Ph.D.
>
>
>
>
>
>

This MI2 file is a copyright file to me.

Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file. Hams and others are warned that downloading said MI2 file is a further violation of federal copyright laws.

Mr. Lewallen will be served shortly with a cease and desist order. If he fails to stop this illegal distribution and publication of this copyright file, he will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC. If Mr. Lewallen does not remove the file immediately then litigation will also seek to determine who has sought to download this file illegally, through Lewallen's distribution and publication on the site www.eznec.com.

Nathan Cohen, Ph.D.

204. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:07:01 UTC
From: n2ey@aol.com
Message-ID: <20010102070701.29901.00001732@nso-de.aol.com>
Source record: 173125

In article <20001231164200.26416.00000574@ng-cr1.aol.com>, fractenna@aol.com (Fractenna) writes:

>IMHO, the value is diminished --as a general EE ref--compared to other pubs, >especially CD-ready ones.

The Handbook is available on CD-ROM. Has been for several years.

It was never meant to be an EE level book. It's a practical radio book. EE is a lot more than radio.

> Example? ART OF ELECTRONICS by Horowitz and Hill.

Which costs how much and is revised how often?
>
>In 1962, I am of the opinion the handbook was the primo resource.

For hams, yes. For EEs, no. Same as today.

EE level references then were books like the Radiotron Designer's Handbook and the IEEE "Reference Data for Electronic Engineers".

>I bought my
>first one in 1967 for $5.00.

If you lived in the USA then, you paid too much. It was $4 in 1967. That's when I got my second one.

> Had all the tube configs in it:-)

No, it didn't.

It had a sampling of tubes commonly used by hams. Also some transistor data. Lots of practical construction projects.
>
>Glow lil' glowbug!
>
Big ones too.

The whole point of the Handbook is to fill the gap left by other publications. It's not meant to be an EE level text.

73 de Jim, N2EY

205. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:07:02 UTC
From: n2ey@aol.com
Message-ID: <20010102070702.29901.00001733@nso-de.aol.com>
Source record: 173126

In article <3A511FC2.7FF217F4@dvol.com>, Brian Kelly <kelly@dvol.com> writes:

>N2EY wrote:
>
>>
>> Despite decades of having "digital modes" pushed on the ham community, they
>> make up only a small part of HF ham radio. Far less than Morse use. Why?
>>
>> I cannot recall how many articles on digital modes I've read in QST - RTTY,
>> packet, AMTOR, PACTOR, PACTOR 2, G-TOR, PSK31, Feld-Hell, and now MFSK16.
>To
>> name just a few - there are lots more. When was the last time you saw an
>> article pushing Morse as a mode? Yet it is more popular on the HF/MF ham
>bands
>> than all of the digital modes put together.
>>
>. . . you forgot the digital mode to end 'em all, Spread Rectum.

You said it - I didn't.
>>
>The digital Tower of Babble is not a bad thing in itself at all because it's
>hams
>doing what hams should be doing, developing radio communications technology.
>But
>expecting any significant number of hams to gallop into what amounts to a
>plethora
>of early-stage laboratory toys is simply not about to happen. Typical techhie
>inability to understand what actually goes on outside their intense little
>boxes.
>>
Of course. The person who tries each one is going to have quite a pile of
boxes, most of which are obsolete.
>
>> Because we like it.

>. . . or if you only have a hundred bucks to spend on an HF xcvr cw is the
>only way
>you'll get on the air.

Yup - or even several times that much. I've built complete stations for less
money than a typical decoder/encoder box. Most of the world does not have lots
of disposable cash to spend on toys.
>>
73 de Jim, N2EY

206. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:07:03 UTC
From: n2ey@aol.com
Message-ID: <20010102070703.29901.00001734@nso-de.aol.com>
Source record: 173124

In article <3A5164B9.25F768C3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Brian Kelly wrote:
>> When was the last time the existence of cw or the regs regarding cw
>"limited
>> the use of other equipment"??
>
>It's doing it right now.

No, it's not. The existence of cw and the cw regs have no effect. The license test requirements may, though.

> My ex-boss is a tech in Colorado. I'm in Texas.

How many miles is that?

>We can't legally talk to each other until he satisfies the code regs.

Not true.

There's amateur satellites. Tropo scatter. Ducting. Other forms of VHF/UHF propagation.

To use the HF/MF amateur bands, he needs to upgrade. That takes a 35 question written test and a simple 5 wpm code test. And a VE fee.

73 de Jim, N2EY

207. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:07:03 UTC
From: n2ey@aol.com
Message-ID: <20010102070703.29901.00001735@nso-de.aol.com>
Source record: 173127

In article <3A5162BB.B0B2DDBB@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>> Nonsense. Do you think AO-40 doesn't support CW?
>
>A0-40 doesn't give CW any more *potential*.

Yes, it does.

>CW is a 100% mature communications mode.

If so, that's a good thing. If not, there's more to learn.
>
>> I learn something new about it with every use.
>
>I'm not talking about individuals. I'm talking about the body of
>knowledge concerning CW.

That bvody of knowledge expands every day. You glimpse but a small part of it.
>
>> Commericial interests have largely given up on CW because they can get more
>for
>> their money with other modes.
>
>My point exactly.

Money isn't everything. Commerical use is not the yardstick to measure amateur
pursuits. Sailboats have almost no commercial application.
>
>> Just because something isn't done commercially doesn't mean its not
>serious.
>
>Commercial = functional = serious, amateur = hobby = fun.

That's completely incorrect and illogical.

Things which are "functional" and "serious" are not limited to commercial use.
Activities from disaster relief to election officiating are done by volunteers,
who are not "commercial" in any sense of the word. But they are sure "serious"
and "functional".

A thing can be "commericial" and "fun" at the same time.
>
>> Why all the badmouthing of the mode?
>
>I have never badmouthed the mode.

You badmouth it at every opportunity.

> I have badmouthed the regulation that
>forces a single mode down the throat of every HF amateur radio operator.

No such regulation exists. No single mode is "forced" down anyone's throat.

73 de Jim, N2EY
>--

208. Re: WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:16:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92sgq1lsa1@uranium.btinternet.com>
Source record: 173142
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

When discussing antennas, 'small' means small in comparison with the wavelength they will be used at. An antenna which has its longest dimension less than say 1/8th wavelength can be considered small.

Radiation resistance of most antennas increases in proportion to Square(Length/Wavelength) where Length is usually the longest dimension. Sometimes it may increase according to the 4th power of Length/Wavelength depending on an antenna's geometry.

But the most important characteristic of small antennas of any sort is power radiating efficiency. They all have poor directivity gain.

Efficiency = (Power in)/(Power out).

Radiation resistance, Rr, is only half the story. Its actual value doesn't matter. It varies greatly from one antenna to another.

The other half of the story is Loss resistance RL. This consists of conductor resistance + ground loss resistance. Again its actual value doesn't matter. It varies greatly from one antenna to another.

What REALLY matters is the RATIO of one to the other because -

Efficiency is given very simply by -

Rr/(Rr+RL) * 100 percent.

The Magloop is the most efficient amongst small antennas. Its radiation resistance is very small, perhaps only milli-ohms, but by using a copper tube 1 to 3 inches in diameter the conductor loss resistance can also be made very small. By mounting it a few feet above ground and away from other structures the induced ground loss can be made negligible.

A Magloop can have a useable efficiency even when its diameter is only 1 percent of a wavelength. Download program MAGLOOP4 from website below and obtain some performance figures.

But to be correct, do you think the height above ground
should be included as one of a magloop's dimensions ? The
feedline has to be at least as long as height.

****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
> How can the notebook antenna have a high radiation
> resistance (and thus high efficiency) from 40m to 10m?
>
> How does one figure out the radiation resistance for a
particular
> antenna design?
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com
> http://www.deja.com/

209. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:20:31 UTC
From: fractenna@aol.com
Message-ID: <20010102072031.10400.00001058@ng-ff1.aol.com>
Source record: 173128

>>IMHO, the value is diminished --as a general EE ref--compared to other pubs,
>>especially CD-ready ones.
>
>The Handbook is available on CD-ROM. Has been for several years.

This comment neither contradicts nor expands upon my statement. I have the CD.
It is hard to use BTW.

>
>It was never meant to be an EE level book. It's a practical radio book. EE is
>a
>lot more than radio.
>

Of course. However, the HANDBOOK's chunk of sales comes from non-hams (or hams
to be).

>> Example? ART OF ELECTRONICS by Horowitz and Hill.
>
>Which costs how much and is revised how often?
>>

I think Paul did a revision in 2000. Used copies--when available go for around
$25.

>>In 1962, I am of the opinion the handbook was the primo resource.
>
>For hams, yes. For EEs, no. Same as today.
>

I stand by my statement.

>EE level references then were books like the Radiotron Designer's Handbook
>and
>the IEEE "Reference Data for Electronic Engineers".
>

Ye..ees...and many also had the HANDBOOK.

>>I bought my
>>first one in 1967 for $5.00.
>
>If you lived in the USA then, you paid too much. It was $4 in 1967. That's
>when
>I got my second one.
>

Yup; it was $5.

>> Had all the tube configs in it:-)
>
>No, it didn't.
>

I am sure it did not have the pin configuration for my DeForest Audion 427; in the context of the discussion, the statement is correct--it had all the USEFUL and NEEDED tube configs.

No doubt more obscure/special purpose tubes were found elsewhere. The point is that you don't find that stuff in the HANDBOOK anymore.

>It had a sampling of tubes commonly used by hams.

A large one; and not just used by hams.

Also some transistor data.

Hmmm... how much in 1967? I don't remember.

>Lots of practical construction projects.
>>
>>Glow lil' glowbug!
>>
>Big ones too.
>
>The whole point of the Handbook is to fill the gap left by other
>publications.
>It's not meant to be an EE level text.
>

Nor did I say it was. You would be hard pressed to find caluclus in its 1967 pages.

What color was the pre-1967 cover Jim? Just curious. Also, no color as I recall.

73
Chip N1IR

>73 de Jim, N2EY

210. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:22:00 UTC
From: fractenna@aol.com
Message-ID: <20010102072200.10400.00001059@ng-ff1.aol.com>
Source record: 173129

```
>
>In article <3A511FC2.7FF217F4@dvol.com>, Brian Kelly <kelly@dvol.com> writes:
>
>>N2EY wrote:
>>
>>>
>>> Despite decades of having "digital modes" pushed on the ham community,
>they
>>> make up only a small part of HF ham radio. Far less than Morse use. Why?
>>>
>>> I cannot recall how many articles on digital modes I've read in QST -
>RTTY,
>>> packet, AMTOR, PACTOR, PACTOR 2, G-TOR, PSK31, Feld-Hell, and now MFSK16.
>>To
>>> name just a few - there are lots more. When was the last time you saw an
>>> article pushing Morse as a mode? Yet it is more popular on the HF/MF ham
>>bands
>>> than all of the digital modes put together.
>>>
>>>. . . you forgot the digital mode to end 'em all, Spread Rectum.
>
>You said it - I didn't.
>>>
>>The digital Tower of Babble is not a bad thing in itself at all because it's
>>hams
>>doing what hams should be doing, developing radio communications technology.
>>But
>>expecting any significant number of hams to gallop into what amounts to a
>>plethora
>>of early-stage laboratory toys is simply not about to happen. Typical
>techhie
>>inability to understand what actually goes on outside their intense little
>>boxes.
>>>
>Of course. The person who tries each one is going to have quite a pile of
>boxes, most of which are obsolete.
>>
>>> Because we like it.
>
>>. . . or if you only have a hundred bucks to spend on an HF xcvr cw is the
>>only way
>>you'll get on the air.
>
>Yup - or even several times that much. I've built complete stations for less
```

>money than a typical decoder/encoder box. Most of the world does not have
>lots
>of disposable cash to spend on toys.
>>>
>73 de Jim, N2EY
>

Spread spectrum has become the dominant mode of telecommunications as of late.
Only hams rarely use it.

73
Chip N1IR

211. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:24:56 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A51C898.A4B3F48D@dvol.com>
Source record: 173130

Cecil wrote:

> Brian Kelly wrote:
> > When was the last time the existence of cw or the regs regarding cw "limited
> > the use of other equipment"??
>
> It's doing it right now. My ex-boss is a tech in Colorado. I'm in Texas.
> We can't legally talk to each other until he satisfies the code regs.

>
I don't think that was Harrison's intended context, I think he's bitching about the cw setaside bandwidths. As far as the squawks about the weenie 5wpm code test is concerned I don't like it and I'll continue to oppose dropping it but nobody is gonna die if it happens. Where I'll really get torqued is when they start bawling about letting phone move down into the low ends of the bands and clobber cw and the digital modes. Expanding the space for a 67 year old mode at the expense of a 100 year old mode? There's a huge chunk of "technological progress".
>
--

> http://www.mindspring.com/~w6rca

>
w3rv

212. Re: Need UHF TV Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:41:17 UTC
From: lederman@star.enet.dec.DISABLE-JUNK-EMAIL.com
Message-ID: <92si9d$4@usenet.pa.dec.com>
Source record: 173131
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.electronics.basic

>> Try a mast mounted pre-amp, but go to a TV Parts and supply house. The
>> AMPs will be better quality than Radio Shack, but Radio Shacks' are OK.
>> This is less massive to install than a larger antenna.

>elements the better the gain. It is also more directional. A good preamp
>with a LOW noise factor is also essential. Less than 3db would ba a good
>choice as is a good quality double shield RG6U coax. All this leaves
>Radio schlock COMPLETELY out of the picture. Winegard makes some

Surprisingly, Radio Shack is not completely out of the picture.
They have (or had) an in-line 75 ohm preamp that works in the
UHF and Small Dish Satellite frequencies. It uses an MMC that
has a less than 4db (I think less than 3db) noise figure
at UHF. I've used one, and it's actually quite good. You may
need to look carefully for it, because it may be under the satellite
dish accessories (it's also used to extend the cable length to
DBS dishes) rather than under 'regular TV' accessories. I'll try
to remember to look for the part number this evening.

--
B. Z. Lederman Personal Opinions Only

Posting to a News group does NOT give anyone permission
to send me advertising by E-mail or put me on a mailing
list of any kind.

Please remove the "DISABLE-JUNK-EMAIL" if you have a
legitimate reason to E-mail a response to this post.

213. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:47:47 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A51CDF3.392C7C4E@dvol.com>
Source record: 173132

Cecil wrote:

> Brian Kelly wrote:
> > When some start mumbling about *eliminating* Morse on the bands, and they
> > are out there, they're talking about treading on *my* freedom of choice.
>
> People mumble about a lot of things. Morse is not going to be eliminated
> except through attrition.

>
I hope that proves to be the case but it's obvious as hell that "certain
others" are quite anxious to hasten the elimination of Morse via means other
than just attrition. They're too lame to run cw, they don't like cw, whatever,
"kill it so that I can have more space for MY mode". Among less obvious reasons
they have for trying to put a hurt on cw. Watch it start.
>--

> http://www.mindspring.com/~w6rca

>
w3rv

214. Re: i hope this is a simple one...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 12:53:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A51CF67.180312B2@dvol.com>
Source record: 173133

just lil ole me wrote:

> thank you to those who responded. seems the idea is to use guying. i
> thought it didn't need it. how do you tell if an antenna needs guying?
> what standards or guidelines are used?

>
There aren't any "standards" unless you get into real towers. In your case it's
a matter of common mechanical horse sense.
>

> thanks
> Joe
> KC8PBN

>
w3rv

215. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 13:15:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92sk9f$1gv$0@208.207.71.140>
Source record: 173134

Cecil wrote:
>
> N2EY wrote:
> >
> > <Cecil.A.Moore@IEEE.org> writes:
> > >I've had PACTOR II QSOs when CW QSOs would have been impossible.
> >
> > So?
>
> My point exactly. What is wrong with live and let live?
>
> > The arguments are simply ones of opinion - nothing more or less.
>
> My point exactly - just like the abortion issue.
>

Finally: We agree. But my protest was that Rich -maybe without meaning to- seemed to criticise CW as a useful communications mode just because it has been around a long time and other more efficient modes exist. I totally disagree with that. If he doesn't want to use that's his business.

Back to antennas. Freakie's disruptions here are more than enough.

216. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 13:23:59 UTC
From: Chris B <cab1971@nospambellsouth.net>
Message-ID: <1Ek46.2705$wz3.78611@news2.atl>
Source record: 173135

I've been trying to do this stuff for a while and can't figure out A) Which
frequencies to monitor and when, and if I am getting them B) which "decoder:
to use in the receiving software (looks like about 20 different kinds of
"satellite transmitters? Meteor NS, Meteor SN, etc.)
Can you shed some light on this?? Would be much appreciated!!
thanks
cb

"Pervert_Extraordinaire" <valued_customer1@att.com> wrote in message
news:3A4D3060.7B02FA70@att.com...
> [Followup set to rec.radio.amateur.antenna]
>
> Hello,
>
> I've been receiving weather sat images for several weeks.
> I've progressed from an unmodified Radio Shack 2006 scanner
> with a Discone antenna, to a Hamtronix R139 receiver with a
> home-brew QFH antenna. My image quality has improved as I've
> modified/upgraded the hardware. However, I'm at a loss how
> to improve further.
>
> My present setup:
>
> Receiver:
> -Hamtronix R139 Weather Sat Receiver
> http://www.hamtronics.com/
>
> Antenna:
> -Home-brew QFH antenna, located at ground level
> -50' interconnect, RG-213U coax, soldered PL259 and BNC
> -antenna made with RG-58 coax per the following.
> http://www.rig.org.uk/Members/Software/body_software.html
>
> Demodulator:
> -Dell 600Mhz, Turtle Beach Montego II A3D 320 sound card
> -SatMon
> http://www.satsignal.net/
>
> I am getting vertical noise lines across the image. It appears
> to be 60Hz related as there are 30 lines across one of the .250sec
> NOAA horizontal scans. (120Hz) I've located the receiver ~10 feet away
> from my PC, I've located the antenna as far away from the PC as possible,
> I've tried disconnecting the power supplys for the speakers
> and printers. I've turned off the monitor. I've moved the feed cables

around
> (with respect to my PC and PC power lines) but note little noise
improvement.
>
> I had the QFH located in the attic at one time. However it was connected
> with RG-58 and had similar noise problems. I'm quite sure it I re-install
> it (even with my improved RG-213U coax) I'd see the same noise.
>
> I note the noise does decreases slightly as the bird overflys. This leads
me
> to believe the noise is entering on the antenna rather than my demodulated
> (and screened) audio feed.
>
> I do have a cell tower located 1/4 mile from me.
>
> This appears to be my last major hurdle before obtaining quality images.
>
> Any help would be greatly appreciated!!
>
> This is a link to an example file.
> http://home.att.net/~valued_customer/12292147.jpg
>
> Followup set to rec.radio.amateur.antenna

217. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 13:29:29 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A51D7B9.2D3A13F9@mwci.net>
Source record: 173136

N2EY wrote:

> It was never meant to be an EE level book. It's a practical radio book. EE is a
> lot more than radio.

This is OK, but there is more to it.

Electronics, as it pertains to Amateur Radio, is no longer the semi-intuitive "gut feel" type of technology that it used to be. It has become very clear that this approach is not working very well any more. Like it or not, the kind of simplistic explanations that used to be OK when radio was, at least on the surface, a lot easier to grab hold of, are just not good enough any more.

To be more explicit, radio technology has never been all that simple. Look at the very early Proceedings of IRE and you will see some science that most radio amateurs were, and still are, completely unaware of. Nevertheless, amateurs could understand basic principles and practice well enough to get on the air with home made gear.

No longer true, except *maybe* at the most elementary levels. Even the QRP rigs are carefully thought out examples of solid state "system design".

If you look through the ARRL Handbook you will see thousands of interesting items that previous generations could not even imagine (I have a 1938 edition). And a basic fact is that these matters can no longer be understood or appreciated on a *purely* intuitive level. The world has changed into a place where math and science skills are basic ingredients, not merely icing on the cake or some kind of ego trip for academic types. The ARRL Handbook these days recognizes this, and tries to get a balance between science and practice that is optimum for radio amateurs and students, but also challenges the mind in new directions.

Like it or not, if we want to be knowledgeable, even at an introductory level, we have to get tuned in to these new ways of thinking about amateur radio technology.

In other words, the word "practical" doesn't mean quite the same thing any more. And one of my favorite "speeches" is that with the personal computer and software for math and design and analysis, it is easier than ever and getting easier all the time to be a lot more scientific about how we deal with the "practical" matters that pertain to amateur radio.

And if we are going to move beyond the mythology and folklore and snake-oil that has pervaded amateur radio for many decades, we have get up to date in our skills and attitudes.

Bill W0IYH

218. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 13:31:36 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A51D838.26C71D2F@dvol.com>
Source record: 173137

Fractenna wrote:

>
> Spread spectrum has become the dominant mode of telecommunications as of late.
> Only hams rarely use it.

>
. . . yeah, it's used in portable phones and in tightly controlled completely
automated commercial very local networks where SS doesn't raise the noise floor
for other users of the bandwidth involved and networks don't collide. For my part
I already have an ISP, I don't have to screw around with radios and antennas to
dial in. Ham radio is not Bell Atlantic and hams trying to emulate Bell Atlantic
are into a real snoozer.
>

> 73
> Chip N1IR

>
w3rv

219. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 13:35:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92slev$3d4$0@208.207.71.140>
Source record: 173138

Cecil wrote:
>
> Brian Kelly wrote:
> > When was the last time the existence of cw or the regs regarding cw "limited
> > the use of other equipment"??
>
> It's doing it right now. My ex-boss is a tech in Colorado. I'm in Texas.
> We can't legally talk to each other until he satisfies the code regs.
>

Since he's your *ex-boss* tell him to get off his duff and do something constructive-learn the piddling 5wpm code!

220. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 14:07:34 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92snb6$97u$0@208.207.71.140>
Source record: 173139

Jim Pennino wrote:
>
You may find
> wonderfull things about fractals; if you do, please write an article for
> the ham world for the rest of us to see.

But you should take care not to get your expectations raised so that
you may forestall certain disappointment.

221. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 14:16:19 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92snrjafn0@208.207.71.140>
Source record: 173140

Jason, be aware that this is the approximate perforamnce of an 18 inch
loaded magmount CB mobile antenna.....

Fractenna wrote:
>
> Yes; quite well. In fact, for example, there is no better small Yagi than the
> FQY described at
>
> http://www.n1ir.com (up soon).
>
> Its efficiency, gain, F/B, and 50 ohm match are unsurpassed by any other small
> Yagi design of similar size.
>

222. Cushcraft X-7

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 14:18:01 UTC
From: Denis O' Flynn <denisf@eircom.net>
Message-ID: <Upl46.3572$s4.2324@news.indigo.ie>
Source record: 173141

Hi to all,
I have come up with a possible problem with my dear neighbour as my X-7 beam will unfortunatly be abt 4 feet over our border fence. I am looking at a few possibilities before I may have to go to more expense and move the tower. The main possibility is : what would be the effect of shortening the longer elements ?

Any replies greatly appreciated

de Denis EI6HB
denisf@eircom.net

223. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:02:35 UTC
From: "Joe S." <w4hh@my-deja.com>
Message-ID: <92sqi7$v29$1@nnrp1.deja.com>
Source record: 173144

In article <92r1mu$l9q$1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> Do fractal antennas work? Would they be useful in an apartment?
>
> Has anyone here made or used a fractal antenna?
>
> Why are fractal antennas so controversial?
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com
> http://www.deja.com/
>

Mr. Hsu:

You innocently (I assume) posted your query relative to the performance of "fractal" antennas on 01/01/01. Note that in no time at all the answers to your question drifted substantially away from answering your question. Maybe that says something about the antenna.

--
Regards,
Joe Schlatter

Sent via Deja.com
http://www.deja.com/

224. Re: W7EL, etal, copyright flap

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:04:33 UTC
From: k3bu@aol.com
Message-ID: <20010102100433.23885.00007327@ng-fs1.aol.com>
Source record: 173143

>I am having a hard time seeing just what he is after, since all the
>things that bother him are not pertinent to the action he proposes.
>

Troll, troll, troll,
attention, attention, attention,
sick, sick sick

Ignore him, it will drive him nuts!

HNY

225. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:05:26 UTC
From: "Joe S." <w4hh@my-deja.com>
Message-ID: <92sqni$v5b$1@nnrp1.deja.com>
Source record: 173146

In article <92rqrr$1fnb$1@nntp1.ba.best.com>,
"Janice and Ed Senior" <senior@best.com> wrote:
> Hi, and happy new year to the group -
>
> I am considering putting up a wire antenna for casual
> HF use (100W class). I would like to operate on as
> many HF bands as possible.
>
> Available supports are a 40 foot tree on one end, and
> an 8 foot fence post on the other end; so this thing
> would be something of a sloper. Available length is
> about 100 feet. Can feed approximately in the middle,
> with either ladder line or coax. I have a new antenna
> tuner available (MFJ).
>
> Any opinions out there as to whether a multiband dipole,
> a windom, a G5RV, a random longwire, or ??? would
> be best suited to this situation?
>
> ...Thanks, Old Ed
>
>

135 feet of wire fed in the center with ladder line. You will need an antenna tuner at the rig end. This is a simple, effective antenna that will load on every band, radiate well, and is quite forgiving. You can purchase one already assembled from any number of suppliers. A place called Radio Works has a neat device called the Ladder Lock that serves as a center insulator and support -- I use that on mine and it prevents wire twisting and breaking at the center.

--
Regards,
Joe Schlatter
W4HH

Sent via Deja.com
http://www.deja.com/

226. Re: W7EL Warning-- Download from http://www.eznec.com Copyright Violation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:13:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92sr62$il3$0@208.207.71.140>
Source record: 173145

Bill Aycock wrote:
>
> Note the tortuous wording that makes it look like a big deal, but is
> really as clear as mud. Apparently, if I did down load it, I am OK, only
> if I only sought to, is he after me. Further, since the file in question
> is NOT Frackies, then any download would not be illegal, so another
> qualifier bites the dust.
> I am having a hard time seeing just what he is after, since all the
> things that bother him are not pertinent to the action he proposes.
>

Hey, Bill, as with all juveniles he craves the attention it seems to
always bring. If he knows anything, he knows what sort of legal "case"
he *doesn't* have. His months-long blubbering bluster should pretty well
prove that he's not really gonna sue anyone. Talk is cheap. His is
worthless.

227. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:15:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A51F0AF.9A6A4C8C@IEEE.org>
Source record: 173148

"David J. Windisch" wrote:
> Cec, you trivialize the abortion pogrom, which has cost the lives of
> 30-plus-million fellow Americans since 1973.

You just proved my point about it being an emotional issue. Does
a woman not have the right to determine the contents of her body?
If she does not, then rape should not be illegal.
--
http://www.mindspring.com/~w6rca

228. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:22:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A51F22F.60968FFC@IEEE.org>
Source record: 173149

Brian Kelly wrote:
> ... it's obvious as hell that "certain
> others" are quite anxious to hasten the elimination of Morse via means other
> than just attrition. They're too lame to run cw, they don't like cw, whatever,
> "kill it so that I can have more space for MY mode".

Just as gun owners are not going to put up with gun elimination,
CW operators are not going to put up with CW elimination. Outlawing
CW will result in wholesale violation of that law. The CB problem
will pale by comparison.
--
http://www.mindspring.com/~w6rca

229. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:24:46 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92srru$il3$1@208.207.71.140>
Source record: 173147

Brian Kelly wrote:
>
> Cecil wrote:
>
> > Brian Kelly wrote:
> > > When some start mumbling about *eliminating* Morse on the bands, and they
> > > are out there, they're talking about treading on *my* freedom of choice.
> >
> > People mumble about a lot of things. Morse is not going to be eliminated
> > except through attrition.
>
> >
> I hope that proves to be the case but it's obvious as hell that "certain
> others" are quite anxious to hasten the elimination of Morse via means other
> than just attrition. They're too lame to run cw, they don't like cw, whatever,
> "kill it so that I can have more space for MY mode". Among less obvious reasons
> they have for trying to put a hurt on cw. Watch it start.

Cecil like to ignore reality when it suits his points or purposes.

230. W7EL Warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:29:20 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A51F3D0.7040001@hiwaay.net>
Source record: 173150

Dick- you are SO right, as is frequently the case. The rumor mill says that the only time in recent history that these civil actions actually involved a lawyer, he was on the recieving end, and backed up so fast he left skid marks. His interpretation , of course, is different.

hope this REALLY helps- I think I will follow Yuri's advice.

(BTW- FWIW, he has actually posted directly to me,(made a direct threat) and read my reply, so his former practice of having me in a 'kill' filter in his AOL account is apparently history)

Bill-W4BSG

231. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:36:03 UTC
From: richardharrison@webtv.net
Message-ID: <29912-3A51F563-23@storefull-112.iap.bryant.webtv.net>
Source record: 173151

Jim, NE2EY wrote:
"The existence of cw and cw regs have no effect. The license test requirements may, though."

Bingo! You`ve hit the nail right on the thumb! Keeping otherwise competent "wannabes" off the bands kills amateur radio for no good reason. Technical developments have presented other pursuits of greater ease and attraction to drain the pool of wannabes. If amateur radio is to survive, it must be easy and attractive, too.

You don`t pass a horsemanship test to get an automobile driver`s license. Neither must you pass a test on the design and construction of automobiles. Technology has made such tests no longer needed. The same is true of CW and thorough technical tests for issuance of an amateur radio license. There is no need for exclusion of fine people because they don`t like code or the technical side of radio. If they are competent people without a record of malfeasance, and pass a minimal test on rules and operating requirements, they should be issued an unresrricted license to full amateur priveleges in all bands, just like drivers are licensed. The applicants already are owners of the airways just as driver applicants are already owners of the roadways.

The idea that a code or technical test is going to keep miscreants off the air is illogical. The character mix of licensed amateurs is certainly no better than most random groups. There are saints and sinners among coders and nocoders and among techies and the clueless in almost the same proportions.

The problem is vanity. Some amateurs prize an amateur license as some sort of credential of superiority. If everyone could easily get a license, the credential would lose value. Exclusivity is needed to give class to the club. I pity them.

Best regards, Richard Harrison, KB5WZI

232. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 15:57:19 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A51FA5F.6729030@IEEE.org>
Source record: 173152
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Redirected to rec.radio.amateur.policy

N2EY wrote:

> W6RCA wrote:
> >A0-40 doesn't give CW any more *potential*.
>
> Yes, it does.

OK, Jim, you're on. From Webster's: "potential - possible, as opposed to actual." Please tell us what is possible with CW and A0-40 that has never before been accomplished in actual practice. CW over a satellite was a potential at one time. It's not anymore. It has already been done. It was a potential in the 50s. I suspect it was actually accomplished in the 60s.

> >CW is a 100% mature communications mode.
>
> If so, that's a good thing.

If CW is a 100% mature communications mode, then it has exhausted its potential. You cannot have it both ways.

> That body of knowledge expands every day. You glimpse but a small part of it.

OK, Jim, you're on. Please tell us something new that has recently been discovered about the CW mode. Better yet, speculate on something new that will be discovered about the CW mode.

> >Commercial = functional = serious, amateur = hobby = fun.
>
> That's completely incorrect and illogical.

Of course, it's true in general. Ham radio is *usually* used as a *hobby* for *fun*. Don't tell me that the majority of ham QSOs are serious (although prostate problems can be serious :-). I was born at night but it wasn't last night.

> >I have never badmouthed the mode.
>
> You badmouth it at every opportunity.

Telling the objective truth about a mode is simply being honest about its capabilities. That's not badmouthing. CW for serious communications has gone the way of the horse for serious transportation. Both occupy small niches compared to their heydays. As far as I can ascertain, CW used by hams on the HF ham bands has never saved a life. Is that badmouthing or just an honest

statement?

You are like my Mother. When I tell the objective truth about the Bible,
she says I'm badmouthing it.

> > I have badmouthed the regulation that
> >forces a single mode down the throat of every HF amateur radio operator.
>
> No such regulation exists. No single mode is "forced" down anyone's throat.

Of course it is, Jim, because of the ITU treaty. When OOK Morse is treated
equally to the other modes then it will have ceased to be forced on anyone.
That won't happen as long as an HF ham is not free to choose his first mode.
--
http://www.mindspring.com/~w6rca

233. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 16:04:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A51FBFF.E5B4175F@IEEE.org>
Source record: 173153

N2EY wrote:
> No, it's not. The existence of cw and the cw regs have no effect. The license
> test requirements may, though.

Uhhhhhhh Jim, test requirements is what is meant by "the regs regarding cw".

> To use the HF/MF amateur bands, he needs to upgrade. That takes a 35 question
> written test and a simple 5 wpm code test. And a VE fee.

Yep, that's what I said - and he tells me he's working on it.
--
http://www.mindspring.com/~w6rca

234. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 16:06:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A51FC7E.BCB55A82@IEEE.org>
Source record: 173154

Dick Carroll wrote:
> Since he's your *ex-boss* tell him to get off his duff and do something
> constructive-learn the piddling 5wpm code!

He tells me that is exactly what he is doing - on his way to Extra.
--
http://www.mindspring.com/~w6rca

235. Unadilla trap dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 16:16:20 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3a520016$0$35016$44a10c7e@news.net-link.net>
Source record: 173155

I have a 450 window line fed 160 meter dipole and need to shorten it to get the ends farther away from metal supports. I was thinking of putting in a set of Unadilla 80 meter traps which would result in shortening the overall antenna length by about 40 feet or so. Would I realize a substantial loss in performance on the higher bands? I use the dipole for primarily 160 and 80 meters.

236. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 16:41:43 UTC
From: marsgal42@hotmail.com
Message-ID: <92t0c6$44e$1@nnrp1.deja.com>
Source record: 173156
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

In article <3A5123FF.B0ADFF82@att.com>,
Pervert_Extraordinaire <valued_customer1@att.com> wrote:

> Given I'm new to this field, I've yet to hear about any ARRL Handbook.
>
> Nevertheless, I'll take your advice and get one.
>
> Sorry if I bothered you. Trust me, it won't happen again.

???

You're not a bother at all. Just referring you to a better
source of information. Especially important for newcomers.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..." - Hospital/Shafte

Sent via Deja.com
http://www.deja.com/

237. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 16:50:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5206DC.7297@wt.net>
Source record: 173157

Fractenna wrote:

> This MI2 file is a copyright file to me.

I asked Perry Mason about this just this morrning, and he says your all
wet. He says you can't have a copyright on a file you didn't make, even
if it resembles an antenna you designed.
>
> Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
> Hams and others are warned that downloading said MI2 file is a further
> violation of federal copyright laws.

Again Perry Mason says your wrong.
>
> Mr. Lewallen will be served shortly with a cease and desist order. If he fails
> to stop this illegal distribution and publication of this copyright file, he
> will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
> If Mr. Lewallen does not remove the file immediately then litigation will also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.

Perry Mason says "good luck in the contest". Being as most counters only
show the main ISP addess and not the individual address, I don't see how
this will be possible. If you "Heckle" went to my web site, I don't see
frektenna at aol.com, I would see something like:

Dec 24 17:38:33 spider-wm033.proxy.aol.com Win 95 MSIE 5.x

So you can see any hopes of nailing the "perps" in this case will be
futile at best. Also when I was talking to Perry on the phone, Paul
Drake broke in on the other line. He was very angry, and said for me to
tell you to quit calling him at all hours of the day and night. He told
me in no certain terms that he does not want to be your new boy toy.
Hope this helps... MK
--
http://web.wt.net/~nm5k

238. Re: QUESTION: Do fractal antennas work?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 17:20:30 UTC
From: rwclark@seanet.com
Message-ID: <3a790d2b.857210703@news.seanet.com>
Source record: 173158

On Tue, 02 Jan 2001 15:02:35 GMT, Joe S. <w4hh@my-deja.com> wrote:

>In article <92r1mu$l9q$1@nnrp1.deja.com>,
> jason_hsu@my-deja.com wrote:
>> Do fractal antennas work? Would they be useful in an apartment?
>>
>> Has anyone here made or used a fractal antenna?
>>
>> Why are fractal antennas so controversial?
>>
>> --
>> Jason Hsu, AG4DG
>> jason_hsu@@@@@@@@@@planetmail.com
>> http://www.bigfoot.com/~jason_hsu/
>>
>> Sent via Deja.com
>> http://www.deja.com/
>>
>
>Mr. Hsu:
>
>You innocently (I assume) posted your query relative to the performance
>of "fractal" antennas on 01/01/01. Note that in no time at all the
>answers to your question drifted substantially away from answering your
>question. Maybe that says something about the antenna.

Hi Joe,

What you say above is not strictly true - and says nothing of the
antenna.

73's
Richard Clark, KB7QHC

239. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 17:32:59 UTC
From: n2ey@aol.com
Message-ID: <20010102123259.15260.00000154@nso-ba.aol.com>
Source record: 173159

In article <20010102072031.10400.00001058@ng-ff1.aol.com>, fractenna@aol.com (Fractenna) writes:

>>It was never meant to be an EE level book. It's a practical radio book. EE
>is
>>a
>>lot more than radio.
>>
>
>Of course. However, the HANDBOOK's chunk of sales comes from non-hams (or
>hams
>to be).

How do you know that? In my experience, most Handbook buyers are hams.
>
>>> Example? ART OF ELECTRONICS by Horowitz and Hill.
>>
>>Which costs how much and is revised how often?
>>>
>
>I think Paul did a revision in 2000. Used copies--when available go for
>around
>$25.

When was the last revision before 2000? How much is a new copy? How big is it, and how much of its contents are usable by the average basement workshop amateur?
>
>>>In 1962, I am of the opinion the handbook was the primo resource.
>>
>>For hams, yes. For EEs, no. Same as today.
>
>I stand by my statement.

It's not based on fact, though.
>
>>EE level references then were books like the Radiotron Designer's Handbook
>>and
>>the IEEE "Reference Data for Electronic Engineers".
>
>Ye..ees...and many also had the HANDBOOK.

Sure - because it was a bargain and had lots of stuff in it. But it was and is NOT an EE level book. Never meant to be.
>
>>>I bought my

>>>first one in 1967 for $5.00.
>>
>>If you lived in the USA then, you paid too much. It was $4 in 1967. That's
>>when
>>I got my second one.
>
>Yup; it was $5.

You paid too much. Cover price was $4. I still have mine, though it's falling
to pieces.
>
>>> Had all the tube configs in it:-)
>>
>>No, it didn't.
>
>I am sure it did not have the pin configuration for my DeForest Audion 427;
>in
>the context of the discussion, the statement is correct--it had all the
>USEFUL
>and NEEDED tube configs.

Is your DeForest Audion 427 a triode with a 5 pin base? If so, the base layout
is in the 1967 version.
>
>No doubt more obscure/special purpose tubes were found elsewhere.

The tube data in the Handbook was not meant to be complete. Many common tubes
useful to hams were not in there. And the data was limited - no characteristic
curves at all. Doesn't mean it wasn't useful, just that it was limited. Anybody
doing real design work would get a tube manual.

>The point
>is
>that you don't find that stuff in the HANDBOOK anymore.

There are still a few tubes listed in the 1988 edition - I don't know about the
2001 version. Tubes are no longer electro-politically correct, doncha know?
>
> Also some transistor data.
>
>Hmmm... how much in 1967? I don't remember.

A few pages. Types commonly used by hams.
>
>>Lots of practical construction projects.
>>>
>>>Glow lil' glowbug!
>>>
>>Big ones too.
>>
>>The whole point of the Handbook is to fill the gap left by other
>>publications.

>>It's not meant to be an EE level text.
>
>Nor did I say it was. You would be hard pressed to find caluclus in its 1967
>pages.

That's the point - it was to present radio with a minimum need for background in math and science. Most of the projects were not and are not "state of the art" in any sense, but most can be built and made to work without lots of tools and test gear. Perhaps that's what is most missing today.
>
>What color was the pre-1967 cover Jim? Just curious. Also, no color as I
>recall.

The 1967 cover was red. The cover color changed every year. I have several of them from 1948 onward, in various stages of decay. All of them have been useful to me as a radio amateur, but their usefulness to me as an EE is rather limited. But they were largely responsible for getting me started on the path to engineering school, and for that I am forever in the debt of the League and the authors of the Handbook.

What is missing from the ARRL library today is a sequel to the '60s masterpiece "Understanding Amateur Radio". This book, a sort of "junior handbook", taught the basics well to a non-engineering audience and had lots of practical projects. Cost was about half that of a Handbook.

73 de Jim, N2EY

240. Re: Eggbeater Design????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 17:44:48 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <92t41t$9ij$1@news.tribune.com>
Source record: 173160

I made both of those eggbeaters also. Used #6 wire for reflectors and loops on the 2 meter, and #6 for reflectors and #8 for loops on 432. The wire is cheap and uninsulated, at your local electrical supplier or home center. Also used clamp type terminals for this size wire to make adjustment of length easy. Have worked 3 birds on close passes, using these antennas and 10 watts!

Thanks to Jerry for the article!
KA9CAR

KF4LAT <kf4lat@hotmail.com> wrote in message
news:0F146.13385$Q9.3518826@ratbert.tds.net...
> Are there any homebrew eggbeater designs out there? Primarily for 70cm,
to
> be used for Satellite use.
>
> Alex
> KF4LAT
> Nashville, TN, USA
>
>

241. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 17:45:28 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92t44dsrs1@iac5.navix.net>
Source record: 173161

Anything that is obtained with little effort is something regarded as something of little value.

When one had to travel to the FCC office and take an exam and wait a month or more to find out if you even passed the test created a sense of value that caused you to be really careful in the way you operated for fear you would loose that privilege you had worked so hard for. Today with instant results and call signs issued within 48 hours, no code, and very little effort the license is only slightly harder than getting on CB. We then complain that the FCC isn't doing it's enforcement job. We used to take pride in policing ourselves, however today's "I can do my own thing" attitude makes that impossible. There is no peer pressure, judgement of another's behavior is considered gauche and we lament the conditions of the bands.

We need less quantity and more quality in amateur operators.

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:29912-3A51F563-23@storefull-112.iap.bryant.webtv.net...
> Bingo! You`ve hit the nail right on the thumb! Keeping otherwise
> competent "wannabes" off the bands kills amateur radio for no good
> reason

242. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 17:46:09 UTC
From: buddycl@my-deja.com
Message-ID: <92t44u$7fm$1@nnrp1.deja.com>
Source record: 173162

thanks, found the diagrams, then i looked
thru the section that talked about using
coax to phase antennas. i must be dense
cause i don't understand how to make a
135 degree phasing network. any pointers
help appreciated

larry
kd5foy

In article <3A4F84CA.2395B432@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> "Larry D. Clark" wrote:
> > wonder if someone could point out a
> > url that has a practical discussion on
> > how to properly connect a pair of
> > vertical antennas so that the result is
> > as uni-directional as possible.
>
> It's in the ARRL Antenna Book. Seems the best one can do is
> spacing of 1/4WL with a phasing of 135 deg for a 4.5dB gain.
> --
> http://www.mindspring.com/~w6rca
>

Sent via Deja.com
http://www.deja.com/

243. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 17:59:41 UTC
From: rwclark@seanet.com
Message-ID: <3a7a118b.858330554@news.seanet.com>
Source record: 173163

On Mon, 1 Jan 2001 16:50:12 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>I remember working for a Ford dealer in the early 40`s and he had an
>assortment of Johansen sp? machined blocks of guaranteed accuracy. We
>used them to check the accuracy of our micrometers. Ford distributed
>those standard blocks.
>
>Richard Clark also said something like, it is as important to make the
>right measurements as it is to make the measurements right. Makes sense
>to me!
>
>Happy New Year.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I have also calibrated Gauge Blocks (Johansen sp? machined blocks of guaranteed accuracy) to the nearest 100 nano-inches by this method.

This was a fascinating experience where the test apparatus sitting on the measured block would peg the indicator meter as I approached the test bench. The IR emission of my body was absorbed by the block which in turn would expand enough to confound the measurement (about one micro-inch). I had to arrange my test components by nudging them around with a yard stick (didn't want my body heat to soak them) and standing back at lest ten feet to wait for the meter to settle down (cool off). Not very productive work actually, with these long cycle times. These blocks became the transfer standards for the utility blocks that Richard describes above, which in turn became the standards for the calipers. This lineage is known as traceability when the most accurate component is calibrated by NIST.

Bridges are the absolute best approach to any measurement requiring accuracy and they have been with us for more than a century working robustly. There are many factors to consider in their use, but such factors are comprehensible and obvious once revealed. They also allow measurements of vast resolution, at least 6 places for some gear. I have worked with many, many bridges. Most fall into the category of the Wheatstone Bridge (which few people have actually used, but think they have), but my favorite is the Kelvin-Varley divider. One bridge, the Hybrid Bridge, is another favorite of mine for confounding experts in "matching and loading." Another such brain twister is the "Magic T." All of these are very simple circuits.

73's
Richard Clark, KB7QHC

244. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:00:01 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92t4vn$t97$1@iac5.navix.net>
Source record: 173164

Nathan, if you feel you have a case against Roy, or for that matter, any member of this newsgroup then get on with the lawsuit. This forum is NOT a court room, and the court of public opinion is Not on your side. Ergo nothing is served by you wasting bandwidth with your lamentations about your M12 file.

"Fractenna" <fractenna@aol.com> wrote in message
> This MI2 file is a copyright file to me.
>
> Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
> Hams and others are warned that downloading said MI2 file is a further
> violation of federal copyright laws.
>
>
> Mr. Lewallen will be served shortly with a cease and desist order. If he fails
> to stop this illegal distribution and publication of this copyright file, he
> will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
> If Mr. Lewallen does not remove the file immediately then litigation will also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.
>
> Nathan Cohen, Ph.D.
>

245. mounting small yagis in trees????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:05:18 UTC
From: News <webqaz@i-is.com>
Message-ID: <3a51dfe3_1@nntp.I-IS.COM>
Source record: 173173

Does anyone know any good web sites that show how to install small yagis in trees??
The reason I'm asking is because I'm thinking of getting on the air but I live in an area with a lot of tall trees, and why spend the money for a 50 ft mast when you already have one (that you dont have to go to radio shack to buy) in your backyard!

Thanks

246. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:24:46 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A521CEE.25B41F8E@IEEE.org>
Source record: 173165

Fred Hambrecht wrote:
> Anything that is obtained with little effort is something regarded as
> something of little value.

The air you breathe?

> We need less quantity and more quality in amateur operators.

It follows from that that we need fewer frequencies for quality
hams than we do for a quantity of hams.
--
http://www.mindspring.com/~w6rca

247. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:31:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A521E65.C4896CAE@IEEE.org>
Source record: 173166

buddycl@my-deja.com wrote:
>
> thanks, found the diagrams, then i looked
> thru the section that talked about using
> coax to phase antennas. i must be dense
> cause i don't understand how to make a
> 135 degree phasing network. any pointers
> help appreciated

984/f is one wavelength in free space. Multiply that by the velocity factor of the coax, e.g. 0.66 for RG-213. 135 deg is 135/360 of a wavelength.

Let's say it is for 40m. 984/7.15=137.6' 137.6x0.66=90.8' (135/360)x90.8=34.06' Fine tuning may be necessary to get the pattern you want on any certain frequency.
--
http://www.mindspring.com/~w6rca

248. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:48:22 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92t7qc$1aa$1@iac5.navix.net>
Source record: 173167

You win pick up the marbles...

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A521CEE.25B41F8E@IEEE.org...
> Fred Hambrecht wrote:
> > Anything that is obtained with little effort is something regarded as
> > something of little value.
>
> The air you breathe?
>
> > We need less quantity and more quality in amateur operators.
>
> It follows from that that we need fewer frequencies for quality
> hams than we do for a quantity of hams.
> --
> http://www.mindspring.com/~w6rca

249. Fracky's picture

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:50:21 UTC
From: Fred Hambrecht <Fred@w4jle.com>
Message-ID: <92t7u3$1bk$1@iac5.navix.net>
Source record: 173168

I was passed this information and it is purported to be a characterization
of Fracky. I leave it to the reader to judge the validity.

http://www.winternet.com/~mikelr/flame15.html

250. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 18:50:25 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <xrp46.450$e5.1172219@news.ntplx.net>
Source record: 173169

N2EY <n2ey@aol.com> wrote:

> >Of course. However, the HANDBOOK's chunk of sales comes from non-hams (or
> >hams to be).

> How do you know that? In my experience, most Handbook buyers are hams.

From what I have gleaned here at HQ, that is correct. Most hams who buy the Handbook seem to buy a new one every few years. Before I came to HQ, it was about 4-5 years apart for me.

> >Ye..ees...and many also had the HANDBOOK.

> Sure - because it was a bargain and had lots of stuff in it. But it was
and is
> NOT an EE level book. Never meant to be.

I have given away copies of the Handbook to non-ham engineering contacts I have in industry. Their look of appreciation (in both senses of the word) appeared to me to be sincere. I would bet a lobster dinner that they didn't throw it away when they got it home. :-)

73,
Ed Hare, W1RFI

251. Re: Alliance HD-73 Rotor - Need Info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 19:05:02 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <3a5225ec_1@news.pacifier.com>
Source record: 173170

"JSPS" <jsps999@earthlink.net> wrote in message
news:c1o25t827sms740uqsnl6r7m6coaausduu@4ax.com...
> I hope this is not off topic for this NG, I appologize if it is.
>
> From an estate sale I recently acquired an Alliance HD-73 rotor &
> control box.
> I knew that these were in good working order and were in use until
> the elderly Ham passed away recently.
> Unfortunately, the persons(s) who took down the tower, etc
> misplaced/lost the rotor control cable with it's what I believe to be,
> but not entirely sure of, a **customized** 6-pin plug at the rotor end
> of it.
>
> I need to know this info:
> To corrolate the control box's numbered terminal strip with
> the color code of the length of 6-wire control cable "tail"
> going into the HD-73 rotor housing.

On the rotor end there should be a numbered terminal strip under an access
panel.

- 73 Bob W7OV

252. test

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 19:18:41 UTC
From: test <test@aol.com>
Message-ID: <92t9j8$24a$1@iac5.navix.net>
Source record: 173171

```
test only
```

253. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 19:24:04 UTC
From: richardharrison@webtv.net
Message-ID: <10687-3A522AD4-80@storefull-115.iap.bryant.webtv.net>
Source record: 173174

Fred Hambrecht wrote:
"Anything that is obtained with little effort is something regarded as something of little value."

Didn`t like your holiday presents, right?

Some don`t appreciate clean air and water until deprived of them. Others say the best things in life are free.

You walk in the casino, drop a guarter in the machine, and hit the jackpot. Not worth carrying out the heavy coins, they only cost a guarter, right?

THe theater ticket`s value is in the entertainment, not the ticket price.

Many confuse value and price. I can only pity them.

Best regards, Richard Harrison, KB5WZI

254. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 19:31:32 UTC
From: rwclark@seanet.com
Message-ID: <3a7b2a40.864655959@news.seanet.com>
Source record: 173172

On Tue, 2 Jan 2001 12:45:28 -0500, "Fred Hambrecht" <Fred@w4jle.com>
wrote:

>Anything that is obtained with little effort is something regarded as
>something of little value.
>
>When one had to travel to the FCC office and take an exam and wait a month
>or more to find out if you even passed the test created a sense of value
>that caused you to be really careful in the way you operated for fear you
>would loose that privilege you had worked so hard for. Today with instant
>results and call signs issued within 48 hours, no code, and very little
>effort the license is only slightly harder than getting on CB. We then
>complain that the FCC isn't doing it's enforcement job. We used to take
>pride in policing ourselves, however today's "I can do my own thing"
>attitude makes that impossible. There is no peer pressure, judgement of
>another's behavior is considered gauche and we lament the conditions of the
>bands.
>
>We need less quantity and more quality in amateur operators.
>
>

Hi Fred,

It seems this discussion is bordering on the tense side - let me add
some more. :-)

Your comment on the appearance of worth is right on, but I would say
that it leads to an incorrect conclusion. We need more folks on the
air not less (this is the political base building that we need to
pursue to insure the future). The obvious solution to their
participation is to ADD SPECTRUM. Only a large constituency can make
that a possibility - not the shrinking one we have at the moment.

As for CW operators having restricted frequencies, sure, with more
spectrum no problemo. We should even bring back Spark Gap technology
(myself I would love to start up an amateur radar station). Why not?
(I'm sure some overstuffed soul will point out why not.)

73's
Richard Clark, KB7QHC

255. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 19:55:57 UTC
From: richardharrison@webtv.net
Message-ID: <10688-3A52324D-29@storefull-115.iap.bryant.webtv.net>
Source record: 173176

Cecil, W6RCA wrote:
"Fine tuning may be necessary to get the pattern you want on any certain frequency."

I`ve waited until now to advertise my ignorance on this topic. Delay in degrees by the unit length of coax has always seemed to work for me. But, several months ago I gave a similar response to yours to what I think was about the same question. Roy was prompted to say such simple phasing works for 1/4-wave and 1/2-wave sections only, if I understood his response. Actually, I still don`t know what he was talking about.

Best regards, Richard Harrison, KB5WZI

256. Re: Fracky's picture

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 20:01:00 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <0sq46.6097$0s3.446017@typhoon.columbus.rr.com>
Source record: 173175

"Fred Hambrecht" <Fred@w4jle.com> wrote in message
news:92t7u3$1bk$1@iac5.navix.net...
> I was passed this information and it is purported to be a characterization
> of Fracky. I leave it to the reader to judge the validity.
>
> http://www.winternet.com/~mikelr/flame15.html
>
>

From what I've read, it's more like this.

http://images.honesty.com/imagedata/h/352/24/23522421.jpg

257. Re: WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 20:18:45 UTC
From: richardharrison@webtv.net
Message-ID: <15471-3A5237A5-23@storefull-114.iap.bryant.webtv.net>
Source record: 173179

Reg wrote:
"Efficiency=(Power in)/(Power out)"

Reg isn`t caught in a faux pas often, but the way this came out in print, the less the (Power out), the higher the Efficiency. This might be ok for a dummy load?

Reg`s calendar flipped with the year change maybe, and took his formula upside down in the process, I suppose.

Best regards, Richard Harrison, KB5WZI

258. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 20:30:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A523A54.4CCED5C4@eznec.com>
Source record: 173177

More than "fine tuning" will be required.

Unfortunately, the method Cecil cites doesn't lead to a 135 degree phasing network. Here's why: The phase delay (of either current or voltage) in a transmission line equals the electrical length (Cecil's calculation) only if the line is terminated in its characteristic impedance (or in a couple of special cases with special lengths). If you start with two elements which have exactly, say, 50 + j0 ohms impedance, then feed them with equal magnitude currents which are 135 degrees out of phase, you'll have feedpoint impedances which are very different. Neither will be 50 ohms and both will be reactive, and they'll be different from each other. Not only will the delay through 135 electrical degrees of line not equal 135 degrees, but the magnitude of the current will be transformed. I'm not talking about a small effect, either. It's easy to get an error of 30 degrees or more, and magnitude transformations on the order of 2:1. The result is that you don't get anything like the pattern you planned. This is discussed in detail in Chapter 8 of the _ARRL Antenna Book_. There's no network there for a 135 degree feed system, but I recommend reading it so you understand the problem. (Cecil, it might be good for you to review it too.) A series of articles describing phasing networks applicable to any phase angles was written by Forrest Gehrke, K2BT, years ago in _Ham Radio_. You'll find the reference at the end of Chapter 8. A general method is also described in _Vertical Antenna Handbook_ by Paul Lee, N6PL, published by CQ. This is the method used by broadcasters and, although complex, will work for any phase angles. It is possible to feed two elements correctly using only transmission lines, if you know how to calculate their lengths. You'll find this method in "The Simplest Phased Array Feed System -- That Works", in the _ARRL Antenna Compendium_, Vol. 2. It can be applied to a 135 degree fed antenna.

Finally, you might like to download fdsp~.exe from ftp://eznec.com/pub. It's a self extracting ZIP file describing the "Field Day Special" antenna, which is made of two elements, spaced 45 degrees and fed at 135 degrees. It resembles a ZL special, but can be made with equal element lengths so you can easily remotely reverse the pattern. A simple program is included which allows you to fiddle the element and phasing line lengths to get the desired results, which include a very good F/B ratio. Often you can find a combination that doesn't even require any external impedance matching.

Roy Lewallen, W7EL

Cecil wrote:
>

> buddycl@my-deja.com wrote:
> >
> > thanks, found the diagrams, then i looked
> > thru the section that talked about using
> > coax to phase antennas. i must be dense
> > cause i don't understand how to make a
> > 135 degree phasing network. any pointers
> > help appreciated
>
> 984/f is one wavelength in free space. Multiply that by the
> velocity factor of the coax, e.g. 0.66 for RG-213. 135 deg
> is 135/360 of a wavelength.
>
> Let's say it is for 40m. 984/7.15=137.6' 137.6x0.66=90.8'
> (135/360)x90.8=34.06' Fine tuning may be necessary to get
> the pattern you want on any certain frequency.
> --
> http://www.mindspring.com/~w6rca

259. Re: Cushcraft X-7

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 20:39:37 UTC
From: nospam@libero.it
Message-ID: <3a5238ff.9600502@News.CIS.DFN.DE>
Source record: 173185

On Tue, 2 Jan 2001 14:18:01 -0000, "Denis O' Flynn"
<denisf@eircom.net> wrote:

>. The main possibility is : what would be the effect of shortening the
>longer elements ?

I fear the shortening the longer elements will deteriorates all the
performance of the antenna.
With my X7 I had some problem with SWR pattern on 20mt, becouse of the
hight above the roof, and i wrote to CushCraft. They said me that
it's possible to change the dimension of the elements for a few
centimeters only.
GL for your problem and enjoy X7.
(visit my homepage, with a section on the X7 - first URL below)

Arturo IK7JWY
www.qsl.net/ik7jwy
www.qsl.net/ari-lecce

260. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 20:45:57 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A523E05.829F7DF3@tir.com>
Source record: 173178

N2EY wrote:
>
<snip>
>
> > Had all the tube configs in it:-)
>
> No, it didn't.
>
> It had a sampling of tubes commonly used by hams. Also some transistor data.
> Lots of practical construction projects.
> >
> >Glow lil' glowbug!
> >
> Big ones too.
>
<snip>

AS I recall, the 1956 Handbook was the last one to have almost all of
the tube references. In other words, the tube section was deminished
after 1956. (Blue cover). 73 Mac
--
J. Mc Laughlin n8tt@tir.com Michigan ~

261. Re: Fracky's picture

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 21:00:07 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <rjr46.201491$_5.45647611@news4.rdc1.on.home.com>
Source record: 173180

>
> "Fred Hambrecht" <Fred@w4jle.com> wrote in message
> news:92t7u3$1bk$1@iac5.navix.net...
> > I was passed this information and it is purported to be a
characterization
> > of Fracky. I leave it to the reader to judge the validity.
> >
> > http://www.winternet.com/~mikelr/flame15.html
> >
> >
>
>
"Jeff Maass" <jmaass@columbus.rr.com> wrote in message
news:0sq46.6097$0s3.446017@typhoon.columbus.rr.com...
> From what I've read, it's more like this.

>
http://images.honesty.com/imagedata/h/352/24/23522421.jpg

Jeff is is right ..... LOL!

Barry D.

262. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 21:02:06 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92th6a$566$5@lure.pipex.net>
Source record: 173182

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:7382-3A50C027-42@storefull-117.iap.bryant.webtv.net...
> Gary7SLL wrote:
> "How recently was this experiment repeated using modern
> instrumentation?"
>
> I don`t know.
>
> Richard Clark is probably as well qualified as anyone recently posting
> to this NG on the subject of measurements and may comment on probable
> accuracy the old guys got with the instrumentation available at the
> time. He surely knows a lot more than I do.
>
> Logically, during the last 70 years, many would have verified the data
> or challenged them. That the work of Brown, Lewis, and Epstein has not
> been superseded by broadcasters trying to save a dollar, or make
> mischief for their competitors, says something about its accuracy.

It is remarkable how a little dedication was able to overcome the
limitations of available instruments and produce such wonderful long
standing results. It is a testimonila to them as much as anything. However
in order to keep these subject really alive it would be nice for some
contemporary workers to repeat the work if only to engender the sense of
wonder once more into a living person.
Who knows what might have been missed first time around due to the
limitations of the equipment, the poor reliability or repeatabilty of the
equipment and of course the limited state of knowledge at the early time of
the original experiment.

I don't know if any watched the program Longitude on BBC 2 which was a
re-enactment of Harrison's trial and tribulations and the sheer pig
headedness to proceed with limited resource gradually building up his
knowledge to the point where by pure persistance he reached his goal. Those
early self taught men had some luck at being the first at the problem, it is
difficult now to find challanging opportunities in the physical sciences
that can be undertaken by an individual. Imagine the sheer discipline of
Joule toi carry out the volume of experiments neccassary to produce the
results that he achieved. And all this from a simple brewer, not a man of
scientific training or vast independent means.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

263. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 21:03:26 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52421E.79CF41B6@IEEE.org>
Source record: 173181

Roy Lewallen wrote:
> This is discussed in detail in
> Chapter 8 of the _ARRL Antenna Book_. There's no network there for a 135
> degree feed system, but I recommend reading it so you understand the
> problem. (Cecil, it might be good for you to review it too.)

Roy, that's what I meant by "fine-tuning". Remember, I typed up your BASIC program and sent you a copy? I used that BASIC program on this antenna:
http://people.delphi.com/cecilmoore/75m2elvp.htm
--
http://www.mindspring.com/~w6rca

264. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 21:14:41 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92th6a$566$6@lure.pipex.net>
Source record: 173183

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29022-3A5109A4-20@storefull-113.iap.bryant.webtv.net...
> Richard Clark wrote:
> "The simplest method to achieve accuracy is to employ a transfer
> standard along with a technique that uses ratios."
>
> I think that means we could have a 100-ohm resistor guaranteed under
> standard conditions to be 0.1% accurate and we could compare a 200-ohm
> resistor to the 100-ohm resistor by use of a 2:1 potential transformer.

Don't forget the admirable work of Wheatstone
Application of the Kirchoff's Laws to the Wheatstone Net

Hadley describes an experiment and demonstrates the associoated Mathematics,
however there is no mention of error analysis. This is a later statistical
technique. What my original suggestion was intenede to awaken was a a
consideration of early measurements in the new light of more recent
learning.
The Metre Bridge is described, and the Post Office Box gets a mention, but
the means of indication the balance of the bridge is a mirror galvanometer.
Exciting stuff, with rudimentary equipment draging the truth from a
reluctant mother Nature by the sheer effort and application of dedicated
man.

This is the spirit that was early ham radio, the mere fact that nobody else
had done whatever it was that the experimenter was attempting, the
excitement of being the first to pass that way. Perhaps in repeating the
experiments some of that wonder can be recaptured NOW.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

265. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 21:23:32 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <92th6c$566$7@lure.pipex.net>
Source record: 173184

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a71e93a.782473727@news.seanet.com...
> On Mon, 1 Jan 2001 11:36:39 -0600 (CST), richardharrison@webtv.net
> (Richard Harrison) wrote:
>
> >Gary7SLL wrote:
> >"How recently was this experiment repeated using modern
> >instrumentation?"
> >
> >I don`t know.
> >
> >Richard Clark is probably as well qualified as anyone recently posting
> >to this NG on the subject of measurements and may comment on probable
> >accuracy the old guys got with the instrumentation available at the
> >time. He surely knows a lot more than I do.
> >
> >Logically, during the last 70 years, many would have verified the data
> >or challenged them. That the work of Brown, Lewis, and Epstein has not
> >been superseded by broadcasters trying to save a dollar, or make
> >mischief for their competitors, says something about its accuracy.
...
> Hi Richard,
>
> Yah looped me into this one for sure.
>
> Accuracy is not always a function of newer, better, more resolution.
> In fact these last characteristics are generally indicators of the
> illusion of a false security.

Wonderful stuff

> Techniques rather than equipment count far more for the accuracy of a
> test. The techniques may have been supplanted with others employing
> "state of the art" gear, but that doesn't necessarily mean more
> accuracy either - simply more productivity.

Technique plus perseverence, persistance and just plain doggedness on the
part of those dedicated pioneers. Repeating their work in a modern context
is giving recognition to their magnificent efforts, and is recreating for
others some of the wonder of dicovery.

> The techniques of yore can be as accurate, or more so than present day
> methods. The technique of distinguishing 0.2 dB is not that very
> difficult, even for the tests performed more than 50 years ago. It
> does call for some ingenuity, but those fellows drew on ingenuity far

> more than we do now.

Yes indeed, modern conveinience has made us quite sloppy, the rigour of an earlier age seems to be missing from much of what we do today. Not only in this feild but some of the best Literature was pened before WWII, after that time the attention to detail seems to have suffered.

> The simplest method to achieve accuracy is to employ a transfer
> standard along with a technique that uses ratios. Almost anyone here
> can bootstrap themselves into a very accurate measure of nearly any
> phenomenon by observing this rule. Coming up with that transfer
> standard is the real task, but it should be noted that every important
> measurement that a Ham would be interested in, has a method that was
> originated more than half a century ago (or even 100 years ago) to an
> accuracy far in excess of any Ham's expectation.

Indeed I devised a very acurate method for calibrating signal level, it awaits a good high temperature noise standard that is easily reproducable in the confines of the typical Ham workshop for it to be applied generally to the hobby. All of that contest data could be put to some reall use in producing good dynamic maps of the propogation conditions around the world.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

266. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 22:00:53 UTC
From: rwclark@seanet.com
Message-ID: <3a7c4b97.873190110@news.seanet.com>
Source record: 173186

On Tue, 2 Jan 2001 21:23:32 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>> The techniques of yore can be as accurate, or more so than present day
>> methods. The technique of distinguishing 0.2 dB is not that very
>> difficult, even for the tests performed more than 50 years ago. It
>> does call for some ingenuity, but those fellows drew on ingenuity far
>> more than we do now.
>
>Yes indeed, modern conveinience has made us quite sloppy, the rigour of an
>earlier age seems to be missing from much of what we do today. Not only in
>this feild but some of the best Literature was pened before WWII, after that
>time the attention to detail seems to have suffered.
>

Hi Gary,

I have been guilty (once again) of painting with too broad a brush in
regards to ingenuity missing from our age. Your posting helped me to
recover from that by adding some accomplishments that I regard as
quite remarkable.

The Standard Cell, once the cornerstone of the Volt, has gone the way
of the Dodo. When I see the retired standards in the rummage boxes at
Ham fairs, it is somewhat saddening to observe the former champion now
languishing in the metaphorical gutter. These units had been in
service since the turn of the century (100 years ago - not last week).
They represented the peak of electro-chemistry with an accuracy
bordering on 10's of microvolts (depending on length of service).
Those who find one at a rummage sale would be advised to orient them
upright (so that they appear to you as the letter H) and allow them to
settle for a couple of months. There are MANY instruments in the
rummage market that were tailored for the standard potential of 1.3
odd volts. If you thought finding rare matched FETs was difficult,
these will become even rarer (but could be replaced with standard
Zeners).

The Josephson junction is the new (relatively speaking) and current
champ of the Volt (unless they've aced me with something better).
This standard of the Volt is based on Quantum mechanics and pulls that
formerly ethereal math into the work-a-day world.

Another stroke of genius is found in the standard capacitor that is
co-axial in design and using laser interferometry to measure the
plunge of the piston into the cylinder to provide a very accurate
delta C. It is instructive that the technique is what provides the

boon in accuracy, and not the component nor the laser (both necessary, but alone would not suffice without that AHA! of the delta).

73's
Richard Clark, KB7QHC

267. Re: 10M ground plane question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 22:11:27 UTC
From: mikey spikey <mpelgen@netusa1.net>
Message-ID: <yks46.3142$HZ2.2931@newsfeed.slurp.net>
Source record: 173187

paul wrote in message <3A5139AB.7B9E@nospam.com>...
>Hello,
>
>I want to make a homebrewed 10 meter ground plane antenna. I've got
>most everything together but have a question on the radials.
>
>Is it possible to physically shorten the lengths of the radials by
>adding a loading coil to each one? I think that the radials (on a

Moxon says you don't have to put a loading coil in each one. What
you do is tie the three or four radials together, make them insulated
from ground, and put a single loading coil between the shield and radials.

This way the exact length is unimportant, but efficiency will decrease the
more
you shorten them. You adjust the loading coil to tune the antenna. You
probably
won't get the lowest SWR this way, but don't worry about that too much.
Mike WM9D Kokomo IN

268. Re: Cushcraft X-7

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 22:15:06 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A5252EA.9080003@hiwaay.net>
Source record: 172837

Denis- this may sound like a strange way to fix it, but, depending on the tower (Rohn - ?) you might have the least trouble and expense by having a four-foot stand-off made to mount the rotor and mast off to the side, away from the neighbor. Rohn has some in their catalog, but I think the ones for 25g are only about three feet. I have one that is sturdy, but only three feet offset, with a 34 inch long tube (vertical)

Good Luck- Bill-W4BSG

Denis O' Flynn wrote:

> Hi to all,
> I have come up with a possible problem with my dear neighbour as my X-7
> beam will unfortunatly be abt 4 feet over our border fence. I am looking at
> a few possibilities before I may have to go to more expense and move the
> tower. The main possibility is : what would be the effect of shortening the
> longer elements ?
>
> Any replies greatly appreciated
>
> de Denis EI6HB
> denisf@eircom.net

269. Re: TV yagi for 6M???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 22:26:44 UTC
From: X@Y.Z.net
Message-ID: <slrn954ld3.dqb.X@animas.frontier.net>
Source record: 173188

On Mon, 01 Jan 2001 21:25:00 -0500, paul scribbled:
>
>I have a rather large Television antenna and I wonder if I could take
>the longest two rear elements and add a little length to them (or maybe

A local 'business' man threw up a LPTV Pay TV station on channel 2
back in the 80's. It did not last very long -- but he insisted on
having his customers install cut-for-channel-2 TV antennas. They
grace the roofs of many homes in town -- even tho' the TV-2
station is defunct, cable has come and peaked, and many folks are
now on to satellite TV.

Anyway.... I've been able to get a few of these for free -- just
for the taking of'em down. They are 5-el on a 60" boom. Most
of the elements are there for marketing -- versus practical gain.

I use one for portable operation on 6M. It works fairly nice.
What I did was figure the % delta between the middle of the
channel 2 and 50.200 mcs. Then I pried open the flattened ends
of the parasitic elements and shoved tight hairpins of calculated
length, 10 gauge aluminium into the end and staked them in place
with a 1/8" pin driver.
For the driven element -- which was a folded dipole -- I used the
same 10 gauge al. wire to fashion big open hairpins to extend the
size of the dipole -- *leaving* the original folded dipole alone.
Thus, I had a new-sized dipole with the ends of the original acting
as a short across the new sized 'fold'. This seems to have
(serendipitously) given me a near-50-ohm feedpoint.
I did not putz around with re-positioning the elements on the boom.
As an added 'bonus', it folds up -- as it was folded coming from the
factory -- and makes transporting it fairly easy.

All of it Standard Amateur Radio Practice.

It works.
I use it.

It would be a good choice for someone living where ham antennas
are 'discouraged'. You look'em straight in the eye and say:
"It's a TV antenna!" -- and show them the sales receipt and
installation instructions.

I'd hesitate, tho', to use an "All Channel" TV antenna. Any
harmonic or spurious emissions from your rig will *also* be
happily (and 'gain'-fully) radiated by such an antenna.
A 'tuned' antenna does give some rejection in such a case.

HTH es HNY!
73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | OS/2
Gunnison, Colorado | @ | Jonesy | linux __
7,703' -- 2,345m | frontier.net | DM68mn SK

270. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 22:56:40 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <o2t46.452$e5.1187786@news.ntplx.net>
Source record: 173189

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A51FC7E.BCB55A82@IEEE.org...

> Dick Carroll wrote:

> > Since he's your *ex-boss* tell him to get off his duff and do something
> > constructive-learn the piddling 5wpm code!

> He tells me that is exactly what he is doing - on his way to Extra.

Great, Cecil.

Do you think he would still be doing so if you had used the expression,
"learn the piddling 5-wpm code?" I hope that the expression hasn't been
used on too-many would-be hams. I would strongly discourage its use.
Perhaps it would be more effective to point out that learning code to 5 wpm
isn't very difficult; generally a few days practice after memorizing it
works for most people. Somehow, it sounds a bit more encouraging that
"learn the piddling code."

73,
Ed Hare, W1RFI

271. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 23:01:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A525DC6.229C7685@eznec.com>
Source record: 173190

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "Fine tuning may be necessary to get the pattern you want on any certain
> frequency."
>
> I`ve waited until now to advertise my ignorance on this topic. Delay in
> degrees by the unit length of coax has always seemed to work for me.
> But, several months ago I gave a similar response to yours to what I
> think was about the same question. Roy was prompted to say such simple
> phasing works for 1/4-wave and 1/2-wave sections only, if I understood
> his response. Actually, I still don`t know what he was talking about.
>
> Best regards, Richard Harrison, KB5WZI

The main reason I took the effort to write the material in the ARRL Antenna Book was so I wouldn't have to keep answering the same question over and over. If you haven't looked at it and really want to understand, I suggest that you do read it. A few newsgroup postings aren't adequate to convey what took a whole chapter to explain. If you've read it and still don't understand, then I've failed as a writer to communicate.

I will, though, give an illustration of what's going on. People with EZNEC or the EZNEC demo program can follow along. (Feel free to change the Units if you prefer to work in feet and inches.) This could all be manually calculated without much effort -- you can find the equations in the Antenna Book -- but after spending years writing thousands of lines of code, I'm inclined to let the program do it for me.

I started with the example antenna Vert1, a simple ground mounted vertical of 40 mm diameter and 10.3 m height, at 7 MHz. It uses MININEC type ground, so there's no ground resistance loss, and the input resistance is about 36 ohms. To illustrate what I'm saying, I modified the antenna to have a feedpoint impedance of 50 + j0. I did this by lengthening the element to 11.45 meters and adding a 0 - j62 ohm load at the feedpoint. In real life, this would be a capacitor. The resulting feedpoint impedance is 50 + j0 within a fraction of an ohm.

Next, I made a second element of the same height and diameter but at X = 5.35 m, 1/8 wavelength away. I put a 0 - j62 ohm load at the feedpoint of this element, and also a source. This second source is a current source with a relative magnitude of 1 and an angle of -135 degrees.

Clicking Src Dat to see the source impedances shows the following:

Source 1: 17.5 - j31.82
Source 2: 20.57 + j30.67

Quite a change from 50 ohms. This is due to mutual coupling between the elements. So if you tried to get the current in element 2 by using a transmission line (and somehow did end up with the correct currents in the elements), the load end of the line would see 20.57 + j30.67 ohms, not 50 + j0. If you put 1 amp into the input of a 135 electrical degree 50 ohm line terminated with this impedance, what would come out? The answer is 0.85 amps, delayed in phase by 165.7 degrees -- not the 1 amp, 135 degrees you need. (This result comes from calculations using standard transmission line formulas assuming no loss.)

Before going on, change the Ground Type to Perfect (this won't change the impedances), and the Plot Type to Azimuth and run a far field plot. Although you'll never see this pattern in practice, it's what you usually see in texts and is useful for understanding the underlying principles. Notice that the front/back ratio isn't perfect, but is around 25 dB despite the perfect spacing and phasing. This is because mutual coupling has modified the current distribution along the elements. Although they have perfectly phased currents at their bases, the magnitude and phase change differently along their lengths. This can be a difficult or impossible manual calculation, so it's something you see with a program like EZNEC but not in graphs based on manual calculations. But it's real. You can improve the F/B by fiddling the feed system to modify the current ratio slightly to compensate. I suggest saving this pattern for future reference.

The antenna pattern with the magnitude 0.85/angle 165.7 ratio isn't relevant because if you did feed element 2 through a 135 degree line from element 1, it wouldn't see 20.57 + j30.67 ohms, because the current ratio wouldn't be 1 at 135 degrees. The current ratio affects the feedpoint impedances, and due to the transmission line transformation, the feedpoint impedance affects the current ratio. Both have to be accounted for at the same time. Again, the calculation isn't difficult, but again, EZNEC can do it. Remove the second source and add a transmission line from wire 1 end 1 to wire 2 end 1 (that is, from the base of the first vertical to the base of the other). For the line length, enter '135d' to make the line 135 electrical degrees long. (If you wanted to see the change in antenna behavior over frequency you'd have to use an actual length, and also change the load type.) Then run the far field pattern.

What you should see is a pattern with a distinct reverse lobe. The front/back ratio is 10 dB instead of 25 for the ideally phased array. The gain has increased 0.9 dB at the expense of a narrower pattern (which can be a disadvantage for a fixed array). If you saved the earlier pattern, you can easily compare the two by adding the saved pattern to the current one. This array has both noticeable gain and front/back ratio, which is why so many people using this kind of feed system mistakenly think they're getting the phasing they planned. But a look at the element currents shows a ratio at the bases of 0.92 at an

angle of -156.5 degrees, not 1 at -135 degrees. Is it a useful pattern? Very possibly. Is it what you planned? Probably not. If you used 75 ohm coax instead of 50, you'd get a different result. If you used quarter wavelength elements you'd have a different result. If you have ground loss you'd have a different result. And if you used two lines differing by 135 electrical degrees to feed the elements, you'd get a different result. At least with EZNEC you can get a good idea of what the result would be.

Using the Compendium article I mentioned in my last posting, you can calculate feeline lengths that *will* work. One set of lengths for this array, with these elements (having these feedpoint impedances) is 44.4 electrical degrees of line to the first element and 148.3 to the second, both 50 ohms. Note that the difference in length is 103.9 degrees, yet the element currents will end up 135 degrees apart, and with the same magnitude. I didn't run this model, but examples CardTL and 4SqTL illustrate the technique.

If you'd like to understand more about feeding phased arrays, I suggest taking a look at Chapter 8 of the ARRL Antenna Book. I believe it was the 15th Edition where the phased array material first appeared.

Roy Lewallen, W7EL
ARRL Technical Advisor

272. Re: Unadilla trap dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 23:03:47 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A525E42.FF4DBDD7@home.com>
Source record: 173191

"Rudolph M. Marcelletti" wrote:

> I have a 450 window line fed 160 meter dipole and need to shorten it to get
> the ends farther away from metal supports. I was thinking of putting in a
> set of Unadilla 80 meter traps which would result in shortening the overall
> antenna length by about 40 feet or so. Would I realize a substantial loss
> in performance on the higher bands? I use the dipole for primarily 160 and
> 80 meters.

I'd just shorten it if it was only a matter of a few feet or so. You only have to be a couple of feet or so clear of the metal supports. If that's all you have to shorten it, you probably wouldn't even notice the difference. Traps would be a needless expense as well as reducing the effectiveness of the antenna. At the very worst, if you weren't pleased with the 'shortened' antenna, you could still add the traps -- but I wouldn't expect that outcome.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

273. Re: mounting small yagis in trees????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 23:06:41 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A525EF1.C33AA56D@home.com>
Source record: 173192

News wrote:

> Does anyone know any good web sites that show how to install small yagis in
> trees??
> The reason I'm asking is because I'm thinking of getting on the air but I
> live in an area with a lot of tall trees, and why spend the money for a 50
> ft mast when you already have one (that you dont have to go to radio shack
> to buy) in your backyard!
>
> Thanks

How small? For VHF just tied them to a solid branch.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

274. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 23:09:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A525FB4.94BD91A8@eznec.com>
Source record: 173193

I guess it's a difference in semantics. If you connect your rig to one element, then from there connect to the second element through a transmission line, there's no length of line which will lead to equal magnitude, 135 degree phased currents. So if "fine tuning" consists of adjusting the line length, no amount of fine tuning will necessarily lead to a really good front/back ratio. (I say "necessarily" because you might get lucky with a good combination of element impedance, ground loss resistance, and feedline impedance and get close enough. But you might not.)

Sorry, I'd forgotten about the program. The original programs from the Compendium article can be downloaded as SIMPFEED.ZIP from ftp://eznec.com/pub.

Roy Lewallen, W7EL

Cecil wrote:
>
> Roy Lewallen wrote:
> > This is discussed in detail in
> > Chapter 8 of the _ARRL Antenna Book_. There's no network there for a 135
> > degree feed system, but I recommend reading it so you understand the
> > problem. (Cecil, it might be good for you to review it too.)
>
> Roy, that's what I meant by "fine-tuning". Remember, I typed up your BASIC
> program and sent you a copy? I used that BASIC program on this antenna:
> http://people.delphi.com/cecilmoore/75m2elvp.htm
> --
> http://www.mindspring.com/~w6rca

275. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 23:24:01 UTC
From: k3ky@erols.com
Message-ID: <92tnuhbbe1@bob.news.rcn.net>
Source record: 173194

Great story, Dick! It really makes the case for the unique on-the-air qualities of the venerable CW mode. Yep- it is definitely one of those "you had to be there" sort of things. :o) All the great qualities of the various digital modes not withstanding. I think that other hams who prefer to work phone or the digital modes are every bit as good as me, but those who have never grown to know and love CW just have no clue what they are missing. I work all these modes, but CW will always be my favorite. CW is going to be around on the ham bands for a good while longer.
73 to all and have a great 2001... David K3KY

In article <92ph54nmt0@208.207.71.141>
Dick Carroll <dixie@townsqr.com> wrote:

>
>
> Richard Harrison wrote:
>>
>> Dick Carrol wrote:
>> "There are times when nothing else is applicable or workable." (Other
>> than Morse, I suppose.)
>>
>> We can choose to ignore better digital modes, but they abound and they
>> are more efficient and effective than Morse.
>>
>
>
> Rich, you just don't understand, and that is something that I *can*
> understand since you haven't experienced working Morse, at least to any
> extent.
> There is a letter to the editor in the new issue of QST which
> illustrates what I'm speaking of. Describing how he'd heard that "CW
> gets through when other modes can't", the ham said he had finally saw it
> it action. He was in SSB QSO with a ham friend on 40 meters when the
> other station faded to where he lost copy and could't tell what was
> being said at all. At that point he heard the other station on the
> frequency on CW, weak but readable, sending "3990, 3990". So he switched
> to 75 meters on 3990 khz and there his friend was, on SSB, and they then
> completed their contact.
> So - what other mode would have accomplished the same thing in the same
> way? RTTY? PACTOR? CLOVER? SSTV? PSK31? MFSK16? Don't think so. With no
> preset arrangements that dictate what other mode they should go to, and
> no time to make them,(even if equal gear was present on both ends) only
> a quickly implemented, universally understood media could serve. Any
> other signal that appeared wouldn't have been understood and copied.

> Certainly it wasn't anything earthshaking, just a clear illustration
> of one of the unique characteristics of radiotelegraph communications.
> When it is widely known it can quickly and easily be used. No other mode
> is so elegant in its simplicity and flexibility.
> There's no question that other modes are more efficient and for most
> uses in most cases, better suited. That's progress. But progress doesn't
> change the attributes of CW.
>
> 73, Dick W0EX

276. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-02 23:40:52 UTC
From: k1bqt@aol.com
Message-ID: <20010102184052.27794.00000020@ng-fm1.aol.com>
Source record: 173195

>Phil speaks for himself on aol and he ID's as Phil.>

Perhaps. Perhaps not. It appears to me that "fractenna@aol" is such a public urinal of an address that we have no assurance of message authenticity whatsoever. Even if the lawsuit of his dreams depended on it, Chip couldn't prove who really wrote any given post that appeared there--regardless of who "ID" it. Face it! The "yellow" may be in the bowl, but--short of DNA testing--neither Chip nor ANY of us can prove who put it there because he has failed to properly control his password. That goes for those nasty little legal threats, as well.

Of course, as long as Chip pays the AOL bill and provides access, it is in the end, his "home address" and he's ultimately responsible for the things that go on there.

Rick K1BQT

277. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:11:51 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <U8u46.458$e5.1192755@news.ntplx.net>
Source record: 173196

Roger Halstead <rdhalste@tm.net> wrote:

> For me to place any faith in the standards, I'd need to see the criteria for
> the studies, the unprocessed results, and the detailed methods used to both
> get the data and how it was processed.

The world has developed several thousand standards by now. For what percentage of them have you seen the criteria for the studies, the unprocessed resuls and the detailed mehtods used to both get the data and how it was processed?

The IEEE RF-safety standards committee reviewed over 500 papers for the present version of the standard. For the next revision (or affirmation) they are reviewing over 1500 published papers. BTW, most of these papers were published in peer-reviewed journals, ensuring that they meet some level of scientific acceptability.

If you really are qualified to evaluate the studies, unprocessed results and detailed methods, I am sure that IEEE SCC-28 would be more than pleased to accept you as a member and accept your review and comment. They are looking for paper reviewers, last I heard.

73,
Ed Hare, W1RFI

278. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:15:22 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <ccu46.459$e5.1192789@news.ntplx.net>
Source record: 173198

Peter O. Brackett <ab4bc@ix.netcom.com> wrote:

> Safety Factors, heh, heh:

> If such conservative safety factors as we find in the EMI/RFI world today
> now, were applied to other areas of human endeavor, why then...

> Airplanes would not be able to fly, all would be grounded...

Have you not been able to operate your station because it didn't meet the
standards.

> Rivers would not be crossed by bridges, all bridges would be declared
> unsafe...

Has your station been declared unsafe?

> Automobiles would not be allowed on the roads...

Has the FCC taken your station off the air?

> We would all have to raise our own produce, for the grocery stores would
not
> be allowed to sell us commercially produced vegetables...

I am sure you would be allowed to sell your station any time you wanted. :-)

> Face it... those RFI/EMI/EMC standards are a scaremonger's dream....
let's
> all try to work to set them to be more realistic!!!

You can do so by attending and participating in the IEEE SCC-28 standards
commmittee meetings. The meetings are, by definition, public.

Do you really believe that an exposure level that 99% of amateur stations
easily meet is "scaremonger?"

73,
Ed Hare, W1RFI

279. Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:16:14 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A526F4E.33851641@att.com>
Source record: 173197
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

marsgal42@hotmail.com wrote:
>
> In article <3A5123FF.B0ADFF82@att.com>,
> Pervert_Extraordinaire <valued_customer1@att.com> wrote:
>
> > Given I'm new to this field, I've yet to hear about any ARRL Handbook.
> >
> > Nevertheless, I'll take your advice and get one.
> >
> > Sorry if I bothered you. Trust me, it won't happen again.
>
> ???
>
> You're not a bother at all. Just referring you to a better
> source of information. Especially important for newcomers.

Thanks again. Your help is certainly appreciated.

280. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:26:56 UTC
From: burke_br@freemark.com
Message-ID: <3a52717a.54608981@news.surfree.com>
Source record: 173199

>>
>
>This MI2 file is a copyright file to me.
>
>Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
>Hams and others are warned that downloading said MI2 file is a further
>violation of federal copyright laws.
>
>
>Mr. Lewallen will be served shortly with a cease and desist order. If he fails
>to stop this illegal distribution and publication of this copyright file, he
>will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
>If Mr. Lewallen does not remove the file immediately then litigation will also
>seek to determine who has sought to download this file illegally, through
>Lewallen's distribution and publication on the site www.eznec.com.
>
>Nathan Cohen, Ph.D.
>
Here we go again.

S.O.S.

This group desperately needs moderation.
Regards,

Bruce

"An elected despotism is not the government we fought for." --Thomas
Jefferson

281. Re: mounting small yagis in trees????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:29:29 UTC
From: News <webqaz@i-is.com>
Message-ID: <3a523a81_3@nntp.I-IS.COM>
Source record: 173208

I was thinking about using a Radio Shack FM Antenna that I modifyed (using plans I found in a QST mag a few years ago). So its about 4ft long.

"Irv Finkleman" <finkirvNOSPAM@home.com> wrote in message news:3A525EF1.C33AA56D@home.com...
> News wrote:
>
> > Does anyone know any good web sites that show how to install small yagis in
> > trees??
> > The reason I'm asking is because I'm thinking of getting on the air but I
> > live in an area with a lot of tall trees, and why spend the money for a 50
> > ft mast when you already have one (that you dont have to go to radio shack
> > to buy) in your backyard!
> >
> > Thanks
>
> How small? For VHF just tied them to a solid branch.
>
>
> --
>
> Please hit 'REPLY TO' e-mail address before sending. Thanks.
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada
>
>

282. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:40:43 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <92tseatla1@nnrp1.deja.com>
Source record: 173201

In article <vDO26.310$e5.815717@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
> > > That's just great. And if he is, we can start the myth that hams
are
> > > mostly wacko, just like Vietnam Vets.
>
> > Aren't most hams wacko? Proof is on r.r.a.p.
>
> Do you believe that most hams post to rec.radio.amateur.policy?
>
> 73,
> Ed Hare, W1RFI

ARRL Member?

Sent via Deja.com
http://www.deja.com/

283. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:42:03 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <92tsn4$vp1$1@slb2.atl.mindspring.net>
Source record: 173200

Richard Harrison wrote in message
<29912-3A51F563-23@storefull-112.iap.bryant.webtv.net>...
>
>
>The problem is vanity. Some amateurs prize an amateur license as some
>sort of credential of superiority. If everyone could easily get a
>license, the credential would lose value. Exclusivity is needed to give
>class to the club. I pity them.
>
>Best regards, Richard Harrison, KB5WZI

And many of us pity the freebanders as well. They can have no sense of pride or accomplishment in their ham license. How can they? It is almost to the point that all anyone has to do now is open a box of wheaties to get a ticket. Now doubt Wall Mart will be carrying them at discount prices or as blue light specials soon.

Whether CW is more or less efficient than another mode or whether it is outdated or not is not relevant to the hobby. What is relevant is that CW at one time was the common denominator that literally held amateur radio together. Everybody paid the same entry "fee"...everyone went through the same hell to get the ticket...everyone respected the effort that every other ham had made to acquire that ticket.

The freebanders would have us accept the premise that anyone who believes in a strict set of entry requirements for the hobby is, in some manner, practicing discrimination or that we are elitists in nature. Nothing could be further from the truth and I suspect the freebanders know it. Their tactics are of the politically correct genre that is used to attack so many of the elements of society today. It is inappropriate for any individual to have achieved a status not held by everyone else. Therefore, that individual and his or her accomplishments are vane, even evil.

I would have considerably more respect for the freebanders if they were simply honest and forthright in asserting their true beliefs.

Dean Craft -- W4IHK

284. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 00:42:18 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <92tsh9$tm3$1@nnrp1.deja.com>
Source record: 173202

In article <20001228222630.03725.00000551@ng-md1.aol.com>,
wa8ulx@aol.com (WA8ULX) wrote:
> After checking his Call it appears hes one of them Techs, what a
surprise

Did you marry this one as well? Related?

Sent via Deja.com
http://www.deja.com/

285. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:14:07 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A527CDF.D99B48C0@dvol.com>
Source record: 173204

Richard Harrison wrote:

> Some don`t appreciate clean air and water until deprived of them. Others
> say the best things in life are free.

>
27Mhz radio is a great example of the freebie good life

286. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:19:40 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92tum5$hl8$1@slb7.atl.mindspring.net>
Source record: 173205

Mark:

Uh... I thought Paul Drake was dead! You must have meant Paul Drake, Jr.

And... I'm not sure if Perry is qualified to practice "intellectual property" law, he always seems to be handling criminal cases.

And so... clearly Perry and Paul are not qualified to offer opinions on these matters. Too bad...

How about Judge Roy Bean... now there's a guy who knows the law. And he will "hang" anyone who triffles with him. I'm sure that Roy would have Fractenna doing the six gun dance pretty quickly... Heh, heh.

-Peter K1PO, Cary, NC

"Mark Keith" <nm5k@wt.net> wrote in message news:3A5206DC.7297@wt.net...
> Fractenna wrote:
>
> > This MI2 file is a copyright file to me.
>
> I asked Perry Mason about this just this morrning, and he says your all
> wet. He says you can't have a copyright on a file you didn't make, even
> if it resembles an antenna you designed.
> >
> > Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this file.
> > Hams and others are warned that downloading said MI2 file is a further
> > violation of federal copyright laws.
>
> Again Perry Mason says your wrong.
> >
> > Mr. Lewallen will be served shortly with a cease and desist order. If he fails
> > to stop this illegal distribution and publication of this copyright file, he
> > will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
> > If Mr. Lewallen does not remove the file immediately then litigation will also
> > seek to determine who has sought to download this file illegally, through
> > Lewallen's distribution and publication on the site www.eznec.com.
>
> Perry Mason says "good luck in the contest". Being as most counters only
> show the main ISP addess and not the individual address, I don't see how

> this will be possible. If you "Heckle" went to my web site, I don't see
> frektenna at aol.com, I would see something like:
>
> Dec 24 17:38:33 spider-wm033.proxy.aol.com Win 95 MSIE 5.x
>
> So you can see any hopes of nailing the "perps" in this case will be
> futile at best. Also when I was talking to Perry on the phone, Paul
> Drake broke in on the other line. He was very angry, and said for me to
> tell you to quit calling him at all hours of the day and night. He told
> me in no certain terms that he does not want to be your new boy toy.
> Hope this helps... MK
> --
> http://web.wt.net/~nm5k

287. Re: 10M ground plane question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:26:55 UTC
From: Bill Rhodes <wdrhodes@mail.com>
Message-ID: <zdv46.4386$Rb.678114@typhoon.nyroc.rr.com>
Source record: 173206

paul <paul@nospam.com> wrote in message news:3A5139AB.7B9E@nospam.com...
> Hello,
>
> I want to make a homebrewed 10 meter ground plane antenna. I've got
> most everything together but have a question on the radials.
>
> Is it possible to physically shorten the lengths of the radials by
> adding a loading coil to each one? I think that the radials (on a
> homebrewed antenna) would really be the only unattractive part as they
> would take up most of the roof. Any idea of what size to make the coil
> /whip combination? Any idea if this would improve, degrade, or be the
> same in terms of performance?
>
> Thanks
>
> Paul
> KD4GNU

Try making the radials out of colored (insulated) wire the same color as the roof and lay them right on the roof. They'll be nearly invisible.

288. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:32:13 UTC
From: Bill Rhodes <wdrhodes@mail.com>
Message-ID: <xiv46.4405$Rb.680622@typhoon.nyroc.rr.com>
Source record: 173209

Joe S. <w4hh@my-deja.com> wrote in message
news:92sqni$v5b$1@nnrp1.deja.com...
> In article <92rqrr$1fnb$1@nntp1.ba.best.com>,
> "Janice and Ed Senior" <senior@best.com> wrote:
> > Hi, and happy new year to the group -
> >
> > I am considering putting up a wire antenna for casual
> > HF use (100W class). I would like to operate on as
> > many HF bands as possible.
> >
> > Available supports are a 40 foot tree on one end, and
> > an 8 foot fence post on the other end; so this thing
> > would be something of a sloper. Available length is
> > about 100 feet. Can feed approximately in the middle,
> > with either ladder line or coax. I have a new antenna
> > tuner available (MFJ).
> >
> > Any opinions out there as to whether a multiband dipole,
> > a windom, a G5RV, a random longwire, or ??? would
> > be best suited to this situation?
> >
> > ...Thanks, Old Ed
> >
> >
>
> 135 feet of wire fed in the center with ladder line. You will need an
> antenna tuner at the rig end. This is a simple, effective antenna that
> will load on every band, radiate well, and is quite forgiving. You can
> purchase one already assembled from any number of suppliers. A place
> called Radio Works has a neat device called the Ladder Lock that serves
> as a center insulator and support -- I use that on mine and it prevents
> wire twisting and breaking at the center.
>
>
> --
> Regards,
> Joe Schlatter
> W4HH
>
>
> Sent via Deja.com
> http://www.deja.com/

Yepp, the good old center fed Zepp .... I have used one for years .... I put up a G5RV for a while but went back to the Zepp .... only drawback, especially if you are using computer logging is RF in the shack getting into the computer. I have my tuner less than 2 feet from the entrance to the shack and a really good ground and it is not too bad on the computer except on 10 where the cursor jumps around the screen as I talk ;-)

289. "Converting" a commercial 42-50 mhz load to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:33:23 UTC
From: mdemeo@frontiernet.net
Message-ID: <3a548009.1080455@news.frontiernet.net>
Source record: 173207

I have an Antenna Specialists "low band" 42-50 Mhz 5/8 wave base loaded mobile antenna. These antennas, when new, are shipped with a cutting graph (which I do not have) so that the length of the radial can be tuned to the desired frequency in the spread.
My question...can this be tuned to 52 mhz by changing the length outside the graph?

I know I could play around with an SWR meter, but can the antenna handle it?
Mike
Standard Broadcast
W2MDM

If you like old Telechron Clocks
Check Out
www.frontiernet.net/~mdemeo

290. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:36:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92tvna$269$1@nntp9.atl.mindspring.net>
Source record: 173210

Oops! The holes in Chip's background are showing again...

> > Example? ART OF ELECTRONICS by Horowitz and Hill.

Horowitz is a nice book, good piece of work... I have a copy myself along with several editions of the venerable ARRL "Handbook", but do not be mislead... Horowitz is not an EE text!!!

Come on fellas... Horowitz is a neat book, but more of a comprehensive electronics hobbyist handbook, not an EE textbook.

I challenge anyone to name an ABET accredited EE program that includes Horowitz among it's recommended EE textbooks.
Horowitz could be used as supplemental reading for some EE courses, but it is definitely not an EE textbook.

With such opinions on EE text book material as espoused here on this thread, I can see that it is no wonder Chip N1IR has only managed to be employed teaching at a non-ABET accredited engineering school.

I'm glad that ABET is watching our engineering programs and keeping most engineering education programs at least plausibly honest.

-Peter K1PO

291. Re: TV yagi for 6M???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:40:14 UTC
From: mdemeo@frontiernet.net
Message-ID: <3a5682d8.1799365@news.frontiernet.net>
Source record: 173211

Wow, that is really creative!

On 02 Jan 2001 22:26:44 GMT, X@Y.Z.net (Jynx) wrote:

>On Mon, 01 Jan 2001 21:25:00 -0500, paul scribbled:
>>
>>I have a rather large Television antenna and I wonder if I could take
>>the longest two rear elements and add a little length to them (or maybe
>
>A local 'business' man threw up a LPTV Pay TV station on channel 2
>back in the 80's. It did not last very long -- but he insisted on
>having his customers install cut-for-channel-2 TV antennas. They
>grace the roofs of many homes in town -- even tho' the TV-2
>station is defunct, cable has come and peaked, and many folks are
>now on to satellite TV.
>
>Anyway.... I've been able to get a few of these for free -- just
>for the taking of'em down. They are 5-el on a 60" boom. Most
>of the elements are there for marketing -- versus practical gain.
>
>I use one for portable operation on 6M. It works fairly nice.
>What I did was figure the % delta between the middle of the
>channel 2 and 50.200 mcs. Then I pried open the flattened ends
>of the parasitic elements and shoved tight hairpins of calculated
>length, 10 gauge aluminium into the end and staked them in place
>with a 1/8" pin driver.
>For the driven element -- which was a folded dipole -- I used the
>same 10 gauge al. wire to fashion big open hairpins to extend the
>size of the dipole -- *leaving* the original folded dipole alone.
>Thus, I had a new-sized dipole with the ends of the original acting
>as a short across the new sized 'fold'. This seems to have
>(serendipitously) given me a near-50-ohm feedpoint.
>I did not putz around with re-positioning the elements on the boom.
>As an added 'bonus', it folds up -- as it was folded coming from the
>factory -- and makes transporting it fairly easy.
>
>All of it Standard Amateur Radio Practice.
>
>It works.
>I use it.
>
>It would be a good choice for someone living where ham antennas
>are 'discouraged'. You look'em straight in the eye and say:
>"It's a TV antenna!" -- and show them the sales receipt and
>installation instructions.

>
>I'd hesitate, tho', to use an "All Channel" TV antenna. Any
>harmonic or spurious emissions from your rig will *also* be
>happily (and 'gain'-fully) radiated by such an antenna.
>A 'tuned' antenna does give some rejection in such a case.
>
>HTH es HNY!
>73
>Jonesy

Mike
Standard Broadcast
W2MDM

If you like old Telechron Clocks
Check Out
www.frontiernet.net/~mdemeo

292. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:48:53 UTC
From: richardharrison@webtv.net
Message-ID: <21205-3A528505-90@storefull-118.iap.bryant.webtv.net>
Source record: 173216

Gary7SLL wrote:
"I don`t know if any watched the program Longitude on BBC 2 which was a re-enactment
of Harrison`s trials and tribulations and sheer pig headedness to proceed with limited resource gradually building up his knowledge to the point where by pure persistence he reached his goal."

Awesome. It was John Harrison, not Richard Harrison. John had stubborn opposition from the "not invented here" group, with their own selfish agenda. John had an even worse time trying to collect a royal reward offered to the first producer of a practical chronometer that had the accuracy needed aboard a ship to determine a ship`s position.

Richard Clark appropriately noted in an earlier posting, that success is as much taking the right measues as measuring right. Innovators often originate their own discovery and invention methods. How to measure is more easily taught than how to invent.

Best regards, Richard Harrison, KB5WZI

293. Lattin multiband antenna .....anyone build?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:51:50 UTC
From: carkenord@juno.com
Message-ID: <92u0jk$12a$1@nnrp1.deja.com>
Source record: 173214

Many years ago a Mr. Lattin....W4JRW....developed and patented a novel multiband dipole.

This antenna is shown at:

www.wa3rey.com/lattin.htm

Lattin published these plans, and he also sold the antenna.

Has anyone used this antenna? Has anyone built or tried to build this antenna?

I would like to hear comments or experiences......

Lee Carkenord KA0FPJ

Sent via Deja.com
http://www.deja.com/

294. Re: "Converting" a commercial 42-50 mhz load to 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:55:34 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <92u0qu$9dj$1@bob.news.rcn.net>
Source record: 173212

<mdemeo@frontiernet.net> wrote in message
news:3a548009.1080455@news.frontiernet.net...
> I have an Antenna Specialists "low band" 42-50 Mhz 5/8 wave base loaded
mobile antenna.
> These antennas, when new, are shipped with a cutting graph (which I do not
have) so that
> the length of the radial can be tuned to the desired frequency in the
spread.
> My question...can this be tuned to 52 mhz by changing the length outside
the graph?
>
Yes. Should work fine.

295. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 01:57:11 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92u0u3$5l2$1@nntp9.atl.mindspring.net>
Source record: 173213

Ed:

Get real. No, no, and no.

None of this affects me or my amateur station operation, thanks!

Thanks for helping to protect us amateurs from onerous regulations, still...

I am personally not afraid of incidental exposure to RF in most casual/occasional circumstances. [Also, I don't look down the wave guide of an operating high power radar, or operate my microwave oven with the door off and my hand in the oven, or deeply enhale the gasoline fumes when I fill up my car gas tank at the self serve!]

But with all of the "hype" about this RF stuff in the media, etc... uninformed lay folks might easily be frightened into unreasonable actions.

I say, let's cool it on the scaremongering.

The average person is more likely to die in an airplane or train crash, wherein both methods of transport have smaller safety factors than exhibited by the new RF exposure regulations, than suffer any observable trauma from incidental RF radiation!

Ed, let's stop trying to protect everyone by well meaning, but misguided standards and beaureaucratic mumbo jumbo.

Come on, admit it, many standards groups are simply boondoogles perpetuated by the attendees of everlasting committees who, have their bosses bamboozled into believing that they are doing something useful, and who were sent to the committees in the first place by their employers simply to prevent anyone else from "winning" anything.

Been there, done that...

Reminds me of the early earnest Canadian DOC rule making about telephone jacks when they first came out. No free "male" jacks were allowed, in case someone put the jack in their mouth and might get electrocuted by the telephone line's -48 volts! Anyone ever hear of anybody putting a male telephone jack in their mouth and "buying the farm"???

What!!!

Stop scaremongering....

-Peter K1PO, Cary NC

However I do feel that
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message

news:ccu46.459$e5.1192789@news.ntplx.net...
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
>
> > Safety Factors, heh, heh:
>
> > If such conservative safety factors as we find in the EMI/RFI world
today
> > now, were applied to other areas of human endeavor, why then...
>
> > Airplanes would not be able to fly, all would be grounded...
>
> Have you not been able to operate your station because it didn't meet the
> standards.
>
> > Rivers would not be crossed by bridges, all bridges would be declared
> > unsafe...
>
> Has your station been declared unsafe?
>
> > Automobiles would not be allowed on the roads...
>
> Has the FCC taken your station off the air?
>
> > We would all have to raise our own produce, for the grocery stores would
> not
> > be allowed to sell us commercially produced vegetables...
>
> I am sure you would be allowed to sell your station any time you wanted.
:-)
>
> > Face it... those RFI/EMI/EMC standards are a scaremonger's dream....
> let's
> > all try to work to set them to be more realistic!!!
>
> You can do so by attending and participating in the IEEE SCC-28 standards
> commmittee meetings. The meetings are, by definition, public.
>
> Do you really believe that an exposure level that 99% of amateur stations
> easily meet is "scaremonger?"
>
> 73,
> Ed Hare, W1RFI
>
>

296. Re: Need UHF TV Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:04:31 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <PMv46.333$y12.42379@news7.onvoy.net>
Source record: 173215
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair,sci.electronics.basic

I have installed quite a few channel master tv antennas. I would go with the Yagi style antenna with a corner reflector on the back side. One that is at least 4 feet long should give you good gain and directivity. Get a name brand, like Channel Master or Winegard which are better quality than the Radio Shack (Antenna Craft) brand. I would spend a little more money on a better antenna because wind will wreck the cheaper ones in a couple of years.

If you get a booster, get a split one with the booster at the antenna and the power supply at the tv. Channel Master makes a good one. CMS 0064 is a vhf/uhf combination with a fm trap in it.

http://www.channelmaster.com/pages/u1.htm
Check out the uhf antennas (4248 model) and the Spartan mast mount preamps at this site.

<BB> wrote in message news:tf605t0tqfiobhedr1vccl2d0dh80vei92@4ax.com...
> I use a UHF attention for reception of local channels and I need a
> little advice on improving my reception. I would greatly appreciate
> any ideas you guys might have. I'm pretty much clueless on this stuff
> :)
>
> Currently, I use a 4 bay bow tie outdoor antenna with twinlead. I've
> posted example pictures of the kind of reception I get at:
> http://www.popmud.com/tv.htm
>
> As you can see from the pics, my main problem is reception on channel
> 54. Unfortunately, this is the ONE channel I REALLY want. Doh!
>
> So, what I'm wondering is which one of the following is the best
> option to improve channel 54?
> 1) A mast mounted preamp and RG6 to replace the twinlead.
> OR
> 2) A better antenna.... say, an 8 bay bow tie...
>
> Obviously, the best option is BOTH, but I'm not willing to invest that
> much for one channel.
>
> Also, if the preamp is the best option, how good an amp will I
> need(20db, 30db...)? And will amp overload likely be a problem with
> the other stations?
>

297. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:06:58 UTC
From: n4jzh@knology.net
Message-ID: <3a5285f4.364878322@news.knology.net>
Source record: 173217

On 02 Jan 2001 11:31:01 GMT, fractenna@aol.com (Fractenna) wrote:

Getting mighty tired of Mr. Cohen threatening to sue you Roy,
My daddy always told me, Son if you can't stand the battle then
don't start the war.
Mr. Cohen you can't make chicken salad out of chicken shit, by the
many threats you have made by now Roy should be
broke and you should be in the top 500 wealthiest list.
I believe you scared to the fact that someone else is smarter than
you. Roy keep up the good work...
and Dr. Cohen get back up on your stump and poke your thumb back

in your mouth.
Sue me for these comments....
Donnie N4JZH

>>The EZNEC files on my site at ftp://eznec.com/pub/MI2 were created
>>solely by Steve Best, VE9SRB, except for 0notes.txt, which I wrote and
>>which tells what the other files are. I have Steve's express permission
>>to post them, and no one has rights to these files except Steve, who
>>puts no restrictions on their copying and use. Fractenna, Inc. and
>>Nathan Cohen Phd have both claimed to have copyrights for these works,
>>but their claims are completely false. Anyone may download, copy, and
>>use these files without violating any criminal or civil law. Good ethics
>>and manners would be served by crediting Steve as the files' author when
>>appropriate.
>>
>>Anyone else with files to post in response to Chip's "1000 dollar MI2
>>challenge" are welcome to submit them. I'll be glad to post them with
>>the same conditions under which I posted Steve's: You give me your
>>express permission to do so, and please don't include any inappropriate
>>editorial material in the accompanying text files.
>>
>>I am solely responsible for all material on my web site
>>http://eznec.com.
>>
>>Roy Lewallen, W7EL
>>
>>Bill Aycock wrote:
>>>
>>> See clarification within Frackies post, below.
>>>
>>> Fractenna wrote
>>>
>>> > SNIP

>>> > This MI2 file is a copyright file to me.
>>>
>>> Poor wording, but, the last time I looked, this file is not the one
>>> Fracky put on his site, so how can there be a copyright violation?
>>>
>>> >
>>> > Roy Lewallen, D/B/A EZNEC, is illegally distributing and publishing this
>>file.
>>> > Hams and others are warned that downloading said MI2 file is a further
>>> > violation of federal copyright laws
>>> SNIP
>>>
>>> >
>>> >
>>> > litigation will also
>>> > seek to determine who has sought to download this file illegally, through
>>> > Lewallen's distribution and publication on the site www.eznec.com.
>>>
>>> Note the tortuous wording that makes it look like a big deal, but is
>>> really as clear as mud. Apparently, if I did down load it, I am OK, only
>>> if I only sought to, is he after me. Further, since the file in question
>>> is NOT Frackies, then any download would not be illegal, so another
>>> qualifier bites the dust.
>>> I am having a hard time seeing just what he is after, since all the
>>> things that bother him are not pertinent to the action he proposes.
>>>
>>> For what it's worth- I have the file, I did not download it from the
>>> EZNEC site, and I hope he comes for me- I am on a retirement income, and
>>> could sure use the proceeds of my countersuit.
>>>
>>> Hope this helps- Bill
>>>
>>> >
>>> > Nathan Cohen, Ph.D.
>>
>>
>>
>>
>>
>>
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>Hams and others are warned that downloading said MI2 file is a further
>violation of federal copyright laws.
>
>
>Mr. Lewallen will be served shortly with a cease and desist order. If he fails
>to stop this illegal distribution and publication of this copyright file, he

>will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
>If Mr. Lewallen does not remove the file immediately then litigation will also
>seek to determine who has sought to download this file illegally, through
>Lewallen's distribution and publication on the site www.eznec.com.
>
>Nathan Cohen, Ph.D.
>

298. Re: Lattin multiband antenna .....anyone build?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:12:22 UTC
From: avatar <avatar@frii.com>
Message-ID: <nMw46.596$B9.191604736@news.frii.net>
Source record: 173074

Lee,

Lattin had an article in QST in the early 60's about these antennas. I built the 80/40M version and it worked very well. He did caution that trying to do more than two bands with one radiator would require a lot of cut-n-try.

Dave W0MAY

<carkenord@juno.com> wrote in message news:92u0jk$12a$1@nnrp1.deja.com...
> Many years ago a Mr. Lattin....W4JRW....developed and patented a novel
> multiband dipole.
>
> This antenna is shown at:
>
> www.wa3rey.com/lattin.htm
>
> Lattin published these plans, and he also sold the antenna.
>
> Has anyone used this antenna? Has anyone built or tried to build this
> antenna?
>
> I would like to hear comments or experiences......
>
> Lee Carkenord KA0FPJ
>
>
> Sent via Deja.com
> http://www.deja.com/

299. Re: Impedance of PL-259 and "Barrel" connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:15:17 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3a527e12_4@news1.prserv.net>
Source record: 173203

Silver solder (as used for jewelry) is often available in five grades:

grade melting point
IT 1490F
Hard 1425F
Medium 1390F
Easy 1325F
Extra Easy 1270F

Sterling silver (7.5% copper) melts at 1640F and fine silver at 1762F.

That must be some soldering iron you guys use to work with silver solder!!
(I use a torch, myself; and nowhere near any electronics.)

"Soft solder" (sometimes with just a little silver in it) is a different
story, but this is definitely not "silver solder."

Bill
W2WO

300. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:26:14 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A528DC6.5020402@hiwaay.net>
Source record: 173071

I can't help it- Donnies last statement reminds me of the old British
description of a dormant mental condition-
"With your thumb in your Bum and your mind in neutral"

Hope this helps-Bill-W4BSG

Donnie wrote:

> On 02 Jan 2001 11:31:01 GMT, fractenna@aol.com (Fractenna) wrote:
>
> Getting mighty tired of Mr. Cohen threatening to sue you Roy,
> My daddy always told me, Son if you can't stand the battle then
> don't start the war.
> Mr. Cohen you can't make chicken salad out of chicken shit, by the
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> broke and you should be in the top 500 wealthiest list.
> I believe you scared to the fact that someone else is smarter than
> you. Roy keep up the good work...
> and Dr. Cohen get back up on your stump and poke your thumb back
>
> in your mouth.
> Sue me for these comments....
> Donnie N4JZH
>
>
>>> The EZNEC files on my site at ftp://eznec.com/pub/MI2 were created
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>>> puts no restrictions on their copying and use. Fractenna, Inc. and
>>> Nathan Cohen Phd have both claimed to have copyrights for these works,
>>> but their claims are completely false. Anyone may download, copy, and
>>> use these files without violating any criminal or civil law. Good ethics
>>> and manners would be served by crediting Steve as the files' author when
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>>>
>>> Anyone else with files to post in response to Chip's "1000 dollar MI2
>>> challenge" are welcome to submit them. I'll be glad to post them with
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>>> express permission to do so, and please don't include any inappropriate
>>> editorial material in the accompanying text files.
>>>
>>> I am solely responsible for all material on my web site
>>> http://eznec.com.
>>>

>>> Roy Lewallen, W7EL
>>>
>>> Bill Aycock wrote:
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>>> file.
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>>>>
>>>> SNIP
>>>>
>>>>
>>>>>
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>>>> For what it's worth- I have the file, I did not download it from the
>>>> EZNEC site, and I hope he comes for me- I am on a retirement income, and
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>>>>
>>>>
>>>>> Nathan Cohen, Ph.D.
>>>>
>>>
>>>

>>>
>>>
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>>
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>> to stop this illegal distribution and publication of this copyright file, he
>> will be sued and criminal charges will be brought against Lewallen D/B/A EZNEC.
>> If Mr. Lewallen does not remove the file immediately then litigation will also
>> seek to determine who has sought to download this file illegally, through
>> Lewallen's distribution and publication on the site www.eznec.com.
>>
>> Nathan Cohen, Ph.D.
>>

301. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:27:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A528E1F.5B4A@wt.net>
Source record: 173218

Peter O. Brackett wrote:
>
> Mark:
>
> Uh... I thought Paul Drake was dead!

Oh, I think Perry Mason is too. But he is such a bad ass lawyer he can
bite you from the grave.

> And... I'm not sure if Perry is qualified to practice "intellectual
> property" law, he always seems to be handling criminal cases.

Doesn't matter. Perry was a "TV" attorney. He was qualified in all areas
of the law. And knew everything. Just like Frak.
>
> And so... clearly Perry and Paul are not qualified to offer opinions on
> these matters. Too bad...

Well, Maybe not Paul, but Perry is. He's a super lawyer, ready to take
those tough cases. Even from the grave!
And with his powerful sidekick PI Drake to snoop around and pry, watch
out!
>
> How about Judge Roy Bean... now there's a guy who knows the law. And he
> will "hang" anyone who triffles with him. I'm sure that Roy would have
> Fractenna doing the six gun dance pretty quickly... Heh, heh.

Well, I don't know how well he knew the law, but his subtle methods
seemed to be effective. The rope neckties seem to take all the fight out
of the defective units. MK
--
http://web.wt.net/~nm5k

302. Gap Titon DX vs. Butternut HF9V - any help?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:33:00 UTC
From: "Dennis P. Stahr" <irf9905@irfutures.com>
Message-ID: <wbw46.28017$F_3.1075603@newsread2.prod.itd.earthlink.net>
Source record: 173069

Am going to get a vertical soon (antenna restrictions and all), and will ground mount. Like both of these because of the "dirty little secrets" information found on the Bencher.com site.

Can anyone give me comments? I have been away from the hobby too long and just getting back.... sure will appreciate any comments or comparisons.

Thanks,
Dennis KF2XL

****
"Paranoia... you only have to be right once
to make it all worthwhile!"
****

303. Gap Titon DX vs. Butternut HF9V - any help?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 02:33:01 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <xbw46.28018$F_3.1075603@newsread2.prod.itd.earthlink.net>
Source record: 173070

Am going to get a vertical soon (antenna restrictions and all), and will ground mount. Like both of these because of the "dirty little secrets" information found on the Bencher.com site.

Can anyone give me comments? I have been away from the hobby too long and just getting back.... sure will appreciate any comments or comparisons.

Thanks,
Dennis KF2XL

****
"Paranoia... you only have to be right once
to make it all worthwhile!"
****

304. Re: Chain link fence as antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 03:06:16 UTC
From: "David R.Gemmer" <david.r.gemmer@gte.net>
Message-ID: <IGw46.707$c23.406078@paloalto-snr1.gtei.net>
Source record: 173072

Thanks for all the observations. Guess I can use the far fence supports as supports for a long wire. The fence probably would make a good ground, no?

<ik7565@erols.com> wrote in message news:3A5118CC.845BFD1F@erols.com...
> "Worked All Neighbors" Award ?

305. WTB: Bird 43 Slugs or case

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 03:06:49 UTC
From: Keith Beckmann <Kbeckmann.spankme@wi.rr.com>
Message-ID: <dHw46.278$rh3.84853@typhoon.mn.mediaone.net>
Source record: 173073
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Looking for a few good used Bird 43 slugs. Could use:

5E (5W, 400 - 1000 MHz)
10E (10W, 400 - 1000 MHz)
50C (50W, 100 - 250 MHz)
50D (50W, 200 - 500 MHz)
100C (100W, 100 - 250MHz)
100D (100W, 200 - 500 MHz)
1000H (1KW, 2 - 30 MHz)
2500H (2.5KW, 2 - 30 MHz)

And perhaps others if the price is right.

Could also use a Bird 43 case, like the CC-1

Contact via e-mail at:

kbeckman.spankme@wi.rr.com (Remove .spankme to respond)

306. Re: Two Hamsticks as a Dipole???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 03:34:33 UTC
From: Paul Lantz <plantz@onlink.net>
Message-ID: <92u6l1fko1@onlink3.onlink.net>
Source record: 173077

I tried two 75m hamsticks with the Lakeview connector for portable operations when visiting people. I was able to check in with local nets and made a few reasonable contacts but nothing impressive (as could be expected) but was impressed that it actually did work at all.
73
Paul
VE3KBL

307. Re: W7EL Warning-- Download from http://www.eznec.com Copyright

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 03:42:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A529FA6.29CA991E@eznec.com>
Source record: 173076

Fractenna wrote:

>. . .

> If Mr. Lewallen does not remove the file immediately then litigation will also
> seek to determine who has sought to download this file illegally, through
> Lewallen's distribution and publication on the site www.eznec.com.
>
> Nathan Cohen, Ph.D.

I'd like to chip in (pun intended) on this. I don't know of any way to track who downloads from the public ftp part of my web site. Actually, I'm more interested in how many than who, but if you want to put some effort into this, let me know. I'll be glad to help.

Roy Lewallen, W7EL

308. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 03:46:53 UTC
From: wa8ulx@aol.com
Message-ID: <20010102224653.07551.00014503@ng-cs1.aol.com>
Source record: 173078

>Did you marry this one as well? Related?
>

no I would think of marrying your mother

309. Re: Alliance HD-73 Rotor - Need Info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 04:30:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92u9seplo0@208.206.142.86>
Source record: 173079

JSPS wrote:
>
> I hope this is not off topic for this NG, I appologize if it is.
>
> From an estate sale I recently acquired an Alliance HD-73 rotor &
> control box.
> I knew that these were in good working order and were in use until
> the elderly Ham passed away recently.
> Unfortunately, the persons(s) who took down the tower, etc
> misplaced/lost the rotor control cable with it's what I believe to be,
> but not entirely sure of, a **customized** 6-pin plug at the rotor end
> of it.
>
> I need to know this info:
> To corrolate the control box's numbered terminal strip with
> the color code of the length of 6-wire control cable "tail"
> going into the HD-73 rotor housing.
>

I believe that underneath the cover with the hole in it that the "tail"
goes through, you'll find a terminal strip with the same number of
terminals, which correspond numerically with those on the control box.

Dick

310. Re: Newbie Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:07:48 UTC
From: cajun2857@aol.com
Message-ID: <20010103000748.12878.00001158@ng-cr1.aol.com>
Source record: 173080

if you have enough room a small quad would help... depending on what
frequency you are looking for go to cubical quad antenna javaacripr calculator
and check it out. from kd7hsc

311. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:22:48 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ucv8$5jq$0@208.206.142.86>
Source record: 173081

Richard Harrison wrote:

> Keeping otherwise
> competent "wannabes" off the bands kills amateur radio for no good
> reason.

Competent in WHAT?

then:

> There is no need for exclusion of fine people because
> they don`t like code or the technical side of radio.

So just what sort of competence is it that a wannabe should possess? A birth certificate?

If they are
> competent people without a record of malfeasance, and pass a minimal
> test on rules and operating requirements, they should be issued an
> unresrricted license to full amateur priveleges in all bands, just like
> drivers are licensed.

Sounds just like the "test" that was once given to applicants in the 27 Mhz CB service. Care to show us the difference?

> The applicants already are owners of the airways
> just as driver applicants are already owners of the roadways.

Really??? Just like we all "own" all the "publicly owned lands" and "national parks". So why can't I just fence off my portion and park my camper there if it's mine"?

> The idea that a code or technical test is going to keep miscreants off
> the air is illogical. The character mix of licensed amateurs is
> certainly no better than most random groups. There are saints and
> sinners among coders and nocoders and among techies and the clueless in
> almost the same proportions.

THAT is illogical. Moreover it is simply incorrect. Anything that has been obtained free and without investment of even minor effort is held in disdain and to be valueless to the point that the holder is moved to the attitude of "so what, who cares if it goes?". Not an attitude conducive to causing to toe the line and act to protect and preserve it. This isn't rocket science nor news to behavioral scientists.

> The problem is vanity. Some amateurs prize an amateur license as some
> sort of credential of superiority. If everyone could easily get a
> license, the credential would lose value.

Pride in accomplishment does not equate to vanity. That you make such a linkage is revealing. It reveals that your view ham radio as merely a casual pastime that has no serious application to communications in the real world. Nonsense. A radio signal transmitted by a ham is no less a signal than that transmitted by the most important commercial or government station. It is just as fully capable of creating damaging interference problems to critical services. No hobby with such potential for creating widespread problems that are often totally obscure and unknown to the originator can be allowed to function on so loose a basis. To do otherwise is an abrogation of the FCC's mandate to protect the RF spectrum from abuse and misuse. It is the very reason for the existence of a licensing system.
Ham radio is unique in that respect if no other. It is clear that the influence of the far-flung outlawry on 27 mHz has permeated the thinking of a great many of the like-minded along with you. FCC has evidently decided that it is futile to attempt any serious control over so many miscreants, at least that seems the view of the current crop of FCC operatives.

> Exclusivity is needed to give
> class to the club. I pity them.

I pity you for your total misapprehension of the amateur radio service. It's about as wrong as it can be. And I know you're not alone, Cecil Moore being of like mind. I pity him, too.

Somehow it all comes back to a 20 WPM CW test. Those who do it don't think anything of it. Those who think they can't, criticize and say it's all for nothing. There's the revealing and pitiful truth.

312. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:24:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52B7A4.5B237A61@IEEE.org>
Source record: 173086

Dick Carroll wrote:
> How does that correlate with the fact that we have steadily lost total
> spectrum over the same period of years that have seen exponential growth
> of the number of ham radio licenses issued?

Fewer hams don't need as much bandwidth. One ham doesn't need any
bandwidth. Think about it.
--
http://www.mindspring.com/~w6rca

313. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:27:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52B831.8448B0A8@IEEE.org>
Source record: 173087

Dean Craft wrote:
> I would have considerably more respect for the freebanders if they were
> simply honest and forthright in asserting their true beliefs.

How do you meet freebanders? I don't know any.
--
http://www.mindspring.com/~w6rca

314. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:27:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92ud8a$5jq$1@208.206.142.86>
Source record: 173082

Cecil wrote:
>
> It follows from that that we need fewer frequencies for quality
> hams than we do for a quantity of hams.

How does that correlate with the fact that we have steadily lost total spectrum over the same period of years that have seen exponential growth of the number of ham radio licenses issued?

315. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:33:11 UTC
From: n2ey@aol.com
Message-ID: <20010103003311.29901.00001754@nso-de.aol.com>
Source record: 173084

In article <3A51FA5F.6729030@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Redirected to rec.radio.amateur.policy

Redirected right back where it started.
>
>N2EY wrote:
>
>> W6RCA wrote:
>> >A0-40 doesn't give CW any more *potential*.
>>
>> Yes, it does.
>
>OK, Jim, you're on. From Webster's: "potential - possible, as opposed
>to actual."

Ah, the old dictionary trick.

> Please tell us what is possible with CW and A0-40 that has
>never before been accomplished in actual practice.

Morse code through a non-LEO satellite.

>CW over a satellite
>was a potential at one time. It's not anymore. It has already been done.
>It was a potential in the 50s. I suspect it was actually accomplished
>in the 60s.

It was accomplished in the early 1960s through Oscar 3, I believe. Oscar 3 was
a low-earth orbit satellite. AO-40 isn't.

>> That body of knowledge expands every day. You glimpse but a small part of
>it.
>
>OK, Jim, you're on. Please tell us something new that has recently been
>discovered about the CW mode.

Prove to us that nothing new can be learned about it, Cecil. Show us that it is
100% understood.

>Better yet, speculate on something new
>that will be discovered about the CW mode.

Here are some uses for Morse that have only been slightly explored:

- Use of Morse by the handicapped
- Use of Morse for man-machine interface
>

>> >Commercial = functional = serious, amateur = hobby = fun.
>>
>> That's completely incorrect and illogical.
>
>Of course, it's true in general.

No, it's false in general. You're simply mistaken, Cecil old boy.

> Ham radio is *usually* used as a
>*hobby* for *fun*.

So? That has nothing to do with your claims.

> Don't tell me that the majority of ham QSOs are
>serious (although prostate problems can be serious :-)

The majority of ham QSOs are serious.

> I was born
>at night but it wasn't last night.

That's my line.
>
>> >I have never badmouthed the mode.
>>
>> You badmouth it at every opportunity.
>
>Telling the objective truth about a mode is simply being honest about its
>capabilities.

You don't know the objective truth about the mode. That's obvious.

> That's not badmouthing. CW for serious communications has gone
>the way of the horse for serious transportation.

Nope. Not true. "Commercial" does not equal "serious". Go look that up in your Funk and Wagnall's.

>Both occupy small niches
>compared to their heydays.

Depends on whaere you look, that's all.

>As far as I can ascertain, CW used by hams on the
>HF ham bands has never saved a life. Is that badmouthing or just an honest
>statement?

It's incorrect. Morse used by hams in the ham bands has saved many lives. Most of them were long ago, of course, but they DID happen. Some were relatively recent - ask WB5RUE.

Your promulgation of false information is badmouthing. Lives have been saved by hams using Morse on the ham bands.
>
>You are like my Mother.

A very patient woman who says you would argue with a fence post to hear your head rattle, Cecil.

>When I tell the objective truth about the Bible,
>she says I'm badmouthing it.

How can you tell her the objective truth about the Bible, when only God has that knowledge?
>
>> > I have badmouthed the regulation that
>> >forces a single mode down the throat of every HF amateur radio operator.
>>
>> No such regulation exists. No single mode is "forced" down anyone's throat.
>
>Of course it is, Jim, because of the ITU treaty. When OOK Morse is treated
>equally to the other modes then it will have ceased to be forced on anyone.

It isn't forced on anyone. Those who want the license pass the tests. Simple. No forcing at all.

>That won't happen as long as an HF ham is not free to choose his first mode.

No ham is forced to use Morse.

73 de Jim, N2EY

316. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:33:13 UTC
From: n2ey@aol.com
Message-ID: <20010103003313.29901.00001755@nso-de.aol.com>
Source record: 173083

In article <29912-3A51F563-23@storefull-112.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, NE2EY wrote:

The call is N2EY

>"The existence of cw and cw regs have no effect. The license test
>requirements may, though."
>
>Bingo! You`ve hit the nail right on the thumb!

Then you agree.

> Keeping otherwise
>competent "wannabes" off the bands kills amateur radio for no good
>reason.

Who are these "otherwise competent wannabes"? Who gets to decide who is
competent?

>Technical developments have presented other pursuits of greater
>ease and attraction to drain the pool of wannabes.

What other pursuits?

>If amateur radio is
>to survive, it must be easy and attractive, too.

It's easier than ever before. Attractive is another story - that's in the eye
of the beholder.
>
>You don`t pass a horsemanship test to get an automobile driver`s
>license.

Nope - because most people today don't ever get near horses. Horse use on the
nation's roads is extremely limited.

But the use of Morse on the HF/MF ham bands is extremely common. So it makes
sense to test for basic Morse skill for access to those bands.

>Neither must you pass a test on the design and construction of
>automobiles.

But you do need to know something about how they work. Like how road conditions
affect stopping distance.

Your analogy is useless.

>Technology has made such tests no longer needed.

Only if the ARS is to become a service where only type-accepted, channelized equipment is allowed.

>The same
>is true of CW and thorough technical tests for issuance of an amateur
>radio license.

The current written tests are by no stretch of the imagination "thorough".

>There is no need for exclusion of fine people because
>they don`t like code or the technical side of radio.

WHO are these people?

>If they are
>competent people without a record of malfeasance, and pass a minimal
>test on rules and operating requirements, they should be issued an
>unresrricted license to full amateur priveleges in all bands, just like
>drivers are licensed.

That's not how driver's licensing works in most states.

To drive a car requires passing a written and operating test. To drive other vehicles requires more testing. Here in PA, a basic driver's license doesn't allow you to drive an 18 wheeler or even a truck over a certain gross weight.

>The applicants already are owners of the airways
>just as driver applicants are already owners of the roadways.

There are about 250,000,000 Americans and about 5,000,000,000 human beings. Sit down and figure out how much of the radio spectrum between 3 and 30 MHz each of us can claim to "own".
>
>The idea that a code or technical test is going to keep miscreants off
>the air is illogical.

Not true at all. Look at what happened to another radio service that had no license tests. Utter chaos just a few years after it was created. The FCC has been trying to clean it up for at least three decades without success.

> The character mix of licensed amateurs is
>certainly no better than most random groups.

On what studies do you base that assumption?

>There are saints and
>sinners among coders and nocoders and among techies and the clueless in
>almost the same proportions.

Not from what I've observed for 34 years.
>
>The problem is vanity. Some amateurs prize an amateur license as some
>sort of credential of superiority. If everyone could easily get a
>license, the credential would lose value. Exclusivity is needed to give

>class to the club. I pity them.

No, that's not the issue at all.

The problem is accomplishment. Some people value it, some don't. Getting a ham license used to be more of an accomplishment than it is today. Simple fact.

Here's an example:

I've run two marathons (26.2 miles) and a few dozen half-marathons (13.1 miles) in the past 19 years or so. I'm not a particularly good runner, but completing those races was an accomplishment - particularly the marathons.

Now suppose the folks in charge of certifying races (TAC) decided that a "marathon" should be redefined as 10 miles and a "half marathon" as 5 miles. Lots more people would be able to say they were "marathoners" but it would not be the same accomplishment at all. Doesn't mean the folks who run 10 mile "marathons" are evil or lazy. It DOES mean that the standards would be lowered.
>
73 de Jim, N2EY

317. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:33:15 UTC
From: n2ey@aol.com
Message-ID: <20010103003315.29901.00001756@nso-de.aol.com>
Source record: 173085

In article <20010101214036.27079.00000331@ng-cr1.aol.com>, fractenna@aol.com (Fractenna) writes:

>>Back about 1954, my uncle bought a nice 3 bedroom twin home in the town
>where
>>B&W used to be for $12,000. He went into hock up to his ears to buy it, too
>-
>>took every cent for a while, because it exceeded the "2 years gross salary"
>>rule of the time. 20 year mortgage at 4%, which was considered almost usury
>>then.
>>
>>In 1979 I bought a very similar house four doors down for $47,000. I, too,
>>went
>>into hock up to my ears to buy it. 30 year mortgage at 10.5%, which was
>>considered pretty good at the time.
>>
>>Several years ago we both moved away. He went first and got about 8.5 times
>>his
>>purchase price. I got about twice my purchase price. His house was nicer ;-)
>>
>>Compared to decent real estate, ham radio gear is dirt cheap.
>>
>>73 de Jim, N2EY
>
>This is all very far away from the original thread.

Not at all. The discussion is about relative values over time. The Handbook that cost $3 in the fifties costs over ten times that now. The house that cost $12,000 back then costs eight times that now (in raw price). Add in the higher costs of taxes and insurance, and the Handbook hasn't inflated nearly so much.
>
>The point(s) is/ (are):
>
>1) the ARRL HANDBOOK's price does not represent the very cheapest it could be
>and still turn a profit.

How do you know? Have you ever been involved in its production?

> I would guesstimate that price-point is of order
>$24
>or so;

Based on what?

>2) The ARRL HANDBOOK is designed to MAKE money to cover the extensive losses
>incurred in operations at the League;

What "losses"?

The main reason the ARRL publishes is to be of service to amateurs. They have bills to pay, so the publications cost some money. Compared to similar sized engineering texts, they are dirt cheap.

>3) If the League didn't have the HANDBOOK then there would be a very severe
>cut
>in many of the operations we have come to expect;

Maybe. You ever read their financial report?

>I would speculate that
>things
>which do not generate revenue and have low readership--such as contest
>results,
>DXCC; and so on would suffer.

Not really. Those things do not consume much in the way of resources. They could be funded other ways.

> And say goodbye to the percs such as the web
>site; letters; bulletins; and so on.

Maybe.
>
>What's the point(s)?
>
>1) The League is a well run ship with no fat;

Agreed.

>2) The League does have a cashcow--the HANDBOOK--that makes a lot of the
>other
>things possible;

I don't know about that at all.

>3) Prices of items seldom reflect their costs. If you believe they do, then
>ask
>yourself how much money McDonald's makes on hamburgers (actually very little;
>of order a dime for a quarter pounder) compared to a coke (about 60-100+
>cents
>per drink) and fries (about 20-30 cents per order).

Sure - marketing and sales. Pretty smart folks in Newington. That's why I've been a member for 33 years.
>
>So not everything scales as a KWM-2 ;-)

Sure. The costs of producing a book like the Handbook skyrocketed. Particularly during the '70s and early '80s. The costs of producing electronic equipment have dropped.

We shouldn't even be discussing the Handbook, anyway. It's copyrighted material.

73 de Jim, N2EY

318. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:35:50 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52BA36.C9A14246@IEEE.org>
Source record: 173089

Dick Carroll wrote:
> Anything that has
> been obtained free and without investment of even minor effort is held
> in disdain and to be valueless ...

The air you breathe is valueless and you hold it in disdain?????

> Pride in accomplishment does not equate to vanity.

Personal pride does not equate to vanity. However, personal pride
is a personal matter. Public pride *IS* vanity.

> Somehow it all comes back to a 20 WPM CW test.

The one that has been buried in the sands of time? RIP
--
http://www.mindspring.com/~w6rca

319. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:39:19 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92udu7$86q$0@208.206.142.86>
Source record: 173088

Richard Harrison wrote:
>
> Many confuse value and price. I can only pity them.

Is that the Dow Jones or the Nasdaq?

320. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:43:33 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52BC05.46DA4D74@IEEE.org>
Source record: 173090

"Ed Hare, W1RFI" wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> Do you think he would still be doing so if you had used the expression,
> "learn the piddling 5-wpm code?"

It appears to be part of the continuing pattern to discourage and keep
otherwise qualified people out of ham radio. When will it ever end?
--
http://www.mindspring.com/~w6rca

321. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 05:52:41 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <92uen9$86q$1@208.206.142.86>
Source record: 173091

"Ed Hare, W1RFI" wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A51FC7E.BCB55A82@IEEE.org...
>
> > Dick Carroll wrote:
>
> > > Since he's your *ex-boss* tell him to get off his duff and do something
> > > constructive-learn the piddling 5wpm code!
>
> > He tells me that is exactly what he is doing - on his way to Extra.
>
> Great, Cecil.
>
> Do you think he would still be doing so if you had used the expression,
> "learn the piddling 5-wpm code?" I hope that the expression hasn't been
> used on too-many would-be hams. I would strongly discourage its use.
> Perhaps it would be more effective to point out that learning code to 5 wpm
> isn't very difficult; generally a few days practice after memorizing it
> works for most people. Somehow, it sounds a bit more encouraging that
> "learn the piddling code."
>

5 WPM is still piddling, Ed.
> 73,
> Ed Hare, W1RFI

322. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 06:00:43 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <92uf7i$27k$1@nntp9.atl.mindspring.net>
Source record: 173092

Cecil wrote in message <3A52B831.8448B0A8@IEEE.org>...
>Dean Craft wrote:
>> I would have considerably more respect for the freebanders if they were
>> simply honest and forthright in asserting their true beliefs.
>
>How do you meet freebanders? I don't know any.
>--
>http://www.mindspring.com/~w6rca

W6RCA meet KB5WZI
KB5WZI meet W6RCA

Sorry I have to introduce you and run, but I have matters elsewhere that now require my attention. Glad I could be of service to you. :o)

Dean Craft -- W4IHK

323. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 06:27:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52C641.D9512EA3@IEEE.org>
Source record: 173093

N2EY wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> writes:
> > Please tell us what is possible with CW and A0-40 that has
> >never before been accomplished in actual practice.
>
> Morse code through a non-LEO satellite.

You forgot the smiley face. I'm sure CW was passed through a
non-LEO military satellite in the 60s and/or 70s.

> Prove to us that nothing new can be learned about it, Cecil.

Aha, the old prove a negative trick. You know that's impossible.
Please prove that you are not a criminal.

> The majority of ham QSOs are serious.

You forgot the smiley face. 99% of ham QSOs are not worth a hoot.

> You don't know the objective truth about the mode. That's obvious.

That's a strange thing to say to someone with more years experience
with the mode than you have. What were you doing in 1951 while I was
staying up all night pounding a straight key?

> Depends on whaere you look, that's all.

Depends upon whether one has blinders on or not.

> It's incorrect. Morse used by hams in the ham bands has saved many lives. Most
> of them were long ago, of course, but they DID happen. Some were relatively
> recent - ask WB5RUE.

That wasn't CW used on the HF CW bands which was the boundary condition. Please
list some cases where CW was used by hams on the HF CW ham bands to save lives
that would otherwise have been lost.

> Your promulgation of false information is badmouthing. Lives have been saved by
> hams using Morse on the ham bands.

It wasn't false. Here's what I said: "As far as I can ascertain, CW used by
hams on the HF ham bands has never saved a life." That's an absolutely true
statement.

> How can you tell her the objective truth about the Bible, when only God has
> that knowledge?

Not so fast. Please prove that God exists. Why was the gospel of Thomas
left out of the Bible? Why was Revelations left out of the Greek Orthodox
Bible? Why does the Catholic Bible contain more books than the Protestant
Bible?

> It isn't forced on anyone. Those who want the license pass the tests. Simple.
> No forcing at all.

Are you saying the FCC doesn't have the power to influence, affect,
or control hams? Dream on.

From Websters: "force - power to influence, affect, or control"

Of course, the FCC forces, i.e. has the power to influence, all HF hams
to learn Morse code before they can use any other HF mode.

> No ham is forced to use Morse.

Every HF ham is forced to use Morse to obtain a license.
--
http://www.mindspring.com/~w6rca

324. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 06:30:34 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52C70A.FC732E27@IEEE.org>
Source record: 173094

Dean Craft wrote:
>
> Cecil wrote in message <3A52B831.8448B0A8@IEEE.org>...
> >How do you meet freebanders? I don't know any.
>
> W6RCA meet KB5WZI
> KB5WZI meet W6RCA

KB5WZI is a freebander? Richard, what frequencies do you use?
--
http://www.mindspring.com/~w6rca

325. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 06:44:14 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A52CA3E.1E3FA041@IEEE.org>
Source record: 173095

Roy Lewallen wrote:
> Source 1: 17.5 - j31.82
> Source 2: 20.57 + j30.67

I've wondered about another way to feed these elements. How about backing up the feedline toward the source until a current maximum point is reached on each feedline. Transform both impedances to 50 ohms at the current maximum points. Add whatever coax is necessary to get the phasing right. What do you think?
--
http://www.mindspring.com/~w6rca

326. Re: metal roof as ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 07:34:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A52D60A.CD137994@eznec.com>
Source record: 173096

If you're operating at HF, the pattern shape is determined primarily by ground reflections taking place well away from the roof. So the roof won't have much of an impact on the pattern. This is made even more so by the relatively gentle slope of the roof.

Roy Lewallen, W7EL

paul wrote:
>
> Hello,
>
> I am in the process of putting up a number of antennas on a metal roof.
> I see no need to use radials with such a perfect ground plane already
> provided. The roof is about 100 feet by 150 feet and we are working
> somewhere near the middle. It is a sloping roof 35 ft high on the one
> side and 20 ft on the other. We're fashioning brackets to make the
> elements vertical. I wonder if anyone has any ideas on what the roof's
> slope would do to the polar pattern of the antenna? Would it "steer"
> the pattern towards the lower side or have no consequence at all?
>
> Thanks.
>
> Paul
> KD4GNU

327. You Looking for Vertical Comparisons??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 07:39:40 UTC
From: ardujenski@aol.com
Message-ID: <20010103023940.12214.00000575@ng-mn1.aol.com>
Source record: 173097

Which vertical?? Here is a paper available that compares several major brands.
This might be a better place to go first for some answers.

HF VERTICAL PERFORMANCE - TEST METHODS & RESULTS
Nï¿½AX and K7LXC are at it again - this time it's HF multiband verticals. Now you
can read an unbiased report on how they really performed. Antennas tested
include the Cushcraft R8, Butternut HF6V, MFJ 1798, Force 12 ZR-3 and V-3,
Diamond CP-6, Hustler 6BTV and Gap Titan. It's 64 pages of protocol, data sets
and summaries. Presented at the 2000 Dayton Hamvention. $17.00

---
http://www.championradio.com/cgi-bin/WebStore/web_store.cgi?page=publicati
ons.html&category=yes&cart_id=

Alan KB7MBI in Woodinville, WA

328. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 08:37:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A52E4C2.2C569726@dvol.com>
Source record: 173098

Cecil wrote:

> "Ed Hare, W1RFI" wrote:
> >
> > Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> > Do you think he would still be doing so if you had used the expression,
> > "learn the piddling 5-wpm code?"
>
> It appears to be part of the continuing pattern to discourage and keep
> otherwise qualified people out of ham radio. When will it ever end?

>
Hopefully never. I keep hearing about all these poor technical geniuses being denied use of the ham bands and I keep asking who they are and it goes around the circle unanswered again. What poor techies?? I notice that your former boss isn't sitting on his butt and wringing his hands about being "excluded". That's the way it should be.
>
I've run into any number of wannabes over the years who told me "I'd like to get into ham radio but I just can't do the code . . " I have yet to run into one of those who had any technical expertise at all, they've all been Radio Shack clerks, scanner freaks, kids who get off on HTs, etc. who couldn't even handle Ohm's Law if their lives depended on it. All they want is a radio with a channel selector and a mic, anything more complex loses their attention.
>
How many nocodes have written articles which have appeared in QEX? Considering that they represent the largest license class in the service and that the license was designed to attract all the "technically competent potential contributors" without burdening them with a code test. There's the whole story, there ain't no other story.
>
--

> http://www.mindspring.com/~w6rca

>
w3rv

329. Re: WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 08:38:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <92uoe0okq1@neptunium.btinternet.com>
Source record: 173099

Just a check to see how many of you are awake.

Reg.

330. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 09:19:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A52EE85.E11868EE@dvol.com>
Source record: 173100

Dick Carroll wrote:

>In my camping rig I use a 60 ft random wire, never above about 10 feet

> high, tuned with an automatic tuner and use a 40 foot piece of magnet
> wire lying on the ground for the counterpoise. (I have hooked to the
> frame of the motorhome but got to thinking about the 40 gallons of
> gasoline in the tank, and decided against it since it's not possible to
> know just what voltages develop where, particularly with a
> frequency-agile allband system).
> I have no problem at all making all the contacts I want, in fact I get
> reports comparible with my 50 ft dipoles I use at home.

>
Can't count the number of times I've played the game pretty much the same way quite successfully. 60-70 feet of wire up any way you can get it up and another 60-70 feet strung along the ground and that's all she wrote for 7-28 Mhz ops.100-150 ft adds 80/75. Less than a buck's worth of Home Depot insulated #14 thru the trees, whatever. No traps, no tricks, no nothin'. In my case I use any of several MFJ manual tuners because I run into high-impedance feedpoints which the auto-tuners don't like. I've found that using an MFJ-259B analyzer to tweak the tuner before putting the radio online greatly simplifies band-hopping and makes life easier for the radio.
>
Too many folk make too big a fuss over HF wire antennas, good antennas just ain't that big a deal. Unless ya just can't deal with it unless it comes from the factory with the PL-259 installed.
>
>Dick W0EX
>
w3rv

331. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 09:35:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A52F265.EE5966D3@dvol.com>
Source record: 173101
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Cecil wrote:

> Of course it is, Jim, because of the ITU treaty. When OOK Morse is treated
> equally to the other modes then it will have ceased to be forced on anyone.
> That won't happen as long as an HF ham is not free to choose his first mode.

>
It is tested like the other modes ignoring the fact that there is no mouth test element for phone. Knowledge of all modes except cw is tested in the writtens. As it happens the only practical way to test for knowledge of the cw mode is a 5wpm dit-dah thingey. The Bard would love it, a "Much Ado About Nothing" drill taken to an idiotic jihad-level extreme.
>

> --
> http://www.mindspring.com/~w6rca

>
w3rv

332. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 12:58:07 UTC
From: fractenna@aol.com
Message-ID: <20010103075807.10762.00001231@ng-cr1.aol.com>
Source record: 173102

>
>In article <20010101214036.27079.00000331@ng-cr1.aol.com>, fractenna@aol.com
>(Fractenna) writes:
>
>>>Back about 1954, my uncle bought a nice 3 bedroom twin home in the town
>>where
>>>B&W used to be for $12,000. He went into hock up to his ears to buy it, too
>>-
>>>took every cent for a while, because it exceeded the "2 years gross salary"
>>>rule of the time. 20 year mortgage at 4%, which was considered almost usury
>>>then.
>>>
>>>In 1979 I bought a very similar house four doors down for $47,000. I, too,
>>>went
>>>into hock up to my ears to buy it. 30 year mortgage at 10.5%, which was
>>>considered pretty good at the time.
>>>
>>>Several years ago we both moved away. He went first and got about 8.5 times
>>>his
>>>purchase price. I got about twice my purchase price. His house was nicer
>;-)
>>>
>>>Compared to decent real estate, ham radio gear is dirt cheap.
>>>
>>>73 de Jim, N2EY
>>
>>This is all very far away from the original thread.
>
>Not at all. The discussion is about relative values over time. The Handbook
>that cost $3 in the fifties costs over ten times that now. The house that
>cost
>$12,000 back then costs eight times that now (in raw price). Add in the
>higher
>costs of taxes and insurance, and the Handbook hasn't inflated nearly so
>much.
>>
>>The point(s) is/ (are):
>>
>>1) the ARRL HANDBOOK's price does not represent the very cheapest it could
>be
>>and still turn a profit.
>
>How do you know? Have you ever been involved in its production?
>

>> I would guesstimate that price-point is of order
>>$24
>>or so;
>
>Based on what?
>
>>2) The ARRL HANDBOOK is designed to MAKE money to cover the extensive losses
>>incurred in operations at the League;
>
>What "losses"?
>
>The main reason the ARRL publishes is to be of service to amateurs. They have
>bills to pay, so the publications cost some money. Compared to similar sized
>engineering texts, they are dirt cheap.
>
>>3) If the League didn't have the HANDBOOK then there would be a very severe
>>cut
>>in many of the operations we have come to expect;
>
>Maybe. You ever read their financial report?
>
>>I would speculate that
>>things
>>which do not generate revenue and have low readership--such as contest
>>results,
>>DXCC; and so on would suffer.
>
>Not really. Those things do not consume much in the way of resources. They
>could be funded other ways.
>
>> And say goodbye to the percs such as the web
>>site; letters; bulletins; and so on.
>
>Maybe.
>>
>>What's the point(s)?
>>
>>1) The League is a well run ship with no fat;
>
>Agreed.
>
>>2) The League does have a cashcow--the HANDBOOK--that makes a lot of the
>>other
>>things possible;
>
>I don't know about that at all.
>
>>3) Prices of items seldom reflect their costs. If you believe they do, then
>>ask
>>yourself how much money McDonald's makes on hamburgers (actually very

>little;
>>of order a dime for a quarter pounder) compared to a coke (about 60-100+
>>cents
>>per drink) and fries (about 20-30 cents per order).
>
>Sure - marketing and sales. Pretty smart folks in Newington. That's why I've
>been a member for 33 years.
>>
>>So not everything scales as a KWM-2 ;-)
>
>Sure. The costs of producing a book like the Handbook skyrocketed.
>Particularly
>during the '70s and early '80s. The costs of producing electronic equipment
>have dropped.
>
>We shouldn't even be discussing the Handbook, anyway. It's copyrighted
>material.
>
>73 de Jim, N2EY
>

I will be pithy.

Have I been ivolved in book publication--and thus understand the costs and pricing structure?--yes.

Is the ARRL making some money from the HANDBOOK to over other losses in operations? Absolutely.

Do I have anything else to add, other than this accurate and factual perspective? Nope.

Do you understand what a copyright is and its application? Apparently not.

Have a good new year.

73
Chip N1IR

333. Re: Gap Titon DX vs. Butternut HF9V - any help?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 13:22:33 UTC
From: Larry Bratcher <lbratche@ipa.net>
Message-ID: <KAF46.20$723.15851@nntp2.onemain.com>
Source record: 173103

I went through the same dilemma a few years back and after much research, decided on Butternut HF6V. I've been very happy with my HF6V and not having any experience with the Gap, would not trade the HF6V for any other vertical. Might check out www.ehm.com for reviews on the Butternut and other antennas.

Good Luck
Larry
KD5IKA
"Dennis P. Stahr" <irf9905@irfutures.com> wrote in message news:wbw46.28017$F_3.1075603@newsread2.prod.itd.earthlink.net...
> Am going to get a vertical soon (antenna restrictions and all), and will
> ground mount. Like both of these because of the "dirty little secrets"
> information found on the Bencher.com site.
>
> Can anyone give me comments? I have been away from the hobby too long and
> just getting back.... sure will appreciate any comments or comparisons.
>
> Thanks,
> Dennis KF2XL
>
> **********
> "Paranoia... you only have to be right once
> to make it all worthwhile!"
> **********
>
>

334. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 13:33:16 UTC
From: n2ey@aol.com
Message-ID: <20010103083316.18498.00000865@nso-mh.aol.com>
Source record: 173104

In article <3A52C641.D9512EA3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>>
>> Cecil <Cecil.A.Moore@IEEE.org> writes:
>> > Please tell us what is possible with CW and A0-40 that has
>> >never before been accomplished in actual practice.
>>
>> Morse code through a non-LEO satellite.
>
>I'm sure CW was passed through a
>non-LEO military satellite in the 60s and/or 70s.

Which one? When? How far apart were the ground stations?

The anti-code "experts" tell us the military stopped using Morse for anything important long before the 1960s. You can't have it both ways.
>
>> Prove to us that nothing new can be learned about it, Cecil.
>
>Aha, the old prove a negative trick. You know that's impossible.

Then why should I accept your biased opinion as fact?

>Please prove that you are not a criminal.

Why? I am a "criminal". I got a minor traffic ticket a few years ago and paid a fine. Learned from my mistake, too.
>
>> The majority of ham QSOs are serious.
>
>You forgot the smiley face. 99% of ham QSOs are not worth a hoot.

If that's your opinion, it's no wonder you are here and not on the air.

>> You don't know the objective truth about the mode. That's obvious.
>
>That's a strange thing to say to someone with more years experience
>with the mode than you have.

The truth is often perceived as strange by those who don't want to accept it.

I don't think you have more years experience with Morse than I do. You dropped out of ham radio for many years, as I recall. I've been continuously active for 34 years now.

It's very probable that my knowledge, skill, and experience with Morse all far exceed yours, Cecil. Sorry if that burns your bacon, but it's an objective

fact.

> What were you doing in 1951 while I was
>staying up all night pounding a straight key?

I was developing my potential.

What you did one night 50 years ago doesn't establish you as any sort of expert on the subject, nor more experienced than me. It's what has happened since then that matters.
>
>> Depends on whaere you look, that's all.
>
>Depends upon whether one has blinders on or not.

Take yours off, then.
>
>> It's incorrect. Morse used by hams in the ham bands has saved many lives.
>Most
>> of them were long ago, of course, but they DID happen. Some were relatively
>> recent - ask WB5RUE.
>
>That wasn't CW used on the HF CW bands which was the boundary condition.

So? Why must it be the HF bands? Did Morse used by hams on the ham bands save a life that would have otherwise been lost in the WB5RUE case? Yes or no?

>Please
>list some cases where CW was used by hams on the HF CW ham bands to save
>lives
>that would otherwise have been lost.

Plenty of floods and other disasters before and immediately after WW2. You want specifics, go look up some old QSTs.
>
>> Your promulgation of false information is badmouthing. Lives have been
>saved by
>> hams using Morse on the ham bands.
>
>It wasn't false.

The information was false. Your ignorance was true.

>Here's what I said: "As far as I can ascertain, CW used by
>hams on the HF ham bands has never saved a life." That's an absolutely true
>statement.

There are non so blind as those that will not see, nor deaf as those who will not hear.
>
>> How can you tell her the objective truth about the Bible, when only God has
>> that knowledge?
>

>Not so fast. Please prove that God exists.

You have to define what something is before its existence can be defined. By my definition, the existence of God is axiomatic. QED.

> Why was the gospel of Thomas
>left out of the Bible?

It did not meet the conditions for inclusion set by those who compiled the version you looked at.

> Why was Revelations left out of the Greek Orthodox
>Bible?

It did not meet the conditions for inclusion set by those who compiled that version.

>Why does the Catholic Bible contain more books than the Protestant
>Bible?

Different conditions for definition of a "book".

73 de Jim, N2EY

335. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 13:51:03 UTC
From: k6mhe@arrl.net
Message-ID: <3a532dd5.1297964@news.mcn.org>
Source record: 173107

On 03 Jan 2001 05:33:15 GMT, n2ey@aol.com (N2EY) wrote:

[snip]

>
>We shouldn't even be discussing the Handbook, anyway. It's copyrighted
>material.
>
>73 de Jim, N2EY
>

It is forbidden to speak of copyrighted things?

Danny, K6MHE

336. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:17:15 UTC
From: w1rfi@aol.com
Message-ID: <20010103091715.07744.00000655@ng-fy1.aol.com>
Source record: 173105

>From: "Peter O. Brackett" ab4bc@ix.netcom.com

>I am personally not afraid of incidental exposure to RF in most
>casual/occasional circumstances. [Also, I don't look down the wave guide of
>an operating high power radar, or operate my microwave oven with the door
>off and my hand in the oven, or deeply enhale the gasoline fumes when I fill
>up my car gas tank at the self serve!]

Wise precautions, all. I agree; I, too, am not afraid of exposure at the level of the standard, controlled or uncontrolled. I would be afraid for exposure at a rate at which I was absorbing 4 watts/kilogram of body mass for extended periods of time (ie, >6 minutes). Clearly, the exposure level needs to be set below that threshold.

>But with all of the "hype" about this RF stuff in the media, etc...
>uninformed lay folks might easily be frightened into unreasonable actions.

Absolutely, but the media hype has nothing to do with safe levels of RF, in fact, quite the opposite. I can point you to sites that offer some pretty bizzare "information" about RF exposure.

>The average person is more likely to die in an airplane or train crash,
>wherein both methods of transport have smaller safety factors than exhibited
>by the new RF exposure regulations

Are you suggesting that the safety factors be reduced to a level at which people die?

>Ed, let's stop trying to protect everyone by well meaning, but misguided
>standards and beaureaucratic mumbo jumbo.

Although I serve on the IEEE SCC-28 standards committee, I did not set the levels that are in the present standard. These standards were set by people whose expertise I believe to be much greater than mine, so I would not call the standard "misguided." If the level of the standard caused any significant difficulty for the Amateur Radio Service, I would be quite uncomfortable with the safety factors, too, but IMHO, the benefits of having regulations that define acceptable conduct, thus offering some degree of protection against the unreasoned "inquiries" of our neighbors, outweighs the inconvenience of having to spend a minute or two to demonstrate to ourselves that our station is under the limits.

I have talked to several neighbors of hams who had questions about RF safety, some of which were being raised wrt tower applications. In all of those cases, that neighbor came away from that conversation with an understanding that the RF coming from the ham's station was safe to them and their families. The very safety factors you are eschewing were the major part of their decision that

there was no safety issue at hand. If you can discuss any such conversations you have had, I welcome them.

>Ed, let's stop trying to protect everyone by well meaning, but misguided
>standards and beaureaucratic mumbo jumbo.

I do not see my role as protecting everyone from the "evil RF." I do see my role as helping amateurs to understand the rules, the reasons that they were created and the importance of doing what the rules say because it is important that the majority of hams are seen by the FCC as following the rules.

73,
Ed Hare, W1RFI

337. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:22:58 UTC
From: w1rfi@aol.com
Message-ID: <20010103092258.07744.00000657@ng-fy1.aol.com>
Source record: 173106

>From: "Peter O. Brackett" ab4bc@ix.netcom.com

>Come on, admit it, many standards groups are simply boondoogles perpetuated
>by the attendees of everlasting committees who, have their bosses bamboozled
>into believing that they are doing something useful, and who were sent to
>the committees in the first place by their employers simply to prevent
>anyone else from "winning" anything.

I have been a participant in SCC-28 for a couple of years now. I do not
believe that the focus of most of the participants is as you describe.

>Been there, done that...

I am a member of or a liaison with about a dozen industry committees. Although
I can say I have been there, I don't go there to "do that." I spend time that
I really don't have because I believe that it is important that these
committees have information about Amateur Radio as they set their standards.
Life is too short for me to spend time on committees that I don't believe to be
useful.

> Anyone ever hear of anybody putting a male
>telephone jack in their mouth and "buying the farm"???

Shocks are dangerous for many more reasons than that a few of them are fatal.
I would imagine that the standard was enacted because those male jacks are just
the sort of thing that an infant might decide to "explore."

>What!!!

>Stop scaremongering....

Can you tell me which of my words you believe to be "scaremongering?"

73,
Ed Hare, W1RFI

338. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:32:01 UTC
From: w1rfi@aol.com
Message-ID: <20010103093201.07744.00000659@ng-fy1.aol.com>
Source record: 173108

>From: n2ey@aol.com (N2EY)

>>2) The ARRL HANDBOOK is designed to MAKE money to cover the extensive losses
>>incurred in operations at the League;

>What "losses"?

>The main reason the ARRL publishes is to be of service to amateurs. They have
>bills to pay, so the publications cost some money. Compared to similar sized
>engineering texts, they are dirt cheap.

I agree with both of you; ARRL publishes material that it believes will be useful to amateurs and prices them so that it can use the excess revenues over costs to fund many of its activities. Without the money from the sales of publications, either dues would have to be raised or some significant changes would have to be made in the scope of what ARRL does. If the dues were raised to cover the missing revenues, members would not renew, etc. Balancing its revenues between dues, pub sales and ad sales is a reasonable way to operate, IMHO.

Of course, if you would like to pay double your dues and not buy a Handbook, I can arrange to put the excess revenues in the ARRL Lab Test Equipment fund. :-)

>We shouldn't even be discussing the Handbook, anyway. It's copyrighted
>material.

:-) I can assure you that ARRL will not sue you for discussing the Handbook. I consider discussing its content to be protected both as fair use and as free speech. Under fair use, you could even quote short sections of it to further a discussion point without violating copyright, if my understanding is correct.

73,
Ed Hare, W1RFI

339. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:41:36 UTC
From: w1rfi@aol.com
Message-ID: <20010103094136.07744.00000662@ng-fy1.aol.com>
Source record: 173109

>From: Keith K5WX

>My 1929 edition of the Handbook shows a cover price of $1.00. That was
>probably a
>lot of money back then...especially after the crash.

Tell ya' what. I'll double your money and give you two dollars for it. :-)

73,
Ed Hare, W1RFI

340. Re: Do Trees Absorb RF ?? (Re-visited) UHF/VHF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:51:06 UTC
From: "Steve Hammer, KG6ENA" <steve59@home.com>
Message-ID: <3A533C4D.2F267A4@home.com>
Source record: 173110

I am planning to add a 6m beam to an installation that is about ten feet from a large group of trees. Many have said on this thread that trees degrade uhf/vhf signals. Will there be a significant affect to 6m?

Steve Hammer, KG6ENA

341. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:55:30 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A533D62.227CDC36@IEEE.org>
Source record: 173111

N2EY wrote:
> Which one? When? How far apart were the ground stations?

CW through a satellite has already been done. There doesn't
exist the potential to do it again for the first time. Slight
changes in minute details don't matter.

> So? Why must it be the HF bands?

Because the Morse requirement is for HF and that was my original
question. Why can't I get an answer?

> Did Morse used by hams on the ham bands save a
> life that would have otherwise been lost in the WB5RUE case?

Morse code is not a *requirement* for VHF access so WB5RUE's
tale about using a VHF FM transceiver is irrelevant to answering
my question about lives being saved by hams using CW on the HF
CW bands.

> The information was false.

Nope, the information was about me and was 100% true. It is true
that I have never heard of a life being saved by hams using CW
on the HF CW ham bands. It doesn't mean it hasn't happened but
one would think I would have heard about it by now.

> > Why was Revelations left out of the Greek Orthodox
> >Bible?
>
> It did not meet the conditions for inclusion set by those who compiled that
> version.

I thought you said God was responsibile for the Bible. So God
must be inconsistent.
--
http://www.mindspring.com/~w6rca

342. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 14:57:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A533DF0.57D51253@IEEE.org>
Source record: 173112
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian Kelly wrote:
> (CW) is tested like the other modes ignoring the fact that there is no mouth test
> element for phone.

A lot of facts must be ignored to believe that CW is tested
like the other modes. :-)
--
http://www.mindspring.com/~w6rca

343. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 15:08:42 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A53407A.DA8A917B@IEEE.org>
Source record: 173113

Brian Kelly wrote:
> I've run into any number of wannabes over the years who told me "I'd like to
> get into ham radio but I just can't do the code . . " I have yet to run into
> one of those who had any technical expertise at all, ...

Is that from a sample of two? How about all the engineers who are
nocode techs? How about the astronauts who are nocode techs?

> How many nocodes have written articles which have appeared in QEX?

How many articles have you written for QEX? I know nocode techs who
write articles for IEEE publications, hold RF engineering patents,
have PhD degrees in EE, ...
--
http://www.mindspring.com/~w6rca

344. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 15:26:20 UTC
From: richardharrison@webtv.net
Message-ID: <416-3A53449C-8@storefull-116.iap.bryant.webtv.net>
Source record: 173116

Jim, N2EY wrote:
"The anti-code "experts" tell us the military stopped using Morse for anything important long before the 1960s."

I don`t know when the military quit Morse. I know the Coast Guard no longer monitors for CW distress calls.

The military were large customers of AT&T, using leased 30-baud telegraph circuits. AT&T essentially declared the mode obsolete in the early 1970s and discontinued the service. My company was using the service over thousands of miles of leased circuits, not for Morse, but for BCH coded SCADA. We sued AT&T to continue the service and lost.

Without leased circuits for telegraph, the military was about finished with telegraph in the U.S.

AT&T had notified the FCC that it was discontinuing telegraph service and withdrawing the tariff offerings. The FCC agreed telegraph was obsolete and said AT&T was justified because there was no price for the service that could profit AT&T. Raise tariffs to cover costs and lose customers. Lower tariffs, and gain insufficient customers to return a profit. The FCC sided with AT&T against their customers, mostly government agencies and a few commercial users.

Western Union? It leases voice circuits as a communications supplier and as a customer of other carriers. I`ve heard FCC staff joke about its resident corpse, Western Union, and that was decades ago.

Long after AT&T has actually become only AT, Telegraph is dead. That`s why they`ve buried the cables, don`t you know? All this happened in the early 1970s.

Best regards, Richard Harrison, KB5WZI

345. Re: snake antenna variants

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 15:30:39 UTC
From: inagaddadavida@webtv.net
Message-ID: <27894-3A53459F-25@storefull-115.iap.bryant.webtv.net>
Source record: 173115

bob, the advantage of nichrome? they want me to spend as much money as i can, and as much trouble looking for parts before i bury it all in the yard. nichrome wire has a very high resistance, and is very expensive. in short, they are f**king with me.

346. Re: Fracky's picture

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 15:44:19 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5348D3.620F@wt.net>
Source record: 173114

Jeff Maass wrote:

>
> From what I've read, it's more like this.
>
> http://images.honesty.com/imagedata/h/352/24/23522421.jpg

Yep, thats him I think. I have another which I believe may have been
taken at his workplace. Or may be an older image of the bent one. I
notice in your picture an increase of the dreaded "roundness" effect.
MK
--
http://web.wt.net/~nm5k/stuck.jpg

347. Working against ground!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 15:53:52 UTC
From: Larry Spinner <lspinner@savvy.net>
Message-ID: <2_H46.11748$uq.509570@e420r-atl1.usenetserver.com>
Source record: 172844

I've heard of some hams working 160 meters with a 10-80 meters G5RV "worked against ground". Exactly what does "worked against ground mean"? If the G5RV or any other dipole for that matter is balanced and doesn't require a ground, how does one use a ground with it?

Thanks ot all who reply...

Larry-N2ICZ

348. Help ! outdoorTV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 16:08:12 UTC
From: "J. Sun" <jsun@lucent.com>
Message-ID: <92vipd$g14@nntpa.cb.lucent.com>
Source record: 173117

Hi,

I live in the flat area about 50-60 mile from new york city.
I would like to buy a outdoor TV antenna to boot the TV
signal broadcasted from NYC..

I have several questions as follows:

1. what is the difference between
the antennas where the UHF element
are either vertical to the axis or V-shaped ?

top view:

```
| | | | / / / /
---------- or ----------
I | | | \ \ \ \
```

2. how many elenmet is appropriate ?
3. how long the boom is appropriate ?

Thanks !

Rus

349. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 16:24:05 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <a0i65t88ec10i0mge2mk6781i42hghg8g4@4ax.com>
Source record: 173118

On 03 Jan 2001 14:17:15 GMT, w1rfi@aol.com (W1RFI) wrote:

>>From: "Peter O. Brackett" ab4bc@ix.netcom.com

>>The average person is more likely to die in an airplane or train crash,
>>wherein both methods of transport have smaller safety factors than exhibited
>>by the new RF exposure regulations
>
>Are you suggesting that the safety factors be reduced to a level at which
>people die?

Ed, that is not exactly what he's saying. Have you ever read "To
Engineer is Human"? Safety factors are one of the core features of
engineering.

To answer your question bluntly, yes, in a manner of speaking, that's
exactly what all engineers do. They nibble away at the bell curve of
failures until they reach a financially or socially acceptable limit
of harm. That's where the engineer's design will be most efficient.

If they did not do this, we'd never drive cars, we'd never operate
radios, we'd never use fertilizers, we'd never use drugs to cure
disease, and so on and so forth.

>>Ed, let's stop trying to protect everyone by well meaning, but misguided
>>standards and beaureaucratic mumbo jumbo.
>
>Although I serve on the IEEE SCC-28 standards committee, I did not set the
>levels that are in the present standard. These standards were set by people
>whose expertise I believe to be much greater than mine, so I would not call the
>standard "misguided." If the level of the standard caused any significant
>difficulty for the Amateur Radio Service, I would be quite uncomfortable with
>the safety factors, too, but IMHO, the benefits of having regulations that
>define acceptable conduct, thus offering some degree of protection against the
>unreasoned "inquiries" of our neighbors, outweighs the inconvenience of having
>to spend a minute or two to demonstrate to ourselves that our station is under
>the limits.

I think that any standard which takes apocryphal "non-thermal" effects
in to account, or which inserts its own arbitrary safety factors is in
fact misguided.

>I do not see my role as protecting everyone from the "evil RF." I do see my
>role as helping amateurs to understand the rules, the reasons that they were
>created and the importance of doing what the rules say because it is important
>that the majority of hams are seen by the FCC as following the rules.

I don't think anyone's suggesting that you are. I do suggest, however, that the standards committee is running amok with some well intentioned ideas. However, I think they're falling for the fallacy of "if X exposure is bad, then X/10 must be better, and X/100 ought to be outstanding."

The assumption that proportional decreases of exposure will produce proportional decreases in injuries is bogus. It's like assuming that if the law of the land reduces the definition of intoxicated from .10 to .08 blood alcohol level that you will get a lower death rate on the roads. Below a certain point, nobody takes it seriously.

We all know that beyond some socially acceptable point we'll get diminishing returns. The RF exposure standards have been pulled mostly from studies which merely document effects, not actual injuries. So we already have standards which are arbitrarily stringent.

The problem is that we already have many places where the older 10 mw/cm^2 standard is met but the new exposure standard is not. Do you think people will take the new standard seriously when they've been working under the old one for all these years without injury? Do you think it would be politically acceptable to weaken the present standard with all the fear-mongering in the media?

I don't. That's I'm so jaded about this RF exposure standard.

I realize that I'm whining. I can't do anything about this standard. It exists. It's policy. Hell, now it's even the law of the land. I just can't help thinking the whole thing is a bunch of hooey.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

350. Re: Help ! outdoorTV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 16:31:33 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A5353E4.2055799@ix.netcom.com>
Source record: 173019

Rus Maybe check out the Winegard TV Antenna pages at URL:
http://www.winegard.com/offair1.html

Fringe Area Specifications like yours at URL:
http://www.winegard.com/caspecs.html

Look around your neighborhood to see what other installations are
receiving.

The element "vertical to the axis or V-shaped" have to do with
directivity -- but wouldn't worry about it.
Number of elements and boom length determine gain and directivity -- the
more (longer) the better -- but you need to determine the model you need
based on what other closeby installations are receiving.
I have had Winegard Antennas in the past and they are excellent.

A local installer may be able to advise the model you need.

Good Luck

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========

"J. Sun" wrote:

> Hi,
>
> I live in the flat area about 50-60 mile from new york city.
> I would like to buy a outdoor TV antenna to boot the TV
> signal broadcasted from NYC..
>
> I have several questions as follows:
>
> 1. what is the difference between
> the antennas where the UHF element
> are either vertical to the axis or V-shaped ?
>
> top view:
>
> | | | | / / / /
> ---------- or ----------
> I | | | \ \ \ \
>

> 2. how many elenmet is appropriate ?
> 3. how long the boom is appropriate ?
>
> Thanks !
>
> Rus

351. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 16:50:11 UTC
From: RonE <elbeca@my-deja.com>
Message-ID: <92vl80$a48$1@nnrp1.deja.com>
Source record: 173022

In article <xiv46.4405$Rb.680622@typhoon.nyroc.rr.com>,
"Bill Rhodes" <wdrhodes@mail.com> wrote:
>
> Joe S. <w4hh@my-deja.com> wrote in message
> news:92sqni$v5b$1@nnrp1.deja.com...
> > In article <92rqrr$1fnb$1@nntp1.ba.best.com>,
> > "Janice and Ed Senior" <senior@best.com> wrote:
> > > Hi, and happy new year to the group -
> > >
> > > I am considering putting up a wire antenna for casual
> > > HF use (100W class). I would like to operate on as
> > > many HF bands as possible.
> > >
> > > Available supports are a 40 foot tree on one end, and
> > > an 8 foot fence post on the other end; so this thing
> > > would be something of a sloper. Available length is
> > > about 100 feet. Can feed approximately in the middle,
> > > with either ladder line or coax. I have a new antenna
> > > tuner available (MFJ).
> > >
> > > Any opinions out there as to whether a multiband dipole,
> > > a windom, a G5RV, a random longwire, or ??? would
> > > be best suited to this situation?
> > >
> > > ...Thanks, Old Ed
> > >
> > >
> >
> > 135 feet of wire fed in the center with ladder line. You will need
an
> > antenna tuner at the rig end. This is a simple, effective antenna
that
> > will load on every band, radiate well, and is quite forgiving. You
can
> > purchase one already assembled from any number of suppliers. A
place
> > called Radio Works has a neat device called the Ladder Lock that
serves
> > as a center insulator and support -- I use that on mine and it
prevents
> > wire twisting and breaking at the center.
> >
> >
> > --

> > Regards,
> > Joe Schlatter
> > W4HH
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
> Yepp, the good old center fed Zepp .... I have used one for
years .... I put
> up a G5RV for a while but went back to the Zepp .... only drawback,
> especially if you are using computer logging is RF in the shack
getting into
> the computer. I have my tuner less than 2 feet from the entrance to
the
> shack and a really good ground and it is not too bad on the computer
except
> on 10 where the cursor jumps around the screen as I talk ;-)
>
>

What about using coax long enuf to just get out of the shack? My assumption is that the coax will stop some of the RF in the shack problems.
I've been using a 102' doublet fed with cheap (RG58U) coax and am thinking of switching the feedline to ladder line. I'm thinking of using the coax out of the tuner just to get out of the shack. Then go to the ladder and up to the doublet. I am looking at a book to try to decide if a balun is in order.
--
RonE -KC IFL- (Blue BikeE '99 XL 3.0 AT)
elbeca@nothotmail.com (undo the not to email me)

Sent via Deja.com
http://www.deja.com/

352. Re: Cellphones and cancer not linked

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 16:57:05 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <92vljproc1@slb3.atl.mindspring.net>
Source record: 173021

Ed:

Hey don't get too defensive on me here!

I applaud all of your efforts, and I like the job that you are doing for us, and I agree that you personally did not set the standards, and...

I am glad that you are "there" protecting our "self interest group" - radio amateurs - from someone else "winning" big.

Thanks for all of your efforts, and ...

I won't whisper anything to David about the "boondoggles", heh, heh.

-Peter K1PO

"W1RFI" <w1rfi@aol.com> wrote in message news:20010103092258.07744.00000657@ng-fy1.aol.com...
> >From: "Peter O. Brackett" ab4bc@ix.netcom.com
>
> >Come on, admit it, many standards groups are simply boondoogles perpetuated
> >by the attendees of everlasting committees who, have their bosses bamboozled
> >into believing that they are doing something useful, and who were sent to
> >the committees in the first place by their employers simply to prevent
> >anyone else from "winning" anything.
>
> I have been a participant in SCC-28 for a couple of years now. I do not
> believe that the focus of most of the participants is as you describe.
>
> >Been there, done that...
>
> I am a member of or a liaison with about a dozen industry committees. Although
> I can say I have been there, I don't go there to "do that." I spend time that
> I really don't have because I believe that it is important that these
> committees have information about Amateur Radio as they set their standards.
> Life is too short for me to spend time on committees that I don't believe to be
> useful.
>
> > Anyone ever hear of anybody putting a male
> >telephone jack in their mouth and "buying the farm"???

>
> Shocks are dangerous for many more reasons than that a few of them are
fatal.
> I would imagine that the standard was enacted because those male jacks are
just
> the sort of thing that an infant might decide to "explore."
>
> >What!!!
>
> >Stop scaremongering....
>
> Can you tell me which of my words you believe to be "scaremongering?"
>
> 73,
> Ed Hare, W1RFI
>

353. Re: Help ! outdoorTV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 16:58:18 UTC
From: WB3KUM/9 <breedend@NO.excite.SPAM.com>
Message-ID: <3A535952.AC2CE80A@NO.excite.SPAM.com>
Source record: 173020

Hello, "H" and "V" beams both should work equally well, it mostly a design factor for matching the antenna to the feed line (75 ohm coax or 300 ohm twin lead) and should be worried about. Most manufactures for TV antennas list consumer grade antennas by miles they are good for. A general rule of thumb I heard a LONG time ago (we won't go into that please) was get an antenna rated for twice the distance you need. So an antenna rated for 100-120 miles should give you a good quality signal for 1-2 TVs. Beyond 2 TVs, go with a pre-amp, either mast mounted (preferred) or a inside, possibly a distribution type. Also a pre-amp can at as a lighting protector. It is better to lose a $20-30 pre-amp than a TV. Go to a GOOD TV parts supplier. They will have access to a good selection of antennas and pre-amps. Not worst case, but you can do better, Radio Shack does have a good selection of antennas, pre-amps, rotors, cable, antenna mounts.

"J. Sun" wrote:

> Hi,
>
> I live in the flat area about 50-60 mile from new york city.
> I would like to buy a outdoor TV antenna to boot the TV
> signal broadcasted from NYC..
>
> I have several questions as follows:
>
> 1. what is the difference between
> the antennas where the UHF element
> are either vertical to the axis or V-shaped ?
>
> top view:
>
> | | | | / / / /
> ---------- or ----------
> I | | | \ \ \ \
>
> 2. how many elenmet is appropriate ?
> 3. how long the boom is appropriate ?
>
> Thanks !
>
> Rus

354. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 17:01:18 UTC
From: rwclark@seanet.com
Message-ID: <3a7e5a55.942500884@news.seanet.com>
Source record: 173023

On 03 Jan 2001 05:33:11 GMT, n2ey@aol.com (N2EY) wrote:

>- Use of Morse for man-machine interface

Hi OM,

This does not belong in the realm of the unexplored. I've been
writing applications for PCs for years that have debug messages beeped
in Morse code (the lowest common denominator for when the system hangs
and the screen freezes).

73's
Richard Clark, KB7QHC

355. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 17:21:51 UTC
From: K0HB@USWEST.NET
Message-ID: <92vn3f$oa6$1@news.netmar.com>
Source record: 173024
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <3A51FA5F.6729030@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org>
writes:

> When OOK Morse is treated equally to the other modes then
> it will have ceased to be forced on anyone.

OK, lets just even things up.

Until you can demonstrate proficiency in Morse, you are not authorized to
us a Vibroplex key.

Until you can recite the complete Fletcher-Munson tables, you are not
authorized to use a microphone.

73, Hans, K0HB

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http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

356. Need manuals for Wilson System III

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 17:33:47 UTC
From: "Richard L. Goodin" <rlgoodin@uswest.net>
Message-ID: <3A53627B.426443A7@uswest.net>
Source record: 173026

Help;

I need manuals for the Wilson System III. I just received this one from a friend, (FREE) and would like to rebuild it and then put it up.

Everything is in fair condition it just needs several new elements, and some cleaning.

This thing has 10 elements and covers 10, 15, and 20 meters.

Lee

357. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 17:36:10 UTC
From: rwclark@seanet.com
Message-ID: <3a805ef9.943688922@news.seanet.com>
Source record: 173025

On Wed, 03 Jan 2001 00:44:14 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Roy Lewallen wrote:
>> Source 1: 17.5 - j31.82
>> Source 2: 20.57 + j30.67
>
>I've wondered about another way to feed these elements. How about
>backing up the feedline toward the source until a current maximum
>point is reached on each feedline. Transform both impedances to
>50 ohms at the current maximum points. Add whatever coax is necessary
>to get the phasing right. What do you think?

Hi Cecil,

I think the jist of what Roy is talking about (and trying to get you
to read the manual) is that you are talking about a moving target with
your method above. Yeah - eventually... perhaps.

73's
Richard Clark, KB7QHC

358. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 17:52:21 UTC
From: n2ey@aol.com
Message-ID: <92voshdta1@nnrp1.deja.com>
Source record: 173027

In article <3A533D62.227CDC36@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> > Which one? When? How far apart were the ground stations?
>
> CW through a satellite has already been done.

Through an amateur satellite, yes. You said it was done through a non-LEO military satellite. You said you were "sure". But you can't tell me which one.

> There doesn't
> exist the potential to do it again for the first time. Slight
> changes in minute details don't matter.

You haven't shown that it has been done the first time.
>
> > So? Why must it be the HF bands?
>
> Because the Morse requirement is for HF and that was my original
> question. Why can't I get an answer?

I gave you one, but you ignored it. Many lives have been saved by hams using Morse on the ham bands. You want exact details, go look through old QSTs.
>
> > Did Morse used by hams on the ham bands save a
> > life that would have otherwise been lost in the WB5RUE case?
>
> Morse code is not a *requirement* for VHF access so WB5RUE's
> tale about using a VHF FM transceiver is irrelevant to answering
> my question about lives being saved by hams using CW on the HF
> CW bands.

There are NO "HF CW bands". Not in the USA, anyway.

The answer to my question is obviously "yes, Morse used by hams on the hambands saved lives in the WB5RUE case". You don't want to admit that fact, so you don't answer the question.
>
> > The information was false.
>
> Nope, the information was about me and was 100% true. It is true
> that I have never heard of a life being saved by hams using CW
> on the HF CW ham bands.

I told you there were many examples of it in the past. So now you have heard of a life being saved by hams using CW on the HF CW ham bands. Twice.

> It doesn't mean it hasn't happened but
> one would think I would have heard about it by now.

Why? You're not omniscient by any stretch of the imagination. Heck, you never heard of Ten Tec until I told you about the company. Some of the best CW ham gear ever made, but you had no knowledge of it. Probabaly still don't.

> > > Why was Revelations left out of the Greek Orthodox
> > >Bible?
> >
> > It did not meet the conditions for inclusion set by those who compiled that
> > version.
>
> I thought you said God was responsibile for the Bible.

Nope. I didn't write that. You're mistaken. Again.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

359. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 18:15:31 UTC
From: n2ey@aol.com
Message-ID: <92vq7q$f4e$1@nnrp1.deja.com>
Source record: 173029

In article <20010103093201.07744.00000659@ng-fy1.aol.com>,
w1rfi@aol.com (W1RFI) wrote:
> >From: n2ey@aol.com (N2EY)
>
> >>2) The ARRL HANDBOOK is designed to MAKE money to cover the
extensive losses
> >>incurred in operations at the League;
>
> >What "losses"?
>
> >The main reason the ARRL publishes is to be of service to amateurs.
They have
> >bills to pay, so the publications cost some money. Compared to
similar sized
> >engineering texts, they are dirt cheap.
>
> I agree with both of you; ARRL publishes material that it believes
will be
> useful to amateurs and prices them so that it can use the excess
revenues over
> costs to fund many of its activities.

Of course, Ed. My point was that Chipper singled out the Handbook as
a "cash cow". I have no idea what it costs to produce that book, or
what it cost to produce in years gone by. I DO know that it's a
fraction of the cost of typical engineering texts. And it contains info
specific to ham radio.

> Without the money from the sales of
> publications, either dues would have to be raised or some significant
changes
> would have to be made in the scope of what ARRL does. If the dues
were raised
> to cover the missing revenues, members would not renew, etc.
Balancing its
> revenues between dues, pub sales and ad sales is a reasonable way to
operate,
> IMHO.

Simple marketing - you price at the knee of the curve.

Down through the years, the price of a Handbook has tracked the cost of
a single year of ARRL membership pretty closely.
>
> Of course, if you would like to pay double your dues and not buy a

Handbook, I
> can arrange to put the excess revenues in the ARRL Lab Test Equipment
fund. :-)

That reminds me - better go check my membership status. Don't want a
hole in the QST collection.

You know, if Hq really wants a "cash cow", please consider putting the
older Handbooks and other classic League pubs on CD-ROM, just like QST
and QEX. Better yet, print repro versions (clearly identified as such).
Start with the 1949 Handbook....

Better yet, put out a book containing all of the "Rotten Radio"
articles, the "Flippin" stories, and "Dixie Jones Owl Juice". They are
all still relevant today.
>
> >We shouldn't even be discussing the Handbook, anyway. It's
copyrighted
> >material.
>
> :-)

AT LAST! Somebody got it! The duck just came down!

>I can assure you that ARRL will not sue you for discussing the
Handbook.

I am breathing easier already. Whew! I was afraid somebody would want
the basing diagram for a Type 80, and I'd be facing a moral, ethical
and legal crisis.

> I consider discussing its content to be protected both as fair use
and as free
> speech. Under fair use, you could even quote short sections of it to
further a
> discussion point without violating copyright, if my understanding is
correct.

Works for me!

Some trivia that is sort of connected:

I heard somewhere that you cannot copyright a title. I could write a
song and call it "Stardust" or "Stairway To Heaven" or even "The
Liberty Bell" and copyright the music and lyrics, but neither I nor the
owners of the better-known versions can copyright the title.

The "ARRL Handbook" used to be called "The radio amateur's handbook"
(sic - only the T was capitalized) but back about 25 years an imitation
appeared with the same title. So the League changed the title to avoid
confusion. I was miffed that somebody would copy the title of Handy's
handy handbook.
>

There is an old story, probably true, that a friend of Art Collins' tried to get Art to sell him one of the Collins ham receivers "at cost". (Most versions of the story say it was a 75A-4). Art refused. When pressed, Art finally had to tell him that if he sold the friend one "at cost", the price would be MORE than he would have paid at a dealer! The friend took the hint and just bought one through conventional channels.

There was also at least one home made 75A-4, but that's another story.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

360. Re: Help ! outdoorTV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 18:28:30 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A536F4E.10A7@wt.net>
Source record: 173028

```
J. Sun wrote:
>
> Hi,
>
> I live in the flat area about 50-60 mile from new york city.
> I would like to buy a outdoor TV antenna to boot the TV
> signal broadcasted from NYC..
>
> I have several questions as follows:
>
> 1. what is the difference between
> the antennas where the UHF element
> are either vertical to the axis or V-shaped ?
>
> top view:
>
> | | | | / / / /
> ----------- or ----------
> I | | | \ \ \ \
>
> 2. how many elenmet is appropriate ?
> 3. how long the boom is appropriate ?
>
> Thanks !
>
> Rus

I've heard there is an advantage to the forward swept elements, but I
can't really remember why. I don't think the difference is large at all.
They usually rate tv antennas in "miles". Say 70-90-120 miles etc. Don't
get one too close to the edge. If I were 60 miles away, I wouldn't get
the 70 mile version, I'd get the 90 or 120.
You need a little overkill to account for weather/ducting effects,etc ,
wet twin lead if used. The bigger the better in general. It's cheaper to
buy a big one first and be a happy camper for many years, rather than
get a too small one, and having a slightly noisy pix at times. Then you
end up buying the bigger one after all. I would think UHF more critical
than VHF. Most combo antennas seem to use a corner reflector/log type of
deal for UHF, with the swept elements for VHF. MK
--
http://web.wt.net/~nm5k
```

361. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 18:50:09 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A537461.181B@wt.net>
Source record: 173030

RonE wrote:

>
> What about using coax long enuf to just get out of the shack? My
> assumption is that the coax will stop some of the RF in the shack
> problems.
> I've been using a 102' doublet fed with cheap (RG58U) coax and am
> thinking of switching the feedline to ladder line. I'm thinking of
> using the coax out of the tuner just to get out of the shack. Then go
> to the ladder and up to the doublet. I am looking at a book to try to
> decide if a balun is in order.

No need to go thru all that. Just run ladder line straight from the tuner to the antenna. Why ruin things adding coax to a setup like that? With the ladder line, no balun is needed. Most tuners have a 4:1 inside for ladder line anyway. RF problems in the shack are caused from weak decoupling of the antenna to the feedline when coax is used. If you run coax you need a good balun at the feedpoint, but this is not a good multi band setup compared to using just the ladder line unless you are paralleling dipoles or something like that. You will have large losses on some bands with the single 102 ft antenna feeding with coax. Real high SWR and coax don't mix too well. But the losses using ladder line with a high SWR are not too bad. Coax stops nothing as far as rf. In fact, without a proper balun from the coax to the ladder line, you will be causing problems not stopping them. With ladder line all the way, you should have very little rf problems overall. I know I didn't here using a mfj 989c to a center fed 30m dipole used from 30-10 meters. Had no rf problems on any of those bands with that antenna. With my coax fed dipoles I use a coax choke balun to help cure common mode problems. Grounding really helps nothing. May bandaid the problem, but fixes nothing. The real problem being the antenna /feedline decoupling. Or maybe fundimantal overload. But thats not the antennas's fault. That just being too close to the strong rf field. Nothing you do will fix that except moving the antenna farther away, or fixing the effected gear to have better shielding to rf. MK
--
http://web.wt.net/~nm5k

362. Re: Cushcraft A3S Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 18:56:45 UTC
From: stormo@my-deja.com
Message-ID: <92vsl8hcn1@nnrp1.deja.com>
Source record: 173031

Don, I have a A3S up 52 feet, and it is doing a great job. Bought it
used last year, and when I came home, I only had to clean feedline
connections, Make sure you wind choke as spec'd.
Gent who I purchased from had it up 5 plus years.
I would buy another one.
Hope that helps.
73's
Dave
KR4VP>

Sent via Deja.com
http://www.deja.com/

363. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 19:15:02 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9303jdirp3@lure.pipex.net>
Source record: 173039

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a7a118b.858330554@news.seanet.com...
> On Mon, 1 Jan 2001 16:50:12 -0600 (CST), richardharrison@webtv.net
> (Richard Harrison) wrote:
> in "matching and loading." Another such brain twister is the "Magic
> T."
Take butcher's at a picture of me working with my home made Majic Tee for
'S' Band making adjustments on the components for the feed of the prime
Ground antenna for Apollo.
This wonder may be viewd on my WebPages

Click on the picture of me for a minibio and a few links to NASA including
the site at Tidbinbilla.

Loads of fun
Interesting your mechanical calibration methods I managed to produce a
device producing 12 V/ micron whilst working on the EMI Scanner. I still
have the prototype in my junk box. One day I might get around to finding a
use for it connected with Ham Radio.
73 de
--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

364. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 19:26:29 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9303jeirp4@lure.pipex.net>
Source record: 173040

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a7c4b97.873190110@news.seanet.com...
> On Tue, 2 Jan 2001 21:23:32 -0000, "Gary Peach" <xcg34@dial.pipex.com>
> wrote:
>
> >> The techniques of yore can be as accurate, or more so than present day
....
> >
> >Yes indeed, modern ...
> I have been guilty (once again) of painting with too broad a brush in
> regards to ingenuity missing from our age. Your posting helped me to
> recover from that by adding some accomplishments that I regard as
> quite remarkable.

I can make no fault with that, I think that what has happend is that so much more technical work is now going on that much of the shoddy work hides the few brilliant accomplishments going on in odd corners. High precision is not a commercial money spinner, so most of it goes on out of the lime light. That said I would like to see the general standard benefit from the rigour that was developed and is now lost from the very earliest days of the emergence of good physical laboratory practices. It would be nice to see Hams taking a pride in the precision of their measurements and applying that care to all that they do, especially in contests and other activities on air.

> The Josephson junction is the new (relatively speaking) and current
> champ of the Volt (unless they've aced me with something better).
> This standard of the Volt is based on Quantum mechanics and pulls that
> formerly ethereal math into the work-a-day world.

This is interesting.
Do you think that such a standard would be within the realm of the ham shack?
Can you think of a method whereby this standard can be used to calibrate a noise standard? i.e. Noise Temperature / noise power in a known bandwidth. perhaps bolometric bridge.

> Another stroke of genius is found in the standard capacitor that is
> co-axial in design and using laser interferometry to measure the
> plunge of the piston into the cylinder to provide a very accurate
> delta C. It is instructive that the technique is what provides the
> boon in accuracy, and not the component nor the laser (both necessary,
> but alone would not suffice without that AHA! of the delta).

You sound like a candidate for a copy of my signal calibration method, If interested I will be glad to E-Mail the file. Beware it's a big un.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

365. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 19:32:33 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A537E51.EB072F2F@IEEE.org>
Source record: 173032

Mark Keith wrote:
> Most tuners have a 4:1 inside for ladder line anyway.

Those are usually meant for matching folded dipoles. They are not
designed for the stress of non-resonant length antennas.

> With my coax fed
> dipoles I use a coax choke balun to help cure common mode problems.

That's a better solution than the 4:1 built into a tuner.
--
http://www.mindspring.com/~w6rca

366. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 19:47:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5381D7.17D3C06C@IEEE.org>
Source record: 173033

n2ey@aol.com wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > There doesn't
> > exist the potential to do it again for the first time.
>
> You haven't shown that it has been done the first time.

You just admitted that CW has been sent through a satellite before.
Therefore, it cannot be done again for the first time. Please tell
us about a real first for CW that will happen in the future.

> Many lives have been saved by hams
> using Morse on the ham bands. You want exact details, go look through
> old QSTs.

I don't have any old QSTs. Please relate just one incident for me.

> There are NO "HF CW bands". Not in the USA, anyway.

Of course there are, Jim. Amateur HF CW is not allowed outside the
amateur ham bands. 7.0-7.3MHz is one of the ham HF CW bands.

> The answer to my question is obviously "yes, Morse used by hams on the
> hambands saved lives in the WB5RUE case".

Use of a VHF FM transceiver doesn't answer my question. Why do you avoid
answering my question?

> I told you there were many examples of it in the past.

I simply do not believe you. Please produce just one.

> Why? You're not omniscient by any stretch of the imagination. Heck, you
> never heard of Ten Tec until I told you about the company. Some of the
> best CW ham gear ever made, but you had no knowledge of it. Probabaly
> still don't.

Well, you enlightned me on Ten Tec so why are you having so much trouble
enlightening me on CW saving lives on the HF ham bands?
--
http://www.mindspring.com/~w6rca

367. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 19:55:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5383C7.A554684F@IEEE.org>
Source record: 173034

Richard Clark wrote:
> I think the jist of what Roy is talking about (and trying to get you
> to read the manual) is that you are talking about a moving target with
> your method above. Yeah - eventually... perhaps.

Seems to me one could sweep the frequencies using a FSM to find the
maximum gain point and fine tune from there. I'm always looking for
easier methods, like varying the length of the feedline to tune the
antenna system so I don't have to build/buy a 500w tuner.
--
http://www.mindspring.com/~w6rca

368. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 20:05:04 UTC
From: richardharrison@webtv.net
Message-ID: <7543-3A5385F0-35@storefull-113.iap.bryant.webtv.net>
Source record: 173035

N2EY wrote:
"Many lives have been saved by hams using Morse on the ham bands."

When did rescue agencies ever monitor the ham bands as a standard practice?

From history we find examples of rescue summoned by radio telegraph at sea which douibtless saved hundreds of lives.

Radio watch on the CW distress frequency has ended. Why? There are better ways to call for help now. To save lives, what works best should be used. Hoping someone is on-frequency and paying attention within radio range is inferior to calling on a satellite phone for help. Plain voice and no code needed. CQD, SOS, and May day are understood by speakers of many languages.

Best regards, Richard Harrison, KB5WZI

369. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 20:22:49 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A538A19.B7E278F9@IEEE.org>
Source record: 173037

Richard Harrison wrote:
> From history we find examples of rescue summoned by radio telegraph at
> sea which douibtless saved hundreds of lives.

I know that CW probably saved lots of lives. I am trying to narrow
the set of information down to where CW used by hams on HF bands
saved lives. I don't disagree that it might have. I just have not
seen any evidence yet. I have read QST since the early 50s and I
don't recall it ever happening.
--
http://www.mindspring.com/~w6rca

370. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 20:24:54 UTC
From: Ed Cregger <ecregger@earthlink.net>
Message-ID: <qUL46.34291$F_3.1388549@newsread2.prod.itd.earthlink.net>
Source record: 173036

The 4:1 balun in my MFJ-949C tuner has been holding up to close to a kilowatt using a dipole with 450 ohm twin lead for nearly a decade.

I'm not saying that you are wrong, but that I haven't had any problems, so far.
--
Ed Cregger, NM2K
ecregger@earthlink.net

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A537E51.EB072F2F@IEEE.org...
> Mark Keith wrote:
> > Most tuners have a 4:1 inside for ladder line anyway.
>
> Those are usually meant for matching folded dipoles. They are not
> designed for the stress of non-resonant length antennas.
>
> > With my coax fed
> > dipoles I use a coax choke balun to help cure common mode problems.
>
> That's a better solution than the 4:1 built into a tuner.
> --
> http://www.mindspring.com/~w6rca
>

371. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 20:38:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A538DDF.699DB284@IEEE.org>
Source record: 173038

Ed Cregger wrote:
> The 4:1 balun in my MFJ-949C tuner has been holding up to
> close to a kilowatt using a dipole with 450 ohm twin lead
> for nearly a decade.

EGADS Ed, the MFJ949 is only rated for 300 watts. :-o
--
http://www.mindspring.com/~w6rca

372. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 20:47:55 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9303jhirp5@lure.pipex.net>
Source record: 173041

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a4e7b3d.361100975@news.seanet.com...
> On Tue, 26 Dec 2000 05:36:47 -0000, "Gary Peach"
> <xcg34@dial.pipex.com> wrote:
>
> >For a moment consider a point 500 miles away from the Antenna (no matter
> >what is being used, bit of wet string if you like) Does the wave at that
> >point really care about the ground resistance over which it is passing to
> >make it the next 500 miles?
> >
> >What would need to be done to duplicate those conditions at the launch
point
> >of a wave?
> Everyone seems more interested in the magic 120 radials than in your
> question.

That is understandable considering the topic heading, for a moment I was hoping to prompt the thought in contributor and lurkers head, "wait aminute what exactly are we trying to acheive?" that point seems to have become lost here and there along the thread.
We are attempting to launch a wave that will propogate to a distant point of our choice.
Does the buterfly flapping its wings in New York have any effect upon the weather in London. well that really depends about what happened before.

If we retrace our steps backwards along the wave path from this imaginary point on an ideal wave to the origin the wave geometry and strength depends upon what came before, finally we reach the origin, what is the ideal wave pattern of oscilating voltages and currents going to be. Does it really have to be related to the earth at that point, what has changed so radically from the remote ideal wave to this feed point. It seems that it is the geaometry of the device that we are using to launch the wave. Popular because it is easy to construct is the counterpoised vertical, Marconi used it and gave his name to it. Doe sthat mean that we are not barking up a tree. The enginuioty of the human mind has devised a loop antenna.

So her we have a device on one hand that is mostly Voltage operated and on the other hand a device that is mostly current operated. Both methods require extremes of low resistance because they are operating at boundary conditions.
What we need, (and at this time I have not the slightest ide what this thing would look like), is some device that will launch the wave without requiring either high current or High voltage to transduce power from the transmitter into space.
Of course by reciprocity the same structure will also be a receiving

antenna.

> The mechanics here are simply the Z's found at the interface or
> boundary. That is, the wave in the air travels through a Z of more
> than 300 Ohms

Something of the order 377 Ohms per sqaure I think.
At least a bit of RAM (RADAR ABSORBING MATERIAL) with that sort of spec has
a very low reflection having absorbed most of the ray.
This works out to (u0/Eo)^1/2 according to Ginzton, Silver, et.al.

>whereas when it encounters the earth (in any form) it is
> subject to a mismatch because that earth Z is substantially less than
> free space Z.

The boundary condition?

> It is the mismatch that controls the mechanics of
> reflection and even if the ground is lossy. If it presents a
> substantial Z differential to free space, then very little power will
> be lost to ground (the mismatch reflects most of the power and very
> little of the wave is actually absorbed in the loss of ground).

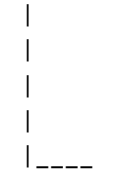
How is this measurement acheived?

> Thus the quick answer to your question above is - yes - ground
> Resistance (Z) is significant to the process of reflection. the
> significance of that ground resistance is found in the differential,
> not in the absolute value. The greater the differential the better.

Interesting, so
as R(earth) approaches zero
377/ R(earth) approaches infinity
or no power loss.
or simply Power(earth) = I^2 R(earth) = 0

Now does this go the other way
as R(earth) approaches infinity
377/inf approaches zero.
And power dissipation is 377 I^2
or all of the power is in the wave.
This would indicate that the higher the wave is above the Earth the better
it goes.

Returning for a moment to a practical AE at long wavelength in an urban
garden. just how high is high enough. In other words would it be better to
site the active element a bit higher so that the stub to ground does not
place such a stringent requirement upon Earth conduction?



```
_____ (~) feed point
| <stub match also used to elevate AE
|___e_a_r_t_h__r_a_d_i_a_l_s_ whatever____
```

perhaps some lumped reactance in this side,
but not sufficient to limit the loading current.

> (I would add that it necessarily follows that earth Z should be as low
> as possible - if you can control that factor.

Moving the feed point just a little away from the earth will transfom the
feed requirement. I suspect that even a little will help.

> Contrariwise, a
> exceedingly high earth Z would perform the same job just as capably,
> but attaining a very high Z is for all practical purposes - far more
> difficult, if not downright impossible.)

Yes we Earth bound creatures have to accomodate our environment. :)

> Now to the second part of your question (part B). Most neophytes
> presume that the ground condition at the base of the antenna is
> responsible for the low angle launch characteristic. It is not.

I might expect the ground resistance is the factor that limits load current,
and nothing else.

> Ground conditions near the antenna (within the first wavelength) are
> responsible for MATCH conditions far moreso than launch conditions.

So a small stub in the earth side of a vertical below the feed point would
help to increase the required earth impedence for satisfactory loading, and
feeder VSWR.

> It is the far field ground that matters more for launch conditions and
> again this strictly a function of the Z differential.

This supposes that the vertical is sufficiently high above the more distant
mirror will produce correctly phased waves to combine with the main wave
thus producing the beam launch angle. As the AE height increases so the
angle becomes shallower and a greater distance at ground level is acheived.
Yes you have drawn quite a clear picture of that physical process for me
thank you.

>The higher the
> mismatch to free space, the greater the reflection (the cleaner the
> mirror). If you could extend those 120 radials out 10 wavelengths,
> then you may drastically boost that Z differential (by driving down
> the ground resistance).

I suspect that the major effect of increasing the length of the ground
radials is to increase the maximum possible AE feed current and therefore
notionally increase the efficiency of the feed. Since shorter radials are
already acheiving high efficiencies of feed current the increase in radiated

power will go almost un-noticed. Especially far field signal strength monitoring will now be subject to factors having a greater bearing upon the propogated wave and power.

> However, this is a very difficult requirement
> to be met (your 10M vertical would have to sit in the middle of a
> football stadium sized ground field - scale that to 160M to discover
> the sheer size demanded!).

And at 136 kHz even more so. :)

> One compelling proof of this is found in the excellent reports of
> mobile operations within short distances from a shoreline. Water is
> not a very good conductor, but its Z is sufficiently low to present a
> very high mismatch to free space borne waves and thus presents a very
> good reflection surface.

How for instance would a vertical sited at say Pevensey marshes near to the shore line, compare with and identical structure on top of the Cliffs at Ventnor.
Both structures will launch over a sea water mirror but the greatest differnce between the two structures will be the angle of incidence at the point where the wave first meets the surface of the sea.

>The near field earth conditions dominate the
> match, and the far field earth conditions dominate the launch angle.

I think that is what you have caused me to see. thank you.

> In all practicality we can control near field earth conditions far
> better than far field earth conditions (except when we purposely
> choose a site based on these considerations such as locating near a
> ocean shoreline, lake, or marsh).

I guess I better look for a house on a cliff top near the sea, there should be some cheap ones going about now because of their propensity to "fally in the water."
Applogies to Sir Eccles

> Thus to answer your question in the context of this thread, shorter
> radials may be effective for a MATCH condition, but have no effect in
> the launch condition. The same answer could be applied to lengthened
> radials (that is, until they are some 5 to 10 wavelengths long) too.

So what one might expect to see is an increase in loading current but no reported increse of signal level at a remote point. :)

One could see that ther are the seeds of disagrement between the operator of the transmitting station and the receiving station.

However as the primary objective is the signal level at the distant point we must take the receiver operators word for the quality of the communications channel.

TNKS 73
--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

373. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 21:01:46 UTC
From: rwclark@seanet.com
Message-ID: <3a819211.956768039@news.seanet.com>
Source record: 173042

On Wed, 3 Jan 2001 14:05:04 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>May day are understood by
>speakers of many languages.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Hmm, forgotten some of our First Class teachings, eh?

May Day (from the French for help me: m'aider (?)) is well known, and relates to situations that pose a danger to a person.

Securitï¿½ is also a call that relates to a situation that poses a danger to property (if I recall correctly). In fact, I've rarely seen this discussed and may have fallen into disuse (or simply ignored by Francophobes).

73's
Richard Clark, KB7QHC

374. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 21:06:03 UTC
From: rwclark@seanet.com
Message-ID: <3a829357.957094459@news.seanet.com>
Source record: 173043

On Wed, 03 Jan 2001 13:55:51 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> I think the jist of what Roy is talking about (and trying to get you
>> to read the manual) is that you are talking about a moving target with
>> your method above. Yeah - eventually... perhaps.
>
>Seems to me one could sweep the frequencies using a FSM to find the
>maximum gain point and fine tune from there. I'm always looking for
>easier methods, like varying the length of the feedline to tune the
>antenna system so I don't have to build/buy a 500w tuner.

Hi Cecil,

As I use to admonish my students in the Navy, RTMFM (Read The
Meticulously Formulated Manual).

Your method still smacks of nailing jelly to a tree. As Roy points
out, when you excite one, the other, or both, it is a new game every
evolution. This has all the hallmarks of taking a very long time.

73's
Richard Clark, KB7QHC

375. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 21:45:30 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A539D7A.4CB9F070@IEEE.org>
Source record: 173044

Richard Clark wrote:
> This has all the hallmarks of taking a very long time.

So does a CW QSO but it's fun. :-) And thinking the unthinkable
sometimes results in an epiphany.
--
http://www.mindspring.com/~w6rca

376. FS:Cushcraft A-3s NIB with kit $300.00

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 21:55:42 UTC
From: Buffalo Soldier <BACKDOORMAN@HOTVOICE.COM>
Message-ID: <93074prcp1@nnrp1.deja.com>
Source record: 173047

I have a Cushcraft A-3s new in box works for 20 meter/15 meter/10 meter antenna has 3 elements 14 foot boom 8 db gain stainless hardware multiband antenna.Aso have the 40 meter or 10mhz add on kit for antenna also both are new selling antenna and kit for $300.00 firm.This package is perfect for dx contest or pileups.

Sent via Deja.com
http://www.deja.com/

377. FS:Cushcraft a-3s with kit $300

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 21:57:22 UTC
From: Buffalo Soldier <BACKDOORMAN@HOTVOICE.COM>
Message-ID: <93077t$re9$1@nnrp1.deja.com>
Source record: 173046

I have a Cushcraft A-3s new in box works for 20 meter/15 meter/10 meter antenna has 3 elements 14 foot boom 8 db gain stainless hardware multiband antenna.Aso have the 40 meter or 10mhz add on kit for antenna also both are new selling antenna and kit for $300.00 firm.This package is perfect for dx contest or pileups.

Sent via Deja.com
http://www.deja.com/

378. FS:Cushcraft a-3s with kit $300

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 21:57:35 UTC
From: Buffalo Soldier <BACKDOORMAN@HOTVOICE.COM>
Message-ID: <93078aree1@nnrp1.deja.com>
Source record: 173045

I have a Cushcraft A-3s new in box works
for 20 meter/15 meter/10 meter antenna
has 3 elements 14 foot boom 8 db gain
stainless hardware multiband antenna.Aso
have the 40 meter or 10mhz add on kit for
antenna also both are new selling antenna
and kit for $300.00 firm.This package is
perfect for dx contest or pileups.

Sent via Deja.com
http://www.deja.com/

379. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 22:03:18 UTC
From: n2ey@aol.com
Message-ID: <9307ivrrl1@nnrp1.deja.com>
Source record: 173048

In article <3a7e5a55.942500884@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On 03 Jan 2001 05:33:11 GMT, n2ey@aol.com (N2EY) wrote:
>
> >- Use of Morse for man-machine interface
>
> Hi OM,
>
> This does not belong in the realm of the unexplored.

Sorry if I wasn't clear. It's not unexplored, but in no way has it been explored to its full potential.

> I've been
> writing applications for PCs for years that have debug messages beeped
> in Morse code (the lowest common denominator for when the system hangs
> and the screen freezes).

Excellent! I recall a story where some medical equipment would beep "SOS" in Morse if it was nonfunctional.

But man-machine interface goes far beyond error codes. And there is also the "other direction" - human telling the machine what to do. I can't use a touch screen or keyboard safely while driving, but I could use a Morse key then.

Basic point is that the possibilities have barely been explored. Lots of potential applications - but some folks simply refuse to see them.
>
73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

380. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 22:07:33 UTC
From: n2ey@aol.com
Message-ID: <9307qt$s16$1@nnrp1.deja.com>
Source record: 173049

In article <xrp46.450$e5.1172219@news.ntplx.net>,
"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> N2EY <n2ey@aol.com> wrote:
>
> > >Of course. However, the HANDBOOK's chunk of sales comes from non-hams (or
> > >hams to be).
>
> > How do you know that? In my experience, most Handbook buyers are hams.
>
> From what I have gleaned here at HQ, that is correct. Most hams who buy the
> Handbook seem to buy a new one every few years. Before I came to HQ, it was
> about 4-5 years apart for me.

I'm overdue. Perhaps it's time for a late Xmas present...
>
> > >Ye..ees...and many also had the HANDBOOK.
>
> > Sure - because it was a bargain and had lots of stuff in it. But it was
> and is
> > NOT an EE level book. Never meant to be.
>
> I have given away copies of the Handbook to non-ham engineering contacts I
> have in industry. Their look of appreciation (in both senses of the word)
> appeared to me to be sincere.

Of course! Didn't mean to say EEs have no use for it. Just that it's
not a "professional" engineering text. And it was never meant to
be. "Amateur" is something to be proud of. I remember when Olympians
were all supposed to be amateurs...

> I would bet a lobster dinner that they didn't
> throw it away when they got it home. :-)

I'll take that bet and lose intentionally. But you have to come to
Radnor Township to collect, Ed ;-)
>
73 de Jim, N2EY
--

FISTS #4360
BIT #0001

gee, this is getting expensive...

Sent via Deja.com
http://www.deja.com/

381. Homebrew Antenna sugestions for 462mhz please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 22:51:41 UTC
From: tomfree <tfreeman@blueridge.net>
Message-ID: <t57b9vhq3fl2f3@corp.supernews.com>
Source record: 173050

I just started using the Cobra PR-1000 to communicate with the house when out on my farm. I would like to add an antenna mounted on top of the house to make communications more reliable when at the extremes (distance wise) of my property. We are talking rolling hills and woods. The house is near the middle of the tract of land. It also has a tin roof and I was not sure about the effects of this on any installation. The antenna would be mounted on a pole about ten feet down from the crest of the roof at one end of the house, the pole will extend above the crest. Since the antenna will be fairly small at these frequencies (462Mhz) I wanted to try my hand at building one. Any suggestions would be appreciated.

Tom

382. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 23:04:00 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A53AFE0.F25D74B5@dvol.com>
Source record: 173051
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Cecil wrote:

> Brian Kelly wrote:
> > (CW) is tested like the other modes ignoring the fact that there is no mouth test
> > element for phone.
>
> A lot of facts must be ignored to believe that CW is tested
> like the other modes. :-)

>
OK, ya wanna play n2ey let's make it "the code test is just one of the tests for basic knowledge of the various modes". Jihad over nothing. Giggle.
>--

> http://www.mindspring.com/~w6rca

>
w3rv

383. Diawa CR-4 rotor info reqired

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 23:11:35 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <lmO46.49850$ca6.775810@news6-win.server.ntlworld.com>
Source record: 173052

I have aquired a Diawa CR4 rotator without the handbook and am in need of the wiring connections, can someone please help.

Thanks in advance.

Jon M0BQQ

384. Re: 'Wakefield Killer' callsign?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 23:22:07 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <930c6n$4t$1@nnrp1.deja.com>
Source record: 173053

In article <20010102224653.07551.00014503@ng-cs1.aol.com>,
wa8ulx@aol.com (WA8ULX) wrote:
> >Did you marry this one as well? Related?
> >
>
> no I would think of marrying your mother
>

But she's not related to you and she's not a Technician, your
two criterion for wedlock.

Sent via Deja.com
http://www.deja.com/

385. Re: TV yagi for 6M???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 23:43:44 UTC
From: Claus Waldraff <DF8GH@t-online.de>
Message-ID: <3A53B930.CB5973F3@t-online.de>
Source record: 173054

Hello Paul,

> I have a rather large Television antenna and I wonder if I could take
> the longest two rear elements and add a little length to them (or maybe
> a coil) and get them to resonate in the 50-54 Mhz band. I know that TV
> channel 2 is 60-66 Mhz (or something like that). I proved this
> resonance with an MFJ-259 analyzer. It is my theory that everything in
> front would act like some sort of director elements.

I would recommend analysing this antenna with appropriate software first
to have a certain imagination of the frequency range. Go find someone
owning EZNEC, AO, YO, NECfWin etc. and see the properties of this piece
of aluminium. After analysing you maybe find an easy way to convert it.

> I would of course feed it with 75 ohm coax to the 300 ohm balun on the
> antenna. I know that baluns are lossy and wouldn't handle much more
> than a watt but it seems a simple, cheap way to have a QRP beam. We
> don't have a channel 2 in the area so I doubt if it would mess up my TV
> reception much (when used as a regular TV antenna).

If you have known properties you don'T have to count on these 'cheap'
baluns.
Build a new feed (don't need to be difficult/expensive) and use the
amount of power you like.

73 de Claus

386. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 23:56:45 UTC
From: k6mhe@arrl.net
Message-ID: <3a53bbd6.483553@news.mcn.org>
Source record: 173065

On Wed, 03 Jan 2001 22:07:33 GMT, n2ey@aol.com wrote:

>[snip]
>Of course! Didn't mean to say EEs have no use for it. Just that it's
>not a "professional" engineering text. And it was never meant to
>be. "Amateur" is something to be proud of. I remember when Olympians
>were all supposed to be amateurs...
>
[snip]
>>
>73 de Jim, N2EY

Engineers built the Titanic.

Amateurs built the ark.

Danny, K6MHE

387. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-03 23:57:41 UTC
From: w1rfi@aol.com
Message-ID: <20010103185741.12249.00001242@ng-cr1.aol.com>
Source record: 173055

>From: n2ey@aol.com

>I'll take that bet and lose intentionally. But you have to come to
>Radnor Township to collect, Ed ;-)

What state is that in? I drive through NY, NJ or PA fairly often as I go to various conventions and/or meetings. I would be game and we could decide who wins by tallying up CW sweepstakes scores and dividing the score by the power used. :-)

>gee, this is getting expensive...

The last lobster bet I lost was to Rick Tannehill W7RT (regular poster on rra.policy). Due to a complete lack of planning, I had to pay up in Phoenix. You don't want to know how much it cost me. :-) But honor was served nicely, and, win or lose, I was eating lobster!

73,
Ed Hare, W1RFI

388. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:01:54 UTC
From: w1rfi@aol.com
Message-ID: <20010103190154.12249.00001243@ng-cr1.aol.com>
Source record: 173056

>From: n2ey@aol.com

>I am breathing easier already. Whew! I was afraid somebody would want
>the basing diagram for a Type 80, and I'd be facing a moral, ethical
>and legal crisis.

Well, maybe I can put an end to your crisis. How about I put up the old
Handbook tube data and tables on the ARRL TIS web pages
(http://www.arrl.org/tis) and you can then just link to them? :-)

73,
Ed Hare, W1RFI

389. Re: vertical phasing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:18:04 UTC
From: rwclark@seanet.com
Message-ID: <3a83c0f5.968772871@news.seanet.com>
Source record: 173057

On Wed, 03 Jan 2001 15:45:30 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> This has all the hallmarks of taking a very long time.
>
>So does a CW QSO but it's fun. :-) And thinking the unthinkable
>sometimes results in an epiphany.

Hi Cecil,

No argument there, Bubba.

73's
Richard Clark, KB7QHC

390. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:19:25 UTC
From: rwclark@seanet.com
Message-ID: <3a84c175.968900875@news.seanet.com>
Source record: 173058

On 03 Jan 2001 23:57:41 GMT, w1rfi@aol.com (W1RFI) wrote:

>But honor was served nicely,
>and, win or lose, I was eating lobster!
>
>73,
>Ed Hare, W1RFI
>

Beats eating Crow.

73's
Richard Clark, KB7QHC

391. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:23:45 UTC
From: billsohl@mindspring.com
Message-ID: <3a53c21b.725014@news.mindspring.com>
Source record: 173059
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Wed, 03 Jan 2001 04:35:33 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>
>Cecil wrote:
>
>> Of course it is, Jim, because of the ITU treaty. When OOK Morse is treated
>> equally to the other modes then it will have ceased to be forced on anyone.
>> That won't happen as long as an HF ham is not free to choose his first mode.
>
>It is tested like the other modes ignoring the fact that there is no mouth test
>element for phone.

Sorry, that is factually incorrect since ONLY morse has a
separate pass/fail test.

>Knowledge of all modes except cw is tested in the writtens.

And you can totally ignor several of those modes and
still pass the written...but you can not ignore the
separate CW exam and still become a General.

Cheers,
Bill K2UNK

392. Re: Looking for very smal tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:27:40 UTC
From: Joe Giacobello <k2xx@swva.net>
Message-ID: <3A53C37C.16F8EB9D@swva.net>
Source record: 173060

I use the MFJ-16010 for a portable tuner with my Icom-706. It is a very small package and ideal for QRP, although its claimed power rating is 200 watts. It is an L-match constructed from a tapped toroidal inductor and a small air variable capacitor. I use random wires exclusively when I travel, and it has unfailingly tuned everything I've put up. I have observed no problem with saturation of the core at the 100 watt level, and I have consistently received good signal reports from all over the world. I highly recommend it.

73, Joe

Phil wrote:

> Hello,
>
> Does anyone has URL that points to very small antenna tuner/matcher.
> I want to take a very small model along in my luguage on holidays.
> I need to tune rondom wire against RF ground ...
>
> Thanks !
> Phil
> ON4BAW@pandora.be

393. Killfile

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:30:18 UTC
From: no-mail-thanks@hotmail.com
Message-ID: <3a53c19d.206657605@news.eclipse.net>
Source record: 173061

Not having an automatic killfile in my newsreader, I do a "search and delete" on the following subjects/authors, and my time in this newsgroup is SO much better as a result.

- W7EL Warning (apologies to Roy, a fine gentleman)
- Fractenna (anything even remotely resembling..... Frac, Fractenna, Fractal)
- Wakefield
- stuff about ARRL profits (take it to r.r.a.policy or whatever)

Could I ask those responsible to please consider that the purpose of this newsgroup is to discuss antennas? Could you please take nitpicking BS to private email? I doubt I am alone when I say "Enough, already!! Stop !! The rest of us don't give a s__t "

Rick K2XT
if you want to flame me my email = ricknj10 - hotmail

394. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:37:28 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <930gl9nhf1@iac5.navix.net>
Source record: 173063

Base Diagram for 80 Rectifier. Base 4C
4 1
O O

o o
3 2

1 and 4 = 5Volt Heater @ 2 Amps
2 and 3 = Plates 350 V for condenser input
500 V for Choke Input
125 Ma.
Peak inverse voltage 1400. P-P max I =.375 Amps .

If I can be of further assistance please let me know. :>)

"W1RFI" <w1rfi@aol.com> wrote in message
news:20010103190154.12249.00001243@ng-cr1.aol.com...
> >From: n2ey@aol.com
>
> >I am breathing easier already. Whew! I was afraid somebody would want
> >the basing diagram for a Type 80, and I'd be facing a moral, ethical
> >and legal crisis.
>
> Well, maybe I can put an end to your crisis. How about I put up the old
> Handbook tube data and tables on the ARRL TIS web pages
> (http://www.arrl.org/tis) and you can then just link to them? :-)
>
> 73,
> Ed Hare, W1RFI
>

395. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:37:53 UTC
From: Steve Ellington <N4LQ@igLou.com>
Message-ID: <3a53c559_3@news.iglou.com>
Source record: 173062

And that's why one should use a Johnson Matchbox which has no lossy balun
and has a nice balanced output.

--
Steve
N4LQ
"Wes Stewart" <no_spam_n7ws@azstarnet.com> wrote in message
news:3a4c0d2d.5144385@news.azstarnet.com...
> On 28 Dec 2000 17:32:28 GMT, k9sqg@aol.com (K9SQG) wrote:
>
> >The value of the SWR is a big discriminator. If one has, or expects,
high SWR
> >due to using a single antenna on multiple bands, then go for the open
wire
> >line. SWRs of 50:1 or so don't produce as much loss as coax with an SWR
of
> >3:1.
>
> Until you install the balun and tuner that are required to utilize the
open wire
> line.
>
> N7WS
>
>
> >
> >73s,
> >
> >Evan
>

396. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 00:41:53 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A53C6D1.67D9A325@dvol.com>
Source record: 173064

Cecil wrote:

> Brian Kelly wrote:
> > I've run into any number of wannabes over the years who told me "I'd like to
> > get into ham radio but I just can't do the code . . " I have yet to run into
> > one of those who had any technical expertise at all, ...
>
> Is that from a sample of two?

>
Uncountable volume going back close to a half century ago when the same laments were heard about not going for the Novice test.
>

> How about all the engineers who are
> nocode techs?

>
Never ran into one. Of the several dozen electronics techs and EEs I know who are hams I can only think of three who don't have 20wpm Extras and one of those has an Advanced ticket and the other two are Tech Pluses going back to the 60s.
>
>

> How about the astronauts who are nocode techs?

>
. . . gimmee a break . .

>
> > How many nocodes have written articles which have appeared in QEX?
>
> How many articles have you written for QEX?

>
None. The discussion is about nocodes, I'm not a nocode. I wasn't excused from taking the code tests so that I could "advance the state of the art if it wasn't for the damned code test".
>

> I know nocode techs who
> write articles for IEEE publications, hold RF engineering patents,
> have PhD degrees in EE, ...

>
So? What's any of that have to do with ham radio? Absolutely nothing. The unaswered question still remains on the table: "How many nocodes have written for QEX?" The

flagship underlying argument for minimizing or eliminating code tests has been to open the doors to to the technically astute who would contibute their expertise to advancing the state of the art given no annoying code tests. Along with "accomdations" and "credentials" cometh responsibility. A triple PhD who squeezed in with a nocode ticket and has done nothing beyond squeezing in is an insult to the service and a joke of a ham.
>

>
> --
> http://www.mindspring.com/~w6rca

>
w3rv

397. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 01:20:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A53CFEC.748C@wt.net>
Source record: 173066

Cecil wrote:
>
> Mark Keith wrote:
> > Most tuners have a 4:1 inside for ladder line anyway.
>
> Those are usually meant for matching folded dipoles. They are not
> designed for the stress of non-resonant length antennas.
>
> > With my coax fed
> > dipoles I use a coax choke balun to help cure common mode problems.
>
> That's a better solution than the 4:1 built into a tuner.

Myself, I can't tell a lot of difference in using the 4:1 or not.
Nothing magic about the ratio thats for sure.
The one in my tuner is pretty stout though. It's pretty big and wound
with teflon etc. I don't think I've ever gotten it warm hardly. But I
don't run ladder line all that often. I think a 1:1 just about as good,
just as long as you have some type of balun to handle balanced lines.
"Instead of hooking to coax connectors" etc. To me, if he has a balun in
the tuner, using coax and a balun between it and the ladder line, kinda
a waste of time unless there is some reason for it. Myself, I'd just run
the ladder line the whole way and be done with it. So far here , I
haven't had any real problems with the built in baluns. But my tuner is
rated 3KW. Of course thats wishful thinking in many cases, but it's
balun is still fairly beefy. But most my everyday antennas are coax fed.
I use the ladder line for feeding weird stuff that may not have a 50 ohm
feedpoint. MK

--
http://web.wt.net/~nm5k

398. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 01:24:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A53D0C4.1BAF2167@IEEE.org>
Source record: 173068

Mark Keith wrote:
> To me, if he has a balun in
> the tuner, using coax and a balun between it and the ladder line, kinda
> a waste of time unless there is some reason for it.

The toroid for the 4:1 balun in my MFJ949 is about the size of a quarter.
My current balun toroid is four inches in diameter. There's no comparison
in the current handling capacity.
--
http://www.mindspring.com/~w6rca

399. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 01:33:16 UTC
From: n2ey@aol.com
Message-ID: <20010103203316.08959.00000994@nso-ml.aol.com>
Source record: 173067

In article <3A5381D7.17D3C06C@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>n2ey@aol.com wrote:
>>
>> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>> > There doesn't
>> > exist the potential to do it again for the first time.
>>
>> You haven't shown that it has been done the first time.
>
>You just admitted that CW has been sent through a satellite before.

Not through a non LEO satellite. Not through a non-LEO amateur satellite.

>Therefore, it cannot be done again for the first time. Please tell
>us about a real first for CW that will happen in the future.

Morse through AO-40 is a real first.

There's also the Elser-Mathes Cup.
>
>> Many lives have been saved by hams
>> using Morse on the ham bands. You want exact details, go look through
>> old QSTs.
>
>I don't have any old QSTs.

That's YOUR problem. You have plenty of dictionaries, though..

> Please relate just one incident for me.

Please do your own research. I'm not your go-fer.
>
>> There are NO "HF CW bands". Not in the USA, anyway.
>
>Of course there are, Jim. Amateur HF CW is not allowed outside the
>amateur ham bands. 7.0-7.3MHz is one of the ham HF CW bands.

Nope. A "CW band" is one in which ONLY CW is permitted. The only CW-only
amateur spectrum in the USA is on 6 and 2 meters.
>
>> The answer to my question is obviously "yes, Morse used by hams on the
>> hambands saved lives in the WB5RUE case".
>
>Use of a VHF FM transceiver doesn't answer my question. Why do you avoid
>answering my question?

Why do you avoid answering MY question? Why don't you do your own research?
>
>> I told you there were many examples of it in the past.
>
>I simply do not believe you.

Why not? I think it's because deep down inside you know you are mistaken.

> Please produce just one.

Why? You won't believe me anyway. Or you'll say it was too long ago, or another mode could have been used, or that the lives involved were not saved by hams using Morse in the HF ham bands. Or some other lame excuse.
>
>> Why? You're not omniscient by any stretch of the imagination. Heck, you
>> never heard of Ten Tec until I told you about the company. Some of the
>> best CW ham gear ever made, but you had no knowledge of it. Probabaly
>> still don't.
>
>Well, you enlightned me on Ten Tec

Exactly the point. You didn't even know it existed, even though the company was formed over 30 years ago and has been making ham gear all that time. You missed any mention of CW saving lives, too.

>so why are you having so much trouble
>enlightening me on CW saving lives on the HF ham bands?

I'm not having any trouble. I'm simply not going to waste my time looking up something you will deny anyway. See above.

73 de Jim, N2EY

>--

400. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 05:33:58 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <9327fk$b1k$1@slb6.atl.mindspring.net>
Source record: 172934

Richard Harrison wrote in message
<27895-3A53D68A-44@storefull-115.iap.bryant.webtv.net>...
>
The "triple PhD" likely has more "potential" than most hams and adds
some class just by deigning to associate to some degree with the likes
of some of us who are already licensees.

Best regards, Richard Harrison, KB5WZI

This from a freebander who frequently calls proponents of a code requirement
elitist and vane.

Dean Craft -- W4IHK

401. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 05:36:58 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <9327fk$b1k$2@slb6.atl.mindspring.net>
Source record: 172935
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Cecil wrote in message <3A53DE40.3C190F43@IEEE.org>...
>Brian Kelly wrote:
>> You can get 80% of a 5wpm code test wrong and still pass.
>
>How?
>--
>http://www.mindspring.com/~w6rca

Try KayMart

Dean Craft -- W4IHK

402. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 14:20:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A548698.B9C76B29@IEEE.org>
Source record: 172919

N2EY wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> writes:
> > It is impossible to send CW through
> >a satellite again for the first time.
>
> Of course. But it is possible to send Morse through a different type of
> satellite for the first time.

It is possible to fly across the Atlantic Ocean in a 747 instead of
in the Spirit of St. Louis but nobody cares.

> You know what the Elser-Mathes cup is?

Nope, it must not make the front page of the Madisonville Meteor.

> What, exactly, did you do to "research"?

Most of the QSTs for the past 50 years, all my ham radio reference books,
and the world wide web. The Texas A&M Library is next.

> First time you use the words "asking for help" about this. I doubt you really
> want help or information.

If I didn't want or need help I would have not asked the question. Why
would I ask a question if I already knew the answer?

> You're not struggling.

You say I am ignorant. Therefore, I am struggling. Please enlighten
me with your knowledge like you did regarding Ten Tec.

> >I didn't say CW-only bands.
>
> You implied it.

Nope, you inferred it. What I was trying to do was narrow the question
down to the HF ham frequencies normally used for CW. If I were calling
for help using CW, I would call for help on the frequencies normally
used for CW, wouldn't you?

> You have not asked for help before now.

Uhhhhhhh Jim, asking a question is what the normal person does when he
is asking for help. How do you ask for help?

> You'll pull it apart in typical Cecil fashion.

I give you my word, I am simply asking for information that I have been
unable to obtain by myself.

> Now you can pick that apart all you want, Cecil. But now you have heard a true
> story of human lives saved by hams using CW (Morse) on the HF ham bands.

I don't want to pick it apart. Thank you for the story. Was that published
in QST? I wasn't reading QST in 1937 so I missed it.
--
http://www.mindspring.com/~w6rca

403. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 14:25:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5487F7.ABE7CD51@IEEE.org>
Source record: 172920

David Sinclair wrote:
> As long as folks don't go out of their way to kill it, say by
> abandoning band plans or allowing phone anywhere in the band,
> CW will be around for a long time to come.

Don't know about you, David, but I can read CW through almost any
QRM except another narrow band signal right on the same frequency.
I hear people checking into nets when they can't make it with SSB
and the weak CW signal is readable through the SSB KWs.
--
http://www.mindspring.com/~w6rca

404. Re: Gap Titon DX vs. Butternut HF9V - any help?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 14:37:22 UTC
From: oh3nx.nospam@sral.fi
Message-ID: <CU%46.277$Jy5.8641@read2.inet.fi>
Source record: 172921

>www.ehm.com

Larry

Can't open that site from here - is that link correct?
Would be interested to see the reviews myself too.

Regards
Juha
OH3NX

405. Re: Log periodic?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 14:48:25 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <9322it$8g9a7$1@ID-52642.news.dfncis.de>
Source record: 172922

I owned a T-10 Tennadyne LP for quite a few years. I loved it! It covered 13. thru 30 mhz, maintained a F/B of greater than 17 dB over its entire operating range and showed no worse than a 1.7:1 vswr. I had it up 72' and it was fed via 175' of coax. I used it mostly in DX contests, and never had any problem working whomever I called with 500w output.

It held up mechanically quite well through five major ice storms. The sixth storm caused some problems with the boom to element mounting of the largest/longest element, but was repairable. This antenna was 10 el on a dual 24' boom. It weighed 55 lbs. My Yaesu G1000SDX rotor had no problem handling it along with an elevation rotor above the T-10 with 2x22 el K1FO horizontally stacked 70cm yagis and a single 12 el K1FO 2m yagi.

I sold it when I moved. I should be putting up a new tower in the spring and I plan to buy another Tennadyne. This time, I'm downsizing to a T-6 (12' boom, as I recall). I found their service and delivery to be perfect. The antennas are built well, and they peform as they should.

With the T-6 what I was looking for:

1. Low maintainenece.
2. 4 to 5 dB gain
3. consistent F/B > 15 dB
4. Good match
5. Relatively short boom length.
6. Low weight and wind loading.
7. Good value for the dollar.

All of these criteria are met by the T-6. I have no hesitation recommending their line of antennas. If I were more adventurous, I would go back to the T-10 or even a T-12, but I just don't have it in me any more.

--
hasan schiers, N0AN
schiers@netins.net
DL <phochief@adelphia.net> wrote in message
news:930tl6$ic4$1@news.gate.net...
> Anyone out there using a log periodic antenna? I'm thinking about
getting
> one; any brand or model I should stay away from? Any recommendations?
>
> Tnx,
> David
>
>
>

>

406. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 14:51:47 UTC
From: RonE <elbeca@my-deja.com>
Message-ID: <9322m0$ap3$1@nnrp1.deja.com>
Source record: 172923

In article <uRV46.3012$3t2.115011@newsread1.prod.itd.earthlink.net>,
"Ed Cregger" <ecregger@earthlink.net> wrote:
> Doh!
>
> You're right, Cecil. I meant to type MFJ-989C.
> --
> Ed Cregger
> ecregger@earthlink.net
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A538DDF.699DB284@IEEE.org...
> > Ed Cregger wrote:
> > > The 4:1 balun in my MFJ-949C tuner has been holding up
> to
> > > close to a kilowatt using a dipole with 450 ohm twin
> lead
> > > for nearly a decade.
> >
> > EGADS Ed, the MFJ949 is only rated for 300 watts. :-o
> > --
> > http://www.mindspring.com/~w6rca
>
>

Well, based on everyone's input, I think I'll just run 450 Ohm ladder line to the 102' doublet straight from the tuner. I have an older MFJ tuner rated for 300Watts. My old Ten Tec only puts out about 90 to 100Watts anyhow.

This 102 footer fed with coax and no balun actually seems to work pretty good on 80, 40, and 20. My rig doesn't work to well on 15 and 10. I think the antenna is too short for 160M. Now all I need is a warm, dry day, and I'll unroll some ladder line.
--
RonE -KCIFL-
elbeca@nothotmail.com (undo the not to email me)

Sent via Deja.com
http://www.deja.com/

407. Re: Do Trees Absorb RF ?? (Re-visited) UHF/VHF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 15:11:45 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <9323qs$tt6@r02n01.cac.psu.edu>
Source record: 172924

HI:
When I ran VHF in Michigan, my lot had many 100' maple trees all around the antenna site. I often wondered if the trees had any effect. The only thing I can say is that there was no difference between myself and a friend that talked to regularly if the trees has leaves or not on 6m. I take that as an indication on 6m the trees had little or no effect. I also had a 450MHz link from my shack to another friend for a split site repeater we ran. There the link signal went up about 3db when the trees lost their leaves. So on 450MHz I'm sure the trees had an effect. On 450MHz rain and snow also had an effect.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Steve Hammer, KG6ENA" <steve59@home.com> wrote in message
news:3A533C4D.2F267A4@home.com...
> I am planning to add a 6m beam to an installation that is about ten feet
> from a large group of trees. Many have said on this thread that trees
> degrade uhf/vhf signals. Will there be a significant affect to 6m?
>
> Steve Hammer, KG6ENA

408. G3SEK change of address... last call!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 15:16:21 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <bQBEYfBFPJV6EwKf@ifwtech.plus.net>
Source record: 172930

A final reminder to anyone who has my address and website bookmarked:

Please check that your entries are -

g3sek@ifwtech.com
http://www.ifwtech.com/g3sek

The old addresses at demon.co.uk will close in the next few days!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

409. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 15:17:21 UTC
From: k6mhe@arrl.net
Message-ID: <3a559250.653136@news.mcn.org>
Source record: 172931

I believe every word you said. But that is true with the system you
are using. Others may not be so fortunate. The matchbox was designed
to match ~ 500 Ohm balanced line, of course it will tune beyond that
range depending upon frequency and so forth.

I have and use a matchbox. In my case it did not provide a good enough
match for my solid state rig on several amateur bands. My solution was
to include a "T" type tuner in series with the matchbox and doing that
everything works fine.. and I can also get on 160 with this
arrangement. However, this setup does require a bit more knob
twisting... But what the heck, real hams twist knobs :-)

73
Danny, K6MHE

On Wed, 3 Jan 2001 23:18:02 -0800, "John Moriarity" <k6qq@hdo.net>
wrote:

>Well, don't tell that to my 275 watt Matchbox.
>It matches my ladder-line fed inverted-V just fine
>on the WARC bands, except for 17 meters where
>the impedance is just too high. (I'll get around to
>adding a few feet of line to bring in into range one
>of these days.)
>
>73,
>
>John, K6QQ
>
>
>"Dan Richardson" <k6mhe@arrl.net> wrote in message
>news:3a53dbbc.8650282@news.mcn.org...
>> Yes, but it is limited in its tuning range, was not designed for the
>> WARC bands, nor will it tune 160 meters.
>>
>> Danny, K6MHE
>>
>> On Wed, 3 Jan 2001 19:37:53 -0500, "Steve Ellington" <N4LQ@igLou.com>
>> wrote:
>>
>> >And that's why one should use a Johnson Matchbox which has no lossy
>balun
>> >and has a nice balanced output.
>>
>

410. Re: Best AM Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 15:31:07 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <i5VUOoW0mnNFkBm+N9JDPa3V6ElM@4ax.com>
Source record: 172927

Tom Marin <marint@concentric.net> wrote:

>Hi all:
>
>I am currenly using the GE Super Radio III with the Select-A-Tenna and
>get pretty good results but the tuning is sometimes tricky and some
>stations are very difficult to pull in during the daytime.
>
>Would upgrading to the CCRadio, made by C. Crane Co., make a significant
>improvement?
>
>I am trying to pull in AM radio stations that are about 150-200 miles
>away.
>
>Thanks in advance.
>
>
>
>

Maybe, maybe not. I have a CCRadio and Select-A-Tenna. The main limitation on pulling in distant stations seems to be local stations that are on the same frequency as distant stations. The local stations wipe out any distant stations on the same frequencies. So receiving distant stations is relegated to whatever gaps I have in local frequencies, so this can be a fruitless exercise, unless you live in a rural location without a lot of local stations (I'm in a big metropolitan area).

Having said all that, my $1200 JRC NRD-525 with its amplified antenna doesn't really pull in distant AM broadcast stations any better than my $150 CCRadio, and my little $20 Sony Dream Machine does about as well as my CCRadio.

The tuning on a CCRadio might be a little smoother than on the GE SuperRadio, but the SuperRadio has the same 8" ferrite core built-in antenna that the CCRadio does, so I don't know that you'll gain that much.

Bob

411. Code Quick System

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 15:41:04 UTC
From: Pete <pete@etep.com>
Message-ID: <kQ056.60827$36.2259909@news1.rdc1.il.home.com>
Source record: 172929

I've seen where this system has been mentioned a few times in this NG.
Where can I get some information on it? Thanks

412. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:03:08 UTC
From: Mike Mayer <mwmayer@tds.net>
Message-ID: <871yujcnv1.fsf@auberon.circuitfarm.com>
Source record: 172932

>>>>> "Brian" == Brian Kelly <kelly@dvol.com> writes:

[...]

> I've run into any number of wannabes over the years who told me
> "I'd like to get into ham radio but I just can't do the code . . "
> I have yet to run into one of those who had any technical
> expertise at all, they've all been Radio Shack clerks, scanner
> freaks, kids who get off on HTs, etc. who couldn't even handle
> Ohm's Law if their lives depended on it. All they want is a radio
> with a channel selector and a mic, anything more complex loses
> their attention.

[...]

I got the highest grade on the final exam in my third year fields and
waves class (used "Lines, Waves, and Antennas" by
Brown/Sharpe/Hughes/Post) :-), and was a Design Engineer for 15 years. I
now help sell signal integrity software (all of that transmission line
theory helps). I don't have a license and think it would be silly to
learn morse code in order to get one. I've never worked for Radio Shack,
do not own a scanner, and do not own an HT :-).

--
==========
Mike Mayer

413. Re: Gap Titon DX vs. Butternut HF9V - any help?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:12:52 UTC
From: Alexander Poliakov <ka2r@hotmail.com>
Message-ID: <8i156.1954$OP2.391816@typhoon2.ba-dsg.net>
Source record: 172933

http://www.eham.net/reviews/products/13

Alex (KA2R)

414. Re: sdfg

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:33:52 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <gl8239.ql6.ln@mail.specsol.com>
Source record: 172940
Body handling: HTML body converted to readable text

grak wrote:
>
>
> sdfgsdfgsdfg

Seems "Prof. Beaker" is back with a new identity; into the kill file you go.

PLONK

415. Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:44:13 UTC
From: jason_hsu@my-deja.com
Message-ID: <93298q$h9g$1@nnrp1.deja.com>
Source record: 172936
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

http://www.io.com/~n5fc/notebk_ant.htm

The zigzag antenna design at the above URL led me to wonder if zigzag radials are a viable option. I also read somewhere that radials do not even have to be symmetrical. I also read that the use of many 1/16 wavelength radials can still yield respectable performance.

Are zigzag radials a viable option? If so, less space is needed for the antenna (especially important for apartment dwellers like me). Furthermore, the wire radials are less cumbersome to deal with.

I find it hard to believe that people have room for 1/4 wavelength radials for vertical antennas on 160m, as this means 130-foot radials extending outward from the antenna. The zigzag design of the notebook antenna sounds like a possible solution for apartment dwellers who need radials for a short vertical antenna.

So how important is it that radials be straight? While I am certain that deviation from straight radials reduces the effectiveness of the antenna ground, I am not certain whether this reduction is slight or gargantuan.

But can an effective radial be made of helical conductors? As I have pointed out before, my Cliffdweller slinky dipole stinks. Exactly why is a helical antenna design inefficient? (As a BSEE graduate, I'm not that afraid of equations.) And what makes a particular radial set more effective than another set given the same number and length of radials?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

416. Zigzag/longer/shorter/multiple counterpoises

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:46:17 UTC
From: jason_hsu@my-deja.com
Message-ID: <9329clhcv1@nnrp1.deja.com>
Source record: 172937
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

I keep hearing about the use of a counterpoise, or a length of conductor connected to the ground (of the transmitter, tuner, and/or antenna) terminated by an insulator at the far end.

Are zigzag wire counterpoises (whether used as radials for a wire antenna or as an RF transmitter ground) viable solutions? Again, a zigzag configuration takes up less space and is less cumbersome to work with. Again, I refer you to:
http://www.io.com/~n5fc/notebk_ant.htm

I have been told to use a 1/4 wavelength wire counterpoise as an RF transmitter ground if the cold water pipe and the 8-foot buried metal rod are not viable solutions.

What happens if I use a shorter counterpoise? How much less effective is such a counterpoise as an RF transmitter ground? (This could be an issue at lower frequencies.)

What happens if I use a longer counterpoise? Can you use a counterpoise designed for 40m (33 feet long) on 10m (which would be a full wavelength long)? Would a long counterpoise be even more effective? Or would it radiate unwanted RF?

What happens if I use multiple counterpoises?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

417. What is a ground loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:47:34 UTC
From: jason_hsu@my-deja.com
Message-ID: <9329f3hdq1@nnrp1.deja.com>
Source record: 172938

I have heard that one should avoid having ground loops when
constructing an RF transmitter ground.

What exactly is a ground loop? What are the ramifications of one? (Does
it cause unwanted RF transmissions?) And how do you avoid ground loops?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

418. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:56:43 UTC
From: richardharrison@webtv.net
Message-ID: <15393-3A54AB4B-40@storefull-115.iap.bryant.webtv.net>
Source record: 172944

Jim, N2EY wrote:
"The number of hideously communications and physically disabled folk learning the code and finally being able to express themselves by some truly inventive means is growing by leaps and bounds."

That struck me as so funny, I couldn`t quit laughing for awhile. Thanks, Jim.

Is Jim characterizing radio amateurs? Well maybe he meant other handicapped people. Maybe tragedy has comic implications, at times.

What does this have to do with test requirements for amateur radio? It`s only desperation to find some merit in an outmoded device, Morse code, used to exclude people from the amateur ranks. It`s been used as hazing, or passwords and secret codes used by children in their secret societies.

Using the tragic to persuade that morse should pervade the ham bands is not new. There is the old stroke victim story. The speechless patient could only communicate with the medic, who happened to be a ham, by squeezing his fingers in Morse code.

It`s a real stretch to make practical conclusions from the extraordinary.

Best regards, Richard Harrison, KB5WZI

419. Re: Homebrew Antenna sugestions for 462mhz please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 16:57:39 UTC
From: Ash <abuse@gravitywell.org>
Message-ID: <3A54AC23.A6DE5584@gravitywell.org>
Source record: 172939

http://members.home.net/ac3l/antenna.htm
is a good page with calculatorn for you to calculate the correct length for any frequency.
simplest is a dipole / inverted V , and got quite good reception for a non-directional antenna.
if you want an easy directional antenna try a beam,
http://members.home.net/ac3l/antlegn.htm

tomfree wrote:

> I just started using the Cobra PR-1000 to communicate with the house when
> out on my farm. I would like to add an antenna mounted on top of the house
> to make communications more reliable when at the extremes (distance wise) of
> my property. We are talking rolling hills and woods. The house is near the
> middle of the tract of land. It also has a tin roof and I was not sure
> about the effects of this on any installation. The antenna would be mounted
> on a pole about ten feet down from the crest of the roof at one end of the
> house, the pole will extend above the crest. Since the antenna will be
> fairly small at these frequencies (462Mhz) I wanted to try my hand at
> building one. Any suggestions would be appreciated.
>
> Tom

--
< This is my actual email adress, hopefully the spam programs filter out abuse@*!* adresses >

420. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:09:42 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A54AE56.5ADA@wt.net>
Source record: 172941
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:
>
> http://www.io.com/~n5fc/notebk_ant.htm
>
> The zigzag antenna design at the above URL led me to wonder if zigzag
> radials are a viable option. I also read somewhere that radials do not
> even have to be symmetrical. I also read that the use of many 1/16
> wavelength radials can still yield respectable performance.
> Are zigzag radials a viable option? If so, less space is needed for the
> antenna (especially important for apartment dwellers like me).
> Furthermore, the wire radials are less cumbersome to deal with.

Better than no radials. Yep, the mass of radials at the base of the
antenna the most important place, so many short radials will do pretty
well. Zig zagging is no real problem. Not as good as straight, but much
better than none.
>

>
> I find it hard to believe that people have room for 1/4 wavelength
> radials for vertical antennas on 160m, as this means 130-foot radials
> extending outward from the antenna. The zigzag design of the notebook
> antenna sounds like a possible solution for apartment dwellers who need
> radials for a short vertical antenna.

I string mine out just about any old way. I don't have 130 ft straight
line, so I have them run along the fence lines, around the base of the
house, along the lawn, etc. Most are making turns somewhere.
>
> So how important is it that radials be straight? While I am certain
> that deviation from straight radials reduces the effectiveness of the
> antenna ground, I am not certain whether this reduction is slight or
> gargantuan.
>
Probably not, if you had enough of them.

> But can an effective radial be made of helical conductors? As I have
> pointed out before, my Cliffdweller slinky dipole stinks. Exactly why
> is a helical antenna design inefficient? (As a BSEE graduate, I'm not
> that afraid of equations.) And what makes a particular radial set more
> effective than another set given the same number and length of
> radials?

A helical antenna needs capacitance at the end to work well. A slinky in
itself does not satisfy this. Add a fairly long wire leader to each end,

in addition to the coil part , and I bet it comes to life. I use quite a few helical antennas for mobile, but all use long stingers. A must for decent performance. And if you dump the narrow windings and put a larger lumped coil in, all the better. MK
--
http://web.wt.net/~nm5k

421. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:14:33 UTC
From: rwclark@seanet.com
Message-ID: <3a89ac4d.1029020112@news.seanet.com>
Source record: 172943

On Thu, 04 Jan 2001 07:10:20 GMT, tom_bruhns@agilent.com wrote:

>So...just WHAT would you do with op amps in the sampling probe?? Do yo
>have a line on op amps that do a nice low-jitter job of sampling?
>
>Cheers,
>Tom

Hi Tom,

They would precede the sampling as precision rectifiers, hence the need for GHz unity GBW to work at HF (this band restriction may be less than the original poster intended tho'). As for a source, I am steadfast in the products from Analog Devices whose Op Amps I confirmed to my customer's needs when I designed the Flight Data Recorder.

As an example of one of their products randomly selected:
>The AD8009 is an ultrahigh speed current feedback amplifier with a
>phenomenal 5,500 V/ï¿½s slew rate that results in a rise time of 545 ps,
>making it ideal as a pulse amplifier.
visit their page at:
http://www.analog.com/industry/analog_processing.html

Gain of one configurations with a headroom of noise gain will provide bandwidth, stability and low distortion.

My notion probably pushes more design into the probe than was there previously (what we in software call feature creep), but the technology should be able to support my notion at a reasonable cost to the amateur.

73's
Richard Clark, KB7QHC

422. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:14:39 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A54AF7F.8078653D@dvol.com>
Source record: 172942

Cecil wrote:

> Brian Kelly wrote:
> > What I said was that academic and industrial credentials don't mean squat in ham
> > radio as those credentials relate to getting breaks in license testing.
>
>
> . . . . possessed by an RF design engineer and ham radios. A tech
> with a PhD in EE is likely to know much more about ham radios than
> the *average* extra.

>
So what? Knowledge in itself is worthless unless it's applied in useful directions. I know several useless PhDs and so do you.
>
The "relationship" involves the basic fallacy behind the nocode ticket which dropped the code test in order to attract more technical expertise to the service. That maneuver may or may not have done that, there is no way to dipstick those data. Two points: What is a nocode PhD EE contributiong to the service unless that PhD is working on technical issues which contribute to the state of the art? Which was a cardinal and ongoing excuse for dropping the code tests. The mere possession of credentials means squat unless those skills are used to the benefit of the service. A PhD on a machine isn't "contributing" any more than Joe the eighth grade dropout plumber on the frequency. Once again which nocodes with or without academic credentials have contributed anything to the volume of ham technical literature? They've had ten years to justify the dropping of the code tests so that they could "upgrade the technical content of the service". Where's the BEEF Cecil? Ed?
>
Second point being that the nocode ticket has drawn a helluva lot more Joes than it has Termans which in turn has resulted a huge dumbing-down of the service overall. Which is exactly the opposite, predicted result vs. the transparently bogus rationale used to justify the creation of the nocode ticket.
>
I don't have a problem with nocodes as such, I'm glad they're out there populating the high bands, I have a bunch of nocode buddies. I have a big problem with those who continue to try to couple nocode EEs with anything actually useful to the service beyond getting paid by their employers to design the radios. Which EEs probably do in many cases without any ham tickets.
>--

> http://www.mindspring.com/~w6rca

>
w3rv

423. Re: Best AM Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:16:46 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A54AFFE.4EDD@wt.net>
Source record: 172946

Bob Miller wrote:

>
> Having said all that, my $1200 JRC NRD-525 with its amplified antenna
> doesn't really pull in distant AM broadcast stations any better than
> my $150 CCRadio, and my little $20 Sony Dream Machine does about as
> well as my CCRadio.
>
> The tuning on a CCRadio might be a little smoother than on the GE
> SuperRadio, but the SuperRadio has the same 8" ferrite core built-in
> antenna that the CCRadio does, so I don't know that you'll gain that
> much.
>
> Bob

My favorite AM radio is the old zenith transoceanic. Has a good loop built in the top. Wide as a barn door, but they sound great. I still have an old 1958 model sitting under the table here. But I'm afraid to use it lately, because the caps are drying out, and I'm trying to conserve the tube life. "They are getting kinda hard to find" without paying 2 arms and a leg. My old drake R4 is a pretty good AM radio, but I don't have the low freq converter , so I can only drop to about maybe 900kc or so before my preselector is too far out to be usable. But what it does get is pretty good up in the upper end of the band. MK

--
http://web.wt.net/~nm5k

424. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:16:49 UTC
From: rwclark@seanet.com
Message-ID: <3a8aafd3.1029922650@news.seanet.com>
Source record: 172945

On 04 Jan 2001 12:45:22 GMT, w1rfi@aol.com (W1RFI) wrote:

>>From: rwclark@seanet.com (Richard Clark)
>
>>>But honor was served nicely,
>>>
>>Beats eating Crow.
>
>Clearly you didn't understand the bet. :-)
>
>73,
>Ed Hare, W1RFI

Hi Ed,

Perhaps not, by I do know how to read the menu. :-)

73's
Richard Clark, KB7QHC

425. 1691MHz downconverter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:18:40 UTC
From: Ash <abuse@gravitywell.org>
Message-ID: <3A54B110.78DC217A@gravitywell.org>
Source record: 172947
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,alt.radio.scanner.uk

I'm looking for a design/schematics for a downconverter for 1691MHz (meteosat)
down to anything below 1300MHz, guess most IF's is ~137.5 for APT compability
though for me higher = less interference.
But any designs are welcome..
Any suggestions? (yeah I'll problably end up buying one, but $100-$300 is more than
I want to spend if I can build one cheap :)

//Ash

--
< This is my actual email adress, hopefully the spam programs filter out abuse@*!* adresses
>

426. Re: Log periodic?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:34:03 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A54B40B.9972FA66@qth.com>
Source record: 172928
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Ive had several Tennadynes....best antennas for the money Ive ever seen under
Normal conditions.....73 Murray

DL wrote:

> Anyone out there using a log periodic antenna? I'm thinking about getting
> one; any brand or model I should stay away from? Any recommendations?
>
> Tnx,
> David

[One or more binary attachments are retained only in the source text.]

427. Re: Log periodic?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:34:42 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A54B432.D27AB240@qth.com>
Source record: 172925
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Ive had several Tennadynes....best antennas for the money Ive ever seen under
Normal conditions.....73 goto" www.tennadyne.com.....Murray

DL wrote:

> Anyone out there using a log periodic antenna? I'm thinking about getting
> one; any brand or model I should stay away from? Any recommendations?
>
> Tnx,
> David

[One or more binary attachments are retained only in the source text.]

428. Re: Log periodic? More

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:37:37 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A54B4E1.2026A379@qth.com>
Source record: 172926
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

AND, I have absolutely perfect SWR every where on my T6.....under 1.5 in all ususalble portions of the bands....they are affected by antennas above or below them...(beams) but what else you gonna put up with it?; 73 M

David Sinclair wrote:

> In article <930tl6$ic4$1@news.gate.net>
> "DL" <phochief@adelphia.net> wrote:
>
> > Anyone out there using a log periodic antenna? I'm thinking about getting
> > one; any brand or model I should stay away from? Any recommendations?
> >
> > Tnx,
> > David
>
> I have a Tennadyne T7 up 40ft. I am very happy with it. Good F/S and F/B
> directivity from 18 to 32 MHz. I would buy one again. Log periodics can have
> somewhat higher SWR within certain parts of some bands. If your radio is
> real finnicky about SWR or does not have a built in automatic antenna
> tuner, you may not like this. SWR is not a big issue for me, and I really like
> having good directivity at all frequencies in range, not just the ham bands.
> 73, David K3KY

[One or more binary attachments are retained only in the source text.]

429. EZNEC treatment of two metals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 17:55:03 UTC
From: k3bu@aol.com
Message-ID: <20010104125503.16011.00001102@ng-co1.aol.com>
Source record: 172948

Statement from EZNEC manual:
"Currently, only one type of metal or one amount of resistivity and permeability can be specified for the entire antenna model."

What is the best workaround to treat antennas like vertical made of aluminum tubing and with copper wire radials, or copper wire Quad elements and aluminum Yagi elements in one antenna or model?

Yuri, K3BU

430. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 18:10:43 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A54BCA3.DAAE6464@dvol.com>
Source record: 172949
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Cecil wrote:

> Brian Kelly wrote:
> > You been smoking that TexMex stuff that got sprayed AGAIN? I *toldja*
> > not to do that Cecil! Barely get one minute outta five vaguely right =
> > 20% right = 80% wrong.
>
> Conversely, miss five characters out of five minutes and flunk.
> That's 96% correct and one still flunks. The five missing characters
> also caused a failing grade on the fill in the blank exam.

>
Which is why anybody who can actually copy 5wpm and has half a brain
wouldn't take that option. We're all allowed to go for the easy way out and
shoot ourselves in the foot.
>
b.

431. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 18:24:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A54BFF3.BDBC04D0@IEEE.org>
Source record: 172950

Brian Kelly wrote:
>
> Cecil wrote:
> > . . . . possessed by an RF design engineer and ham radios. A tech
> > with a PhD in EE is likely to know much more about ham radios than
> > the *average* extra.
>
> So what?

So what nothing. The statement is true, that's what. To bar otherwise qualified people from HF ham radio simply because they don't know Morse code hurts amateur radio. Would you refuse to be rescued by someone who didn't know Morse code? Aren't 1000 emergency operators superior to 500 emergency operators even though 500 of them don't know Morse code? The vast majority of the hams who know Morse code are not dumb enough to use it for emergencies anyway.

> The "relationship" involves the basic fallacy behind the nocode ticket which dropped
> the code test in order to attract more technical expertise to the service. That
> maneuver may or may not have done that, there is no way to dipstick those data.

It certainly did at Intel in Chandler, AZ. I suspect that is multiplied by any number of large electronics firms all over the nation.

> What is a nocode PhD EE contributiong to the service unless that PhD is
> working on technical issues which contribute to the state of the art?

Answer: Whatever he chooses to contribute, just like you, me, and Ed.

> Where's the BEEF Cecil? Ed?

What have you contributed to amateur radio that a nocoder cannot contribute? If I didn't know Morse code, would that prohibit me from having three antenna web pages? Would it prohibit Ed from being an RFI expert? Exactly what changes happen in someone's brain when they learn Morse code that turns them into a more worthy and more valuable person? Does your wife know in what low esteem you hold nocoders?

> Second point being that the nocode ticket has drawn a helluva lot more Joes than it
> has Termans which in turn has resulted a huge dumbing-down of the service overall.

Exactly what has been the effects of this "dumbing-down"? Nobody was dumber than I when I passed my 13wpm Morse code exam in the early 50s at 13 years of age. Introduction of the Novice Class License in the early 50s certainly dumbed-down ham radio. But obviously, you were already a genius when you passed your first ham exam.

Seems to me, Morse code has had much more of a dumbing-down effect on amateur radio than have electronic engineers. There is an organization of men with large sexual members. Seems Morse code symbolically fulfills that function in ham radio by separating the men from the boys, so to speak.
--
http://www.mindspring.com/~w6rca

432. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 18:26:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A54C060.3570C4E2@IEEE.org>
Source record: 172951
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Mark Keith wrote:
> Better than no radials. Yep, the mass of radials at the base of the
> antenna the most important place, so many short radials will do pretty
> well. Zig zagging is no real problem. Not as good as straight, but much
> better than none.

How about spiraling the radials? How about, heaven forbid, fractal radials?
--
http://www.mindspring.com/~w6rca

433. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 18:45:39 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A54C4D3.3ADCD829@IEEE.org>
Source record: 172953

Mark Keith wrote:
> You HAVE to know code to work HF.

Nope, there are plenty of HF stations who don't know Morse code.
CBers, for example.
--
http://www.mindspring.com/~w6rca

434. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 18:47:35 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A54C547.77FE@wt.net>
Source record: 172952

Richard Harrison wrote:

>
> What does this have to do with test requirements for amateur radio? It`s
> only desperation to find some merit in an outmoded device, Morse code,
> used to exclude people from the amateur ranks. It`s been used as hazing,
> or passwords and secret codes used by children in their secret
> societies.

Thats kinda a stretch there. Morse code has never been used as a means to exclude anyone. It was first used to enable hams to know if they were interfering with another service or emergency from what I hear. Not to mention being the heaviest used mode. If a person refuses to learn the code to get a test, they are the ones excluding themselves, not the fcc. The reason being all have to pass the same test. The same way we all have to pass the written. The written could be called a hazing by a few I'm sure. I know myself, I had much less trouble learning the code than I did learning theory. Why? Because there is so much more theory to learn. The code is 26 letters, 10 numbers, and a few others used for periods, etc. Now, you tell me, Why would it be harder to learn appx 40 characters of code, compared to learning all the theory needed to pass the extra? "I'm talking about learning enough to really pass it, not just memorize the questions". I was doing 18 wpm when I took my novice ticket in 1977. But when it came to theory I was a real dumbass. Still am, it could be argued...:(It's taken me 20 plus years to get where I am now from scratch. Much longer than learning the code. I've never worked in the radio field, EE, phd, ad nausium... I'm just a regular "started from scratch as a SWL" dummy that does this only as a hobby. I might could have faked my way thru the extra test in maybe about 1985-1990 or so, and thats still a good ways past 1977 when I first started. But I ended up getting it in 1997 I think. 20 years later. And I still failed the extra written the first time. It's weird, most say the advanced the hardest, but I flew right through that one. I found the extra harder. So to me, it would be backwards, the written was more of a hazing than the code. I found the code a total piece of cake. It's just how the person looks at it I guess. BTW, although I won't lose any real sleep if they drop the code requirements, I still think it's a good thing for hams to know, even at only 5 wpm. It can come in handy. And that speed is so slow to be useless for any real use, but takes very little time to learn. That is unless the person has a self induced mental block about code. Now, if the rest of the world dropped the code as far as the ITU etc, and the USA kept it anyway, then you might have a point. But thats not the case so far. You HAVE to know code to work HF. So far anyway. It's not just something a bunch of guys down at the ARRL or somewhere just cooked up to exclude people. It's obvious they want

even more people in. I think they would endorse the end of code in about 3 seconds if they had the chance. IE: end of worldwide regulations requiring it. I'm sure the FCC could care less one way or the other. MK
--
http://web.wt.net/~nm5k

435. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 18:58:26 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A54C7D2.7BE4150D@dvol.com>
Source record: 172954

KB9WFK wrote:

> So what great things have you done that take you beyond being "an insult to
> the service and a joke of a ham"? You must have invented something? You
> came up with a new operating mode? Since you have been a ham for ?? years
> you have to have met hundreds or thousands of hams correct? Can you give me
> 10 examples of how you and anyone you know has advanced the state of the
> art? Come on. Out of all of the TRUE hams you know and since you claim to
> be a TRUE ham yourself you must have done something or at least know a
> couple of dozen others that have done something to improve the state of the
> art since that appears to be your criteria for being a TRUE ham.

>
I obviously went over your head. A primary pretext for the creation of the nocode license was that hordes of techies who didn't want to deal with code tests in order to become hams (i.e., don't care enough about ham radio to do a little work, God forbid) would jump into ham radio and upgrade the base of technical skills and make contributions to the state of the art. Thus were born specific expectations which would justify eliminating even the 5wpm code test. Ten years later of course no such "contributions" have been made and the whole nocode "technical contributions" apologist crap is a failed mindless snicker as was predicted ten years ago.
>
The FCC didn't drop the test requirements for Extras in order for us "to enable contributions to the state of the art", I didn't slide in with any onus on me other than passing the test. I've met the "expectations".
>
As far as where the contributions are coming from glom a copy of QEX and track down the license classes of the authors and get back to me when a nocode gets published.
>
w3rv

436. Re: Lightning protection in auto tuners??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:09:01 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <hT356.6393$3t2.271358@newsread1.prod.itd.earthlink.net>
Source record: 172955

Can't speak to those two in particular, but have experience with the SGC-230 family. My advice is to either:

1. Install a knife switch(s) and manually ground the antenna and disconnect it from the tuner when not in use in lightning season

2. Install a relay to do the same, powering the relay from the 12V line to the tuner so that when the tuner is powered down, the antenna is disconnected and grounded.

K8AC

"John P. Franklin" <jpfrankl@teleport.com> wrote in message news:0GS46.12160$pA5.835063@nntp1.onemain.com...
> Does ANYONE know if there is some kind of lightning protection scheme for
> auto-tuners like the ICOM AH-4 or the Alinco EDX-2? Are we expected to run
> out and take it off the wall or tower everytime a nasty looking cell blows
> through the area?
>
> Pat
>
>
>

437. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:10:17 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <932hppmji1@neptunium.btinternet.com>
Source record: 172956
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Hello Jason,

Lay your radials straight or bent, of no particular length
or depth. For a given amount of wire prefer more short
radials to a few long ones. Stop when you get to about 6
radials, do some listening tests on known transmissions, add
another 2 radials, do some more listening tests. If you
can't detect any difference in received signal strength
between 6 and 8 radials fire up the rig and call CQDX.

Download program ENDFEED in a few seconds from the website
below.. Not zipped up. Run immediately.

Judge the relative radiating efficiencies of vertical or
inverted-L antennas used with a differing number of radials
of differing lengths shallow-buried in different types of
soils.

This little, easy to use program will also tell you the
inductance and capacitance settings of the T or L-network
needed to match the feedpoint impedance to a 50-ohm
feedline.

To home-brew your own tuner or loading coils download
program SOLNOID2. It's so easy !

And if you've ever wondered how a tuner + coax + balun +
twin-line + dipole + ground works, download program VARNEY.

Makes handbooks, annuals and magazines obsolete.
--
****
Regards from Reg, G4FGQ
For FREE radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Jason wrote .
>
> The zigzag antenna design at the above URL led me to
wonder if zigzag
> radials are a viable option. I also read somewhere that
radials do not
> even have to be symmetrical. I also read that the use of
many 1/16
> wavelength radials can still yield respectable

performance.
>
> Are zigzag radials a viable option? If so, less space is
needed for the
> antenna (especially important for apartment dwellers like
me).
> Furthermore, the wire radials are less cumbersome to deal
with.
>
> I find it hard to believe that people have room for 1/4
wavelength
> radials for vertical antennas on 160m, as this means
130-foot radials
> extending outward from the antenna. The zigzag design of
the notebook
> antenna sounds like a possible solution for apartment
dwellers who need
> radials for a short vertical antenna.
>
> So how important is it that radials be straight? While I
am certain
> that deviation from straight radials reduces the
effectiveness of the
> antenna ground, I am not certain whether this reduction is
slight or
> gargantuan.
>
> But can an effective radial be made of helical conductors?
As I have
> pointed out before, my Cliffdweller slinky dipole stinks.
Exactly why
> is a helical antenna design inefficient? (As a BSEE
graduate, I'm not
> that afraid of equations.) And what makes a particular
radial set more
> effective than another set given the same number and
length of
> radials?
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com
> http://www.deja.com/

438. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:17:58 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A54CC66.80D@wt.net>
Source record: 172958

Cecil wrote:
>
> Mark Keith wrote:
> > You HAVE to know code to work HF.
>
> Nope, there are plenty of HF stations who don't know Morse code.
> CBers, for example.
> --
> http://www.mindspring.com/~w6rca

They wouldn't be too long if Riley had his way about it. I know a guy here in town right now that got a hefty fine for that. I think it he got it lowered , but it's still about a ft-1000d's worth or so. MK
--
http://web.wt.net/~nm5k

439. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:20:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <932id2$i3c$1@plutonium.btinternet.com>
Source record: 172959

Bill, download program VARNEY from website below. Takes only
a few seconds. Run immediately. You will find there's
little or nothing to choose between one dipole length and
another when used with ladder or open-wire line. Keep the
coax short and use a choke balun wound on a 2" diameter
ferrite ring.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****
Bill Rhodes wrote -
>
> Joe S. <w4hh@my-deja.com> wrote in message
> news:92sqni$v5b$1@nnrp1.deja.com...
> > In article <92rqrr$1fnb$1@nntp1.ba.best.com>,
> > "Janice and Ed Senior" <senior@best.com> wrote:
> > > Hi, and happy new year to the group -
> > >
> > > I am considering putting up a wire antenna for casual
> > > HF use (100W class). I would like to operate on as
> > > many HF bands as possible.
> > >
> > > Available supports are a 40 foot tree on one end, and
> > > an 8 foot fence post on the other end; so this thing
> > > would be something of a sloper. Available length is
> > > about 100 feet. Can feed approximately in the middle,
> > > with either ladder line or coax. I have a new antenna
> > > tuner available (MFJ).
> > >
> > > Any opinions out there as to whether a multiband
dipole,
> > > a windom, a G5RV, a random longwire, or ??? would
> > > be best suited to this situation?
> > >
> > > ...Thanks, Old Ed
> > >
> > >
> >
> > 135 feet of wire fed in the center with ladder line.
You will need an
> > antenna tuner at the rig end. This is a simple,

effective antenna that
> > will load on every band, radiate well, and is quite
forgiving. You can
> > purchase one already assembled from any number of
suppliers. A place
> > called Radio Works has a neat device called the Ladder
Lock that serves
> > as a center insulator and support -- I use that on mine
and it prevents
> > wire twisting and breaking at the center.
> >
> >
> > --
> > Regards,
> > Joe Schlatter
> > W4HH
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
> Yepp, the good old center fed Zepp .... I have used one
for years .... I put
> up a G5RV for a while but went back to the Zepp .... only
drawback,
> especially if you are using computer logging is RF in the
shack getting into
> the computer. I have my tuner less than 2 feet from the
entrance to the
> shack and a really good ground and it is not too bad on
the computer except
> on 10 where the cursor jumps around the screen as I talk
;-)
>
>

440. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:21:38 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A54CD42.24BB@wt.net>
Source record: 172957
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Cecil wrote:
>
> Mark Keith wrote:
> > Better than no radials. Yep, the mass of radials at the base of the
> > antenna the most important place, so many short radials will do pretty
> > well. Zig zagging is no real problem. Not as good as straight, but much
> > better than none.
>
> How about spiraling the radials? How about, heaven forbid, fractal radials?

I have in fact seen people spiral radials. Was just reading an old
article where the guy did just that to fit a small area. Yep, I guess a
fractal radial would work too. MK

--
http://web.wt.net/~nm5k

441. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:26:19 UTC
From: tom_bruhns@agilent.com
Message-ID: <932ioeqgj1@nnrp1.deja.com>
Source record: 172961

Hi Richard,

The original probe is really pretty simple, conceptually: sample the current and the voltage with very low jitter and at a relatively low rate. Buffer the sampled output back to the main box (in a way that specifically matches the system design). As they say, the devil is in the details.

I tend to keep pretty well abreast of what modern op amps can do, but I sure don't see much place for them in this situation. (Why would you "precision rectify" before sampling and lose the phase info??)

As I see it, the question is something like, "is it practical to homebrew a probe that will plug into a stock HP-4815A box to replace a non-existing original probe?" It might be possible, but in the 4815A manual you won't find much info on the parts in the probe, specifically the current sampler transformer, a couple current-mode baluns, and a delay line. It seems to me if you want to keep to the spirit of the question as I've stated it, you probably shouldn't have to supply external power to the probe, and the output should interface directly with the 4815A main box. It seems to me it would be a step backwards to make things more complicated to use than the original.

If the question instead is, "can one homebrew a vector impedance meter with capabilities similar to the HP-4815A?" then maybe there should be a different thread on that. In fact, there's already one over in sci.electronics.design just now, similar freq range and all.

Cheers,
Tom

In article <3a89ac4d.1029020112@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Thu, 04 Jan 2001 07:10:20 GMT, tom_bruhns@agilent.com wrote:
>
> >So...just WHAT would you do with op amps in the sampling probe?? Do
yo
> >have a line on op amps that do a nice low-jitter job of sampling?
> >
> >Cheers,
> >Tom
>
> Hi Tom,
>
> They would precede the sampling as precision rectifiers, hence the
> need for GHz unity GBW to work at HF (this band restriction may be

> less than the original poster intended tho'). As for a source, I am
> steadfast in the products from Analog Devices whose Op Amps I
> confirmed to my customer's needs when I designed the Flight Data
> Recorder.
>
> As an example of one of their products randomly selected:
> >The AD8009 is an ultrahigh speed current feedback amplifier with a
> >phenomenal 5,500 V/µs slew rate that results in a rise time of 545
ps,
> >making it ideal as a pulse amplifier.
> visit their page at:
> http://www.analog.com/industry/analog_processing.html
>
> Gain of one configurations with a headroom of noise gain will provide
> bandwidth, stability and low distortion.
>
> My notion probably pushes more design into the probe than was there
> previously (what we in software call feature creep), but the
> technology should be able to support my notion at a reasonable cost to
> the amateur.
>
> 73's
> Richard Clark, KB7QHC
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

442. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:26:22 UTC
From: Ed Cregger <ecregger@earthlink.net>
Message-ID: <y7456.152$1G4.2260@newsread2.prod.itd.earthlink.net>
Source record: 172960

By no means do I have a killer station, in fact, it's downright cheap, but it does work and it comes embarrassingly close in performance to the "big boys" for the things that I do (75, 40 & 17 meter ragchewing).

My used Yaesu FT-890AT was a terrific bargain at $450 and so was the MFJ-989C and the Ameritron AL-80A "one lunger".

My antenna consists of a Van Gordon "All Bander", which sounds just like what you will be running when you feed it with 450 ohm twin lead. Presently, the apex (inverted vee config.) is about thirty feet off of the ground with the ends down somewhere around four feet. It is a temporary set up, but it works far better than any of the commercial, multiband verticals I've operated. Maybe I can talk the brother-in-law into raising the apex and ends a bit during his next visit (thanks, Bob!).

As far as RF in the shack goes, I don't have any more in the shack than what I had with properly installed commercial, multiband verticals with short coax feedlines. Back in those days I had a smaller lot and was able-bodied, so the quality of work was at least passable.

If you can, try to make a nice long route to your shack with the 450 ohm twin lead. You might then be surprised to learn that you will be able to load up on 160 meters.
--
Ed Cregger, NM2K
ecregger@earthlink.net

"RonE" <elbeca@my-deja.com> wrote

> Well, based on everyone's input, I think I'll just run 450 Ohm ladder
> line to the 102' doublet straight from the tuner. I have an older MFJ
> tuner rated for 300Watts. My old Ten Tec only puts out about 90 to
> 100Watts anyhow.
>
> This 102 footer fed with coax and no balun actually seems to work
> pretty good on 80, 40, and 20. My rig doesn't work to well on 15 and
> 10. I think the antenna is too short for 160M. Now all I

need is a
> warm, dry day, and I'll unroll some ladder line.
> --
> RonE -KC IFL-
> elbeca@nothotmail.com (undo the not to email me)
>
>
> Sent via Deja.com
> http://www.deja.com/
>

443. Re: Latest on CFA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 19:43:15 UTC
From: tom_bruhns@agilent.com
Message-ID: <932joi$r9m$1@nnrp1.deja.com>
Source record: 172962

O!...does that mean it will be short??

I suppose I should not have expected any different, but the "technical" info on the site you mention does seem a bit ... umm, ... non-technical? For example,

"Finally in 1994, the first CFA was brought into regular service, by the Egyptian Radio and TV Union. It was a modest device, handling less than 10 kilowatts on the medium wave. But it was only some 7 metres high - a traditional antenna at that power would have needed to be many times higher."

Oh? How interesting! How low would the power have had to be so that a traditional antenna could be 7 metres high? I wonder how high a traditional antenna for 1 megawatt at 20kHz is. Magic seems magical only until you understand how it's done, hmmm?

Thanks for the pointer, Reg. My prediction is that CFA antenna proponents will continue to try to keep them "magical", and the antennas themselves will continue to work as antennas always have... :-)

Cheers, and Happy New Year,
Tom

In article <931kum$r0d$1@neptunium.btinternet.com>,
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
> It won't be long now !
> Try this :-
> http://www.longwaveradio.com/
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

444. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 20:17:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A54DA42.85ACE1DA@IEEE.org>
Source record: 172963

Mark Keith wrote:
>
> Cecil wrote:
> >
> > Mark Keith wrote:
> > > You HAVE to know code to work HF.
> >
> > Nope, there are plenty of HF stations who don't know Morse code.
> > CBers, for example.
>
> They wouldn't be too long if Riley had his way about it.

You missed the point, Mark. Legal CBers are HFers and don't have
to know Morse code. In fact, CW is illegal on CB, isn't it? :-)

Point was, of all the HF stations, aren't hams the only ones
required to know Morse code?
--
http://www.mindspring.com/~w6rca

445. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 20:43:56 UTC
From: richardharrison@webtv.net
Message-ID: <28198-3A54E08C-82@storefull-118.iap.bryant.webtv.net>
Source record: 172964

Mark Keith wrote:
"You HAVE to know code to work HF."
Cecil wrote:
"Nope, there are plenty of HF stations who don`t know Morse Code. CBers, for example."
Mark Keith wrote:
"I know a guy here in town right now that got a hefty fine for that."

Well, the accused may have been fined for something else, but all CBers can legally operate HF because that is where 27 MHz is in the radio spectrum.

Best regards, Richard Harrison, KB5WZI

446. Re: Help ! outdoorTV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 21:19:36 UTC
From: "J. Sun" <jsun@lucent.com>
Message-ID: <932pd9$s78@nntpa.cb.lucent.com>
Source record: 172965

Thanks for all the responses !

Rus
"J. Sun" <jsun@lucent.com> wrote in message
news:92vipd$g14@nntpa.cb.lucent.com...
> Hi,
>
> I live in the flat area about 50-60 mile from new york city.
> I would like to buy a outdoor TV antenna to boot the TV
> signal broadcasted from NYC..
>
> I have several questions as follows:
>
> 1. what is the difference between
> the antennas where the UHF element
> are either vertical to the axis or V-shaped ?
>
> top view:
>
> | | | | / / / /
> ---------- or ----------
> I | | | \ \ \ \
>
> 2. how many elenmet is appropriate ?
> 3. how long the boom is appropriate ?
>
> Thanks !
>
> Rus
>
>
>

447. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 21:28:47 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A54EB0F.1E62AA2@tir.com>
Source record: 172969

"Peter O. Brackett" wrote:
>
<snip>
> Come on fellas... Horowitz is a neat book, but more of a comprehensive
> electronics hobbyist handbook, not an EE textbook.
>
> I challenge anyone to name an ABET accredited EE program that includes
> Horowitz among it's recommended EE textbooks.
> Horowitz could be used as supplemental reading for some EE courses, but it
> is definitely not an EE textbook.
>
<snip>

My, ABET accredited, school uses Horowitz as a reference in the
mandatory, terminal design course (student must demonstrate the
ability to design and build, not just analyze). I also suggest the
ARRL Handbook to the students and our library keeps a copy of the
Handbook on reserve.
Looking back many years, I received my first formal understanding of
electronics from reading the Handbook. My first experience with
intolerance was having a socialist teacher confiscate my copy of the
Handbook. 73 Mac

--
J. Mc Laughlin n8tt@tir.com Michigan ~

448. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 21:36:07 UTC
From: n1pqg@my-deja.com
Message-ID: <932qc7$1r5$1@nnrp1.deja.com>
Source record: 172968

Guys - please don't continue beating up on KB1EVA - it's NOT the Wakefield killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does live in Haverhill, but other than that, there is no connection to that bearded bastard. Our fellow amateur has been bombarded by press and outraged citizens since the incident, and this type of discussion is only making it worse. The Lawrence Eagle Tribune did a nice article on 12/27 regarding the mistaken identity - check it out at www.eagletribune.com/news/stories/20001227FP_005.htm for the real story here.

73 de N1PQG, another lowly tech trying to upgrade.

In article <20001228133136.22394.00000191@ng-fy1.aol.com>, fractenna@aol.com (Fractenna) wrote:
> As suggested I did a name search on qrz.com. The Boston papers report this guy
> lives in Haverhill and sure enough there it is in the flesh as KB1EVA.
>
> K-B-1-E-V-A
>
> Maybe this is his dad?? I don't think so myself. Sure looked familiar....He
> sure LOOKS like one of those guys you see at the MIT FLEA!!!
>
> If it IS him this only reinforces the notion to the public that hams have
> lunatics in thier midst.
>
> So much for Dr. Cohen being paranoid and stopping public ham appearances and
> ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I
> think Tom Rouch would do well to distribute that prozac he talks about!!
>
> 73
> Phil de N1ZKT
>

Sent via Deja.com
http://www.deja.com/

449. Re: KB1EVA as 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 21:37:49 UTC
From: n1pqg@my-deja.com
Message-ID: <932qfc$1sj$1@nnrp1.deja.com>
Source record: 172967

Guys - please don't continue beating up on KB1EVA - he's NOT the
Wakefield
killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does
live
in Haverhill, but other than that, there is no connection to that
bearded
bastard. Our fellow amateur has been bombarded by press and outraged
citizens since the incident, and this type of discussion is only making
it
worse. The Lawrence Eagle Tribune did a nice article on 12/27
regarding the
mistaken identity - check it out at
http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the
real
story
here.

73 de N1PQG, another lowly tech trying to upgrade.

In article <20001228165724.08425.00000054@ng-fm1.aol.com>,
fractenna@aol.com (Fractenna) wrote:
> Shouldn't the americal radio relay league be doing damage control
before the
> press starts playing up the ham radio angle on this guy??
>
> Not all of us hams are 300 pound-grrrizly adams-- loner- man-
mountains who go
> and shoot people.
>
> Some of us don't even have guns...or even evil thoughts against
others.
>
> Just a thought.
>
> Phil
> de N1ZKT
>

Sent via Deja.com
http://www.deja.com/

450. PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 21:39:18 UTC
From: Mike <laugh@spam.com>
Message-ID: <a4656.32571$1M.7470624@typhoon.ne.mediaone.net>
Source record: 172966

Guys - please don't continue beating up on KB1EVA - he's NOT the Wakefield killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does live in Haverhill, but other than that, there is no connection to that bearded bastard. Our fellow amateur has been bombarded by press and outraged citizens since the incident, and this type of discussion is only making it worse. The Lawrence Eagle Tribune did a nice article on 12/27 regarding the mistaken identity - check it out at http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the real story
here.

73 de N1PQG, another lowly tech trying to upgrade.

"Brian" <brianburke@my-deja.com> wrote in message news:92tseatla1@nnrp1.deja.com...
> In article <vDO26.310$e5.815717@news.ntplx.net>,
> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
> > Cecil <Cecil.A.Moore@IEEE.org> wrote:
> >
> > > > That's just great. And if he is, we can start the myth that hams
> are
> > > > mostly wacko, just like Vietnam Vets.
> >
> > > Aren't most hams wacko? Proof is on r.r.a.p.
> >
> > Do you believe that most hams post to rec.radio.amateur.policy?
> >
> > 73,
> > Ed Hare, W1RFI
>
> ARRL Member?
>
>
> Sent via Deja.com
> http://www.deja.com/

451. Re: KB1EVA is NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 22:10:10 UTC
From: fractenna@aol.com
Message-ID: <20010104171010.29430.00000516@ng-cg1.aol.com>
Source record: 172970

I will repost Dr. Cohen's warning on this. I for one am VERY RELIEVED to see KB1EVA IS NOT the Wakefield Killer.

Thanks to N1IR and N1PQG for setting us straight!

73
Phil
de N1ZKT

>Guys - please don't continue beating up on KB1EVA - he's NOT the
>Wakefield
>killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does
>live
>in Haverhill, but other than that, there is no connection to that
>bearded
>bastard. Our fellow amateur has been bombarded by press and outraged
>citizens since the incident, and this type of discussion is only making
>it
>worse. The Lawrence Eagle Tribune did a nice article on 12/27
>regarding the
>mistaken identity - check it out at
>http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the
>real
>story
>here.
>
>73 de N1PQG, another lowly tech trying to upgrade.
>
>
>
>In article <20001228165724.08425.00000054@ng-fm1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>> Shouldn't the americal radio relay league be doing damage control
>before the
>> press starts playing up the ham radio angle on this guy??
>>
>> Not all of us hams are 300 pound-grrrizly adams-- loner- man-
>mountains who go
>> and shoot people.
>>
>> Some of us don't even have guns...or even evil thoughts against
>others.
>>
>> Just a thought.
>>

>> Phil
>> de N1ZKT
>>
>
>
>Sent via Deja.com
>http://www.deja.com/
>
>
>

From N1IR on 12/29

"Before everyone gets too hot and bothered, check out the CNN stories on McDermott. Also, the Boston Globe articles on www.boston.com. They say he only moved to Haverhill recently, not in February as someone showed on here from the callbook URL. I also noticed, from qrz.com, that his e-mail is not the one that the media refers to.

Haverhill is a pretty small town, but I imagine it's possible to have two Michael McDermotts..with electronics backgrounds...so let's not crucify this guy until/if we know for sure.

I can relate to this: when I was 18 I lost my lunch (at the school lunchroom even) when I read that 'Nathan Cohen' had been arrested for embezzling several million dollars. Of course, he was in a different state, let alone different town.

73,
Chip N1IR "

452. Re: Need manuals for Wilson System III

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 22:17:35 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <WF656.519$e5.1313873@news.ntplx.net>
Source record: 172971

Richard L. Goodin <rlgoodin@uswest.net> wrote in message
news:3A53627B.426443A7@uswest.net...

> I need manuals for the Wilson System III. I just received this one from
> a friend, (FREE) and would like to rebuild it and then put it up.

Is this the company? This is the info from the ARRL TIS database at
http://www.arrl.org/tis/tisfind.html:

Wilson Antenna, Inc.
1181 Grier Drive, Suite A
Las Vegas, NV 89119
Tel: 702-896-0399
800-541-6116
Fax: 702-896-0409
Email: wilson@wilsonantenna.com
http://www.wilsonantenna.com/
Products and Services
ANTENNA>ANTENNA MANUFACTURER;

If they don't have a manual, see also:

http://www.arrl.org/tis/info/pdf/9206067.pdf

For an article about a few of the companies that sell reprints of equipment
manuals. You can also use the TISFIND database and type "equipment manual"
as the search criterion or scroll down to the category list and pick
PUBLICATION-EQUIPMENT MANUAL OR SCHEMATIC.

73,
Ed Hare, W1RFI

453. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 22:33:21 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <RS656.8029$0s3.515943@typhoon.columbus.rr.com>
Source record: 172972
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A54C060.3570C4E2@IEEE.org...
> Mark Keith wrote:
> > Better than no radials. Yep, the mass of radials at the base of the
> > antenna the most important place, so many short radials will do pretty
> > well. Zig zagging is no real problem. Not as good as straight, but much
> > better than none.
>
> How about spiraling the radials? How about, heaven forbid, fractal
radials?
> --

Wow, a new concept: "Slinky Radials" for limited space!

--
Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
USPSA # L-1192 NROI/CRO Amateur Radio K8ND
Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass

454. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 22:42:16 UTC
From: k3ky@erols.spamnocom
Message-ID: <932u88$e18$1@bob.news.rcn.net>
Source record: 172973

Thanks, Mike- your posting has been the best laugh of the week, so far!
Just a case of mistaken identity, and it sure got the no code/pro code
rumble going again :o)
Poor KB1EVA. That must have been a horrible experience for his family.
Perhaps a good lesson here, however-
Question authority, challenge 'experts', investigate personally,
form your own informed opinions!
Ya gotta love those rumor mills, though- eh? :o)
73, David K3KY

In article <a4656.32571$1M.7470624@typhoon.ne.mediaone.net>
"Mike" <laugh@spam.com> wrote:

> Guys - please don't continue beating up on KB1EVA - he's NOT the Wakefield
> killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does live
> in Haverhill, but other than that, there is no connection to that bearded
> bastard. Our fellow amateur has been bombarded by press and outraged
> citizens since the incident, and this type of discussion is only making it
> worse. The Lawrence Eagle Tribune did a nice article on 12/27 regarding the
> mistaken identity - check it out at
> http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the real
> story
> here.
>
> 73 de N1PQG, another lowly tech trying to upgrade.
>
>
> "Brian" <brianburke@my-deja.com> wrote in message
> news:92tseatla1@nnrp1.deja.com...
>> In article <vDO26.310$e5.815717@news.ntplx.net>,
>> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>> > Cecil <Cecil.A.Moore@IEEE.org> wrote:
>> >
>> > > > That's just great. And if he is, we can start the myth that hams
>> are
>> > > > mostly wacko, just like Vietnam Vets.
>> >
>> > > Aren't most hams wacko? Proof is on r.r.a.p.
>> >
>> > Do you believe that most hams post to rec.radio.amateur.policy?
>> >
>> > 73,
>> > Ed Hare, W1RFI
>>
>> ARRL Member?

>>
>>
>> Sent via Deja.com
>> http://www.deja.com/
>

455. Re: Jim Pennino still an ASSHOLE Re: sdfg

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 22:53:45 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ptu239.pjl.ln@mail.specsol.com>
Source record: 172974
Body handling: HTML body converted to readable text

tejmaj wrote:
>
>
> You wouldn't miss what I have to say and you KNOW it.
>
You have nothing else in life to do.
>

>

>
Jim Pennino wrote:
>
grak <gra@yu.com> wrote:
>
>
>
>
>
> sdfgsdfgsdfg
>
Seems "Prof. Beaker" is back with a new identity; into the kill file
> you go.
>
PLONK

>

Yet another false identity for the kill file.

Perhaps I should just kill everything that originates from pacifier.com.

Jim Pennino

456. Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 22:59:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A550054.82F9864D@IEEE.org>
Source record: 172976

I realize that this is the Morse code and guns newsgroup but hope
that no one will object to some antenna information.

I promised to do some measurements for someone but I don't remember
who or what thread - so here it is. My HS-1600 with top hat can be
viewed at: http://people.delphi.com/cecilmoore/mobnow.htm

It is tuned for 75m and note that only 2/3 of the coil is engaged.
Someone asked me what height of stinger was equivalent to my top
hat. I had never approached it from that angle before so I did
some measurements leaving the position of the HS-1600 coil fixed.

The top hat is located at eleven ft from the ground. There is no stinger
above the top hat. If I remove the top hat and install a stinger
to resonate at the same frequency, a twelve foot stinger is required.
That makes the antenna 23ft from the ground - slightly illegal.

The resonant frequency with the top hat is 3.95MHz. The resonant
frequency without the top hat is 8.5MHz. The top hat shifts the
resonant frequency by 4.5MHz. Since minimum inductance on the
loading coil results in maximum field strength, the effect of
a top hat is as close to something for nothing as one can get
with mobile antennas.
--
http://www.mindspring.com/~w6rca

457. Re: KB1EVA as 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:06:49 UTC
From: on4caf@qsl.net
Message-ID: <h70a5tk10hnohfem9nu8njkbd34slp6bp6@4ax.com>
Source record: 172975

Hi Mike,

fractenna@aol.com (Fractenna) started two threads,
KB1EVA--'Wakefield Killer'?? Looks like it... and
KB1EVA as 'Wakefield Killer'---ARRL response??
Which both, to my opinion, were off-topic and very offending in nature to your friend. There was no reason to start this threads.

From: fractenna@aol.com (Fractenna)
Newsgroups: rec.radio.amateur.antenna
Date: 28 Dec 2000 18:31:36 GMT
Organization: AOL http://www.aol.com
Subject: KB1EVA--'Wakefield Killer'?? Looks like it...
Message-ID: 20001228133136.22394.00000191@ng-fy1.aol.com

From: fractenna@aol.com (Fractenna)
Newsgroups: rec.radio.amateur.antenna
Date: 28 Dec 2000 21:57:24 GMT
Organization: AOL http://www.aol.com
Subject: KB1EVA as 'Wakefield Killer'---ARRL response??
Message-ID: 20001228165724.08425.00000054@ng-fm1.aol.com

Please advice your friend to go to a good lawyer.
To my opinion he should be able to recuperate some of the damages inflicted by fractenna@aol.com (Fractenna) by starting this threads.
This case looks so clear that it should not cost him any money because the lawyer will do it on a no cure no pay bases.

73,

Jan, on4caf

Ref http://www.eagletribune.com/news/stories/20001227/FP_005.htm

On Thu, 04 Jan 2001 21:37:49 GMT, n1pqg@my-deja.com wrote:

>Guys - please don't continue beating up on KB1EVA - he's NOT the
>Wakefield
>killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does
>live
>in Haverhill, but other than that, there is no connection to that
>bearded
>bastard. Our fellow amateur has been bombarded by press and outraged
>citizens since the incident, and this type of discussion is only making
>it
>worse. The Lawrence Eagle Tribune did a nice article on 12/27
>regarding the

>mistaken identity - check it out at
>http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the
>real
>story
>here.
>
>73 de N1PQG, another lowly tech trying to upgrade.
>
>
>
>In article <20001228165724.08425.00000054@ng-fm1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>> Shouldn't the americal radio relay league be doing damage control
>before the
>> press starts playing up the ham radio angle on this guy??
>>
>> Not all of us hams are 300 pound-grrrizly adams-- loner- man-
>mountains who go
>> and shoot people.
>>
>> Some of us don't even have guns...or even evil thoughts against
>others.
>>
>> Just a thought.
>>
>> Phil
>> de N1ZKT
>>
>
>
>Sent via Deja.com
>http://www.deja.com/

458. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:27:38 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <t5a1mpf0e7r328@corp.supernews.com>
Source record: 172977

> ... The matchbox was designed
> to match ~ 500 Ohm balanced line, of course it will tune beyond that
> range depending upon frequency and so forth.

The manual for my Matchbox says that it "is capable of
matching a 52 ohm coaxial transmitter output into resistances
ranging from approximately 25 to 1200 ohms for balanced
lines and 25 to 3000 ohms for unbalanced lines and antennas".
The real limitation comes with the reactive part, which they
say can be "several hundred ohms at the higher frequencies
with somewhat less reactance compensation at the lower
frequencies". That's where a switchable section of line can
help. Cecil, W6RCA, is a big advocate of this method.

I am forever thankful for EZNEC and MicroSmith which
allow me to easily predict what impedance I'll have at the
shack end of the transmission line.

> I have and use a matchbox. In my case it did not provide a good enough
> match for my solid state rig on several amateur bands. My solution was
> to include a "T" type tuner in series with the matchbox and doing that
> everything works fine.. and I can also get on 160 with this
> arrangement. However, this setup does require a bit more knob
> twisting... But what the heck, real hams twist knobs :-)

Good for you! So many new "hams" want everything to be
"no tune". Heck, you might just as well use the Internet ;-)

73,

John, K6QQ
Alturas, CA, at the corner of 299 & 395.

459. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:33:01 UTC
From: fractenna@aol.com
Message-ID: <20010104183301.27490.00000375@ng-fm1.aol.com>
Source record: 172978

>
>Hi Mike,
>
>fractenna@aol.com (Fractenna) started two threads,
>KB1EVA--'Wakefield Killer'?? Looks like it... and
>KB1EVA as 'Wakefield Killer'---ARRL response??
>Which both, to my opinion, were off-topic and very offending in nature to
>your
>friend. There was no reason to start this threads.
>
>From: fractenna@aol.com (Fractenna)
>Newsgroups: rec.radio.amateur.antenna
>Date: 28 Dec 2000 18:31:36 GMT
>Organization: AOL http://www.aol.com
>Subject: KB1EVA--'Wakefield Killer'?? Looks like it...
>Message-ID: 20001228133136.22394.00000191@ng-fy1.aol.com
>
>From: fractenna@aol.com (Fractenna)
>Newsgroups: rec.radio.amateur.antenna
>Date: 28 Dec 2000 21:57:24 GMT
>Organization: AOL http://www.aol.com
>Subject: KB1EVA as 'Wakefield Killer'---ARRL response??
>Message-ID: 20001228165724.08425.00000054@ng-fm1.aol.com
>
>
>Please advice your friend to go to a good lawyer.
>To my opinion he should be able to recuperate some of the damages inflicted
>by
>fractenna@aol.com (Fractenna) by starting this threads.
>This case looks so clear that it should not cost him any money because the
>lawyer will do it on a no cure no pay bases.
>
>73,
>
>Jan, on4caf
>
>Ref http://www.eagletribune.com/news/stories/20001227/FP_005.htm
>
>
>
>On Thu, 04 Jan 2001 21:37:49 GMT, n1pqg@my-deja.com wrote:
>
>>Guys - please don't continue beating up on KB1EVA - he's NOT the
>>Wakefield

>>killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does
>>live
>>in Haverhill, but other than that, there is no connection to that
>>bearded
>>bastard. Our fellow amateur has been bombarded by press and outraged
>>citizens since the incident, and this type of discussion is only making
>>it
>>worse. The Lawrence Eagle Tribune did a nice article on 12/27
>>regarding the
>>mistaken identity - check it out at
>>http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the
>>real
>>story
>>here.
>>
>>73 de N1PQG, another lowly tech trying to upgrade.
>>
>>
>>
>>In article <20001228165724.08425.00000054@ng-fm1.aol.com>,
>> fractenna@aol.com (Fractenna) wrote:
>>> Shouldn't the americal radio relay league be doing damage control
>>before the
>>> press starts playing up the ham radio angle on this guy??
>>>
>>> Not all of us hams are 300 pound-grrrizly adams-- loner- man-
>>mountains who go
>>> and shoot people.
>>>
>>> Some of us don't even have guns...or even evil thoughts against
>>others.
>>>
>>> Just a thought.
>>>
>>> Phil
>>> de N1ZKT
>>>
>>
>>
>>Sent via Deja.com
>>http://www.deja.com/
>

OK you misleading person, I'll post it yet again.

>Here it is:

I will repost Dr. Cohen's warning on this. I for one am VERY RELIEVED to see
KB1EVA IS NOT the Wakefield Killer.

Thanks to N1IR and N1PQG for setting us straight!

73
Phil
de N1ZKT

>Guys - please don't continue beating up on KB1EVA - he's NOT the
>Wakefield
>killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does
>live
>in Haverhill, but other than that, there is no connection to that
>bearded
>bastard. Our fellow amateur has been bombarded by press and outraged
>citizens since the incident, and this type of discussion is only making
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>worse. The Lawrence Eagle Tribune did a nice article on 12/27
>regarding the
>mistaken identity - check it out at
>http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the
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>here.
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>73 de N1PQG, another lowly tech trying to upgrade.
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>
>In article <20001228165724.08425.00000054@ng-fm1.aol.com>,
> fractenna@aol.com (Fractenna) wrote:
>> Shouldn't the americal radio relay league be doing damage control
>before the
>> press starts playing up the ham radio angle on this guy??
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>> Not all of us hams are 300 pound-grrrizly adams-- loner- man-
>mountains who go
>> and shoot people.
>>
>> Some of us don't even have guns...or even evil thoughts against
>others.
>>
>> Just a thought.
>>
>> Phil
>> de N1ZKT
>>
>
>
>Sent via Deja.com
>http://www.deja.com/
>
>
>

From N1IR on 12/29

"Before everyone gets too hot and bothered, check out the CNN stories on McDermott. Also, the Boston Globe articles on www.boston.com. They say he only moved to Haverhill recently, not in February as someone showed on here from the callbook URL. I also noticed, from qrz.com, that his e-mail is not the one that the media refers to.

Haverhill is a pretty small town, but I imagine it's possible to have two Michael McDermotts..with electronics backgrounds...so let's not crucify this guy until/if we know for sure.

I can relate to this: when I was 18 I lost my lunch (at the school lunchroom even) when I read that 'Nathan Cohen' had been arrested for embezzling several million dollars. Of course, he was in a different state, let alone different town.

73,
Chip N1IR "

73,

Phil
de N1ZKT

460. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:35:17 UTC
From: fractenna@aol.com
Message-ID: <20010104183517.27490.00000376@ng-fm1.aol.com>
Source record: 172979

>Thanks, Mike- your posting has been the best laugh of the week, so far!
>Just a case of mistaken identity, and it sure got the no code/pro code
>rumble going again :o)
>Poor KB1EVA. That must have been a horrible experience for his family.
>Perhaps a good lesson here, however-
>Question authority, challenge 'experts', investigate personally,
>form your own informed opinions!
>Ya gotta love those rumor mills, though- eh? :o)
>73, David K3KY
>
>In article <a4656.32571$1M.7470624@typhoon.ne.mediaone.net>
>"Mike" <laugh@spam.com> wrote:
>
>> Guys - please don't continue beating up on KB1EVA - he's NOT the Wakefield
>> killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does live
>> in Haverhill, but other than that, there is no connection to that bearded
>> bastard. Our fellow amateur has been bombarded by press and outraged
>> citizens since the incident, and this type of discussion is only making it
>> worse. The Lawrence Eagle Tribune did a nice article on 12/27 regarding
>the
>> mistaken identity - check it out at
>> http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the real
>> story
>> here.
>>
>> 73 de N1PQG, another lowly tech trying to upgrade.
>>
>>
>> "Brian" <brianburke@my-deja.com> wrote in message
>> news:92tseatla1@nnrp1.deja.com...
>>> In article <vDO26.310$e5.815717@news.ntplx.net>,
>>> "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:
>>> > Cecil <Cecil.A.Moore@IEEE.org> wrote:
>>> >
>>> > > > That's just great. And if he is, we can start the myth that hams
>>> are
>>> > > > mostly wacko, just like Vietnam Vets.
>>> >
>>> > > Aren't most hams wacko? Proof is on r.r.a.p.
>>> >
>>> > Do you believe that most hams post to rec.radio.amateur.policy?
>>> >
>>> > 73,
>>> > Ed Hare, W1RFI

>>>
>>> ARRL Member?
>>>
>>>
>>> Sent via Deja.com
>>> http://www.deja.com/
>>
>
>

hEY THERE DAVE--

Didn't we already hear that this wasn't (likely to be) KB1EVA? Or am I just hallucinating a post by N1IR om 12/29?

73
Phil
de N1ZKT

461. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:46:13 UTC
From: k1bqt@aol.com
Message-ID: <20010104184613.13059.00000368@ng-co1.aol.com>
Source record: 172980

>The Boston papers report this guy lives in Haverhill and sure enough there it is in the flesh as KB1EVA.<

Nice detective work "Phil"! Of course, since nobody can prove who actually wrote this mis-information and posted it via "fractenna", responsibility ultimately resides with the the person who pays for that address and controls access to it.

For my own part, I was mislead by the post--and I apologize deeply to Mike, KB1EVA, for any inconvenience my own commentary may have caused. The fractenna site has been "dark" for the last couple days, and think I can see why.

Interestingly enough, the Dover Rochester Times, a small NH local, recently stopped printing the names of apprehended suspects appearing on the police blotter when the Rochester NH police department refused to provide offenders' addresses. The reason? Because, with no address given, any other person in town with the same name might be unfairly subjected to social ostracism and harassment for an offense they didn't committ.

Guess the Times knew what they were doing! Fractenna did not.

Rick K1BQT

462. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:53:26 UTC
From: fractenna@aol.com
Message-ID: <20010104185326.12249.00001432@ng-cr1.aol.com>
Source record: 172981

>Guess the Times knew what they were doing! Fractenna did not.
>
>Rick K1BQT
>

I think its going to be a LOT more quiet from Chip there "Rick" because the legal process has begun. Can't say exactly what's gonna happen, but I gather your post office might having something extra special for ya real soon:-)!

Only on this NG can black be white and up be down. Thanks for makin' it that way! But not for long.

BTW I'm sittin' next to a HUGE folder of K1BQT posts and there's some real good ones. Wonder what they'll be used for??

73 "Rick" !

Phil
de N1ZKT

463. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-04 23:57:01 UTC
From: k1bqt@aol.com
Message-ID: <20010104185701.13059.00000369@ng-co1.aol.com>
Source record: 172982

Extremely lame damage control, and an amazing piece of "spin". Fractenna initiates a false story, hiccups, then heaps self praise on itself for setting the world straight! Denial is not a river in Egypt, it's rapidly becoming a famous institution in Belmont!

Rick K1BQT

464. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:05:20 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A550FC0.7E45@wt.net>
Source record: 172983

Cecil wrote:
>
> Mark Keith wrote:
> >
> > Cecil wrote:
> > >
> > > Mark Keith wrote:
> > > > You HAVE to know code to work HF.
> > >
> > > Nope, there are plenty of HF stations who don't know Morse code.
> > > CBers, for example.
> >
> > They wouldn't be too long if Riley had his way about it.
>
> You missed the point, Mark. Legal CBers are HFers and don't have
> to know Morse code. In fact, CW is illegal on CB, isn't it? :-)

But they are also not supposed to talk over 150 miles away. Also using type accepted xtal controlled radios.
To drag CB into this is kinda silly. Besides, all the people I know that run 11m wouldn't be caught dead with a "cb" radio. They are all using ham rigs, usually better than mine. Thats how the guy I know about got caught. He was in between channels. Dead givaway. Almost all the people I know that hang out on 11m and are serious about radio do so because they don't want to take the code test. Except for maybe the truck drivers.
>
> Point was, of all the HF stations, aren't hams the only ones
> required to know Morse code?

Sure, but we still commonly use it. And we are the only ones that can build our own gear that could possibly interfere with other stations. If Joe ham that transmits "cw only" hears Sam ham spewing 40 kc worth of garbage up and down the band, how will Joe be able to tell Sam if Sam can't copy code? Thats the reasoning behind the rule. Whether it's still a valid rule is not the point, the point is it's not a hazing ritual as Richard suggests. MK

--
http://web.wt.net/~nm5k

465. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:05:29 UTC
From: fractenna@aol.com
Message-ID: <20010104190529.06923.00000898@ng-mb1.aol.com>
Source record: 172984

>Extremely lame damage control, and an amazing piece of "spin". Fractenna
>initiates a false story, hiccups, then heaps self praise on itself for
>setting
>the world straight! Denial is not a river in Egypt, it's rapidly becoming a
>famous institution in Belmont!
>
>Rick K1BQT
>
>

This from a man who recommends how to get the mafia to murder someone he
doesn't like!

There's credability for ya'!

73
Phil
de N1ZKT

466. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:17:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5512A7.2180@wt.net>
Source record: 172985

David Sinclair wrote:
>
> Thanks, Mike- your posting has been the best laugh of the week, so far!
> Just a case of mistaken identity, and it sure got the no code/pro code
> rumble going again :o)
> Poor KB1EVA. That must have been a horrible experience for his family.
> Perhaps a good lesson here, however-
> Question authority, challenge 'experts', investigate personally,
> form your own informed opinions!
> Ya gotta love those rumor mills, though- eh? :o)
> 73, David K3KY

Thats why I was careful not to give his whole callsign or name in my original posts about it. You could have two guys the same name in the same town. Although myself I was convinced he was probably the right one, you never know. Looks like he wasn't. There are lots of Mark Keiths. There was a Mark Keith in Mass. in the 1690s. He was the first that I know of. If I do a people search on my name, I get a whole boatload of me. All in different places. But all originated in Scotland many a moon ago. Most of my other half all came from England. There must be 100's of me around the world. Thats a lot of ugliness to spread around if they all look like me. :/ MK
--
http://web.wt.net/~nm5k

467. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:20:52 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A551364.B33EDE77@dvol.com>
Source record: 172987

Richard Harrison wrote:

> Jim, N2EY wrote:
> "The number of hideously communications and physically disabled folk
> learning the code and finally being able to express themselves by some
> truly inventive means is growing by leaps and bounds."
>
> That struck me as so funny, I couldn`t quit laughing for awhile. Thanks,
> Jim.
>
> Is Jim characterizing radio amateurs? Well maybe he meant other
> handicapped people. Maybe tragedy has comic implications, at times.
>
> What does this have to do with test requirements for amateur radio? It`s
> only desperation to find some merit in an outmoded device, Morse code,
> used to exclude people from the amateur ranks. It`s been used as hazing,
> or passwords and secret codes used by children in their secret
> societies.
>
> Using the tragic to persuade that morse should pervade the ham bands is
> not new. There is the old stroke victim story. The speechless patient
> could only communicate with the medic, who happened to be a ham, by
> squeezing his fingers in Morse code.
>
> It`s a real stretch to make practical conclusions from the
> extraordinary.
>
> Best regards, Richard Harrison, KB5WZI

>
. . . 'bout what I'd expect out of a codeless wonder.

468. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:22:06 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5513AE.98@wt.net>
Source record: 172986

Cecil wrote:

>
> The resonant frequency with the top hat is 3.95MHz. The resonant
> frequency without the top hat is 8.5MHz. The top hat shifts the
> resonant frequency by 4.5MHz. Since minimum inductance on the
> loading coil results in maximum field strength, the effect of
> a top hat is as close to something for nothing as one can get
> with mobile antennas.
> --
> http://www.mindspring.com/~w6rca

How does the wind effect that thing? I bet effective but looks like kind
of a wind catcher??? MK
--
http://web.wt.net/~nm5k

469. Re: Latest on CFA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:36:58 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A55172A.9533F2D0@oio.net>
Source record: 172989

Reg,
It's been a few months since I checked on the CFA antennas
in use at a number of stations. At that time, the one in
Austrailia was the most documented installation. The actual
performance of the CFA at that time was nothing close to the
projected specfications. It was so bad, in fact, that the
station had gone back to using their 'normal' antenna, and
demanded that the CFA be removed from their building. The
test results and measurements by the designer had been proven
false, and in general, the whole idea was suspect.
Until there is quite a bit more evidence to the contrary, I
think the CFA can be written off as a scam.
'Doc

470. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:37:51 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A55175F.8D8A881D@dvol.com>
Source record: 172988

Mike Mayer wrote:

> I got the highest grade on the final exam in my third year fields and
> waves class (used "Lines, Waves, and Antennas" by
> Brown/Sharpe/Hughes/Post) :-), and was a Design Engineer for 15 years. I
> now help sell signal integrity software (all of that transmission line
> theory helps). I don't have a license and think it would be silly to
> learn morse code in order to get one. I've never worked for Radio Shack,
> do not own a scanner, and do not own an HT :-).

>
Yeah, I pegged a few meters in engineering school myself. That and and a buck
gets me a cup of coffee and nothing one way or another in ham radio.
>
You don't need to take a code test to become a ham. Just do it.
>

> Mike Mayer

>
w3rv

471. Re: Homebrew Antenna sugestions for 462mhz please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:37:57 UTC
From: tom_bruhns@agilent.com
Message-ID: <933514$bl1$1@nnrp1.deja.com>
Source record: 172990

I assume right now you're using a built-in antenna on the PR-1000. If you use a reasonably short length of low-loss line between the radio and your roof-mounted antenna, you probably don't need much of an antenna up there. I'd suggest a simple "ground-plane" antenna. A web search should turn up several ideas for how to build one, but if not, ask again here. There's a LOT to be gained by keeping the two ends of your radio link line-of-sight or nearly so, so getting practically any antenna up high like that is a big plus. But do use good line and minimize the length of it. 3dB would be a good maximum line loss to shoot for, I'd say, which will be fairly easy with 60 feet or so of RG-8 foam line or maybe 35 feet of RG-8X. Those are "soft" numbers...a bit more won't kill the advantage of height in the clear.

There are antennas you could build with considerably more gain than a ground plane, but they're more trouble and most would take instruments to get tuned up correctly. A ground plane should work if you are simply careful about getting things the right lengths and connected correctly.

Cheers,
Tom

In article <t57b9vhq3fl2f3@corp.supernews.com>,
"tomfree" <tfreeman@blueridge.net> wrote:
> I just started using the Cobra PR-1000 to communicate with the house
when
> out on my farm. I would like to add an antenna mounted on top of the
house
> to make communications more reliable when at the extremes (distance
wise) of
> my property. We are talking rolling hills and woods. The house is
near the
> middle of the tract of land. It also has a tin roof and I was not
sure
> about the effects of this on any installation. The antenna would be
mounted
> on a pole about ten feet down from the crest of the roof at one end of
the
> house, the pole will extend above the crest. Since the antenna will
be
> fairly small at these frequencies (462Mhz) I wanted to try my hand at
> building one. Any suggestions would be appreciated.
>
> Tom
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

472. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:51:46 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9335r2$8df$2@208.206.142.85>
Source record: 172991
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

```
Bill Sohl wrote:
>
> On Wed, 03 Jan 2001 21:22:04 -0500, Brian Kelly <kelly@dvol.com>
> wrote:
>
> >
> >Bill Sohl wrote:
> >
> >> And you can totally ignor several of those modes and
> >> still pass the written...but you can not ignore the
> >> separate CW exam and still become a General.
> >
> >You can get 80% of a 5wpm code test wrong and still pass.
> >w3rv
>
> You can get 100% of the RTTY, FM or SSB questions wrong
> and still pass...but, as you note you can't do that with the 5wpm
> test.
>

Do tell. What that means is that you can be dumb as a box of rocks with
a photographic memory, but you still need to know *something* - The
code.
```

473. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 00:56:34 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <246339.aii.ln@mail.specsol.com>
Source record: 172992

Fractenna <fractenna@aol.com> wrote:
>>Guess the Times knew what they were doing! Fractenna did not.
>>
>>Rick K1BQT
>>

> I think its going to be a LOT more quiet from Chip there "Rick" because the
> legal process has begun. Can't say exactly what's gonna happen, but I gather
> your post office might having something extra special for ya real soon:-)!

> Only on this NG can black be white and up be down. Thanks for makin' it that
> way! But not for long.

> BTW I'm sittin' next to a HUGE folder of K1BQT posts and there's some real
> good ones. Wonder what they'll be used for??

> 73 "Rick" !

> Phil
> de N1ZKT

They'll be used to help pour large piles of money down a rat hole, IF they
are used for anything at all.

Jim Pennino

474. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:03:13 UTC
From: k1bqt@aol.com
Message-ID: <20010104200313.24033.00007401@ng-fs1.aol.com>
Source record: 172993

>This from a man who recommends how to get the mafia to murder someone he doesn't like!<

Your pathetic and libelous attempt at diversion reminds me of the popular airline commercial with the tag line, "Wanna get away?" Fact is, you just farted in church, shook Judge Judy's hand with your fly open, and burped garlic pizza fumes all over the elevator--and you'd just love to blame it on someone else! Why don't you just apologize to KB1EVA and be done with it? How much can that hurt?

Rick K1BQT

475. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:05:37 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <9336mc$8gg$1@iac5.navix.net>
Source record: 172994

Get a life loser...

"Fractenna" <fractenna@aol.com> wrote in message
news:20010104185326.12249.00001432@ng-cr1.aol.com...
> >Guess the Times knew what they were doing! Fractenna did not.
> >
> >Rick K1BQT
> >
>
> I think its going to be a LOT more quiet from Chip there "Rick" because
the
> legal process has begun. Can't say exactly what's gonna happen, but I
gather
> your post office might having something extra special for ya real soon:-)!
>
> Only on this NG can black be white and up be down. Thanks for makin' it
that
> way! But not for long.
>
> BTW I'm sittin' next to a HUGE folder of K1BQT posts and there's some
real
> good ones. Wonder what they'll be used for??
>
> 73 "Rick" !
>
> Phil
> de N1ZKT
>
>

476. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:07:36 UTC
From: k1bqt@aol.com
Message-ID: <20010104200736.24033.00007402@ng-fs1.aol.com>
Source record: 172995

> I'm sittin' next to a HUGE folder of K1BQT posts and there's some real good ones. Wonder what they'll be used for??<

Keeping your hands warm when you don't have a place to live?

Rick K1BQT

477. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:20:06 UTC
From: Brian <brianburke@my-deja.com>
Message-ID: <9337g0dlh1@nnrp1.deja.com>
Source record: 172997

In article <932u88$e18$1@bob.news.rcn.net>,
k3ky@erols.spamnocom (David Sinclair) wrote:
> Thanks, Mike- your posting has been the best laugh of the week, so
far!
> Just a case of mistaken identity, and it sure got the no code/pro code
> rumble going again :o)

It really doesn't take much, does it?

> Poor KB1EVA. That must have been a horrible experience for his family.
> Perhaps a good lesson here, however-
> Question authority, challenge 'experts', investigate personally,
> form your own informed opinions!
> Ya gotta love those rumor mills, though- eh? :o)
> 73, David K3KY

Questioning and rejecting the old Morse Myths and Morse Authorities is
the cornerstone of the no code movement.

73, Brian

Sent via Deja.com
http://www.deja.com/

478. Re: Open wire feeder v coax loss

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:25:54 UTC
From: k6mhe@arrl.net
Message-ID: <3a551fc2.21696256@news.mcn.org>
Source record: 173006

John,

Mine will not tune 50-Ohms (resistive) on twenty meters! I really doubt that the ranges given is true for all situations. I think (and haven't proved) the manual is using the best situation possible for those those ranges.

Understand I'm not poor-mouthing the matchbox just stating that it is not a panacea. Nor is it a cure *all* for the coax to balanced line transitions.

Danny, K6MHE

On Thu, 4 Jan 2001 15:27:38 -0800, "John Moriarity" <k6qq@hdo.net> wrote:

>> ... The matchbox was designed
>> to match ~ 500 Ohm balanced line, of course it will tune beyond that
>> range depending upon frequency and so forth.
>
>The manual for my Matchbox says that it "is capable of
>matching a 52 ohm coaxial transmitter output into resistances
>ranging from approximately 25 to 1200 ohms for balanced
>lines and 25 to 3000 ohms for unbalanced lines and antennas".
>The real limitation comes with the reactive part, which they
>say can be "several hundred ohms at the higher frequencies
>with somewhat less reactance compensation at the lower
>frequencies". That's where a switchable section of line can
>help. Cecil, W6RCA, is a big advocate of this method.
>
>I am forever thankful for EZNEC and MicroSmith which
>allow me to easily predict what impedance I'll have at the
>shack end of the transmission line.
>
>> I have and use a matchbox. In my case it did not provide a good enough
>> match for my solid state rig on several amateur bands. My solution was
>> to include a "T" type tuner in series with the matchbox and doing that
>> everything works fine.. and I can also get on 160 with this
>> arrangement. However, this setup does require a bit more knob
>> twisting... But what the heck, real hams twist knobs :-)
>
>Good for you! So many new "hams" want everything to be
>"no tune". Heck, you might just as well use the Internet ;-)
>
>73,
>

>John, K6QQ
>Alturas, CA, at the corner of 299 & 395.
>
>
>
>

479. Re: Latest on CFA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:33:04 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A55244F.4BA86DF4@ipeg.com>
Source record: 172996

Reg Edwards wrote:

> It won't be long now !
> Try this :-
> http://www.longwaveradio.com/

My map of Man shows the area they want to use as being in a marsh.
Hmmmm....

Marty
N7MX

480. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:33:46 UTC
From: n2ey@aol.com
Message-ID: <20010104203346.01557.00000137@nso-mo.aol.com>
Source record: 172998

In article <15393-3A54AB4B-40@storefull-115.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"The number of hideously communications and physically disabled folk
>learning the code and finally being able to express themselves by some
>truly inventive means is growing by leaps and bounds."

No. I didn't write that.

>That struck me as so funny, I couldn`t quit laughing for awhile.

Disabilities are not "funny".

>Thanks, Jim.

I repeat: I didn't write it.
>
>Is Jim characterizing radio amateurs?

No. Jim didn't write it.

The author was talking about REAL people with REAL disabilities who are using
Morse code to communicate. That's a good thing.

>Well maybe he meant other
>handicapped people.

He wrote "disabled", not "handicapped".

> Maybe tragedy has comic implications, at times.

The tragedy is that you missed the point entirely.
>
>What does this have to do with test requirements for amateur radio?

A little. Not much.

Back up in the tread and see what was being discussed.

Cecil claimed that Morse code had reached 100% of its potential. He said there
was nothing new to be learned about it, and it had no new applications. He
challenged me to come up with some. I did.

Not talking about test issues at all.

> It`s
>only desperation to find some merit in an outmoded device, Morse code,

It's not outmoded if people are using it and finding new uses for it.

>used to exclude people from the amateur ranks.

That's not what Morse is used for. You can get a ham license with no knowledge of Morse at all. Ever listen to the HF ham bands?

> It`s been used as hazing,
>or passwords and secret codes used by children in their secret
>societies.

Nope.
>
>Using the tragic to persuade that morse should pervade the ham bands is
>not new.

The discussion was about new uses for Morse. The test issue is a dead duck. The FCC has reduced the test requirements as far as they can without a treaty change. The treaty won't change before 2003. End of story.

And the reason the FCC reduced the tests (both code and written) is simple: Less admin work for them. 5 wpm code means no more medical waivers. Fewer license classes mean fewer upgrades. Less paperwork, less cost. Simple.

> There is the old stroke victim story. The speechless patient
>could only communicate with the medic, who happened to be a ham, by
>squeezing his fingers in Morse code.

Those stories are true. You ever deal with a stroke victim? Ever been intubated?

Why do you make fun of people who have?
>
>It`s a real stretch to make practical conclusions from the
>extraordinary.

The conclusion is simply that Morse has new uses. It's not "outmoded". That's all.
>
73 de Jim, N2EY

481. triband mobile Comet vs Diamond

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:38:53 UTC
From: Bruce Brackin <bbrackin@bellsouth.net>
Message-ID: <3A5525AC.E9AEFE94@bellsouth.net>
Source record: 172999

Anyone tried comparing the Comet SB15 and Diamond CR627 triband mobile antennas for 6/2/70cm? Had a SB15 that got "treed" and need to replace it. Wondering about folks experience with the CR627B. Also, will the Diamond fold over?

Thanks - Bruce, KD5IUG

482. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:42:04 UTC
From: rwclark@seanet.com
Message-ID: <3a8c08e0.1052719009@news.seanet.com>
Source record: 173000

On Wed, 3 Jan 2001 20:47:55 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>
>"Richard Clark" <rwclark@seanet.com> wrote in message
snip
>> The mechanics here are simply the Z's found at the interface or
>> boundary. That is, the wave in the air travels through a Z of more
>> than 300 Ohms
>
>Something of the order 377 Ohms per sqaure I think.
>At least a bit of RAM (RADAR ABSORBING MATERIAL) with that sort of spec has
>a very low reflection having absorbed most of the ray.
>This works out to (u0/Eo)^1/2 according to Ginzton, Silver, et.al.
>
>>whereas when it encounters the earth (in any form) it is
>> subject to a mismatch because that earth Z is substantially less than
>> free space Z.
>
>The boundary condition?
>
Yes a boundary condition (the point where the free space Z meets the
Earth Z).
>> It is the mismatch that controls the mechanics of
>> reflection and even if the ground is lossy. If it presents a
>> substantial Z differential to free space, then very little power will
>> be lost to ground (the mismatch reflects most of the power and very
>> little of the wave is actually absorbed in the loss of ground).
>
>How is this measurement acheived?

Historical records take care of that form me, my source:
"TV and Other Receiving Antennas," Arnold Bailey
I will lace that data into the text below.
>
>> Thus the quick answer to your question above is - yes - ground
>> Resistance (Z) is significant to the process of reflection. the
>> significance of that ground resistance is found in the differential,
>> not in the absolute value. The greater the differential the better.
>
>Interesting, so
> as R(earth) approaches zero
> 377/ R(earth) approaches infinity
>or no power loss.
>or simply Power(earth) = I^2 R(earth) = 0

>
>Now does this go the other way
>as R(earth) approaches infinity
>377/inf approaches zero.
>And power dissipation is 377 I^2
>or all of the power is in the wave.
>This would indicate that the higher the wave is above the Earth the better
>it goes.
>
Not sure if I follow your discussion, OM, but I cover that in the text
that follows.
>Returning for a moment to a practical AE at long wavelength in an urban
>garden. just how high is high enough. In other words would it be better to
>site the active element a bit higher so that the stub to ground does not
>place such a stringent requirement upon Earth conduction?
>
>|
>|
>|
>|
>|____
>_____ (~) feed point
>| <stub match also used to elevate AE
>|___e_a_r_t_h__r_a_d_i_a_l_s_ whatever____
>
>perhaps some lumped reactance in this side,
> but not sufficient to limit the loading current.
>
>> (I would add that it necessarily follows that earth Z should be as low
>> as possible - if you can control that factor.
>
>Moving the feed point just a little away from the earth will transfom the
>feed requirement. I suspect that even a little will help.
You are talking about Match conditions (different from reflection
conditions even when we are talking about the same Earth).
>
The following explores Earth Z being very High (instead of very low)
>> Contrariwise, a
>> exceedingly high earth Z would perform the same job just as capably,
>> but attaining a very high Z is for all practical purposes - far more
>> difficult, if not downright impossible.)
>
>Yes we Earth bound creatures have to accomodate our environment. :)
>
>> Now to the second part of your question (part B). Most neophytes
>> presume that the ground condition at the base of the antenna is
>> responsible for the low angle launch characteristic. It is not.
>
>I might expect the ground resistance is the factor that limits load current,
>and nothing else.

>
>> Ground conditions near the antenna (within the first wavelength) are
>> responsible for MATCH conditions far moreso than launch conditions.
>
>So a small stub in the earth side of a vertical below the feed point would
>help to increase the required earth impedence for satisfactory loading, and
>feeder VSWR.
No, there is nothing we can do about ground except create an
artificial one from radials. Stubs or gamma matches do not change
ground, they change the transform of its Z (Earth Z is as lossy before
as it is after).
>
>> It is the far field ground that matters more for launch conditions and
>> again this strictly a function of the Z differential.
>
>This supposes that the vertical is sufficiently high above the more distant
>mirror will produce correctly phased waves to combine with the main wave
>thus producing the beam launch angle. As the AE height increases so the
>angle becomes shallower and a greater distance at ground level is acheived.
>Yes you have drawn quite a clear picture of that physical process for me
>thank you.
It is more the height of the current max (which of course is a
function of the height of the antenna, but in reality ALL currents are
responsible - not just the current max). Think in terms of light rays
and imagine a source roughly 1/2 up a quarterwave structure. This is
the origin of your "ray" for the purposes of observing where it
strikes ground for that principle reflection. If you are interested
in a 10 degree launch angle, your ray must be depressed 10 degrees
below the horizon. Follow that ray to ground and you find it strikes
it more than 5 wavelengths away from the antenna. This is the point
of reflection and THAT ground is the principle controller of the
efficacy of reflection. This is because the boon of verticals is the
combination of the reflected ray and the direct ray. If you cannot
support a reflected ray at the Earth/Free Space boundary, you have
lost the 3 dB boon.
>
>>The higher the
>> mismatch to free space, the greater the reflection (the cleaner the
>> mirror). If you could extend those 120 radials out 10 wavelengths,
>> then you may drastically boost that Z differential (by driving down
>> the ground resistance).
>
>I suspect that the major effect of increasing the length of the ground
>radials is to increase the maximum possible AE feed current and therefore
>notionally increase the efficiency of the feed. Since shorter radials are
>already acheiving high efficiencies of feed current the increase in radiated
>power will go almost un-noticed. Especially far field signal strength
>monitoring will now be subject to factors having a greater bearing upon the
>propogated wave and power.
>

Your are mixing Match conditions in your statement above with the
launch conditions that I am discussing in the response.

>> However, this is a very difficult requirement
>> to be met (your 10M vertical would have to sit in the middle of a
>> football stadium sized ground field - scale that to 160M to discover
>> the sheer size demanded!).
>
>And at 136 kHz even more so. :)
>
>> One compelling proof of this is found in the excellent reports of
>> mobile operations within short distances from a shoreline. Water is
>> not a very good conductor, but its Z is sufficiently low to present a
>> very high mismatch to free space borne waves and thus presents a very
>> good reflection surface.
>
>How for instance would a vertical sited at say Pevensey marshes near to the
>shore line, compare with and identical structure on top of the Cliffs at
>Ventnor.
>Both structures will launch over a sea water mirror but the greatest
>differnce between the two structures will be the angle of incidence at the
>point where the wave first meets the surface of the sea.
>
This is answered above.

>>The near field earth conditions dominate the
>> match, and the far field earth conditions dominate the launch angle.
>
>I think that is what you have caused me to see. thank you.
>
>> In all practicality we can control near field earth conditions far
>> better than far field earth conditions (except when we purposely
>> choose a site based on these considerations such as locating near a
>> ocean shoreline, lake, or marsh).
>
>I guess I better look for a house on a cliff top near the sea, there should
>be some cheap ones going about now because of their propensity to "fally in
>the water."
>Applogies to Sir Eccles
This would be consistent with my comments.
>
>> Thus to answer your question in the context of this thread, shorter
>> radials may be effective for a MATCH condition, but have no effect in
>> the launch condition. The same answer could be applied to lengthened
>> radials (that is, until they are some 5 to 10 wavelengths long) too.
>
>So what one might expect to see is an increase in loading current but no
>reported increse of signal level at a remote point. :)
That, too, is fair to say.
>
>One could see that ther are the seeds of disagrement between the operator of

>the transmitting station and the receiving station.
>
>However as the primary objective is the signal level at the distant point we
>must take the receiver operators word for the quality of the communications
>channel.
I recall hearing a QSO "Got you 5 by 9 here... could you repeat that?"
>
>TNKS 73

Hi Gary,

I am responding principally to the concern of low angle radiation and
if any improvement comes by virtue of radials. You have identified
that there is a grain of that issue in simply improving the radial
system(stronger signal in general is found at all angles). Yes, on
those observations this is true and you are already aware that may not
be very significant.

But back to improving the launch angle, here is some data to consider.

As you've already noted, free space Z is 377 Ohms.
I will now offer the Earth Z for various conditions:
frequency dry soil wet soil ocean
300 KHz ~150 ~25 1 Ohm
3 MHz ~180 ~50 7 Ohms
30 MHz ~180 ~65 20 Ohms
300 MHz ~180 ~65 30 Ohms

We now enter into the poorly understood (for this group) concept of
the "Brewster Angle."

This is also known as the "Critical Angle" and represents that angle
subtended by the ray and Earth, beneath which there is little
reflection and maximum absorption. This is what robs the horizon lobe
of its maximum gain at very low angles. That is, there is still a
principal ray 10 degrees above the horizon, but the reflected ray 10
degrees below the horizon MAY be absorbed by Earth and offer no
contribution to the signal strength at the other end.

The Z ratio of Earth to Free Space has a log-linear relationship with
this critical angle. If Both Z's equal then you cannot expect a very
good radiation boost by reflection for angles less than 45 degrees.
Here is a summary:

SWR lowest angle of reflection
1:1 45 degrees
2:1 22 degrees
3:1 ~15 degrees
4:1 ~12 degrees
5:1 ~10 degrees
10:1 5.5 degrees
50:1 1 degree

You will note that to obtain a 50:1 SWR between Free Space and Earth, then Earth must be Ocean below 3 MHz. If you want to have a reflected ray combine effectively with a direct ray for angles of 10 degrees you will need an Earth Z 1/5 of 377 Ohms. That is, 70 odd Ohms, which means that Earth must be wet soil. You will note the trends above and find that for VLF/ELF, the Earth/Free Space interface is as effective as a copper boundary. This condition is reflected (no pun) in the upper atmosphere and creates a waveguide condition which creates very strong earth bound signals that span the globe (this why they use this frequency for submarine communications).

This all leads us back to the topic of radials, and of course we see that short radials have nothing to do with the reflection point in the remote distance unless they are VERY long and VERY dense (which is already a contradiction). If such were the case then Earth Z would appear to be on the order of 1 Ohm (we can only hope) at that remote point.

73's
Richard Clark, KB7QHC

483. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:45:53 UTC
From: richardharrison@webtv.net
Message-ID: <27574-3A552751-11@storefull-117.iap.bryant.webtv.net>
Source record: 173001

Mark Keith wrote:
"If Joe Ham, that transmits "cw only" hears Sam Ham spewing 40 KHz worth of garbage up and down the band, how will Joe be able to tell Sam if Sam can`t copy code?"

(1) Let George Ham do it.
(2) Joe Ham can get George to do it.
(3) Joe can turn on his modulator to do it.
(4) Joe can send Sam an e-mail.
(5) Joe can take 2 asprin and call Sam when rates are lower.
(6) Joe can use priority mail to Sam.
(7) Joe can send Sam a radiogram delivered by phone from another ham in Sam`s community.
(8) Joe probably wouldn`t rat on Sam Ham to the FCC unless there`s more to the story.

Best regards, Richard Harrison, KB5WZI

484. Re: Need manuals for Wilson System III

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 01:48:46 UTC
From: lucascom <lucascom@email.msn.com>
Message-ID: <eVk9gnrdAHA.321@cpmsnbbsa09>
Source record: 173002

The manuals and some parts for the old 70's Wilson amateur antennas can be obtained from Majestic Communications (Maco) here in Memphis. They have quit building the line, but still have an unknown amount of parts. FWIW, I bought a bunch of formed element_to_boom clamps (similar to the Hygain brackets, only slightly longer) from them for a good price. My last purchase was a year ago, but I'm sure they've got more.Their web site has all of their current production CB (ugh!) antenna manuals in PDF format. If you need the older ham stuff, call them at 901-794-9494.

Mike Lucas W5CHR
Memphis, Tenn.

485. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 02:15:09 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A552E2D.3DFEEEC@dvol.com>
Source record: 173003
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick Carroll wrote:

> Do tell. What that means is that you can be dumb as a box of rocks with
> a photographic memory, but you still need to know *something* - The
> code.

>
Heh.

486. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 02:16:03 UTC
From: rwclark@seanet.com
Message-ID: <3a8d27d7.1060646318@news.seanet.com>
Source record: 173004

On Thu, 04 Jan 2001 19:26:19 GMT, tom_bruhns@agilent.com wrote:

>Hi Richard,
>
>The original probe is really pretty simple, conceptually: sample the
>current and the voltage with very low jitter and at a relatively low
>rate. Buffer the sampled output back to the main box (in a way that
>specifically matches the system design). As they say, the devil is in
>the details.
>
>I tend to keep pretty well abreast of what modern op amps can do, but I
>sure don't see much place for them in this situation. (Why would you
>"precision rectify" before sampling and lose the phase info??)
>
>As I see it, the question is something like, "is it practical to
>homebrew a probe that will plug into a stock HP-4815A box to replace a
>non-existing original probe?" It might be possible, but in the 4815A
>manual you won't find much info on the parts in the probe, specifically
>the current sampler transformer, a couple current-mode baluns, and a
>delay line. It seems to me if you want to keep to the spirit of the
>question as I've stated it, you probably shouldn't have to supply
>external power to the probe, and the output should interface directly
>with the 4815A main box. It seems to me it would be a step backwards to
>make things more complicated to use than the original.

I am unaware of the actual circuitry, so I assume a situation where it
appears to be much like the SWR circuit we find in the common meter.
I recall there being an issue of finding exotic semiconductors that
seems to be missing from your premise above - that is what I am
attending to in bringing Op Amps into the mix. Otherwise, what's so
difficult about building the probe except perhaps special order coax
that goes to the probe? If this were the case, I would say that is
simply a marketing requirement not an engineering one.
>
>If the question instead is, "can one homebrew a vector impedance meter
>with capabilities similar to the HP-4815A?" then maybe there should be a
>different thread on that. In fact, there's already one over in
>sci.electronics.design just now, similar freq range and all.
>
>Cheers,
>Tom

Hi Tom,

As you've already averred, this is actually a simple circuit (but it does have some exotic components). As such, there is no issue with the over riding design, but with the replacement. It is the replacement issue that is frustrating the original poster (either of the probe or the probe components).

The precision rectifier DOES NOT discard phase information, in fact it is eminently superior in maintaining this as the fastest traveling portion of the curve is at the zero cross over, and every diode on the market DOES NOT sustain any signal at the cross over, but rather some 0.3 to 0.6 volts above. This is why this circuit is called a "precision" rectifier. There is far more accuracy in phase measurement at the zero crossover than at the peak which is extremely difficult to find, but very easy to construct. I hope you understand the distinction I am making in that seeming contradiction. I am aware that the 0.3 volt cross-over would serve as well, but my understanding was that there was an issue of replacing semi-conductors. What I offer is a substitution that improves over this problem (if it in fact exists).

Perhaps if I were to expand. My supposition would be that there would be clippers and separators that followed the precision rectifier that would provide the basis for phase angle recovery and incident signal level. The trick here is to observe the complete circuit that performs this operation, not just the probe in isolation as it is only a partial implementation (again, I am unaware of the specifics, but in my career at the bench I have seen what I describe above used to perform these very operations).

My solution was offered as a means to bring the meter back into operation. As a Ham, I, myself, would not shy away from this task - in fact I would embrace it as a technical challenge. However, I have a considerable base of experience in this regard which gives me the confidence to persist to a successful conclusion. I will be the first to admit that this is prone to many problems (already acknowledged as the possibility of building a free running oscillator). This is no guarantee that it is a good solution for everyone, and is not a sift to separate the men from the boys.

73's
Richard Clark, KB7QHC

487. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 02:19:26 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Gca56.533$e5.1331528@news.ntplx.net>
Source record: 173005

N2EY <n2ey@aol.com> wrote:

> >I would be game and we could decide who wins by tallying up CW
> >sweepstakes scores and dividing the score by the power used. :-)

> Works for me!

Okay, but I want to use the year I did 56 QSOs in 31 sections with 10 milliwatts! :-)

> Or maybe we could see who has the most unusual design for an HF
> transceiver. BWAHAHAHA!

Now, for a lobster dinner, I might just bring out the most unusual design I ever thought of for a transceiver. Won't tell you what it is, because though I don't mind losing, I must admit that winning does taste just a bit better.

Should probably have taken this thread off rraa some time ago, so my apologies to my friends here.

73,
Ed

488. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 02:28:50 UTC
From: richardharrison@webtv.net
Message-ID: <4911-3A553162-88@storefull-112.iap.bryant.webtv.net>
Source record: 173008

Jim, I am sorry for mistakenly attributing something to you. I don`t know who wrote it.

Jim did write, or so it appears on my screen:
"The conclusion is simply that Morse has new uses. It`s not "outmoded". That`s all."

Commerce, the military, and other agencies have abandoned Morse. They communicate more than ever, but with other codes and voice.
Today`s voice and data replace Morse. American Telephone & Telegraph Company no longer offers telegraph circuits to anybody, Armed Forces, included. Their name is phoney. It should really be just the AT Company. The Western Union operator no longer occupies a corner down at the railroad depot. No Postal Telegraph messenger boys deliver "wires" on their bicycles.

Morse is no longer stylish, that is, Morse is outmoded.

Best regards, Richard Harrison, KB5WZI

489. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 02:41:44 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Axa56.540$e5.1332780@news.ntplx.net>
Source record: 173007
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian Kelly <kelly@dvol.com> wrote in message
news:3A552E2D.3DFEEEC@dvol.com...

> Dick Carroll wrote:

> > Do tell. What that means is that you can be dumb as a box of rocks with
> > a photographic memory, but you still need to know *something* - The
> > code.

> Heh.

But... but... I learned the code by --- memorizing it! :-)

73,
Ed Hare, W1RFI

490. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:01:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A553907.6E920E4D@dvol.com>
Source record: 173009
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

"Ed Hare, W1RFI" wrote:

>
> But... but... I learned the code by --- memorizing it! :-)

>
Same way you put your engineering degree to use, right?
>
Now what?

491. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:03:24 UTC
From: rwclark@seanet.com
Message-ID: <3a8e30ed.1062972233@news.seanet.com>
Source record: 173010

On 04 Jan 2001 23:57:01 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>Extremely lame damage control, and an amazing piece of "spin". Fractenna
>initiates a false story, hiccups, then heaps self praise on itself for setting
>the world straight! Denial is not a river in Egypt, it's rapidly becoming a
>famous institution in Belmont!
>
>Rick K1BQT

Hi Rick,

Your response was much to lenient. Consider the following root entry
to the thread initiated by Fraudtenna called:
>Wakefield Killer?? Looks Like it...

>As suggested I did a name search on qrz.com. The Boston papers report this guy
>lives in Haverhill and sure enough there it is in the flesh as KB1EVA.
>
>
>K-B-1-E-V-A
>
>
>Maybe this is his dad?? I don't think so myself. Sure looked familiar....He
>sure LOOKS like one of those guys you see at the MIT FLEA!!!
>
>If it IS him this only reinforces the notion to the public that hams have
>lunatics in thier midst.
>
>So much for Dr. Cohen being paranoid and stopping public ham appearances and
>ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I
>think Tom Rouch would do well to distribute that prozac he talks about!!
>
>73
>Phil de N1ZKT

This is simply another ploy of USING someone else's reputation (or
creating one) to serve the last paragraph above. This TRASH was
started for one purpose only, and it wasn't with regard to any greater
human interest issue. All members of this board already note the
allusion made in the last sentence which is in the same vein of a
consistent character assassination. Also note the characterization is
an invention to create a greater illusion of monstrosity AND THEN to
suggest that this is the TYPICAL perception of Hams by the public.

All may note my repugnance of this quote for what it is: TRASH, which
was made some time ago and slammed by the same poster with a veiled

threat wrapped in the ignominy of a perverted sanctity. There was absolutely NO REASON to introduce this subject in an antenna forum.

I think there is a victim here, and he is fully justified in taking legal action against the source of these deliberate speculations and self-serving statements noted in the quote above.

73's
Richard Clark, KB7QHC

492. Civilian Technical Corps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:14:39 UTC
From: ann7how@aol.com
Message-ID: <20010104221439.09687.00000418@ng-fe1.aol.com>
Source record: 173011

I wonder if anybody out there is one of the few remaining ex-members of the CTC. I've been in touch recently with a former member and have had a lot of fun exchanging stories of our sevice with the RAF. ???????? Hal, W9UYA

493. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:20:07 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <t5afbdq802bu2e@corp.supernews.com>
Source record: 173012

You surely did ALL you could to whip up a riot!

Jim

Fractenna <fractenna@aol.com> wrote in message
news:20010104183517.27490.00000376@ng-fm1.aol.com...
> hEY THERE DAVE--
>
> Didn't we already hear that this wasn't (likely to be) KB1EVA? Or am I
just
> hallucinating a post by N1IR om 12/29?
>
> 73
> Phil
> de N1ZKT

494. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:22:29 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A553E3F.46C3664B@bellatlantic.net>
Source record: 173013

In addition to the 3990 story, there are countless others.
Mine is this: I was playing chess with a guy over the air,
and after the 4th move we could no longer make it on SSB.
We switched to CW and completed the entire game - no
problem, except that I lost.

Richard Harrison wrote:

> Dick Carrol wrote:
> "There are times when nothing else is applicable or workable." (Other
> than Morse, I suppose.)
>
> We can choose to ignore better digital modes, but they abound and they
> are more efficient and effective than Morse.
>
> Telegraph. The word implies a written or drawn item sent or received
> over a long distance. This is what Morse intended. He was seeking a
> system which recorded its output on paper. As I recall the story, his
> father-in-law was funding development of the telegraph and the man with
> the money persuaded Morse to go to market with what was already working,
> and not wait for perfection of the printed message development. It seems
> this was a case of father knows best.
>
> Telex and Teletype came later. There are many other digital data
> transmission codes and architectures. Most beat Morse efficiency by
> starting with code elements of equal lengths for the mark and space
> (zero and one) durations.
> Effectiveness is improved by error detection and correction along with
> automatic retransmission of garbled reception segments. Data
> transmission rates can be automatically adjusted to fit the condition of
> the transmission medium so as to optimize transmission efficiency.
> Trying to use Morse to compete with modern data transmission is
> equivalent to showing up at a gun fight with a knife.
>
> There was an American Cavalry General who advised his troops to dismount
> should their horse be shot from under them. Seems the coders have been
> beating a dead horse for years.
>
> Best regards, Richard Harrison, KB5WZI

495. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:41:29 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <933fqldjv1@iac5.navix.net>
Source record: 173014

Let's not forget the strident urgings directed towards ARRL to proceed with immediate damage control. Reminds me of a movie... "A ship of fools".

"Richard Clark" <rwclark@seanet.com> wrote in message news:3a8e30ed.1062972233@news.seanet.com...
> On 04 Jan 2001 23:57:01 GMT, k1bqt@aol.com (Rick Littlefield) wrote:
>
> >Extremely lame damage control, and an amazing piece of "spin". Fractenna
> >initiates a false story, hiccups, then heaps self praise on itself for setting
> >the world straight! Denial is not a river in Egypt, it's rapidly becoming a
> >famous institution in Belmont!
> >
> >Rick K1BQT
>
>
> Hi Rick,
>
> Your response was much to lenient. Consider the following root entry
> to the thread initiated by Fraudtenna called:
> >Wakefield Killer?? Looks Like it...
>
> >As suggested I did a name search on qrz.com. The Boston papers report this guy
> >lives in Haverhill and sure enough there it is in the flesh as KB1EVA.
> >
> >
> >K-B-1-E-V-A
> >
> >
> >Maybe this is his dad?? I don't think so myself. Sure looked familiar....He
> >sure LOOKS like one of those guys you see at the MIT FLEA!!!
> >
> >If it IS him this only reinforces the notion to the public that hams have
> >lunatics in thier midst.
> >
> >So much for Dr. Cohen being paranoid and stopping public ham appearances and
> >ham e-mail. Looks prudent in retrospect. Sure are some loose lids here!! I
> >think Tom Rouch would do well to distribute that prozac he talks about!!
> >

> >73
> >Phil de N1ZKT
>
> This is simply another ploy of USING someone else's reputation (or
> creating one) to serve the last paragraph above. This TRASH was
> started for one purpose only, and it wasn't with regard to any greater
> human interest issue. All members of this board already note the
> allusion made in the last sentence which is in the same vein of a
> consistent character assassination. Also note the characterization is
> an invention to create a greater illusion of monstrosity AND THEN to
> suggest that this is the TYPICAL perception of Hams by the public.
>
> All may note my repugnance of this quote for what it is: TRASH, which
> was made some time ago and slammed by the same poster with a veiled
> threat wrapped in the ignominy of a perverted sanctity. There was
> absolutely NO REASON to introduce this subject in an antenna forum.
>
> I think there is a victim here, and he is fully justified in taking
> legal action against the source of these deliberate speculations and
> self-serving statements noted in the quote above.
>
> 73's
> Richard Clark, KB7QHC

496. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:51:00 UTC
From: k1bqt@aol.com
Message-ID: <20010104225100.29741.00001056@ng-co1.aol.com>
Source record: 173015

Hi Richard--

>I think there is a victim here, and he is fully justified in taking legal action against the source of these deliberate speculations and self-serving statements noted in the quote above.<

How sweet and just and free of rust
That irony would be.....

Rick K1BQT

497. Re: mounting small yagis in trees????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 03:56:48 UTC
From: k7jy@aol.com
Message-ID: <20010104225648.27346.00000011@ng-mp1.aol.com>
Source record: 173016

Out here in the Pacific Northwest, where we grow trees to hundreds of feet in height, a number of enterprising hams have placed HF yagis on rotators in live trees. I have personally assisted my friend Phil Heintz, K7XS, in putting his cushcraft A4 into a 100 footer. K7IR has also done work in trees with hf beams. Usually, they trim the top off to get a solid trunk area to attach the rotator assembly and prevent the upper tree branches from interfering with the rotating elements. Tree climbing is very tricky and dangerous. Only climb them if you know what you're doing and take the proper safety precautions. Or hire a professional tree surgeon to do the climbing for you. Or hire a bucket lift, staying out of the tree and going right to the top. A bucket lift can take the fully assembled antenna right to the top too. Good luck! K7JY, Seattle.

498. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:16:12 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A554ACC.DC94B2E2@bellatlantic.net>
Source record: 173017

Cecil wrote:

> Brian Kelly wrote:
> > When was the last time the existence of cw or the regs regarding cw "limited
> > the use of other equipment"??
>
> It's doing it right now. My ex-boss is a tech in Colorado. I'm in Texas.
> We can't legally talk to each other until he satisfies the code regs.

Sure you can. Use the highly touted, modern technology, cell phone
that has been mentioned in this thread.

>
> --
> http://www.mindspring.com/~w6rca

499. Re: Wire HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:21:20 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <933ifq$n99$1@nntp1.ba.best.com>
Source record: 173018

This is to say THANK YOU to everyone who has shared
their thoughts via posts on this thread. I have also received
some nice direct emails, and have thanked the senders directly.

...73 to the group, Ed

"Janice and Ed Senior" <senior@best.com> wrote in message
news:92rqrr$1fnb$1@nntp1.ba.best.com...
> Hi, and happy new year to the group -
>
> I am considering putting up a wire antenna for casual
> HF use (100W class). I would like to operate on as
> many HF bands as possible.
>
> Available supports are a 40 foot tree on one end, and
> an 8 foot fence post on the other end; so this thing
> would be something of a sloper. Available length is
> about 100 feet. Can feed approximately in the middle,
> with either ladder line or coax. I have a new antenna
> tuner available (MFJ).
>
> Any opinions out there as to whether a multiband dipole,
> a windom, a G5RV, a random longwire, or ??? would
> be best suited to this situation?
>
> ...Thanks, Old Ed
>
>
>

500. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:24:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A554C83.35BDA01A@IEEE.org>
Source record: 172870

N2EY wrote:
> The conclusion is simply that Morse has new uses. It's not "outmoded".

It's outmoded by PACTOR II. :-)
--
http://www.mindspring.com/~w6rca

501. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:31:40 UTC
From: rwclark@seanet.com
Message-ID: <3a91475d.1068716903@news.seanet.com>
Source record: 172869

On Wed, 3 Jan 2001 19:26:29 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>
>> The Josephson junction is the new (relatively speaking) and current
>> champ of the Volt (unless they've aced me with something better).
>> This standard of the Volt is based on Quantum mechanics and pulls that
>> formerly ethereal math into the work-a-day world.
>
>This is interesting.
>Do you think that such a standard would be within the realm of the ham
>shack?
>Can you think of a method whereby this standard can be used to calibrate a
>noise standard? i.e. Noise Temperature / noise power in a known bandwidth.
>perhaps bolometric bridge.
>
>> Another stroke of genius is found in the standard capacitor that is
>> co-axial in design and using laser interferometry to measure the
>> plunge of the piston into the cylinder to provide a very accurate
>> delta C. It is instructive that the technique is what provides the
>> boon in accuracy, and not the component nor the laser (both necessary,
>> but alone would not suffice without that AHA! of the delta).
>
>You sound like a candidate for a copy of my signal calibration method, If
>interested I will be glad to E-Mail the file. Beware it's a big un.
>
>
>--
>Gary7SLL

Hi Gary,

Your signal calibration method would be of interest, yes. Pass it
along. I've done a lot of reviewing of technology writing, mostly for
Gravity detectors, high temperature super conductors and related
technology patents so I will be steeled for your tome.

As for a shack Volt standard, you might peruse the surplus market for
Zener based gear (not all that uncommon by now I would 'spect). Years
back they were just arriving as transfer standards.

As for a noise source, I use a constantly illuminated Photomultiplier
Tube with a 50 Ohm Load. The trick of course is in the constant
illumination - use a constant current fed LED (high voltage, big
resistor is one way - I'm sure you can take the ball on this one).
This has been an ad-hoc standard (not NIST) for quite a while now

which will give you noise from DC to GHz. You can stretch your imagination and creativity with this angle. And you use a rare term here - bolometry. I've burned up a few bolometers in my time. The PMT and a variable filter should provide you with any spectrum you might want to experiment with.

73's
Richard Clark, KB7QHC

502. Re: Lattin multiband antenna; model

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:33:40 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <4ri339.hpr.ln@mail.specsol.com>
Source record: 172874

carkenord@juno.com wrote:
> Many years ago a Mr. Lattin....W4JRW....developed and patented a novel
> multiband dipole.

> This antenna is shown at:

> www.wa3rey.com/lattin.htm

> Lattin published these plans, and he also sold the antenna.

> Has anyone used this antenna? Has anyone built or tried to build this
> antenna?

> I would like to hear comments or experiences......

> Lee Carkenord KA0FPJ

I tried modeling it.

I started out with a 10M section. After a lot of tweaking segments and segment alignment to get stable, realistic results, I added a 12M segment, expecting to get two resonaces somewhere around 10M and 12M.

I only got one resonance at about 16MHz.

Anyone else tried modeling this thing? Results?

Jim Pennino

503. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:35:17 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A554F05.F5BACBD4@IEEE.org>
Source record: 172872

Mark Keith wrote:
>
> Cecil wrote:
> > The resonant frequency with the top hat is 3.95MHz. The resonant
> > frequency without the top hat is 8.5MHz. The top hat shifts the
> > resonant frequency by 4.5MHz. Since minimum inductance on the
> > loading coil results in maximum field strength, the effect of
> > a top hat is as close to something for nothing as one can get
> > with mobile antennas.
>
> How does the wind effect that thing? I bet effective but looks like kind
> of a wind catcher??? MK

There's hardly any area exposed to the wind. It rides nearly perfectly
horizontal.
--
http://www.mindspring.com/~w6rca

504. How far can I talk?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:42:54 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <ihc56.124302$x6.57015676@news2.rdc2.tx.home.com>
Source record: 172871

Okay. I operate exclusively on HF -- mostly CW on 20 meters. So, please excuse my ignorance of VHF and UHF.

Anyway, I'm thinking of getting an IC-706 to run in my travel trailer. As you know, it will also operate on 2m and 70cm. So, I'm thinking that if I carried a 5 watt handheld while off romping in the wilderness I could stay in touch with the xyl and she with me.

The question is, What sort of range could we expect? And, what about under conditions where the line of sight is interrupted like an intervening hill, mountain, canyon, etc.? Considering what I'm wanting to do, which would be better, the 2m or 70cm band?

Thanks, Pete KA�TZK

PS. Yes, I know that she'd need her own license. She'd be happy to do that, of course.

505. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 04:47:33 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A55521D.A3CD3C29@bellatlantic.net>
Source record: 172873

Richard Harrison wrote:

> You don`t pass a horsemanship test to get an automobile driver`s
> license. Neither must you pass a test on the design and construction of
> automobiles. Technology has made such tests no longer needed. The same
> is true of CW and thorough technical tests for issuance of an amateur
> radio license. There is no need for exclusion of fine people because
> they don`t like code or the technical side of radio. If they are
> competent people without a record of malfeasance, and pass a minimal
> test on rules and operating requirements, they should be issued an
> unresrricted license to full amateur priveleges in all bands, just like
> drivers are licensed.

You clearly don't understand why the Amateur Radio Service
exists, per reguilations.

Set aside the code issue for the moment and read your post.
Now read 97.1 b, c and d - which you are supposed to know,
and which knowledge you say new hams should be required to
possess: "and pass a minimal test on rules ..."

97.1 a - e provide the basis and purpose of amateur radio.
You are supposed to know that. 97.1 b, c and e require technical
competance. You're recommending throwing away 60% the reason
for the existence of the Amateur Radio Service when you say people
should be granted full priveleges based on passing a minimal test on
rules and operating requirements.

Esentially, you are arguing for the disbanding of the Amateur Radio
Service, whether you realize it or not.

506. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:33:00 UTC
From: n2ey@aol.com
Message-ID: <20010105003300.15260.00000183@nso-ba.aol.com>
Source record: 172875

In article <3A54C4D3.3ADCD829@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Mark Keith wrote:
>> You HAVE to know code to work HF.
>
>Nope, there are plenty of HF stations who don't know Morse code.

I don't know of any stations that know Morse. Mine sure doesn't.

It's the OPERATOR that knows the code.

>CBers, for example.

They are not "operators" in the legal sense of the word. They are not licensed.
Hams are. BIG difference.

73 de Jim, N2EY

507. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:37:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <933mivhu0@208.206.142.85>
Source record: 172876

Cecil wrote:
>
> Dick Carroll wrote:
> > How does that correlate with the fact that we have steadily lost total
> > spectrum over the same period of years that have seen exponential growth
> > of the number of ham radio licenses issued?
>
> Fewer hams don't need as much bandwidth. One ham doesn't need any
> bandwidth. Think about it.

Nonsense! When the government first handed us all frequencies "200
meters and down" the bandwidth of a CW signal was the same as it is now.
And I did NOT say bandwidth of a spark signal.
From there we have steadily lost spectrum as commercials found the high
frequencies useful and found commercial uses for them.

508. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:38:24 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <933mkghu1@208.206.142.85>
Source record: 172877

Cecil wrote:
>
> Dean Craft wrote:
> > I would have considerably more respect for the freebanders if they were
> > simply honest and forthright in asserting their true beliefs.
>
> How do you meet freebanders? I don't know any.

Oh- You don't "talk to those guys'? I thought you said you do.

509. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:40:14 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <933mr9$50l$1@nntp9.atl.mindspring.net>
Source record: 172879

ehsjr@bellatlantic.net wrote in message
<3A55521D.A3CD3C29@bellatlantic.net>...
>
>
>Esentially, you are arguing for the disbanding of the Amateur Radio
>Service, whether you realize it or not.
>
>

He realizes full well what he is arguing for and has been doing so for the last year. His hatred of things CW and those that support it, knows no end. He is also one of those individuals who, if he had the authority to do so, would mandate that no individual can rise above the level of any other. Find and review his postings. I think you will come to the conclusion that he is a very bitter individual. I am guessing that he is one who apparently was kept out of ham radio by the cw requirement for some period of time. He is to be pitied actually.

Dean Craft -- W4IHK

510. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:40:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A555E59.75F4B6A0@IEEE.org>
Source record: 172880

N2EY wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> writes:
> >CBers, for example.
>
> They are not "operators" in the legal sense of the word. They are not licensed.
> Hams are. BIG difference.

Well then, how about all the HF broadcast station operators? Are
they required to know Morse code to use HF?
--
http://www.mindspring.com/~w6rca

511. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:42:23 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <933mrv$1j6$0@208.206.142.85>
Source record: 172878

Cecil wrote:
>
> Dick Carroll wrote:
> > Anything that has
> > been obtained free and without investment of even minor effort is held
> > in disdain and to be valueless ...
>
> The air you breathe is valueless and you hold it in disdain?????

You're smart enough to know the difference but you still prefer to act
dumb.

>
> > Pride in accomplishment does not equate to vanity.
>
> Personal pride does not equate to vanity. However, personal pride
> is a personal matter.

Not with a peergroup, as you well know.

Public pride *IS* vanity.

And you are still full of hot air as always. The public knows not nor
cares what we hams' accomplishments are nor any hint of why we should be
proud of them.
>
> > Somehow it all comes back to a 20 WPM CW test.
>
> The one that has been buried in the sands of time? RIP

Still, so many of you can't forget that you just "couldn't".

512. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:44:54 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A555F56.A77E10A3@IEEE.org>
Source record: 172882

Dick Carroll wrote:
>
> Cecil wrote:
> > Fewer hams don't need as much bandwidth. One ham doesn't need any
> > bandwidth. Think about it.
>
> Nonsense! When the government first handed us all frequencies "200
> meters and down" the bandwidth of a CW signal was the same as it is now.
> And I did NOT say bandwidth of a spark signal.
> From there we have steadily lost spectrum as commercials found the high
> frequencies useful and found commercial uses for them.

Fewer hams don't need as much bandwidth. Nonsense? One ham doesn't need
any bandwidth. Nonsense? Dick, are you drunk again? If there were only
10,000 hams, we obviously wouldn't need as much bandwidth. If only one
ham existed, Why would he need any bandwidth? Who would he talk to?
--
http://www.mindspring.com/~w6rca

If registering guns will prevent crime,
will registering penises prevent rape?

513. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:47:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A555FDA.24DF2176@IEEE.org>
Source record: 172881

Dick Carroll wrote:
>
> Cecil wrote:
> > How do you meet freebanders? I don't know any.
>
> Oh- You don't "talk to those guys'? I thought you said you do.

Nope, it was CBers that I said I talked to. You said you used
CB also.
--
http://www.mindspring.com/~w6rca

If registering guns will prevent crime,
will registering penises prevent rape?

514. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 05:51:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5560CA.3D85A604@IEEE.org>
Source record: 172883

Dick Carroll wrote:
>
> Cecil wrote:
> > Public pride *IS* vanity.
>
> And you are still full of hot air as always. The public knows not nor
> cares what we hams' accomplishments are nor any hint of why we should be
> proud of them.

Earth to Dick. Other hams *ARE* the public. If you need other hams
for you to be able to feel pride, that *IS* vanity.
--
http://www.mindspring.com/~w6rca

If registering guns will prevent crime,
will registering penises prevent rape?

515. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 06:56:45 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <934der$ou2$1@lure.pipex.net>
Source record: 172892

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a8c08e0.1052719009@news.seanet.com...
> On Wed, 3 Jan 2001 20:47:55 -0000, "Gary Peach" <xcg34@dial.pipex.com>
> wrote:
> >"Richard Clark" <rwclark@seanet.com> wrote in message
> snip
> >> The mechanics here are simply the Z's found at the interface or
> >> boundary. That is, the wave in the air travels through a Z of more
> >> than 300 Ohms
> >
> >Something of the order 377 Ohms per sqaure I think.
> >At least a bit of RAM (RADAR ABSORBING MATERIAL) with that sort of spec
has
> >a very low reflection having absorbed most of the ray.
> >This works out to (u0/Eo)^1/2 according to Ginzton, Silver, et.al.
> >
> >>whereas when it encounters the earth (in any form) it is
> >> subject to a mismatch because that earth Z is substantially less than
> >> free space Z.
> >
> >The boundary condition?
> >
> Yes a boundary condition (the point where the free space Z meets the
> Earth Z).
> >> It is the mismatch that controls the mechanics of
> >> reflection and even if the ground is lossy. If it presents a
> >> substantial Z differential to free space, then very little power will
> >> be lost to ground (the mismatch reflects most of the power and very
> >> little of the wave is actually absorbed in the loss of ground).
> >
> >How is this measurement acheived?
>
> Historical records take care of that form me, my source:
> "TV and Other Receiving Antennas," Arnold Bailey
> I will lace that data into the text below.
> >
> >> Thus the quick answer to your question above is - yes - ground
> >> Resistance (Z) is significant to the process of reflection. the
> >> significance of that ground resistance is found in the differential,
> >> not in the absolute value. The greater the differential the better.
> >
> >Interesting, so
> > as R(earth) approaches zero
> > 377/ R(earth) approaches infinity

> >or no power loss.
> >or simply Power(earth) = I^2 R(earth) = 0
> >
> >Now does this go the other way
> >as R(earth) approaches infinity
> >377/inf approaches zero.
> >And power dissipation is 377 I^2
> >or all of the power is in the wave.
> >This would indicate that the higher the wave is above the Earth the
better
> >it goes.
> >
> Not sure if I follow your discussion, OM, but I cover that in the text
> that follows.
> >Returning for a moment to a practical AE at long wavelength in an urban
> >garden. just how high is high enough. In other words would it be better
to
> >site the active element a bit higher so that the stub to ground does not
> >place such a stringent requirement upon Earth conduction?
> >
> >|
> >|
> >|
> >|
> >|____
> >_____ (~) feed point
> >| <stub match also used to elevate AE
> >|___e_a_r_t_h__r_a_d_i_a_l_s_ whatever____
> >
> >perhaps some lumped reactance in this side,
> > but not sufficient to limit the loading current.
> >
> >> (I would add that it necessarily follows that earth Z should be as low
> >> as possible - if you can control that factor.
> >
> >Moving the feed point just a little away from the earth will transfom the
> >feed requirement. I suspect that even a little will help.
> You are talking about Match conditions (different from reflection
> conditions even when we are talking about the same Earth).

I agree that this will affect match to the feeder, but I am also considering
the following:

Given that the Earth produces a boundary condition for the propogating wave
then the boundary condition for
the Electric field will be normal to or zero at the boundary and for
the magnetic field will be parallel to or zero at the boundary.

In the case of a perfectly conducting plane the current at the boundary is
maximum and the Voltage zero.
As you move vertically away from the surface of the plane the ratio of V/I

move from Zero at the boundary to the limiting value Quarter wave above the plane.

What I am suggesting is that the feed point and therefore the Voltage current pattern at that height above the earth plane can be nearer to that of a propogating wave constrained by the boundary condition outlined above.

I am suggesting that because the velocity factor at the skin of the conductor forming the radiating element does not permit the Voltage current pattern of the conductor to match geometrically the Voltage Current pattern in free space;
that elevating the feed point of the antenna a little above the plane of Earth the two patterns are aligned in a more satisfactory juxtaposition to provide a more efficient transfer from conducting element to free space.
With the added advantage that the requirement for a zero resistance at the point where the physical antenna meets the Earth is relaxed.

> The following explores Earth Z being very High (instead of very low)
> >> Contrariwise, a
> >> exceedingly high earth Z would perform the same job just as capably,
> >> but attaining a very high Z is for all practical purposes - far more
> >> difficult, if not downright impossible.)
> >
> >Yes we Earth bound creatures have to accomodate our environment. :)
> >
> >> Now to the second part of your question (part B). Most neophytes
> >> presume that the ground condition at the base of the antenna is
> >> responsible for the low angle launch characteristic. It is not.
> >
> >I might expect the ground resistance is the factor that limits load
current,
> >and nothing else.
> >
> >> Ground conditions near the antenna (within the first wavelength) are
> >> responsible for MATCH conditions far moreso than launch conditions.
> >
> >So a small stub in the earth side of a vertical below the feed point
would
> >help to increase the required earth impedence for satisfactory loading,
and
> >feeder VSWR.
> No, there is nothing we can do about ground except create an
> artificial one from radials. Stubs or gamma matches do not change
> ground, they change the transform of its Z (Earth Z is as lossy before
> as it is after).

Understood, what I am suggesting is that the radiating element feed point is elevated away from the plane just a little to give some leeway in matching the freespace wave pattern resulting from the boundary conditions to the wave pattern resulting from the lower velocity factor of the radiating element of the AE.

A bit like using a large headed screw perhaps with washers in a big hole
when fixing front panels etc. in order to releive the drilling precison
(PCD) for the associated holes.

The fit is not exact, but a best fit.

> >> It is the far field ground that matters more for launch conditions and
> >> again this strictly a function of the Z differential.
> >
> >This supposes that the vertical is sufficiently high above the more
distant
> >mirror will produce correctly phased waves to combine with the main wave
> >thus producing the beam launch angle. As the AE height increases so the
> >angle becomes shallower and a greater distance at ground level is
acheived.
> >Yes you have drawn quite a clear picture of that physical process for me
> >thank you.
> It is more the height of the current max (which of course is a
> function of the height of the antenna, but in reality ALL currents are
> responsible - not just the current max). Think in terms of light rays
> and imagine a source roughly 1/2 up a quarterwave structure. This is
> the origin of your "ray" for the purposes of observing where it
> strikes ground for that principle reflection.

That is an interesting point when considering horizon distance.
So you are saying take lambda /8 as the launch height
so what angle shall I use to calculate
the ray/earth intersection S = (lambda tan theta)/8 ?

> If you are interested
> in a 10 degree launch angle, your ray must be depressed 10 degrees
> below the horizon. Follow that ray to ground and you find it strikes
> it more than 5 wavelengths away from the antenna. This is the point
> of reflection and THAT ground is the principle controller of the
> efficacy of reflection. This is because the boon of verticals is the
> combination of the reflected ray and the direct ray. If you cannot
> support a reflected ray at the Earth/Free Space boundary, you have
> lost the 3 dB boon.

So what we should be interested in is the rate of change of constructive
interfernce around that point with the change in height of the AE. We are
looking for the ideal point and then must make suitable compromise to match
that position at the feed point.
I suppose that it is a case of not putting the cart before the horse.
There is absolutly no way that a Ham can approach these launch conditions on
136 kHz
The way to 1 W ERP is via much more feed power and resignation to very low
efficiency. I suppose man has struggled along with X-Ray tubes at well below
2% efficiency for many years, so why not the same state of affairs for Hams
at 136 kHz :(
Obviously more radials will not produce sufficient efficiency at this very
long wavelength. nor I fear will my suggestion. Perhaps a small improvement

to efficiency of the system, but not a significant attack on distance for power.

> >>The higher the
> >> mismatch to free space, the greater the reflection (the cleaner the
> >> mirror). If you could extend those 120 radials out 10 wavelengths,
> >> then you may drastically boost that Z differential (by driving down
> >> the ground resistance).
> >
> >I suspect that the major effect of increasing the length of the ground
> >radials is to increase the maximum possible AE feed current and therefore
> >notionally increase the efficiency of the feed. Since shorter radials are
> >already acheiving high efficiencies of feed current the increase in
radiated
> >power will go almost un-noticed. Especially far field signal strength
> >monitoring will now be subject to factors having a greater bearing upon
the
> >propogated wave and power.
> >
> Your are mixing Match conditions in your statement above with the
> launch conditions that I am discussing in the response.

Yes I think I can see that now.

> >> However, this is a very difficult requirement
> >> to be met (your 10M vertical would have to sit in the middle of a
> >> football stadium sized ground field - scale that to 160M to discover
> >> the sheer size demanded!).
> >
> >And at 136 kHz even more so. :)
> >
> >> One compelling proof of this is found in the excellent reports of
> >> mobile operations within short distances from a shoreline. Water is
> >> not a very good conductor, but its Z is sufficiently low to present a
> >> very high mismatch to free space borne waves and thus presents a very
> >> good reflection surface.
> >
> >How for instance would a vertical sited at say Pevensey marshes near to
the
> >shore line, compare with and identical structure on top of the Cliffs at
> >Ventnor.
> >Both structures will launch over a sea water mirror but the greatest
> >differnce between the two structures will be the angle of incidence at
the
> >point where the wave first meets the surface of the sea.
> >
> This is answered above.

But it leaves me a bit in the air if I read you correctly in that you are suggesting an optimum height for distance. From constructive interference between incident and reflected wave at the boundary.

> >>The near field earth conditions dominate the
> >> match, and the far field earth conditions dominate the launch angle.
> >
> >I think that is what you have caused me to see. thank you.
> >
> >> In all practicality we can control near field earth conditions far
> >> better than far field earth conditions (except when we purposely
> >> choose a site based on these considerations such as locating near a
> >> ocean shoreline, lake, or marsh).
> >
> >I guess I better look for a house on a cliff top near the sea, there
should
> >be some cheap ones going about now because of their propensity to "fally
in
> >the water."
> >Applogies to Sir Eccles
> This would be consistent with my comments.
> >
> >> Thus to answer your question in the context of this thread, shorter
> >> radials may be effective for a MATCH condition, but have no effect in
> >> the launch condition. The same answer could be applied to lengthened
> >> radials (that is, until they are some 5 to 10 wavelengths long) too.
> >
> >So what one might expect to see is an increase in loading current but no
> >reported increse of signal level at a remote point. :)
> That, too, is fair to say.
> >
> >One could see that ther are the seeds of disagrement between the operator
of
> >the transmitting station and the receiving station.
> >
> >However as the primary objective is the signal level at the distant point
we
> >must take the receiver operators word for the quality of the
communications
> >channel.
> I recall hearing a QSO "Got you 5 by 9 here... could you repeat that?"
> >
> >TNKS 73
>
> Hi Gary,
>
> I am responding principally to the concern of low angle radiation and
> if any improvement comes by virtue of radials. You have identified
> that there is a grain of that issue in simply improving the radial
> system(stronger signal in general is found at all angles). Yes, on
> those observations this is true and you are already aware that may not
> be very significant.
>
> But back to improving the launch angle, here is some data to consider.
>

> As you've already noted, free space Z is 377 Ohms.
> I will now offer the Earth Z for various conditions:
> frequency dry soil wet soil ocean
> 300 KHz ~150 ~25 1 Ohm
> 3 MHz ~180 ~50 7 Ohms
> 30 MHz ~180 ~65 20 Ohms
> 300 MHz ~180 ~65 30 Ohms
>
> We now enter into the poorly understood (for this group) concept of
> the "Brewster Angle."
>
> This is also known as the "Critical Angle" and represents that angle
> subtended by the ray and Earth, beneath which there is little
> reflection and maximum absorption. This is what robs the horizon lobe
> of its maximum gain at very low angles. That is, there is still a
> principal ray 10 degrees above the horizon, but the reflected ray 10
> degrees below the horizon MAY be absorbed by Earth and offer no
> contribution to the signal strength at the other end.
>
> The Z ratio of Earth to Free Space has a log-linear relationship with
> this critical angle. If Both Z's equal then you cannot expect a very
> good radiation boost by reflection for angles less than 45 degrees.
> Here is a summary:
>
> SWR lowest angle of reflection
> 1:1 45 degrees
> 2:1 22 degrees
> 3:1 ~15 degrees
> 4:1 ~12 degrees
> 5:1 ~10 degrees
> 10:1 5.5 degrees
> 50:1 1 degree
>
> You will note that to obtain a 50:1 SWR between Free Space and Earth,
> then Earth must be Ocean below 3 MHz. If you want to have a reflected
> ray combine effectively with a direct ray for angles of 10 degrees you
> will need an Earth Z 1/5 of 377 Ohms. That is, 70 odd Ohms, which
> means that Earth must be wet soil. You will note the trends above and
> find that for VLF/ELF, the Earth/Free Space interface is as effective
> as a copper boundary. This condition is reflected (no pun) in the
> upper atmosphere and creates a waveguide condition which creates very
> strong earth bound signals that span the globe (this why they use this
> frequency for submarine communications).
>
> This all leads us back to the topic of radials, and of course we see
> that short radials have nothing to do with the reflection point in the
> remote distance unless they are VERY long and VERY dense (which is
> already a contradiction). If such were the case then Earth Z would
> appear to be on the order of 1 Ohm (we can only hope) at that remote
> point.

>
> 73's
> Richard Clark, KB7QHC

Thank you Richard, your later part of this posting clarifies the issue considerably I make no apology for leaving in my earlier part of this posting as I work my way through what you have to say and the truth starts to dawn upon me.

I'd still like to try elevating the feed point to see what happens, this assumes sufficient radials of a practical length to provided the best loading current practicable.
A brighter torch at the right position above the mirror has got to be better than using a flat battery. ;)

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

516. Re: KB1EVA is NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 06:56:57 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <933r96$kr4$1@iac5.navix.net>
Source record: 172884

I am relieved to see that only you will be sued Phil, now that you have cleared Fracky...

"Fractenna" <fractenna@aol.com> wrote in message news:20010104171010.29430.00000516@ng-cg1.aol.com...
> I will repost Dr. Cohen's warning on this. I for one am VERY RELIEVED to see
> KB1EVA IS NOT the Wakefield Killer.
>
> Thanks to N1IR and N1PQG for setting us straight!
>
> 73
> Phil
> de N1ZKT
>
> >Guys - please don't continue beating up on KB1EVA - he's NOT the
> >Wakefield
> >killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does
> >live
> >in Haverhill, but other than that, there is no connection to that
> >bearded
> >bastard. Our fellow amateur has been bombarded by press and outraged
> >citizens since the incident, and this type of discussion is only making
> >it
> >worse. The Lawrence Eagle Tribune did a nice article on 12/27
> >regarding the
> >mistaken identity - check it out at
> >http://www.eagletribune.com/news/stories/20001227/FP_005.htm for the
> >real
> >story
> >here.
> >
> >73 de N1PQG, another lowly tech trying to upgrade.
> >
> >
> >
> >In article <20001228165724.08425.00000054@ng-fm1.aol.com>,
> > fractenna@aol.com (Fractenna) wrote:
> >> Shouldn't the americal radio relay league be doing damage control
> >before the
> >> press starts playing up the ham radio angle on this guy??
> >>
> >> Not all of us hams are 300 pound-grrrizly adams-- loner- man-
> >mountains who go

> >> and shoot people.
> >>
> >> Some of us don't even have guns...or even evil thoughts against
> >others.
> >>
> >> Just a thought.
> >>
> >> Phil
> >> de N1ZKT
> >>
> >
> >
> >Sent via Deja.com
> >http://www.deja.com/
> >
> >
> >
>
> From N1IR on 12/29
>
> "Before everyone gets too hot and bothered, check out the CNN stories on
> McDermott. Also, the Boston Globe articles on www.boston.com. They say he
only
> moved to Haverhill recently, not in February as someone showed on here
from the
> callbook URL. I also noticed, from qrz.com, that his e-mail is not the one
that
> the media refers to.
>
> Haverhill is a pretty small town, but I imagine it's possible to have two
> Michael McDermotts..with electronics backgrounds...so let's not crucify
this
> guy until/if we know for sure.
>
> I can relate to this: when I was 18 I lost my lunch (at the school
lunchroom
> even) when I read that 'Nathan Cohen' had been arrested for embezzling
several
> million dollars. Of course, he was in a different state, let alone
different
> town.
>
> 73,
> Chip N1IR "
>

517. Re: 6 M gamma dimentions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 07:11:28 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5573B1.4385D217@bellatlantic.net>
Source record: 172886

First, .5 wavelength is WAY too long! 12" is a whole lot
closer. I'd recommend about 15" to start, with about 2"
clearance between the gamma tube and driven element.
You can always shorten the 15" dimension.

That answers your question. Now I'll add some more.
If reading about a different way to make a gamma is
not of interest, skip the long part. But do read the end of it.
Here's a long description of a really good and easy way
to make a gamma, once you understand it. It is easier
to make it as I'll describe with the gamma tube fixed
and no shorting strap to slide around.

Here's how I do it: I attach an S0239 to the center
point of the antenna so that the center pin is about 2" above the
driven element. I flatten the end of a piece of 3/8 tubing.
The tubing inner diameter size is just snug on the insulated
center conductor from RG8. I flatten about 1", with 1 blow
from a hammer). I cut the tubing to 15", flattened end to
unflattened end. I drill a hole thru the flattened ent to accept
a #6 screw. I solder a #6 brass screw into the center pin of
the S0239, after putting two nuts on the screw. I cut off the
head of the screw, and remove one of the nuts. I then attach
the tube to the brass screw with the brass nut and brass
lockwashers. I make an insulating strap to support the
tubing at about the 10" point. parallel to the driven element.
(I've seen these made out of plexiglass, but I use a high dielectric
plastic material.) Next, I cut a 20" piece of center conductor,
which I insert into the tube as far as it will go, after stripping about
1" of insulation off the outside (of the tube) end of the conductor.
I then pull it out slightly, to insure that he conductor does not touch
the tube. That completes initial gamma assembly.

To adjust, you sllide the stripped end of the conductor along the
driven element, starting at about 10" from the center point, until
you find best match. You then slide the conductor slowly out of
the tube while leaving the stripped end attached to the driven
element at the point of bets match found earlier, all the while looking
for the best match (lowest swr) There is some interaction between
the two adjustments. Once you have found the point of best
adjustment - lowest swr - check to see how much you can
shorten the wire. For example, let's assume the best point on the
driven element turns out to be 16" from the center, but you had to
pull the conductor 6" out of the tube. That means you can cut off
about 9" of the conductor. Remember, it started out with about

5" sticking out of the tube, so when you finished, you had about 11" of conductor sticking out of the tube. The big loop of extra wire needs to be eliminated. I usually cut the wire twice - I remove most of the extra wire with the first cut, re-verify that the thing is adjusted for best swr, then cut it to the final size and do the final adjustment.

Now, if the best feed point ends up closer to the center of the driven element than about 16", you can shorten the gamma tube by the amount of wire you pulled out of it. Lets say your best match was at 13", and you pulled 5" out of the gamma tube, leaving 10" of center conductor inside the tube at best match. You could then cut the tube to about 11", flattened end to unflattened end, so that your conductor did not have to loop backwards towards the center of the antenna.

That's the details. The net difference is a mechanically superior and easier to make match than the kind where the tube must be supported by both an insulating strap and a shorting strap. In the design I described, the tubing is fixed in place because it is attached to the SO239 center pin - you cannot slide the tubing around. In the other style design, you must slide the tubing around, as well as the shorting strap. Both designs require an insulated tubing support, but you don't have to make a shorting strap with the design I described. Both require two adjustments, but in this design you move only the coax. In the other, you must move the tube and the shorting strap - and sliding either one has the effect of "trying" to move the other so the mechanical manipulation can be a bit more difficult. The degree of difficulty of finding the correct adjustments is identical.

This is the end I referred to that you should read. When you find the point on the driven element where you get the best match. you are actually finding the point where the antenna impedance is about 50 ohms. However - to get current to that point, you need a conductor. (That conductor is the gamma tube, or if you use the design I mentioned, the center conductor stripped out of the RG8.) Great - we found the 50 ohm point somewhere out on the driven element - but we had to use a conductor to get the current out there. And a conductor adds inductance to the antenna system. We need to cancel out that inductance, and we do that with capacitance. Well, the gamma match consists of a tube with an insulated conductor inside of it. Two conductors in close proximity, insulated from one another, form a capacitor. So the gamma match assembly provides everything we need - the conductor to bring the current to the 50 ohm feedpoint, and the capacitor to cancel out

the inductance that that conductor introduced. The adjustments
you make are to do two things: find the 50 ohm point on
the driven element, and adjust the capacitance to counteract
the unavoidably added inductance.

Finally, if your antenna elements are cut to the wrong size,
a 50 ohm match will be hard/impossible. So make sure
the dimensions are correct! And if you cut stuff for greatest
gain, the match point will be harder to establish than if you
cut stuff for the broadest swr bandwidth.

Rosco wrote:

> Can anyont tell me the dimentions of a gamma match for 6 meters.
> I am working on a 4 el beam and would appreciate some help.
>
> The handbook says .5 wavelength but i cannot get it to tune up. I have been
> trying it in the 12" ballpark with no luck.
>
> Thanks
>
> Ross / N0MSS

518. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 07:12:44 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A5573EB.4DD91F28@ipeg.com>
Source record: 172885

Cecil wrote:

> I realize that this is the Morse code and guns newsgroup but hope
> that no one will object to some antenna information.
>
> I promised to do some measurements for someone but I don't remember
> who or what thread - so here it is. My HS-1600 with top hat can be
> viewed at: http://people.delphi.com/cecilmoore/mobnow.htm

And a thing of beauty it is, too!

marty
N7MX

519. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 07:57:04 UTC
From: tom_bruhns@agilent.com
Message-ID: <933uogvek1@nnrp1.deja.com>
Source record: 172887

In article <3a8d27d7.1060646318@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
(deleted to save space...)

The samplers must return the (buffered) instantaneous values of voltage and current (actually the voltage representation of the current) at the sampling instant, not a rectified version of them. As noted before, the buffering must emulate the d-s characteristics of the P-channel fets used in the original... I could send a copy of the probe schematic if you're really intersted.

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

520. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 09:43:36 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9344v4$322$1@plutonium.btinternet.com>
Source record: 172888

Cec,

Some time in the dim and distant past I predicted that if
you superimposed a disk of chicken wire (or something) of
the same diameter on the top radials the resonant frequency
would fall from 3.95 MHz to a lower frequency but still well
inside the 80m band.

ie., the replacement would have a smaller electrical effect
than might at first be expected. I have now lost the
predicted resonant frequency.

Reg.

521. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 10:25:18 UTC
From: n2ey@aol.com
Message-ID: <20010105052518.15260.00000184@nso-ba.aol.com>
Source record: 172889

In article <3A554C83.35BDA01A@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>> The conclusion is simply that Morse has new uses. It's not "outmoded".
>
>It's outmoded by PACTOR II. :-)

No, it isn't.

Can a ham do PACTOR II and drive safely at the same time?

Can a ham do PACTOR II for under $100?

Can a ham do PACTOR II without a computer?

73 de Jim, N2EY

522. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 10:25:22 UTC
From: n2ey@aol.com
Message-ID: <20010105052522.15260.00000185@nso-ba.aol.com>
Source record: 172890

In article <4911-3A553162-88@storefull-112.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, I am sorry for mistakenly attributing something to you. I don`t
>know who wrote it.

That's OK. His call is right there in the post you responded to.
>
>Jim did write, or so it appears on my screen:
>"The conclusion is simply that Morse has new uses. It`s not "outmoded".
>That`s all."

Yep. And that's a true statement.

The mode was being discussed, not the test.
>
>Commerce, the military, and other agencies have abandoned Morse.

Except for a few specialized uses (like auto ID) that's true. The reason is simple: They don't want to pay radio operators. In fact, they are abandoning the whole concept of "radio operator". The Navy dropped that title recently.

>They
>communicate more than ever, but with other codes and voice.
>Today`s voice and data replace Morse.

Sure - because radio is just a tool to them. It's not an end in itself. They would abandon radio in a second if something else came along. They are rapidly abandoning analog voice modes. Who uses SSB besides, hams, cbs and some fishing boats? SSB was first described in 1915 and was on the air in 1923.

In fact, to a large extent both "radio" and "wire" communications are being abandoned. The revolution is powered by fiber optic communications.

> American Telephone & Telegraph
>Company no longer offers telegraph circuits to anybody, Armed Forces,
>included. Their name is phoney. It should really be just the AT Company.

Because they can't make money on them. If they could, they'd offer 'em in a second.

>The Western Union operator no longer occupies a corner down at the
>railroad depot. No Postal Telegraph messenger boys deliver "wires" on
>their bicycles.

Because a telegram would cost too much that way.

>Morse is no longer stylish,

That's simply a subjective opinion. All those hams who use it on the air every day don't agree.

> that is, Morse is outmoded.

Not the same thing at all. Can you actually say that Morse has absolutely no potential nor use in the "modern" world? There was already a post by a designer whose software causes computers to beep Morse error codes. Sounds pretty modern to me. Can you say that no disabled person will ever benefit from Morse as a communications method?

What you are doing is badmouthing the mode, not the test. Why?

73 de Jim, N2EY
>

523. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 10:53:24 UTC
From: ti2dll@email.com
Message-ID: <934932$82gcc$1@ID-7470.news.dfncis.de>
Source record: 172891
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

In article <3A54CD42.24BB@wt.net>, Mark Keith wrote:

>> How about spiraling the radials? How about, heaven forbid, fractal radials?
>
>I have in fact seen people spiral radials. Was just reading an old
>article where the guy did just that to fit a small area. Yep, I guess a
>fractal radial would work too. MK

The whole idea behind the radials, if I remember correctly, is to provide a low loss return path for the signal... so a spiral, if we ignore any coil effects, should be more efficient since it covers a greater area than straight radials...

--
//\/\ario //\/\elendez- TI2DLL
ti2dll@email.com

524. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 12:07:11 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <934dmvodn1@newpoisson.nosc.mil>
Source record: 172893

Mark Keith <nm5k@wt.net> wrote in message news:3A5513AE.98@wt.net...
How does the wind effect that thing? I bet effective but looks like kind of a wind catcher??? MK

Mark and Cecil: I was thinking more along the lines of, "what a great blip that thing would make on a radar screen." Cecil - that was tongue in cheek...that's a great lookin' set up. Regards, Jim R. K9JWV

525. Short Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 12:38:19 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Qej56.388$QP6.365@newsfeed.slurp.net>
Source record: 172894

My homebrew 13.5-ft 40M and 25-ft 80M bugcatchers get out fairly well on a 'ground' system consisting of the two 20-ft halves of a 40-ft extension ladder laid out side-by-each on two sawhorses in the back garden. They're noisy on rcve, but I can work the Js LP/SP from Zinzinnati on 40M, if I listen on a more-quiet antenna.

Other than having to adjust the feed taps and the top-hat tap on the loading-inductors, there seems to be no advantage in having the radiators in a particular position on the 'plane' from one end or the other to any place in-between. The 'ground' is my 'model' of my old pick-em-up truck.

With several chokes in the feedline, there is a substantial current on an ammeter connected between the 'plane' and the dirt-earth-ground below. Adding radials raises this current.

Corona is spectacular on a foggy evening ;-).

73, Dave, K3BHJ

526. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:30:38 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A55CC7E.EC8D50A2@dvol.com>
Source record: 172895

Cecil wrote:

> N2EY wrote:
> > The conclusion is simply that Morse has new uses. It's not "outmoded".
>
> It's outmoded by PACTOR II. :-)

>
Both stations.
>--

> http://www.mindspring.com/~w6rca

527. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:33:15 UTC
From: n2ey@aol.com
Message-ID: <20010105083315.05691.00001873@nso-bh.aol.com>
Source record: 172900

In article <930urp$m15$1@slb6.atl.mindspring.net>, "KB9WFK"
<KB9WFK@mindspring.com> writes:

>>
>> - Use of Morse by the handicapped
>Great. Then they can be handicaped AND not understood by 99 percent of the
>population.

How many people know American Sign Language (ASL)? Probably only a few percent
of the hearing population at best. Does that mean it has no use? Of course not.

>> - Use of Morse for man-machine interface
>
>?
>Sorry, but I don't see ANY logic in how the use of Morse in either of those
>situations would be worthwhile.

Then you lack imagination and are simply badmouthing the mode.

> Which makes more sense, hitting several
>keys/buttons once to do something or hitting one multiple times?

Depends on the situation. Can you show that for all people, disabled or not,
for whom "hitting several keys/buttons once to do something" is easier than
"hitting one multiple times"? I don;t think so.

>Since these were your ideas could you please give an example of either or
>both to show what you mean?

Anything that uses electronics can be equipped to read out in Morse using a
simple piezo tone generator/speaker. Works in the dark, or when other parts of
the system have failed. Flashing LEDs do the same thing. Much simpler and more
universal than voice recognition/genrration.

Depending on the disability, Morse may be far more adaptable for some people
than other modes. A blind person with limited hearing may not be able to
understand speech or read, but the use of Morse could be very easy practical
for them.

But that would mean Morse is not "outmoded" or "obsolete". Not
electropolitically correct these days to find new uses for old things. Ending
is better than mending and all that.

73 de Jim, N2EY

Like I said, I don't see any application in
>either area but maybe I am missing something that will revolutionize the
>computer keyboard.

>
>I over snipped, but there was a comment by someone that the AO-40 sat. was
>in high Earth orbit and that is what makes it special. Although not
>electronic, the moon is also in a high Earth orbit and has been used for
>quite a long time.
>
>

528. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:33:16 UTC
From: n2ey@aol.com
Message-ID: <20010105083316.05691.00001875@nso-bh.aol.com>
Source record: 172898

In article <3A548698.B9C76B29@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>>
>> Cecil <Cecil.A.Moore@IEEE.org> writes:
>> > It is impossible to send CW through
>> >a satellite again for the first time.
>>
>> Of course. But it is possible to send Morse through a different type of
>> satellite for the first time.
>
>It is possible to fly across the Atlantic Ocean in a 747 instead of
>in the Spirit of St. Louis but nobody cares.

Not true. I care. Riding in a 747 is not much of an accomplishment - luggage
can do it. Piloting a single-engine monoplane solo over the same route is a
different thing entirely.
>
>> You know what the Elser-Mathes cup is?
>
>Nope.

Didn't think so.
>
>> What, exactly, did you do to "research"?
>
>Most of the QSTs for the past 50 years,

Then you missed the reference that led me to the Shawnee town story. 1968.

And you previously said you didn't have any old QSTs.

Your research must have consisted of looking at a few magazine covers, seeking
the words "HAM USES CW ON HF HAM BAND TO SAVE LIVES" in letters two inches
high.

> all my ham radio reference books,

Which are? How many of them are histories?

>and the world wide web.

Right. As if.

> The Texas A&M Library is next.

I can just imagine.
>

>> First time you use the words "asking for help" about this. I doubt you
>really
>> want help or information.
>
>If I didn't want or need help I would have not asked the question.

You never used the word "help" before in this discussion.

>Why
>would I ask a question if I already knew the answer?

To divert the discussion.
>
>> You're not struggling.
>
>You say I am ignorant.

Nope. You wrote that, not me. Of course, anyone who isn't omniscient is
ignorant of something.

>Therefore, I am struggling.

Nonsense. One does not follow from the other. Ever hear of "fat, dumb and
happy?"

>> You'll pull it apart in typical Cecil fashion.
>
>I give you my word, I am simply asking for information that I have been
>unable to obtain by myself.

Why should I believe that? You did not believe me.
>
>> Now you can pick that apart all you want, Cecil. But now you have heard a
>true
>> story of human lives saved by hams using CW (Morse) on the HF ham bands.
>
>I don't want to pick it apart.

Uh-huh. And Bill never had sex with Monica.

>Thank you for the story.

You're welcome.

>Was that publishedin QST?

Yes. More than once.

> I wasn't reading QST in 1937 so I missed it.

I wasn't reading QST in 1937 either. Didn't start till about 1965. But I didn't
miss it.

73 de Jim, N2EY

529. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:33:17 UTC
From: n2ey@aol.com
Message-ID: <20010105083317.05691.00001876@nso-bh.aol.com>
Source record: 172897

In article <3a53bbd6.483553@news.mcn.org>, k6mhe@arrl.net (Dan Richardson) writes:

>Engineers built the Titanic.

Managers drove it.
>
>Amateurs built the ark.

Used it, too.

73 de Jim, N2EY

530. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:33:18 UTC
From: n2ey@aol.com
Message-ID: <20010105083318.05691.00001877@nso-bh.aol.com>
Source record: 172899

In article <Gca56.533$e5.1331528@news.ntplx.net>, "Ed Hare, W1RFI"
<w1rfi@arrl.net> writes:

>N2EY <n2ey@aol.com> wrote:
>
>> >I would be game and we could decide who wins by tallying up CW
>> >sweepstakes scores and dividing the score by the power used. :-)
>
>> Works for me!
>
>Okay, but I want to use the year I did 56 QSOs in 31 sections with 10
>milliwatts! :-)

I told you before that I'd take the bet and lose intentionally. "Your money's
no good here, Mr. Hare" ;-)

>> Or maybe we could see who has the most unusual design for an HF
>> transceiver. BWAHAHAHA!
>
>Now, for a lobster dinner, I might just bring out the most unusual design I
>ever thought of for a transceiver.

Better set the boundary conditions:

1) "HF transceiver" means a rig capable of operation on more than one HF
amateur band. It must be tunable over a significant portion of the band and the
receiver and transmitter must track each other.

2) It has to actually have been built and be used to make contacts. Or have
existed and been used.

3) It can't be a copy of a commercially made product or basic design.

>Won't tell you what it is,

I won't tell. You gotta beat a Southgate Type 7.

> because
>though I don't mind losing, I must admit that winning does taste just a bit
>better.

Boiled or broiled? Butter, lemon, or both?

You like mussels in white sauce or chowdah?

How about the hot sauce? I've got Dave's Insanity and Dave's Ultimate Insanity.
>
>Should probably have taken this thread off rraa some time ago, so my

>apologies to my friends here.
>
What antenna did you use with that 10 milliwatt setup? Some pretty big piles of aluminum up there in Newington.

(note mandatory antenna content ;-)

73 de Jim, N2EY

531. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:33:22 UTC
From: n2ey@aol.com
Message-ID: <20010105083322.05691.00001878@nso-bh.aol.com>
Source record: 172896

In article <3A555F56.A77E10A3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>One ham doesn't need
>any bandwidth. Nonsense?

>If only one
>ham existed, Why would he need any bandwidth? Who would he talk to?

Ever hear of radio control?

73 de Jim, N2EY

532. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 13:56:45 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55D29D.61B2F4E8@IEEE.org>
Source record: 172901

N2EY wrote:
>
> k6mhe@arrl.net (Dan Richardson) writes:
> >Amateurs built the ark.
>
> Used it, too.

Hey Jim, something I don't understand. If the entire earth was
covered with water, to where did the water recede?
--
http://www.mindspring.com/~w6rca

533. Re: Code Quick System

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:09:46 UTC
From: dmartin560@aol.com
Message-ID: <20010105090946.22148.00000010@ng-fz1.aol.com>
Source record: 172902

Try a search at google.com for Code Quick. It is by Wheeler Applied Research.
Dwayne KG4ADM

>I've seen where this system has been mentioned a few times in this NG.
>Where can I get some information on it? Thanks
>

534. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:10:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55D5ED.3AAAD6A2@IEEE.org>
Source record: 172903

N2EY wrote:
>
> <Cecil.A.Moore@IEEE.org> writes:
> >It is possible to fly across the Atlantic Ocean in a 747 instead of
> >in the Spirit of St. Louis but nobody cares.
>
> Not true. I care.

Well then, Jim, feel free to apply for entry in the Guiness Book
of Records for your 747 trip.

> And you previously said you didn't have any old QSTs.

I've subscribed to QST since the early 50s except for a time of
protest around 1990. I read them and throw them away so I indeed
do not have access to them anymore.

> Which are? How many of them are histories?

Mostly ARRL pubs which have some history in them. I'm hoping that
the Texas A&M library has a history of Morse code.

> You never used the word "help" before in this discussion.

Is there any difference in saying: "I have a question." and
"Help. I have a question."?

> Why should I believe that? You did not believe me.

I gave you my word. You neglected to give me your word.
--
http://www.mindspring.com/~w6rca

535. Re: Lattin multiband antenna; model

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:21:59 UTC
From: carkenord@juno.com
Message-ID: <934la0$gq6$1@nnrp1.deja.com>
Source record: 172904

Jim P.

....thats interesting......I have often wondered what "modeling" would reveal. Now that you have modeled it, what are your thoughts?

Are the "traps" working as something other than traps?

In your modeling procedure, what would happen if you did the reverse of what you did...that is......if you did the 12M section first...then added 10 meters? (Bear in mind that I don't know much about "antenna modeling" on a computer.)

I tried building one several years ago, with the aid of a grid dip meter. About 5 miles worth of wire later, I gave up.

I just got confusing results....

I am currently wondering if one of these "Antenna Analyzer" devices would enable a person to build this antenna?

Lee Carkenord KA0FPJ

> I tried modeling it.
>> I started out with a 10M section. After a lot of tweaking segments and
> segment alignment to get stable, realistic results, I added a 12M segment,
> expecting to get two resonaces somewhere around 10M and 12M.
> > I only got one resonance at about 16MHz.
> > Anyone else tried modeling this thing? Results?
> > Jim Pennino

Sent via Deja.com
http://www.deja.com/

536. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:26:34 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55D99A.4BB7F05A@IEEE.org>
Source record: 172905

N2EY wrote:
>
> In article <3A554C83.35BDA01A@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:
>
> >N2EY wrote:
> >> The conclusion is simply that Morse has new uses. It's not "outmoded".
> > >
> >It's outmoded by PACTOR II. :-)
>
> No, it isn't.

Note the smiley face. "Outmoded" means outclassed by another mode.
Get it? CW is certainly outclassed by PACTOR II. As far as class
goes, cost and equipment doesn't matter.

> Can a ham do PACTOR II and drive safely at the same time?

I certainly would not want to be on my motorcycle on the same
road as someone doing mobile CW. IMO, mobile CW is an accident
waiting to happen. I found it dangerous to play Morse practice
tapes while driving. While driving, distractions should be
kept at an absolute minimum.
--
http://www.mindspring.com/~w6rca

537. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:33:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55DB3F.1915A527@IEEE.org>
Source record: 172909

Brian Kelly wrote:
>
> Cecil wrote:
> > CW is outmoded by PACTOR II. :-)
>
> Both stations.

There are hundreds. Reliable contact with Germany using 50w and
a low dipole on signals unheard by the human ear. Your trouble
is you can't count the signals that you can't hear. :-)
--
http://www.mindspring.com/~w6rca

538. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:40:03 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <934mc4$u74@r02n01.cac.psu.edu>
Source record: 172907

'Very neat looking setup, but I believe that in Pennsylvania driving a
pickup with out a tail gate is illegal. If I remember right, even the net
kind of replacement tailgate is not allowed.
That looks like the kind of setup that people look at and say "I bet he's
not married" .

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A550054.82F9864D@IEEE.org...
> I realize that this is the Morse code and guns newsgroup but hope
> that no one will object to some antenna information.
>
> I promised to do some measurements for someone but I don't remember
> who or what thread - so here it is. My HS-1600 with top hat can be
> viewed at: http://people.delphi.com/cecilmoore/mobnow.htm
>
> It is tuned for 75m and note that only 2/3 of the coil is engaged.
> Someone asked me what height of stinger was equivalent to my top
> hat. I had never approached it from that angle before so I did
> some measurements leaving the position of the HS-1600 coil fixed.
>
> The top hat is located at eleven ft from the ground. There is no stinger
> above the top hat. If I remove the top hat and install a stinger
> to resonate at the same frequency, a twelve foot stinger is required.
> That makes the antenna 23ft from the ground - slightly illegal.
>
> The resonant frequency with the top hat is 3.95MHz. The resonant
> frequency without the top hat is 8.5MHz. The top hat shifts the
> resonant frequency by 4.5MHz. Since minimum inductance on the
> loading coil results in maximum field strength, the effect of
> a top hat is as close to something for nothing as one can get
> with mobile antennas.
> --
> http://www.mindspring.com/~w6rca

539. Re: 6 M gamma dimentions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:40:10 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A55DD98.43CB09B8@bellatlantic.net>
Source record: 172906

Naturally, I left out a little - but important - detail. I hate it
when that happens. When you solder in the #6 screw -
or try to - you'll find it won't fit inside of the center pin
of the SO239. I forgot to mention that you need to
file down the threads of the screw for the length that
will be inside the center pin so that the screw fits
nicely inside the pin. Also, I should mention making a
bracket to mount the SO239. First, whatever bracket
you do make should be mounted using stainless steel
hardware. Stainless steel should be the only hardware
you use for U bolts and mounting screws with a beam.
To make the brack for mounting the SO239, make an
L out of a piece of aluminum. The aluminum should be
wide enough to easily accomodate a hole into which
you mount the SO239. The dimensions of the L should
be about 1 1/2" on the short piece and about 3 1/2"
on the long part. The short part should be bent into a
saddle - you can do that by placing the flat aluminum
over a pipe of the same outside dimension as the driven
element, and tapping it into shape with a hammer.
Finally, the bracket material should be stiff enough so
that it won't bend out of shape in handling. My local
hardware store carries just the right stuff - I think it
is 3/32 thick.

ehsjr@bellatlantic.net wrote:

> First, .5 wavelength is WAY too long! 12" is a whole lot
> closer. I'd recommend about 15" to start, with about 2"
> clearance between the gamma tube and driven element.
> You can always shorten the 15" dimension.
>
> That answers your question. Now I'll add some more.
> If reading about a different way to make a gamma is
> not of interest, skip the long part. But do read the end of it.
> Here's a long description of a really good and easy way
> to make a gamma, once you understand it. It is easier
> to make it as I'll describe with the gamma tube fixed
> and no shorting strap to slide around.
>
> Here's how I do it: I attach an S0239 to the center
> point of the antenna so that the center pin is about 2" above the
> driven element. I flatten the end of a piece of 3/8 tubing.
> The tubing inner diameter size is just snug on the insulated
> center conductor from RG8. I flatten about 1", with 1 blow

> from a hammer). I cut the tubing to 15", flattened end to
> unflattened end. I drill a hole thru the flattened ent to accept
> a #6 screw. I solder a #6 brass screw into the center pin of
> the S0239, after putting two nuts on the screw. I cut off the
> head of the screw, and remove one of the nuts. I then attach
> the tube to the brass screw with the brass nut and brass
> lockwashers. I make an insulating strap to support the
> tubing at about the 10" point. parallel to the driven element.
> (I've seen these made out of plexiglass, but I use a high dielectric
> plastic material.) Next, I cut a 20" piece of center conductor,
> which I insert into the tube as far as it will go, after stripping about
> 1" of insulation off the outside (of the tube) end of the conductor.
> I then pull it out slightly, to insure that he conductor does not touch
> the tube. That completes initial gamma assembly.
>
> To adjust, you sllide the stripped end of the conductor along the
> driven element, starting at about 10" from the center point, until
> you find best match. You then slide the conductor slowly out of
> the tube while leaving the stripped end attached to the driven
> element at the point of bets match found earlier, all the while looking
> for the best match (lowest swr) There is some interaction between
> the two adjustments. Once you have found the point of best
> adjustment - lowest swr - check to see how much you can
> shorten the wire. For example, let's assume the best point on the
> driven element turns out to be 16" from the center, but you had to
> pull the conductor 6" out of the tube. That means you can cut off
> about 9" of the conductor. Remember, it started out with about
> 5" sticking out of the tube, so when you finished, you had about
> 11" of conductor sticking out of the tube. The big loop of extra
> wire needs to be eliminated. I usually cut the wire twice - I remove
> most of the extra wire with the first cut, re-verify that the thing
> is adjusted for best swr, then cut it to the final size and do the final
> adjustment.
>
> Now, if the best feed point ends up closer to the center of the
> driven element than about 16", you can shorten the gamma
> tube by the amount of wire you pulled out of it. Lets say your
> best match was at 13", and you pulled 5" out of the gamma
> tube, leaving 10" of center conductor inside the tube at best
> match. You could then cut the tube to about 11", flattened
> end to unflattened end, so that your conductor did not have to
> loop backwards towards the center of the antenna.
>
> That's the details. The net difference is a mechanically
> superior and easier to make match than the kind where
> the tube must be supported by both an insulating strap
> and a shorting strap. In the design I described, the tubing
> is fixed in place because it is attached to the SO239 center
> pin - you cannot slide the tubing around. In the other style
> design, you must slide the tubing around, as well as the

> shorting strap. Both designs require an insulated tubing
> support, but you don't have to make a shorting strap
> with the design I described. Both require two adjustments,
> but in this design you move only the coax. In the other,
> you must move the tube and the shorting strap - and sliding
> either one has the effect of "trying" to move the other so the
> mechanical manipulation can be a bit more difficult. The
> degree of difficulty of finding the correct adjustments is
> identical.
>
> This is the end I referred to that you should read.
> When you find the point on the driven element where
> you get the best match. you are actually finding the
> point where the antenna impedance is about 50 ohms.
> However - to get current to that point, you need a
> conductor. (That conductor is the gamma tube, or
> if you use the design I mentioned, the center conductor
> stripped out of the RG8.) Great - we found the 50 ohm
> point somewhere out on the driven element - but we had
> to use a conductor to get the current out there. And a
> conductor adds inductance to the antenna system. We
> need to cancel out that inductance, and we do that with
> capacitance. Well, the gamma match consists of a tube
> with an insulated conductor inside of it. Two conductors
> in close proximity, insulated from one another, form a
> capacitor. So the gamma match assembly provides
> everything we need - the conductor to bring the current
> to the 50 ohm feedpoint, and the capacitor to cancel out
> the inductance that that conductor introduced. The adjustments
> you make are to do two things: find the 50 ohm point on
> the driven element, and adjust the capacitance to counteract
> the unavoidably added inductance.
>
> Finally, if your antenna elements are cut to the wrong size,
> a 50 ohm match will be hard/impossible. So make sure
> the dimensions are correct! And if you cut stuff for greatest
> gain, the match point will be harder to establish than if you
> cut stuff for the broadest swr bandwidth.
>
> Rosco wrote:
>
> > Can anyont tell me the dimentions of a gamma match for 6 meters.
> > I am working on a 4 el beam and would appreciate some help.
> >
> > The handbook says .5 wavelength but i cannot get it to tune up. I have been
> > trying it in the 12" ballpark with no luck.
> >
> > Thanks
> >
> > Ross / N0MSS

540. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:40:23 UTC
From: w1rfi@aol.com
Message-ID: <20010105094023.29571.00000031@ng-fc1.aol.com>
Source record: 172908

>From: n2ey@aol.com (N2EY)

>1) "HF transceiver" means a rig capable of operation on more than one HF
>amateur band.

Boy, that is stacking the deck almost as bad as my CW SS challenge. :-)

>You like mussels in white sauce or chowdah?

Love chowder. Mussels taste like the bottom of the dock smells. :-)

>How about the hot sauce? I've got Dave's Insanity and Dave's Ultimate
>Insanity.

Don't do hot sauce. Love good horseradish, though, but not on lobster.

>What antenna did you use with that 10 milliwatt setup? Some pretty big piles
>of aluminum up there in Newington.

Whew; we can stay. The antenna was an 80 meter dipole, ladder-line fed, up 50 feet on one end, 15 feet on the other, sloping south, in between buildings in Hartford, CT. :-)

73,
Ed Hare, W1RFI

541. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:42:19 UTC
From: richardharrison@webtv.net
Message-ID: <15891-3A55DD4B-2@storefull-118.iap.bryant.webtv.net>
Source record: 172792

ehsjr wrote:
"Essentially, you are arguing for disbanding of the Amateur Radio
Service, whether you realize it or not."

The "Amateur Radio Service" is a licensing vehicle for non-commercial
users

The difference from CB is slight. FCC staff has said to me that when
they scan the CB and Ham spectrum segments with an analyzer, they look
pretty much the same. That`s your quasi-official attitude. But, CB can
be used for commercial purposes, Ham Radio can`t.

Rules and regulations are different for the two services. They are meant
to be appropriate for the different intended uses.

I advocate spectrum continue to be allocated for non-commercial users.
The allocations should be enlarged as h-f spectrum falls from favor with
traditional commercial users. Hams need more spectrum for the growth in
numbers of non-commercial users.

Modes allowed should reflect uage, not dictate usage.

The U.S. Army Cavalry no longer rides horses. It consists of armored
divisions. They ride tanks. The U.S. Army Signal Corps no longer sends
Morse. It uses modern voice and data communications. Modern modes are
also more appropriate for amateur communications. But, since amateur
communications are hobbyist communications, CW should be allowed just
because an amateur likes to use it and it doesn`t hurt anybody or
anything. CW is not as effective as other modern modes. That`s the cause
of its demise. The Signal Corps no longer uses Morse, and no other
agency of the U.S. Government normally uses Morse, either. The Signal
Corps no longer needs an Amateur Radio Service as a ready pool of young
men already trained as Morse operators. Morse is obsolete.

Best regards, Richard Harrison, KB5WZI

542. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:48:46 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55DECE.36362B5B@IEEE.org>
Source record: 172910

Jim Rodenkirch wrote:
> Mark and Cecil: I was thinking more along the lines of, "what a great blip
> that thing would make on a radar screen." Cecil - that was tongue in
> cheek...that's a great lookin' set up. Regards, Jim R. K9JWV

Note that the blip wouldn't be very big *on edge* which is
where the wind is.
--
http://www.mindspring.com/~w6rca

543. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:51:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55DF84.BCC42FD4@IEEE.org>
Source record: 172911

Reg Edwards wrote:
>
> Cec,
>
> Some time in the dim and distant past I predicted that if
> you superimposed a disk of chicken wire (or something) of
> the same diameter on the top radials the resonant frequency
> would fall from 3.95 MHz to a lower frequency but still well
> inside the 80m band.
>
> ie., the replacement would have a smaller electrical effect
> than might at first be expected. I have now lost the
> predicted resonant frequency.

Glad you reminded me, Reg. I had forgotten. The WX here has
warmed up and dried up to where outdoor experiments are fun
again. As I remember, I was disappointed in how little you
thought the frequency would change.
--
http://www.mindspring.com/~w6rca

544. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 14:56:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55E0AF.6EF73EEA@IEEE.org>
Source record: 172913

John Passaneau wrote:
> 'Very neat looking setup, but I believe that in Pennsylvania driving a
> pickup with out a tail gate is illegal. If I remember right, even the net
> kind of replacement tailgate is not allowed.

If there's nothing in the pickup bed, what does it matter?
I lived in Penn. for awhile. Good food, lousy weather.

> That looks like the kind of setup that people look at and say "I bet he's
> not married" .

Beauty is in the eye of the beholder.
--
http://www.mindspring.com/~w6rca

545. Re: How far can I talk?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:06:58 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A55E2D9.1A23ADE3@earthlink.net>
Source record: 172912

well a lot of it depends on how high your RVs antenna could be if your just talking mobile antenna you are talking only a mile or so if you can manage a 20 or 30 foot pole with a gain antenna on it you could get around 5 miles till you drop in a valley
good luck

Pete Holden wrote:

> Okay. I operate exclusively on HF -- mostly CW on 20 meters. So, please
> excuse my ignorance of VHF and UHF.
>
> Anyway, I'm thinking of getting an IC-706 to run in my travel trailer. As
> you know, it will also operate on 2m and 70cm. So, I'm thinking that if I
> carried a 5 watt handheld while off romping in the wilderness I could stay
> in touch with the xyl and she with me.
>
> The question is, What sort of range could we expect? And, what about under
> conditions where the line of sight is interrupted like an intervening hill,
> mountain, canyon, etc.? Considering what I'm wanting to do, which would be
> better, the 2m or 70cm band?
>
> Thanks, Pete KAï¿½TZK
>
> PS. Yes, I know that she'd need her own license. She'd be happy to do that,
> of course.

546. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:10:56 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934o60$sn3$0@208.206.142.111>
Source record: 172914

Cecil wrote:
>
> David Sinclair wrote:
> > As long as folks don't go out of their way to kill it, say by
> > abandoning band plans or allowing phone anywhere in the band,
> > CW will be around for a long time to come.
>
> Don't know about you, David, but I can read CW through almost any
> QRM except another narrow band signal right on the same frequency.
> I hear people checking into nets when they can't make it with SSB
> and the weak CW signal is readable through the SSB KWs.

Cecil your ignorance is showing again. When a CW station checks into the net it's *between* the SSB KWs, who are standing by to copy. An ordinary CW signal is no competetion with a KW SSB.
But then, if you admitted that, your goal of "one big band" with no subbands by mode would suffer wouldn't it?

547. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:16:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55E560.EDE940D@IEEE.org>
Source record: 172916

Dick Carroll wrote:
> Cecil your ignorance is showing again. When a CW station checks into
> the net it's *between* the SSB KWs, who are standing by to copy. An
> ordinary CW signal is no competetion with a KW SSB.

I disagree, Dick. I can usually read CW between the natural pauses
in human speech. Did you realize that a SSB station emits almost
no power while the operator pauses between words?
--
http://www.mindspring.com/~w6rca

548. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:35:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934pkq$31m$0@208.206.142.111>
Source record: 172917

Cecil wrote:
>
> Mark Keith wrote:
> > You HAVE to know code to work HF.
>
> Nope, there are plenty of HF stations who don't know Morse code.
> CBers, for example.

Odd that you should mention it. Is that sort of operation what you wish
onto the ARS?

549. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:36:29 UTC
From: jflanders2@home.com
Message-ID: <3a55e866.426130028@news>
Source record: 172918

On Thu, 04 Jan 2001 23:12:44 -0800, Martin Hibbs <mhibbs@ipeg.com>
wrote:
>Cecil wrote:
>
>> <SNIP> My HS-1600 with top hat can be
>> viewed at: http://people.delphi.com/cecilmoore/mobnow.htm
>
>And a thing of beauty it is, too!
>
>marty
>N7MX
>

Those wishing for a more conventional looking "top hat" should consider loading a bicycle or two up there on the roof. Where I live, people drive around all the time with bicycles mounted up there. No reason why you couldn't do it permanently. No whip required.

Just don't forget it is there when you get to the McDonald's drive-through.

Jerry W4UK

550. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:45:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934q7j$4do$0@208.206.142.111>
Source record: 172769

Brian Kelly wrote:
>
> Richard Harrison wrote:
>
> > Jim, N2EY wrote:
> > "The number of hideously communications and physically disabled folk
> > learning the code and finally being able to express themselves by some
> > truly inventive means is growing by leaps and bounds."
> >
> > That struck me as so funny, I couldn`t quit laughing for awhile. Thanks,
> > Jim.
> >
> > Is Jim characterizing radio amateurs? Well maybe he meant other
> > handicapped people. Maybe tragedy has comic implications, at times.
> >
> > What does this have to do with test requirements for amateur radio? It`s
> > only desperation to find some merit in an outmoded device, Morse code,
> > used to exclude people from the amateur ranks. It`s been used as hazing,
> > or passwords and secret codes used by children in their secret
> > societies.
> >
> > Using the tragic to persuade that morse should pervade the ham bands is
> > not new. There is the old stroke victim story. The speechless patient
> > could only communicate with the medic, who happened to be a ham, by
> > squeezing his fingers in Morse code.
> >
> > It`s a real stretch to make practical conclusions from the
> > extraordinary.
> >
> > Best regards, Richard Harrison, KB5WZI
>
> >
> . . . 'bout what I'd expect out of a codeless wonder.

One wonders what he'd do if he ever found himself in the situation
where he actually needed code to communicate. He'd be outta luck because
he'll never give in and learn it. Be too much of a hazing ritual.

551. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:52:44 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55EDCC.4DDC9807@IEEE.org>
Source record: 172770

Dick Carroll wrote:
>
> Cecil wrote:
> >
> > Mark Keith wrote:
> > > You HAVE to know code to work HF.
> >
> > Nope, there are plenty of HF stations who don't know Morse code.
> > CBers, for example.
>
> Odd that you should mention it. Is that sort of operation what you wish
> onto the ARS?

Why would you say that? Mark's statement above is false. I gave
an example of why it is false. There are other examples like
commercial HF broadcast stations. In fact, to the best of my
knowledge, the ARS is the only service in the nation that still
requires Morse code for HF access.
--
http://www.mindspring.com/~w6rca

552. Antenna Factor (AFE)?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 15:59:58 UTC
From: CDT <xctx@onr.com>
Message-ID: <2cm56.19$Nu3.3458252831@news.onr.com>
Source record: 172915

I need to make a calibrated antenna for field
strength measurements (V/m). What's the
best way to compute the "antenna factor"
for a homebrew test dipole at VHF frequencies.

thanks in advance,
W5CDT

--
-->Remove the x's from my email address before using <--

553. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:01:09 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55EFC5.5813B419@IEEE.org>
Source record: 172772

Dick Carroll wrote:
> One wonders what he'd do if he ever found himself in the situation
> where he actually needed code to communicate. He'd be outta luck because
> he'll never give in and learn it. Be too much of a hazing ritual.

He would have made the same choice as 99.8% of the rest of the
U.S. population. Like them, the odds of him needing Morse code
expertise are infinitesimal. Worrying about more probable
happenings is advisable.
--
http://www.mindspring.com/~w6rca

554. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:09:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55F1C4.D3C39622@IEEE.org>
Source record: 172775
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick Carroll wrote:
> The detailed early memory work of memorizing "facts" is just a
> part of the whole.

Then why do you badmouth it so often?
--
http://www.mindspring.com/~w6rca

555. Re: Lattin multiband antenna; model

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:13:29 UTC
From: jflanders2@home.com
Message-ID: <3a55eb50.426876164@news>
Source record: 172773

Which brings up a question - have the widely-used modeling tools been
validated for non-conventional radiating structures? Back when I had
a real job, we tried to make SURE that a modeling system could be
trusted before placing bets on its result.

What are the validation limits? What kinds of structures are outside
the bounds for Mininec or NEC-2?

Jerry W4UK

On Thu, 4 Jan 2001 20:33:40 -0800, Jim Pennino <jimp@mail.specsol.com>
wrote:

>carkenord@juno.com wrote:
SNIP
>
>> www.wa3rey.com/lattin.htm
>SNIP
>I tried modeling it.
>
>I started out with a 10M section. After a lot of tweaking segments and
>segment alignment to get stable, realistic results, I added a 12M segment,
>expecting to get two resonaces somewhere around 10M and 12M.
>
>I only got one resonance at about 16MHz.
>
>Anyone else tried modeling this thing? Results?
>
>Jim Pennino
>

556. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:15:10 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934rue$98o$0@208.206.142.111>
Source record: 172771
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

"Ed Hare, W1RFI" wrote:
>
> Brian Kelly <kelly@dvol.com> wrote in message
> news:3A552E2D.3DFEEEC@dvol.com...
>
> > Dick Carroll wrote:
>
> > > Do tell. What that means is that you can be dumb as a box of rocks with
> > > a photographic memory, but you still need to know *something* - The
> > > code.
>
> > Heh.
>
> But... but... I learned the code by --- memorizing it! :-)
>

You learned the code *characters* first by memorizing them, which you
soon abandoned in favor of character then word sounds, if you became a
functioning CW operator beyond entry level.
No use in asserting that memory isn't involved in learning, everyone
who knows anything at all about learning knows that. Its the
assimilation of what is learned, when it gets integrated into the
individual's complete bank of knowledge that actual learning takes
place. The detailed early memory work of memorizing "facts" is just a
part of the whole.

557. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:17:40 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934s34$98o$1@208.206.142.111>
Source record: 172774

N2EY wrote:
>
> In article <3A555F56.A77E10A3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:
>
> >One ham doesn't need
> >any bandwidth. Nonsense?
>
> >If only one
> >ham existed, Why would he need any bandwidth? Who would he talk to?
>
> Ever hear of radio control?

He could always call CQ, after all, how would he know he was the only
survivor?

558. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:21:23 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934sa3$a56$0@208.206.142.111>
Source record: 172776

```
Cecil wrote:
>
> Dick Carroll wrote:
> >
> > Cecil wrote:
> > > How do you meet freebanders? I don't know any.
> >
> > Oh- You don't "talk to those guys'? I thought you said you do.
>
> Nope, it was CBers that I said I talked to. You said you used
> CB also.

There ya go, obfuscating again. YOU said you "talked to those guys
using your Icom 706". I said I used a couple legal CB sets for
intervehecular RV communications while travelling with non-hams before I
got some family radio service HT's, which work much better for that use.
Big difference. That makes you a Freebander.
```

559. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:23:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934sdc$a56$1@208.206.142.111>
Source record: 172777

```
Cecil wrote:
>
> Dick Carroll wrote:
> >
> > Cecil wrote:
> > > Public pride *IS* vanity.
> >
> > And you are still full of hot air as always. The public knows not nor
> > cares what we hams' accomplishments are nor any hint of why we should be
> > proud of them.
>
> Earth to Dick. Other hams *ARE* the public. If you need other hams
> for you to be able to feel pride, that *IS* vanity.

Speak for yourself. I don't. You evidently do. You never heard of me
before the code bashing began.
```

560. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:28:15 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934smvarh0@208.206.142.111>
Source record: 172778

ehsjr@bellatlantic.net wrote:
>
> Richard Harrison wrote:
>
> > You don`t pass a horsemanship test to get an automobile driver`s
> > license. Neither must you pass a test on the design and construction of
> > automobiles. Technology has made such tests no longer needed. The same
> > is true of CW and thorough technical tests for issuance of an amateur
> > radio license. There is no need for exclusion of fine people because
> > they don`t like code or the technical side of radio. If they are
> > competent people without a record of malfeasance, and pass a minimal
> > test on rules and operating requirements, they should be issued an
> > unresrricted license to full amateur priveleges in all bands, just like
> > drivers are licensed.
>
> You clearly don't understand why the Amateur Radio Service
> exists, per reguilations.
>
> Set aside the code issue for the moment and read your post.
> Now read 97.1 b, c and d - which you are supposed to know,
> and which knowledge you say new hams should be required to
> possess: "and pass a minimal test on rules ..."
>
> 97.1 a - e provide the basis and purpose of amateur radio.
> You are supposed to know that. 97.1 b, c and e require technical
> competance. You're recommending throwing away 60% the reason
> for the existence of the Amateur Radio Service when you say people
> should be granted full priveleges based on passing a minimal test on
> rules and operating requirements.
>
> Esentially, you are arguing for the disbanding of the Amateur Radio
> Service, whether you realize it or not.

It'x beginning to appear that is exactly what they have in mind.

561. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:30:19 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55F69B.79D8C074@IEEE.org>
Source record: 172779

Dick Carroll wrote:
> He could always call CQ, after all, how would he know he was the only
> survivor?

Because the Morse code requirement was raised to 88wpm. :-)
--
http://www.mindspring.com/~w6rca

562. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:33:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55F75C.FBA3190E@IEEE.org>
Source record: 172781

Dick Carroll wrote:
> There ya go, obfuscating again. YOU said you "talked to those guys
> using your Icom 706". ... That makes you a Freebander.

I'm surprised that you don't know that it is perfectly legal to
"freeband" during an emergency.
--
http://www.mindspring.com/~w6rca

563. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:37:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55F864.77D0C8AA@IEEE.org>
Source record: 172783

Dick Carroll wrote:
> You never heard of me before the code bashing began.

That's because reducing the code requirement hurt your vanity and
lowered your self esteem.
--
http://www.mindspring.com/~w6rca

564. Re: feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:40:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A55F904.17ECAD44@IEEE.org>
Source record: 172785

Tim wrote:
>
> I have an 80-meter off-center fed dipole that I want to trim to 40
> meters and install in the attic.
> The antenna is fed with ladder line, but I want to use coax to prevent
> interference. Should I
> completely replace the ladder line with coax? Or can I leave a length
> of ladder line and run
> RG-58 the rest of the way? Iï¿½ve seen diagrams using 300-ohm twin lead
> and coax, so I wonder
> if I can use the same principal with ladder line. Iï¿½ll need to know
> what length of ladder line to
> keep also. Iï¿½m assuming thereï¿½s a magic formula for this.

Not magic, but the G5RV works well on 80m, 40m, 20m, and 12m.
--
http://www.mindspring.com/~w6rca

565. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:42:22 UTC
From: k3bu@aol.com
Message-ID: <20010105114222.18702.00000024@ng-co1.aol.com>
Source record: 172782

>
>Hey Jim, something I don't understand. If the entire earth was
>covered with water, to where did the water recede?
>--
>http://www.mindspring.com/~w6rca
>
>

It went underground, filled the cavities. God can do anything, don't question it :-)

Yuri

566. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:43:02 UTC
From: rwclark@seanet.com
Message-ID: <3a92f95f.1114286168@news.seanet.com>
Source record: 172780

On Fri, 05 Jan 2001 07:57:04 GMT, tom_bruhns@agilent.com wrote:

>In article <3a8d27d7.1060646318@news.seanet.com>,
> rwclark@seanet.com (Richard Clark) wrote:
>(deleted to save space...)
>
>The samplers must return the (buffered) instantaneous values of voltage
>and current (actually the voltage representation of the current) at the
>sampling instant, not a rectified version of them. As noted before, the
>buffering must emulate the d-s characteristics of the P-channel fets
>used in the original... I could send a copy of the probe schematic if
>you're really intersted.

Hi Tom,

Please do, I would be very interested. Thanks.

73's
Richard Clark, KB7QHC

567. feedline question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:47:30 UTC
From: Tim <timmit@nospam.com>
Message-ID: <3A55FAAF.DDEB03F0@nospam.com>
Source record: 172784

I have an 80-meter off-center fed dipole that I want to trim to 40
meters and install in the attic.
The antenna is fed with ladder line, but I want to use coax to prevent
interference. Should I
completely replace the ladder line with coax? Or can I leave a length
of ladder line and run
RG-58 the rest of the way? Iï¿½ve seen diagrams using 300-ohm twin lead
and coax, so I wonder
if I can use the same principal with ladder line. Iï¿½ll need to know
what length of ladder line to
keep also. Iï¿½m assuming thereï¿½s a magic formula for this.

thanks.

568. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:56:02 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934ub2evn0@208.206.142.111>
Source record: 172786

Mike wrote:
>
> Guys - please don't continue beating up on KB1EVA - he's NOT the Wakefield
> killer!! Mike McDermott, KB1EVA is a good friend of mine, and he does live
> in Haverhill, but other than that, there is no connection
>
> 73 de N1PQG, another lowly tech trying to upgrade.

No, don't say that. No one is saying that techs are "lowly", and
particularly those who are trying to upgrade. If there was such a thing
it' have to be those who continuilly criticize all other licensees
becase of the Morse code.
I believe some of these guys have never tried learning Morse code
because of an irrational fear of failing, similar to some people who
fear speaking in public.
It becomes a self-defeating handicap, all too real because of its
perceived existance. Why else would someone who truly wanted a HF ham
license deny it to himself over long periods of time? If he didn't
believe that he couldn't do it would he allow that sort of obstacle to
prevail? Most of us didn't. It's not rocket science.

569. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:57:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <934ubq$on5$1@neptunium.btinternet.com>
Source record: 172788
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Sorry Mario,

The lowest resistance, lowest inductance and lowest
impedance between two points occurs on a straight wire, ie,
a true radial.

A tight spiral of wire is an RF choke and a waste of good
copper.
--
****
Regards from Reg, G4FGQ
For free radio modelling software go to:
http://www.btinternet.com/~g4fgq.regp

****

570. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 16:59:12 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934uh0evn1@208.206.142.111>
Source record: 172787

Brian wrote:
>
> Questioning and rejecting the old Morse Myths and Morse Authorities is
> the cornerstone of the no code movement.

Sure not built on much is it? "A house built on sand........"

571. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:08:44 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <934v4f$8nn$1@iac5.navix.net>
Source record: 172789

So what is your point? Are you saying vanity and self esteem are bad things? Of course if someone gets exactly what you got at a lesser price it tends to piss you off. The parable of the vineyard aside.

Only the left want all to be equal without regard to effort or ability. The law has been changed, I accept it. The need to rub it in is really starting to upset me!

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message >
> That's because reducing the code requirement hurt your vanity and
> lowered your self esteem.
> --
> http://www.mindspring.com/~w6rca

572. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:14:26 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <934vdi$ht6$0@208.206.142.111>
Source record: 172791

Richard Harrison wrote:
>
> N2EY wrote:
> "Many lives have been saved by hams using Morse on the ham bands."
>
> When did rescue agencies ever monitor the ham bands as a standard
> practice?

Never, except when directed there when circumstances dictate. You should know this, if you've been involved in ham radio much. The Coast Guard routinely comes up on ham HF frequencies when boats (usually private craft) with ham radio declare emergencies via ham bands and the information is passed on to them. It has happened several times that I'm aware of in more recent years. If the boat station had problems using SSB, or conditions were just too weak to be heard by other SSB stations, then it would be entirely normal for him to call a SSB operator using CW. Happens routinely, but of course you're not familar with any of that, as far as you're concerned any station anywhere who doesn't employ latest techniques doesn't deserve to be rescued. We see.

>
> From history we find examples of rescue summoned by radio telegraph at
> sea which douibtless saved hundreds of lives.
>
> Radio watch on the CW distress frequency has ended. Why? There are
> better ways to call for help now.

There have been "better ways" for many decades now, but none that work better. I'd much rather have many thousands of very proficient, well trained,interested and *involved* CW ops monitoring 500 kc for my distress signal than to have a failure-prone sattelite system (a full year after it went into effect almost 100% of distress alarm signals were false alarms, which prompted most of the overworked deck officers who had been saddled with the additonal chore of adminisering theship's emergency signalling system, to just turn it off). That, coupled with the fact that all satellite emergency calls are said to be routed to single point, where a single person monitors them, and the calls do not identify the nature of the emergency nor who, nor what the sice of the vessel, persons aboard, nor details are passed on. The person just relays on the fact that there was a destress call - which can be assumed to be a false alarm untill proven otherwise.

Better than CW? I'm not surprised you'd say that. You just don't know any better.

To save lives, what works best should
> be used. Hoping someone is on-frequency and paying attention within
> radio range is inferior to calling on a satellite phone for help. Plain
> voice and no code needed.

I continue to see more and more evidence that you have no idea of the
facts behind what you are saying.

Dick

573. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:16:38 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A560176.4D7D@wt.net>
Source record: 172790

Cecil wrote:

>
> I certainly would not want to be on my motorcycle on the same
> road as someone doing mobile CW. IMO, mobile CW is an accident
> waiting to happen. I found it dangerous to play Morse practice
> tapes while driving. While driving, distractions should be
> kept at an absolute minimum.
> --
> http://www.mindspring.com/~w6rca

But when you know the code well enough that is not a problem. You work SSB ect don't you? FM broadcast?
To a well worn cw op, there is really no difference. I can listen to code just as easy as voice. And I can transmit it with very little problem if my paddle is sitting on the seat next to me. But saying that , actually I don't do it too often. I'm usually on ssb yakking to all the my buddies and buddetts on 80/40m. I save the cw to when I'm stopped and I can kick back and relax. And be able to write calls down etc. But I could work mobile cw no problemo if I wanted to. But I can see where a slow-to medium speed dude/dudett might find it a hassle. I've got enough overhead built in to handle it. IE: 20 wpm seems like a crawl to me. Makes it much easier. To drive and work cw safely, you need it learned well enough almost to be a second languauge. Which to fast code op's it nearly is. Don't have to really think about what I'm receiving, I just receive it, just like someone in the back seat telling me how to drive...g MK

--
http://web.wt.net/~nm5k

574. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:23:10 UTC
From: rwclark@seanet.com
Message-ID: <3a93fa93.1114594061@news.seanet.com>
Source record: 172793

On Fri, 5 Jan 2001 06:56:45 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>> But back to improving the launch angle, here is some data to consider.
>>
>> As you've already noted, free space Z is 377 Ohms.
>> I will now offer the Earth Z for various conditions:
>> frequency dry soil wet soil ocean
>> 300 KHz ~150 ~25 1 Ohm
>> 3 MHz ~180 ~50 7 Ohms
>> 30 MHz ~180 ~65 20 Ohms
>> 300 MHz ~180 ~65 30 Ohms
>>
>> We now enter into the poorly understood (for this group) concept of
>> the "Brewster Angle."
>>
>> This is also known as the "Critical Angle" and represents that angle
>> subtended by the ray and Earth, beneath which there is little
>> reflection and maximum absorption. This is what robs the horizon lobe
>> of its maximum gain at very low angles. That is, there is still a
>> principal ray 10 degrees above the horizon, but the reflected ray 10
>> degrees below the horizon MAY be absorbed by Earth and offer no
>> contribution to the signal strength at the other end.
>>
>> The Z ratio of Earth to Free Space has a log-linear relationship with
>> this critical angle. If Both Z's equal then you cannot expect a very
>> good radiation boost by reflection for angles less than 45 degrees.
>> Here is a summary:
>>
>> SWR lowest angle of reflection
>> 1:1 45 degrees
>> 2:1 22 degrees
>> 3:1 ~15 degrees
>> 4:1 ~12 degrees
>> 5:1 ~10 degrees
>> 10:1 5.5 degrees
>> 50:1 1 degree
>>
>> You will note that to obtain a 50:1 SWR between Free Space and Earth,
>> then Earth must be Ocean below 3 MHz. If you want to have a reflected
>> ray combine effectively with a direct ray for angles of 10 degrees you
>> will need an Earth Z 1/5 of 377 Ohms. That is, 70 odd Ohms, which
>> means that Earth must be wet soil. You will note the trends above and
>> find that for VLF/ELF, the Earth/Free Space interface is as effective

>> as a copper boundary. This condition is reflected (no pun) in the
>> upper atmosphere and creates a waveguide condition which creates very
>> strong earth bound signals that span the globe (this why they use this
>> frequency for submarine communications).
>>
>> This all leads us back to the topic of radials, and of course we see
>> that short radials have nothing to do with the reflection point in the
>> remote distance unless they are VERY long and VERY dense (which is
>> already a contradiction). If such were the case then Earth Z would
>> appear to be on the order of 1 Ohm (we can only hope) at that remote
>> point.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Thank you Richard, your later part of this posting clarifies the issue
>considerably I make no apology for leaving in my earlier part of this
>posting as I work my way through what you have to say and the truth starts
>to dawn upon me.
>
>I'd still like to try elevating the feed point to see what happens, this
>assumes sufficient radials of a practical length to provided the best
>loading current practicable.
>A brighter torch at the right position above the mirror has got to be better
>than using a flat battery. ;)
>
>--
>Gary7SLL

Hi Gary,

With this posting, I presume your interest lies in 136 KHz. Again, if
you will note the figures above, you should have no problems with far
ground reflections with the Brewster Angle running roughly between 5
and 10 degrees for poor conditions (not abysmal conditions tho').
These angles are to kill for in HF.

As for raising the feed point. This has nothing to do with the launch
angle because the entire structure is going to support the same
current distribution regardless of feed. (I will admit this is
another broad brush stroke again.) You may find some benefit in
regard to drive conditions, but losses (as always) remain in the same
places they did before the move (your only hope was to move a current
max away from a localized resistance).

You might try Roy's EZNEC in its free distribution form (you have no
complexities that would tax it and it would allow you to move your
feed and observe the consequences in RAM).

73's
Richard Clark, KB7QHC

575. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:31:24 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5604EC.5C35@wt.net>
Source record: 172794

Cecil wrote:

> Why would you say that? Mark's statement above is false. I gave
> an example of why it is false. There are other examples like
> commercial HF broadcast stations. In fact, to the best of my
> knowledge, the ARS is the only service in the nation that still
> requires Morse code for HF access.
> --
> http://www.mindspring.com/~w6rca

But I was talking to Richard who is a ham. Not BC station, not cber. If he "Richard" wants to work hf, as a ham, he must pass a 5 wpm test. Being as he said earlier that he knew code at 20 wpm, I don't see how this would be a problem. The ARS service is the only one I'm talking about. Unless maybe he wants to go out and buy a BC station. Or a cb. I guess we could discuss that at a later date. MK
--
http://web.wt.net/~nm5k

576. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:34:17 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9350ipkqm0@208.206.142.111>
Source record: 172795

W1RFI wrote:
>
> >From: n2ey@aol.com (N2EY)
>

> >What antenna did you use with that 10 milliwatt setup?

What I want to know is how did you measure the power output? The margin
of error for most all ham instruments are more than that.

Dick

577. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:39:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9350sqkqm1@208.206.142.111>
Source record: 172796

Richard Clark wrote:
>
Its been at least a generation or two for me and 3-4 still
> sticks in my mind as being filament for many 7 pin tubes.

2 and 7 for the 8-pin octals.

Almost
> useless knowledge and it's still stuck in there (right or wrong).

Only if you don't use it. It'd probably surprise you how many techies
still do.

578. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:42:39 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A56078F.7BA6@wt.net>
Source record: 172798

N2EY wrote:

>
> >Was that publishedin QST?
>
> Yes. More than once.
>
> > I wasn't reading QST in 1937 so I missed it.
>
> I wasn't reading QST in 1937 either. Didn't start till about 1965. But I didn't
> miss it.
>
> 73 de Jim, N2EY

I've got a stack of 1930's QST's sitting next to me here. They are quite interesting. I like the july 35 issue with the mobile on the front. He's got some kind of whip antenna on the back of an old "ford"???, and is feeding it with twisted wire. H.P. Maxim was still the leader of the gang when this issue was printed. I've got a whole walkin closet full of old qst's. Some quite collectable. Fer instance I have not one, but two issues of the QST that shut down the ham bands for WW2. Had a yellow insert inside. I have a 55 issue that has a complete repro of the original QST in 1915. And while old, there is still tons of usuable info in them. MK

--
http://web.wt.net/~nm5k

579. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:46:14 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A560866.27B6@wt.net>
Source record: 172797
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Reg Edwards wrote:
>
> Sorry Mario,
>
> The lowest resistance, lowest inductance and lowest
> impedance between two points occurs on a straight wire, ie,
> a true radial.
>
> A tight spiral of wire is an RF choke and a waste of good
> copper.
> --

The one I saw was a real loose spiral. More of a maypole looking setup.
And more spiraled at the ends of the radials than at the base of the
antenna. MK
--
http://web.wt.net/~nm5k

580. Re: How far can I talk?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:48:28 UTC
From: "Joe S." <w4hh@my-deja.com>
Message-ID: <9351d8sgh1@nnrp1.deja.com>
Source record: 172805

In article <ihc56.124302$x6.57015676@news2.rdc2.tx.home.com>,
"Pete Holden" <peholden@home.com> wrote:
> Okay. I operate exclusively on HF -- mostly CW on 20 meters. So,
please
> excuse my ignorance of VHF and UHF.
>
> Anyway, I'm thinking of getting an IC-706 to run in my travel
trailer. As
> you know, it will also operate on 2m and 70cm. So, I'm thinking that
if I
> carried a 5 watt handheld while off romping in the wilderness I could
stay
> in touch with the xyl and she with me.
>
> The question is, What sort of range could we expect? And, what about
under
> conditions where the line of sight is interrupted like an intervening
hill,
> mountain, canyon, etc.? Considering what I'm wanting to do, which
would be
> better, the 2m or 70cm band?
>
> Thanks, Pete KA�TZK
>
> PS. Yes, I know that she'd need her own license. She'd be happy to
do that,
> of course.
>
>

If you use only the handheld and its "rubber duck" antenna, your range will be limited. You will not be able to work another station directly (from your rig to theirs) much more than a mile or so. If the other station has a good antenna system, you may be able to work five miles or so.

A handheld with its rubber duck antenna is good inside the primary coverage ring of a repeater. That is, if there is a local repeater(s), with antenna(s) on a nice mountaintop, you should be able to hit the repeater for five or more miles away.

I use a handheld in one of my cars but I have an external antenna -- deck-mounted 1/4 wave whip -- and a small amplifier that takes the output from the handheld and runs 20 watts out. That 20 watts, plus

the 1/4-wave external whip gives me 10-15 miles of coverage, easily within range of several repeaters.

Another trick would be to use a mag mount 5/8 wave. You can get a dual-band mag mount for 2 and 450. Connect that to the handheld and you'll work up to 10 miles with the 5 watts.

Of course, all this depends heavily on terrain. If you are in the bottom of a valley, buried deep in the forest, don't expect to work anyone.

--
Regards,
Joe Schlatter

Sent via Deja.com
http://www.deja.com/

581. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:52:03 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9351k3noe0@208.206.142.111>
Source record: 172799

Richard Harrison wrote:
>
> N2EY wrote:
> "Many lives have been saved by hams using Morse on the ham bands."
>
> When did rescue agencies ever monitor the ham bands as a standard
> practice?
>
> From history we find examples of rescue summoned by radio telegraph at
> sea which douibtless saved hundreds of lives.
>
> Radio watch on the CW distress frequency has ended. Why? There are
> better ways to call for help now. To save lives, what works best should
> be used. Hoping someone is on-frequency and paying attention within
> radio range is inferior to calling on a satellite phone for help. Plain
> voice and no code needed. CQD, SOS, and May day are understood by
> speakers of many languages.
>

Rich you speak as a systems engineer, and clearly you have been successful as one. But systems engineers seem to always like things tied up in neat, tidy packages, with everything about the system functing exactly as designed. On ham radio that just won't work, and the widely divergent aspects of this service are in fact its strengths, and portray some of the weaknesses of the high tech modes.
The reason is simplicithy itself - no high tech mode is capable of intercommunicating with any other high tech mode, nor a low tdh mode for that matter. They are all totally incompapable. SSB and CW, on the other hand work very well together-if conditions on SSB fade out, merely switch to CW and complete the contact or quickly make arrangments to QSY to another band.
Happens all the time now, but won't when CW is banned. And make no mistake, your comments clearly indicate your mindset that since it is "outmoded" that it might as well disappear. For commercial and militahy use, it already has, save for ongoing niche applications. But for ham radio, nothing could be farther off base.

Dick

582. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:55:16 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9351q4noe1@208.206.142.111>
Source record: 172802

Cecil wrote:
>
> Dick Carroll wrote:
> > You never heard of me before the code bashing began.
>
> That's because reducing the code requirement hurt your vanity and
> lowered your self esteem.

That's your version of dumbing down the ARS. We understand, Cecil.
Just because you "couldn't" you do your best to make it trivial for
everyone else. We see, but it won't work.

583. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:55:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A560A9C.7CCC@wt.net>
Source record: 172801

Richard Harrison wrote:
>
> ehsjr wrote:
> "Essentially, you are arguing for disbanding of the Amateur Radio
> Service, whether you realize it or not."
>
> The "Amateur Radio Service" is a licensing vehicle for non-commercial
> users
>
> The difference from CB is slight. FCC staff has said to me that when
> they scan the CB and Ham spectrum segments with an analyzer, they look
> pretty much the same. That`s your quasi-official attitude. But, CB can
> be used for commercial purposes, Ham Radio can`t.

Thats because all the cber's are using icom 756's etc. The difference
slight? Come on...We can build our gear. They aren't allowed to even
adjust a trimmer on theirs. "If using a legal type accepted cb".
>
> Rules and regulations are different for the two services. They are meant
> to be appropriate for the different intended uses.

I thought they were almost the same???
>
> I advocate spectrum continue to be allocated for non-commercial users.
> The allocations should be enlarged as h-f spectrum falls from favor with
> traditional commercial users. Hams need more spectrum for the growth in
> numbers of non-commercial users.

Dunno, I think the overall use of the ham bands is declining, not
increasing.
>
> Modes allowed should reflect uage, not dictate usage.

No one dictates what modes I run.
>
> The U.S. Army Cavalry no longer rides horses. It consists of armored
> divisions. They ride tanks. The U.S. Army Signal Corps no longer sends
> Morse. It uses modern voice and data communications. Modern modes are
> also more appropriate for amateur communications. But, since amateur
> communications are hobbyist communications, CW should be allowed just
> because an amateur likes to use it and it doesn`t hurt anybody or
> anything. CW is not as effective as other modern modes. That`s the cause
> of its demise. The Signal Corps no longer uses Morse, and no other
> agency of the U.S. Government normally uses Morse, either. The Signal
> Corps no longer needs an Amateur Radio Service as a ready pool of young

> men already trained as Morse operators. Morse is obsolete.

Well, I guess that means we are a leg up on all the rest of the
services. We can do something they can't anymore. MK
--
http://web.wt.net/~nm5k

584. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:56:17 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9351s1noe2@208.206.142.111>
Source record: 172800

W4JLE wrote:
>
> So what is your point? Are you saying vanity and self esteem are bad things?
> Of course if someone gets exactly what you got at a lesser price it tends to
> piss you off. The parable of the vineyard aside.
>
> Only the left want all to be equal without regard to effort or ability. The
> law has been changed, I accept it. The need to rub it in is really starting
> to upset me!
>

Cecil swears he's an ultra rightist but in fact he'd make a very good
practicing Liberal.

585. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:57:30 UTC
From: n2ey@aol.com
Message-ID: <9351u5$sr7$1@nnrp1.deja.com>
Source record: 172807

In article <3A55D99A.4BB7F05A@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> >
> > In article <3A554C83.35BDA01A@IEEE.org>, Cecil
<Cecil.A.Moore@IEEE.org> writes:
> >
> > >N2EY wrote:
> > >> The conclusion is simply that Morse has new uses. It's
not "outmoded".
> > >
> > >It's outmoded by PACTOR II. :-)
> >
> > No, it isn't.
>
> Note the smiley face.

It means you don't really mean what you wrote. OK.

> "Outmoded" means outclassed by another mode.

Agreed. Morse is not outclassed by PACTOR II.

> Get it? CW is certainly outclassed by PACTOR II.

No, it isn't. Apples and oranges. PACTOR II does some things really
well and other things not so well. Morse does some things really well
and other things not so well.

What is wrong with live and let live?

> As far as class
> goes, cost and equipment doesn't matter.

Sure they do.
>
> > Can a ham do PACTOR II and drive safely at the same time?
>
> I certainly would not want to be on my motorcycle on the same
> road as someone doing mobile CW.

Why not? To me, listening to Morse is like listening to somebody talk.
Shall we ban talking while driving?

> IMO, mobile CW is an accident
> waiting to happen.

Show us some statistics.

>I found it dangerous to play Morse practice
> tapes while driving.

That's YOU. Not everybody else. What is wrong with live and let live?

Besides, one should not try to write while driving.

> While driving, distractions should be
> kept at an absolute minimum.

Then talking, eating, smoking, and playing the any sort of radio while driving should be banned. Harleys should definitely be banned because they make lots of noise and draw too many admiring glances.

Don't even get me started about the distracting properties of miniskirts.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

586. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 17:58:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93520enoe3@208.206.142.111>
Source record: 172803

```
Cecil wrote:
>
> Dick Carroll wrote:
> > There ya go, obfuscating again. YOU said you "talked to those guys
> > using your Icom 706". ... That makes you a Freebander.
>
> I'm surprised that you don't know that it is perfectly legal to
> "freeband" during an emergency.

Tell it to the FCC, then explain your "emergency".
```

587. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:01:09 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <93521q$r2g$1@slb6.atl.mindspring.net>
Source record: 172804

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A55D29D.61B2F4E8@IEEE.org...
> N2EY wrote:
> >
> > k6mhe@arrl.net (Dan Richardson) writes:
> > >Amateurs built the ark.
> >
> > Used it, too.
>
> Hey Jim, something I don't understand. If the entire earth was
> covered with water, to where did the water recede?
> --
> http://www.mindspring.com/~w6rca

polar ice caps

--
Before you criticize someone, you should walk a mile in their shoes.
That way, when you criticize them, you're a mile away and you have
their shoes.

588. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:03:42 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A560C7E.4868@wt.net>
Source record: 172806

Cecil wrote:
>
> Dick Carroll wrote:
> > You never heard of me before the code bashing began.
>
> That's because reducing the code requirement hurt your vanity and
> lowered your self esteem.

What??? Being as they lowered the code tests, before too long I'll be a "SUPER" code op. Being as most of the newcomers will bypass the code, my spread over the average will increase. To these new guys, I'll be so blazing fast that they will bow down in humble admiration. Heck, it's already happening. When I go to a field day, I get people that will stop and just watch me for a while. They will look and stare, and walk off shaking their heads. I'm totally serious. It happens every year. Most muttering "how the hell does he do it". So I think your estimate of the future is quite wrong. MK

--
http://web.wt.net/~nm5k

589. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:07:19 UTC
From: n2ey@aol.com
Message-ID: <9352gg$td0$1@nnrp1.deja.com>
Source record: 172808

In article <20010105094023.29571.00000031@ng-fc1.aol.com>,
w1rfi@aol.com (W1RFI) wrote:
> >From: n2ey@aol.com (N2EY)
>
> >1) "HF transceiver" means a rig capable of operation on more than
one HF
> >amateur band.
>
> Boy, that is stacking the deck almost as bad as my CW SS challenge. :-
)

I'll make it even better: Has to be bandswitching - no plug in coils or
modules.
>
> >You like mussels in white sauce or chowdah?
>
> Love chowder.

New England, I hope.

>Mussels taste like the bottom of the dock smells. :-)

Is that a bad thing?
>
> >How about the hot sauce? I've got Dave's Insanity and Dave's Ultimate
> >Insanity.
>
> Don't do hot sauce.

Aww.

> Love good horseradish, though, but not on lobster.

That means shrimp before the lobster.
>
> >What antenna did you use with that 10 milliwatt setup? Some pretty
big piles
> >of aluminum up there in Newington.
>
> Whew; we can stay. The antenna was an 80 meter dipole, ladder-line
fed, up 50
> feet on one end, 15 feet on the other, sloping south, in between
buildings in
> Hartford, CT. :-)

Dang!

Dig up the QST from 1969 or 1968 where DeMaw describes the 80 meter QRP rig built in a file card box. (That thing sort of started it all). I was one of the stations he worked (WA3IYC). Still have that card. He was pounding into EPA at midday using almost the same antenna. Amazing.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

590. Re: HP4815A vector impedance meter question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:14:18 UTC
From: tom_bruhns@agilent.com
Message-ID: <9352titrm1@nnrp1.deja.com>
Source record: 172809

In article <3a92f95f.1114286168@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Fri, 05 Jan 2001 07:57:04 GMT, tom_bruhns@agilent.com wrote:
> > I could send a copy of the probe schematic if
> >you're really intersted.
>
> Please do, I would be very interested. Thanks.

SASE to me here at Lake Stevens...8600 Soper Hill Rd., Everett, 98205

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

591. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:24:31 UTC
From: richardharrison@webtv.net
Message-ID: <3981-3A56115F-21@storefull-115.iap.bryant.webtv.net>
Source record: 172813

ehsjr wrote:
"Essentially, you are arguing for disbanding of the Amateur Radio Service, whether you realize it or not."

The "Amateur Radio Service" is a licensing vehicle for non-commercial users

The difference from CB is slight. FCC staff has said to me that when they scan the CB and Ham spectrum segments with an analyzer, they look pretty much the same. That`s your quasi-official attitude. But, CB can be used for commercial purposes, Ham Radio can`t.

Rules and regulations are different for the two services. They are meant to be appropriate for the different intended uses.

I advocate spectrum continue to be allocated for non-commercial users. The allocations should be enlarged as h-f spectrum falls from favor with traditional commercial users. Hams need more spectrum for the growth in numbers of non-commercial users.

Modes allowed should reflect uage, not dictate usage.

The U.S. Army Cavalry no longer rides horses. It consists of armored divisions. They ride tanks. The U.S. Army Signal Corps no longer sends Morse. It uses modern voice and data communications. Modern modes are also more appropriate for amateur communications. But, since amateur communications are hobbyist communications, CW should be allowed just because an amateur likes to use it and it doesn`t hurt anybody or anything. CW is not as effective as other modern modes. That`s the cause of its demise. The Signal Corps no longer uses Morse, and no other agency of the U.S. Government normally uses Morse, either. The Signal Corps no longer needs an Amateur Radio Service as a ready pool of young men already trained as Morse operators. Morse is obsolete.

Best regards, Richard Harrison, KB5WZI

592. Re: Learning Morse Code opinion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:27:35 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <nh4c5to52hp6q5nrh4rhr2csdcrsg40jbc@4ax.com>
Source record: 172810

On Mon, 01 Jan 2001 21:52:08 GMT, jason_hsu@my-deja.com wrote:
> "Pete" <pete@etep.com> wrote:
><<A lot of you have a great fear of learning code. I really can't
>understand why.>>
>Believe it or not, not everyone knows about the Code Quick system. Why
>bother with the drudgery of memorizing dits and dahs when you can use
>the cutesy, silly, AND effective Code Quick system. You use sound-
>alikes ("Catch it, catch it!" for C) to learn the RHYTHM of the code.

Jason, you are so right! I've tried different methods and studied the
code for quite awhile but nothing has worked for me like Code Quick.

At field day I heard someone talking about "a LIGHT is lit" and I
instantly new the letter L. It took me a while to get around to it,
but I finally ordered the Code Quick system http://www.cq2k.com/
and I'm really learning the code now. I've been steadily progressing
along and now there are letters that I "just know" when I hear.

I whole heartedly reccommend the tapes/CD's + computer program.

73,

Bryan - k0emt

http://www.dbbear.com/k0emt

593. A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:34:47 UTC
From: TruckDrivingMan <tansorg@cs.tu-berlin.de>
Message-ID: <93540n$9iv$05$1@news.t-online.com>
Source record: 172811

Hi OMs
I've heard that FM mode is forbidden in the USA.Allowed is only AM and SSB.Is that true ?

73 & 55 de
13 TW 071

594. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 18:46:29 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A561685.8ADAF427@oio.net>
Source record: 172812

TruckDrivingMan wrote:
>
> Hi OMs
> I've heard that FM mode is forbidden in the USA.Allowed is only AM and
> SSB.Is that true ?
>
> 73 & 55 de
> 13 TW 071

You can use FM at 29.500 Mhz and above. But
you have to be licensed.
'Doc

595. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 19:18:49 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <9356j2$460$03$1@news.t-online.com>
Source record: 172816

Hi Doc
What band is 29.500 and above ? Here in Germany,the 10-m-band ranges from
28.000-29.700 Mhz.Above that are the military frequencies

Tom

"'Doc" <w5lz@oio.net> schrieb im Newsbeitrag
news:3A561685.8ADAF427@oio.net...
>
>
> TruckDrivingMan wrote:
> >
> > Hi OMs
> > I've heard that FM mode is forbidden in the USA.Allowed is only AM and
> > SSB.Is that true ?
> >
> > 73 & 55 de
> > 13 TW 071
>
> You can use FM at 29.500 Mhz and above. But
> you have to be licensed.
> 'Doc

596. Re: 1691MHz downconverter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 19:21:46 UTC
From: Homer <luggsey@hotmail.com>
Message-ID: <3A561ECA.54F06E36@hotmail.com>
Source record: 172815
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,alt.radio.scanner.uk

Ash wrote:

> I'm looking for a design/schematics for a downconverter for 1691MHz (meteosat)
> down to anything below 1300MHz, guess most IF's is ~137.5 for APT compability
> though for me higher = less interference.
> But any designs are welcome..
> Any suggestions? (yeah I'll problably end up buying one, but $100-$300 is more than
> I want to spend if I can build one cheap :)
>
> //Ash
>
> --
> < This is my actual email adress, hopefully the spam programs filter out abuse@*!*
adresses >

Why not buy a diffrent scanner?
It would be cheaper too if you get a second hand Yuppi!
Paul
(;-)

597. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 19:22:06 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A561EDE.40EB@wt.net>
Source record: 172814

Richard Clark wrote:
>
> This all leads us back to the topic of radials, and of course we see
> that short radials have nothing to do with the reflection point in the
> remote distance unless they are VERY long and VERY dense (which is
> already a contradiction). If such were the case then Earth Z would
> appear to be on the order of 1 Ohm (we can only hope) at that remote
> point.
>
> 73's
> Richard Clark, KB7QHC

When you say short radials I assume you mean 1/4 wl? So I guess you are saying that most of the increases you would see with a larger radial set are due to the overall gain at all angles? Makes sense to me. But to me, thats almost a contradiction in a way. If this if all true, which I don't doubt, why the many times larger increases in signal strength reported in real life as compared to a plot on eznec for example? Lets say that the reflection point is pretty much fixed due to far off ground conditions. If you run a plot on a 160 vertical, comparing 2 radials to 60 using average ground, maybe a 1.4 db increase. Not much. But then you hear reports of 10 db difference when comparing in real life. "Say for Toms example". Thats quite a difference from the theoretical. It's this difference that has me scratching my head. Either the difference in the theoretical gains are understated, or the far off field has more effect than realized. Being as with 1/4 wl radials, you are not effecting the far off ground conditions, that leads me to suspect the current theoretical gain numbers of adding more radials. What I really need to do is round up 60 radials worth of wire, and compare to 2 here at this QTH with my fairly good ground conditions. Thats the only way I'll really know the real difference for this area's ground conditions. Anything I read will be hearsay...g But even if I did that, I don't really know of an accurate way to measure my low angle performance other than just A/B comparisons. Kinda hard to do. I don't think just disconnecting 58 radials would totally cut the effect of having them layed out. I think they would slightly help even unhooked. So kind of hard to accurately test I would think other than totally getting rid of them. You don't really know the exact angle/angles being used for one thing. But overall, I tend to agree with your position on the remote distance reflection . We shouldn't really be effecting it much at all. Or I would think anyway. MK
--
http://web.wt.net/~nm5k

598. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 19:37:17 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A56226D.328BEE0B@oio.net>
Source record: 172817

TruckDrivingMan wrote:
>
> Hi Doc
> What band is 29.500 and above ? Here in Germany,the 10-m-band ranges from
> 28.000-29.700 Mhz.Above that are the military frequencies
>
> Tom

Tom,
It's the same here, 28.00 - 29.7 Mhz. The
29.5 - 29.7 Mhz sub-band is for FM (and other
modes). No FM below 29.5 Mhz.
'Doc

599. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 19:47:19 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <93588fvmv07$1@news.t-online.com>
Source record: 172818

Ok,tnx fr having things cleared

"'Doc" <w5lz@oio.net> schrieb im Newsbeitrag
news:3A56226D.328BEE0B@oio.net...
>
>
> TruckDrivingMan wrote:
> >
> > Hi Doc
> > What band is 29.500 and above ? Here in Germany,the 10-m-band ranges
from
> > 28.000-29.700 Mhz.Above that are the military frequencies
> >
> > Tom
>
> Tom,
> It's the same here, 28.00 - 29.7 Mhz. The
> 29.5 - 29.7 Mhz sub-band is for FM (and other
> modes). No FM below 29.5 Mhz.
> 'Doc

600. A4S V A3S

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 20:00:18 UTC
From: Denis O' Flynn <denisf@eircom.net>
Message-ID: <UIp56.4412$s4.2929@news.indigo.ie>
Source record: 172819

Anyone her would like to give me a comparision on these 2 antennas. My first choice was an X 7 but they seem to be hard to get in either U.K or Ireland.

Denis EI6HB

601. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 20:15:06 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <eXp56.9987$0s3.545199@typhoon.columbus.rr.com>
Source record: 172821

The "and above" also includes licensed Amateurs being able to
use FM within the 6 meter, 2 meter, 220 MHz, 440 MHz, etc.
bands (certain segments).

73,
--
Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
USPSA # L-1192 NROI/CRO Amateur Radio K8ND
Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass

"TruckDrivingMan" <truckdrivingman@hotmail.com> wrote in message
news:9356j2$460$03$1@news.t-online.com...
> Hi Doc
> What band is 29.500 and above ? Here in Germany,the 10-m-band ranges from
> 28.000-29.700 Mhz.Above that are the military frequencies
>
> Tom
>
> "'Doc" <w5lz@oio.net> schrieb im Newsbeitrag
> news:3A561685.8ADAF427@oio.net...
> >
> >
> > TruckDrivingMan wrote:
> > >
> > > Hi OMs
> > > I've heard that FM mode is forbidden in the USA.Allowed is only AM and
> > > SSB.Is that true ?
> > >
> > > 73 & 55 de
> > > 13 TW 071
> >
> > You can use FM at 29.500 Mhz and above. But
> > you have to be licensed.
> > 'Doc
>
>

602. Re: 1691MHz downconverter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 20:15:30 UTC
From: Ash <abuse@gravitywell.org>
Message-ID: <3A562B5D.A4731B4D@gravitywell.org>
Source record: 172820
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,alt.radio.scanner.uk

```
Buying is not cheaper than building for almost free is it? :)
besides such a broadband scanner cost x10 more than just the downconverter i need

Homer wrote:

> Ash wrote:
>
> > I'm looking for a design/schematics for a downconverter for 1691MHz (meteosat)
> > down to anything below 1300MHz, guess most IF's is ~137.5 for APT compability
> > though for me higher = less interference.
> > But any designs are welcome..
> > Any suggestions? (yeah I'll problably end up buying one, but $100-$300 is more than
> > I want to spend if I can build one cheap :)
> >
> > //Ash
> >
> > --
> > < This is my actual email adress, hopefully the spam programs filter out abuse@*!*
adresses >
>
> Why not buy a diffrent scanner?
> It would be cheaper too if you get a second hand Yuppi!
> Paul
> (;-)

--
< This is my actual email adress, hopefully the spam programs filter out abuse@*!* adresses
>
```

603. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 20:35:28 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A562FF5.C1DF296C@home.com>
Source record: 172822
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Reg Edwards wrote:

> Hello Jason,
>
> Lay your radials straight or bent, of no particular length
> or depth. For a given amount of wire prefer more short
> radials to a few long ones. (snipped here).

Good info Reg, and there is also a maxim that 'radials need not
be longer than
the antenna is tall'.
--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

604. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 20:45:57 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <935bmd$rq3$02$1@news.t-online.com>
Source record: 172823

Of course,I know this.I meant the immediate range above 29.7 Mhz up to 32
Mhz.This range is (here) reserved for the military

"Jeff Maass" <jmaass@columbus.rr.com> schrieb im Newsbeitrag
news:eXp56.9987$0s3.545199@typhoon.columbus.rr.com...
> The "and above" also includes licensed Amateurs being able to
> use FM within the 6 meter, 2 meter, 220 MHz, 440 MHz, etc.
> bands (certain segments).
>
> 73,
> --
> Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
> USPSA # L-1192 NROI/CRO Amateur Radio K8ND
> Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass
>
> "TruckDrivingMan" <truckdrivingman@hotmail.com> wrote in message
> news:9356j2$460$03$1@news.t-online.com...
> > Hi Doc
> > What band is 29.500 and above ? Here in Germany,the 10-m-band ranges
from
> > 28.000-29.700 Mhz.Above that are the military frequencies
> >
> > Tom
> >
> > "'Doc" <w5lz@oio.net> schrieb im Newsbeitrag
> > news:3A561685.8ADAF427@oio.net...
> > >
> > >
> > > TruckDrivingMan wrote:
> > > >
> > > > Hi OMs
> > > > I've heard that FM mode is forbidden in the USA.Allowed is only AM
and
> > > > SSB.Is that true ?
> > > >
> > > > 73 & 55 de
> > > > 13 TW 071
> > >
> > > You can use FM at 29.500 Mhz and above. But
> > > you have to be licensed.
> > > 'Doc
> >
> >
>

>

605. Re: Latest on CFA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 20:53:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <935c71$m7k$1@neptunium.btinternet.com>
Source record: 172824

Doc wrote -
> Until there is quite a bit more evidence to the
contrary, I
> think the CFA can be written off as a scam.
==========
The story so far doesn't allow much praise to be showered on
latter-day broadcast station engineers and their educational
standards.

Reg.

606. Measuring low power (was re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 21:00:59 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <aEq56.551$e5.1370979@news.ntplx.net>
Source record: 172825

Dick Carroll <dixie@townsqr.com> wrote:

> What I want to know is how did you measure the power output? The margin
> of error for most all ham instruments are more than that.

I used the W7EL wattmeter, featured in the Feb 1990 QST. It was calibrated here in the Lab against our HP microwattmeter.

The article is available for download from: (big file -- about 6 MB):

http://www.arrl.org/tis/info/pdf/9002019.pdf

73,
Ed Hare, W1RFI

607. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:02:48 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <7yr56.553$e5.1373803@news.ntplx.net>
Source record: 172829

Cecil <Cecil.A.Moore@IEEE.org> wrote:

> If only one ham existed, Why would he need any bandwidth? Who would he talk to?

There are a number of permitted one-way transmissions.

73,
Ed Hare, W1RFI

608. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:03:05 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <3A564499.6DAE9248@berkshire.net>
Source record: 172828

Fractenna wrote:
> BTW I'm sittin' next to a HUGE folder of K1BQT posts and there's some real
> good ones. Wonder what they'll be used for??
> Phil
> de N1ZKT

to boost you up to reach the keyboard?

i'm so soooorrrryyyyy, i just couldn't let that one go.

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

609. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:12:31 UTC
From: n2ey@aol.com
Message-ID: <935gs9$av9$1@nnrp1.deja.com>
Source record: 172832

In article <93521q$r2g$1@slb6.atl.mindspring.net>,
"KB9WFK" <KB9WFK@mindspring.com> wrote:
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A55D29D.61B2F4E8@IEEE.org...
> > N2EY wrote:
> > >
> > > k6mhe@arrl.net (Dan Richardson) writes:
> > > >Amateurs built the ark.
> > >
> > > Used it, too.
> > >
> > Hey Jim, something I don't understand.

Right.

> > If the entire earth was
> > covered with water, to where did the water recede?

You have to define "entire earth" and "covered".
> > --
> > http://www.mindspring.com/~w6rca
>
> polar ice caps

That should be easy to prove.

Figure out how much water it would take to cover the planet to a given
depth. Then figure out how much water there is in the polar ice caps
and the atmosphere.

Also figure out how much rain could fall in 40 days and 40 nights.

My guess is there isn't near enough.

--

Phil Kane said it best. He said something on the order of the Bible not
being a science book nor a history book but the story of a people's
developing relationship to God.

If you want to pick the Bible apart on literal scientific grounds, you
need go no farther than the two contradictory creation stories in
Genesis. But the Book isn't meant to be taken literally.

--

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

610. HELP custom built antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:15:57 UTC
From: cf NI4L <cfox007@bellsouth.net>
Message-ID: <3A56479D.586758CD@bellsouth.net>
Source record: 172830

I am looking for a guy in New London north carolina that builds
antennas.
thanks

--
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.219 / Virus Database: 103 - Release Date: 12/5/00

611. WTB 21' 2 meter base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:18:12 UTC
From: cf NI4L <cfox007@bellsouth.net>
Message-ID: <3A564823.A81D0AD6@bellsouth.net>
Source record: 172831

```
WTB 21' 2 meter base antenna
full wave.
thanks

--
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.219 / Virus Database: 103 - Release Date: 12/5/00
```

612. Re: HELP custom built antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:28:08 UTC
From: Andy Brinkley <andy@brinkleyelectronics.com>
Message-ID: <3A564A78.AD62FA5F@brinkleyelectronics.com>
Source record: 172834

cf NI4L wrote:

> I am looking for a guy in New London north carolina that builds
> antennas.
> thanks
>
> --
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.219 / Virus Database: 103 - Release Date: 12/5/00

Here it is:

http://www.kmaantennas.com/

Andy

NC Certified Firefighter III / Instructor II / EMT-A
FCC Licensed Technician / Amateur Call NC4AB
http://www.brinkleyelectronics.com

613. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 22:59:02 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5651B6.FDA7823A@IEEE.org>
Source record: 172835

KB9WFK wrote:
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> > Hey Jim, something I don't understand. If the entire earth was
> > covered with water, to where did the water recede?
>
> polar ice caps

That would have been the quickest ice age in history. :-)
--
http://www.mindspring.com/~w6rca

614. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:12:10 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5654CA.4A84D7EC@IEEE.org>
Source record: 172836

n2ey@aol.com wrote:
> You have to define "entire earth" and "covered".

"Fifteen cubits upward did the waters prevail; and the mountains
were covered." Gen 7-20

Now we know how Noah survived. The water was 15 cubits deep and
the Ark was 30 cubits high. They sure had low mountains back
then, huh?

> Also figure out how much rain could fall in 40 days and 40 nights.
> My guess is there isn't near enough.

Lots of evidence points to it being a breakthrough of sea-level
water into the Black Sea which at the time was fresh water and
300ft below sea level. They have uncovered an entire civilization
300ft below the present level of the Black Sea along with fresh
water shellfish. Makes a lot of sense to me. Someone looking at
the difference between the levels of the Mediterranean and the Black
Sea (lake) and knowing about earthquakes could have warned Noah
about what was inevitably coming.
--
http://www.mindspring.com/~w6rca

615. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:19:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565697.284480BF@IEEE.org>
Source record: 172839

Mark Keith wrote:
> But I was talking to Richard who is a ham. Not BC station, not cber. If
> he "Richard" wants to work hf, as a ham, he must pass a 5 wpm test.

But, you see, that's not true. Richard can use CB anytime he wants
to work HF. It doesn't matter if he's a ham or not. Lots of nocode
techs probably work HF as CBers. No test required. (Do you feel that
tug around your left ankle?)
--
http://www.mindspring.com/~w6rca

616. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:22:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565753.F615411F@IEEE.org>
Source record: 172840

Mark Keith wrote:
> But when you know the code well enough that is not a problem.

IMO, that's like saying, "When you can hold your liquor well enough, driving drunk is not a problem." On my motorcycle, I would not knowingly share the road with a mobile CW operator.
--
http://www.mindspring.com/~w6rca

617. Re: Two Hamsticks as a Dipole???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:25:29 UTC
From: Donald Taylor <donald.taylor@usa.net>
Message-ID: <3A565844.81CEE567@usa.net>
Source record: 172838

I read about a marine ham who used this setup at the top of his mast on a sailboat for 20m and said it was better than the backstay antenna.

VE1DST

"James P. Rybak" wrote:

> I know that it is possible to use two Hamstick antennas together as a
> dipole. A special mounting bracket is available for this purpose. Can
> anyone tell me how well this arrangement will work (say, compared to a
> single Hamstick with radials) for portable operation? I'm thinking of
> using two Hamsticks in this manner for 20 meters.
>
> Thanks.
>
> Jim Rybak W0KSD

618. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:33:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5659C4.C79A395A@IEEE.org>
Source record: 172841

n2ey@aol.com wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > Get it? CW is certainly outclassed by PACTOR II.
>
> No, it isn't. Apples and oranges.

Earth to Jim! That's exactly why PACTOR II outclasses CW. There
is no comparison. Note that I didn't compare them and say one is
"better" than the other. Only high class hams can afford PACTOR II. :-)
CW is the lower class ham's answer to digital RF. You have always said
that anyone could afford a CW rig.

> > As far as class
> > goes, cost and equipment doesn't matter.
>
> Sure they do.

High class things cost more. That's what makes them high class.
Is a Rolls Royce really any better than a Buick?

> To me, listening to Morse is like listening to somebody talk.
> Shall we ban talking while driving?

Some places are banning talking on a cell phone while driving. Call me
old-fashioned, I believe driving should receive someone's undivided
attention. If you rode a motorcycle, you would understand. When I see
a lady driver curling her eyelashes, I get the heck away from her.
--
http://www.mindspring.com/~w6rca

619. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:37:29 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565AB9.A3D3EA56@IEEE.org>
Source record: 172843

Dick Carroll wrote:
>
> Cecil wrote:
> > I'm surprised that you don't know that it is perfectly legal to
> > "freeband" during an emergency.
>
> Tell it to the FCC, then explain your "emergency".

No need. No one objected. I used 3w AM to call for help on my IC-706
on CB channel 9. If that's a crime, it was a victimless crime. Do
you think I should turn myself in?
--
http://www.mindspring.com/~w6rca

620. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:42:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565BF7.4207C10B@IEEE.org>
Source record: 172845

W4JLE wrote:
> So what is your point? Are you saying vanity and self esteem are bad things?
> Of course if someone gets exactly what you got at a lesser price it tends to
> piss you off.

IMHO, that is at least a neurotic problem. I got a 13wpm Extra license.
You and Dick still have the same privileges that you had before April 15.
You have no rational reason to be pissed. Your achievement is still exactly
the same as it ever was. Any negative feelings are due to lack of self-esteem.
--
http://www.mindspring.com/~w6rca

621. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:45:28 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <935mcejuu1@iac5.navix.net>
Source record: 172842

You must be bored out of your tree Cecil, either that our your going through menopause. You haven't had a reply in the last week that hasn't taken a contrary position to what ever is posted. Some are not even in agreement with your previous posts. Please extract the bug from your rectum and get back to your old self.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A565753.F615411F@IEEE.org...
> Mark Keith wrote:
> > But when you know the code well enough that is not a problem.
>
> IMO, that's like saying, "When you can hold your liquor well
> enough, driving drunk is not a problem." On my motorcycle, I
> would not knowingly share the road with a mobile CW operator.
> --
> http://www.mindspring.com/~w6rca

622. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:46:37 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565CDC.DAD6588C@IEEE.org>
Source record: 172846

Dick Carroll wrote:
> Cecil swears he's an ultra rightist but in fact he'd make a very good
> practicing Liberal.

Liberal is half of being a Libertarian. I'm a social liberal, hence my attitudes about amateur radio and abortion. I'm an economic conservative, hence my attitudes toward tax supported welfare. I never said I was right or left. I am actually 90 degrees away from right and left.
--
http://www.mindspring.com/~w6rca

623. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:49:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565D7B.EFEC2438@IEEE.org>
Source record: 172848

Dick Carroll wrote:
> Just because you "couldn't" you do your best to make it trivial for
> everyone else.

None of my self esteem stems from the ham exams I took. Seems to
me, most of your self esteem stems from the ham exams you took.
That, IMO, is a symptom of at least a neurosis.
--
http://www.mindspring.com/~w6rca

624. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:52:34 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565E42.A4F3832C@IEEE.org>
Source record: 172849

Mark Keith wrote:
> To these new guys, I'll be so
> blazing fast that they will bow down in humble admiration. Heck, it's
> already happening. When I go to a field day, I get people that will stop
> and just watch me for a while. They will look and stare, and walk off
> shaking their heads. I'm totally serious. It happens every year. Most
> muttering "how the hell does he do it". So I think your estimate of the
> future is quite wrong. MK

That's great but the question is whether you base your self esteem on
that "humble admiration" of others. If you do, IMO, you got a problem.
--
http://www.mindspring.com/~w6rca

625. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:57:25 UTC
From: nielsen@WashingtonStateResident.oz.net
Message-ID: <935n15knj0@216.39.171.5>
Source record: 172847

And FM is allowed in the U.S. on AMATEUR BANDS above 29.5 (i.e., on 10
meters that is between 29.5 and 29.7 MHz.)

On Fri, 5 Jan 2001 21:45:57 +0100, TruckDrivingMan wrote:
>Of course,I know this.I meant the immediate range above 29.7 Mhz up to 32
>Mhz.This range is (here) reserved for the military
>
>"Jeff Maass" <jmaass@columbus.rr.com> schrieb im Newsbeitrag
>news:eXp56.9987$0s3.545199@typhoon.columbus.rr.com...
>> The "and above" also includes licensed Amateurs being able to
>> use FM within the 6 meter, 2 meter, 220 MHz, 440 MHz, etc.
>> bands (certain segments).
>>
>> 73,
>> --
>> Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
>> USPSA # L-1192 NROI/CRO Amateur Radio K8ND
>> Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass
>>
>> "TruckDrivingMan" <truckdrivingman@hotmail.com> wrote in message
>> news:9356j2$460$03$1@news.t-online.com...
>> > Hi Doc
>> > What band is 29.500 and above ? Here in Germany,the 10-m-band ranges
>from
>> > 28.000-29.700 Mhz.Above that are the military frequencies
>> >
>> > Tom
>> >
>> > "'Doc" <w5lz@oio.net> schrieb im Newsbeitrag
>> > news:3A561685.8ADAF427@oio.net...
>> > >
>> > >
>> > > TruckDrivingMan wrote:
>> > > >
>> > > > Hi OMs
>> > > > I've heard that FM mode is forbidden in the USA.Allowed is only AM
>and
>> > > > SSB.Is that true ?
>> > > >
>> > > > 73 & 55 de
>> > > > 13 TW 071
>> > >
>> > > You can use FM at 29.500 Mhz and above. But
>> > > you have to be licensed.

>> > > 'Doc
>> >
>> >
>>
>>
>
>

626. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-05 23:57:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A565F77.8C4593C0@IEEE.org>
Source record: 172850

Dick Carroll wrote:
> I believe some of these guys have never tried learning Morse code
> because of an irrational fear of failing, ...

That's because you keep telling them how hard it was for you, how much effort you expended, and that nocode techs are so dumbed-down already, that they will never be any better than CBers.
--
http://www.mindspring.com/~w6rca

627. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:02:31 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A566097.6393F168@IEEE.org>
Source record: 172851
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Reg Edwards wrote:
> A tight spiral of wire is an RF choke and a waste of good
> copper.

However, a less than tight spiral of wire is a loading coil.
About a year ago there was a shortened dipole with end hats
made out of spirals. It appeared to be an OK design to me.
It offered some end-loading inductance along with end-to-end
capacitance. I've been thinking of trying it for a vertical.
--
http://www.mindspring.com/~w6rca

628. trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:03:13 UTC
From: Steve Woodruff <sjwoodr.nospam@nospam.email.com>
Message-ID: <935o7c$j75$1@flood.xnet.com>
Source record: 172852

How does one compute the design of a trap for an HF antenna?
(ie: # of turns, diameter of insulator, length of conductor around
the insulator, etc...) End result, if i have X amount of feet to
rig up a dipole, i need to determine the trap construction parameters.

--steve

629. Re: Working against ground!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:32:02 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A566782.BFB53B64@IEEE.org>
Source record: 172855

Larry Spinner wrote:
>
> I've heard of some hams working 160 meters with a 10-80 meters G5RV "worked
> against ground". Exactly what does "worked against ground mean"? If the
> G5RV or any other dipole for that matter is balanced and doesn't require a
> ground, how does one use a ground with it?

I suspect this means feeding the G5RV "Marconi-style", which means shorting
the inner and outer coax conductors at the transmitter and feeding it as
an inverted-L against ground. Works pretty well.
--
http://www.mindspring.com/~w6rca

630. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:35:21 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A566849.BE57EDC@IEEE.org>
Source record: 172857

Steve Woodruff wrote:
> How does one compute the design of a trap for an HF antenna?
> (ie: # of turns, diameter of insulator, length of conductor around
> the insulator, etc...) End result, if i have X amount of feet to
> rig up a dipole, i need to determine the trap construction parameters.

It would be a two-step operation for me. I would model it using EZNEC
and then use the coil formula in The ARRL Handbook to wind the coil.
OK, maybe three steps. Fine tuning would, no doubt, be required. Roy,
does the free demo version of EZNEC handle series impedances/loads?
--
http://www.mindspring.com/~w6rca

631. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:39:02 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A566926.4C7E@wt.net>
Source record: 172853

Cecil wrote:
>
> Mark Keith wrote:
> > To these new guys, I'll be so
> > blazing fast that they will bow down in humble admiration. Heck, it's
> > already happening. When I go to a field day, I get people that will stop
> > and just watch me for a while. They will look and stare, and walk off
> > shaking their heads. I'm totally serious. It happens every year. Most
> > muttering "how the hell does he do it". So I think your estimate of the
> > future is quite wrong. MK
>
> That's great but the question is whether you base your self esteem on
> that "humble admiration" of others. If you do, IMO, you got a problem.
> --
> http://www.mindspring.com/~w6rca

I have no self esteem. So I don't have to worry about what other people think. I'm gonna do what I'm gonna do no matter if others admire it or not. I do like the goofy look they get on their faces though. I've played the guitar for over 20 years too, and can kick butt fairly well, but I almost never play to other people. I'm a closet guitarist. If I sought others admiration at that , I'd probably be in a different line of work. :/ MK
--
http://web.wt.net/~nm5k

632. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:40:28 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A56697C.DF769CEF@IEEE.org>
Source record: 172858

W4JLE wrote:
> You must be bored out of your tree Cecil, either that our your going through
> menopause. You haven't had a reply in the last week that hasn't taken a
> contrary position to what ever is posted. Some are not even in agreement
> with your previous posts. Please extract the bug from your rectum and get
> back to your old self.

This is my r.r.a.p personality as Jim or Dick can verify. I tried to
redirect these threads over to r.r.a.p but was thwarted in my effort.
It's really difficult trying to manage a multiple personality syndrome.
--
http://www.mindspring.com/~w6rca

633. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:41:39 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5669C3.F43681A9@dvol.com>
Source record: 172854

Cecil wrote:

> Brian Kelly wrote:
> >
> > Cecil wrote:
> > > CW is outmoded by PACTOR II. :-)
> >
> > Both stations.
>
> There are hundreds. Reliable contact with Germany using 50w and
> a low dipole on signals unheard by the human ear. Your trouble
> is you can't count the signals that you can't hear. :-)

>
I have about a six inch stack of qsl cards from Huns I did hear and I
sure as hell ain't about to pop three hundred bucks for a modem to pick
up any more of 'em.
>

634. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:46:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A566AD5.42CA@wt.net>
Source record: 172856

Cecil wrote:
>
> Mark Keith wrote:
> > But when you know the code well enough that is not a problem.
>
> IMO, that's like saying, "When you can hold your liquor well
> enough, driving drunk is not a problem." On my motorcycle, I
> would not knowingly share the road with a mobile CW operator.
> --
> http://www.mindspring.com/~w6rca

Oh well. I guess you'll have to call a helicopter. I know quite a few
people that work nothing but mobile CW.
They haven't hit anything yet. When is the last time you heard a news
report of a ham hitting another object because of excessive diddling?
MK
--
http://web.wt.net/~nm5k

635. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:51:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A566C0F.82A1DACF@dvol.com>
Source record: 172859

N2EY wrote:

> In article <3A555F56.A77E10A3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:
>
> >One ham doesn't need
> >any bandwidth. Nonsense?
>
> >If only one
> >ham existed, Why would he need any bandwidth? Who would he talk to?
>
> Ever hear of radio control?

>

Good point. There were some very large number of radio control hobbyists who had to pass 13wpm code tests back when just to be allowed to operate up the six meter band where one-way RC ops were permitted. They didn't whine about the code test, they just did what they had to do to get their birds up.

>

> 73 de Jim, N2EY

>

w3rv

636. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 00:53:42 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A566C96.59356B80@IEEE.org>
Source record: 172860

Mark Keith wrote:
> When is the last time you heard a news
> report of a ham hitting another object because of excessive diddling?

Cops and reporters would have absolutely no idea why the accident
occurred. Therefore, there would be no news report of such.
--
http://www.mindspring.com/~w6rca

637. t-6 tennadyne for sell cheap.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 01:06:47 UTC
From: kf4toh@aol.com
Message-ID: <20010105200647.08652.00000055@ng-fv1.aol.com>
Source record: 172861

i have the T 6 tennadye log antenna that i need to sell
i got it last year and put it together and really never got to use it
pick up in mid tenn or i can ship

almost $500 if you got it new today with collins balun

$300 with collins balun plus shipping
will ship ups and i wouldnt have to tear it all apart

specs are 6 elements on a 12 foot boom 13 to 30 mhz
thanks
joe kane kf4toh
ashland city tn

638. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 01:08:43 UTC
From: rwclark@seanet.com
Message-ID: <3a956ff7.1144646755@news.seanet.com>
Source record: 172862

On Fri, 05 Jan 2001 18:35:21 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Steve Woodruff wrote:
>> How does one compute the design of a trap for an HF antenna?
>> (ie: # of turns, diameter of insulator, length of conductor around
>> the insulator, etc...) End result, if i have X amount of feet to
>> rig up a dipole, i need to determine the trap construction parameters.
>
>It would be a two-step operation for me. I would model it using EZNEC
>and then use the coil formula in The ARRL Handbook to wind the coil.
>OK, maybe three steps. Fine tuning would, no doubt, be required. Roy,
>does the free demo version of EZNEC handle series impedances/loads?

Hi Cecil,

I think the only limitation is in the number of segments (10 or 20?).

73's
Richard Clark, KB7QHC

639. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 01:09:16 UTC
From: w1rfi@aol.com
Message-ID: <20010105200916.20405.00000107@ng-fl1.aol.com>
Source record: 172863

>Subject: Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer
>not

Speaking of tube data, see:

http://www.nj7p.org/cgi-bin/tube

73,
Ed Hare, W1RFI

640. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 01:22:38 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A56735E.6000105@hiwaay.net>
Source record: 172864

David Robbins wrote:

>
> Fractenna wrote:
>
>> BTW I'm sittin' next to a HUGE folder of K1BQT posts and there's some real
>> good ones. Wonder what they'll be used for??
>> Phil
>> de N1ZKT
>
>
> to boost you up to reach the keyboard?

To help in Phils much needed technical education?

To wipe the ring around his nose?

641. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 01:33:43 UTC
From: n2ey@aol.com
Message-ID: <20010105203343.15567.00000009@nso-de.aol.com>
Source record: 172865

In article <3A55D5ED.3AAAD6A2@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>>
>> <Cecil.A.Moore@IEEE.org> writes:
>> >It is possible to fly across the Atlantic Ocean in a 747 instead of
>> >in the Spirit of St. Louis but nobody cares.
>>
>> Not true. I care.
>
>Well then, Jim, feel free to apply for entry in the Guiness Book
>of Records for your 747 trip.

The only Guiness I care about is bitter. ("Drink your beer before it gets
cold).
>
>> And you previously said you didn't have any old QSTs.
>
>I've subscribed to QST since the early 50s except for a time of
>protest around 1990. I read them and throw them away so I indeed
>do not have access to them anymore.

Then how did you research them? You said you had looked trough 50 years of QST.

I would suggest that if you don't want them anymore, give them away to other
hams or a library.
>
>> Which are? How many of them are histories?
>
>Mostly ARRL pubs which have some history in them.

Which ones?

>I'm hoping that
>the Texas A&M library has a history of Morse code.

Most of them focus on the landwire telegraph rather than radio. Few
non-ham-radio books do a good job of recounting amateur radio history.

The term "radio history" to most historians is taken to mean "the history of
broadcasting". I enjoyed "Empire Of The Air: The Men Who Made Radio", but it's
about broadcasting. Ham radio is hardly mentioned at all.
>
>> You never used the word "help" before in this discussion.
>
>Is there any difference in saying: "I have a question." and
>"Help. I have a question."?

Of course.
>
>> Why should I believe that? You did not believe me.
>
>I gave you my word. You neglected to give me your word.

You neglected to ask for my "word".

And unless I am joking, I tell the truth as I know it. "Giving my word" doesn't make a statement any more or less true.

73 de Jim, N2EY
>--

642. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 01:44:49 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A567891.573E68F5@IEEE.org>
Source record: 172866

N2EY wrote:
> Then how did you research them? You said you had looked trough 50 years of QST.

Yep, one at a time as they were published. Remember, I've got a
photographic memory. Otherwise, I couldn't have memorized all I
needed to know to pass the ham exams. :-)

> I would suggest that if you don't want them anymore, give them away to other
> hams or a library.

Good idea. But would anybody ever read them in Madisonville, TX?

> And unless I am joking, I tell the truth as I know it. "Giving my word" doesn't
> make a statement any more or less true.

You mean you never cross your heart and hope to die?
--
http://www.mindspring.com/~w6rca

643. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 02:17:40 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <9360e0$dh7$1@slb3.atl.mindspring.net>
Source record: 172719

Brian Kelly wrote in message <3A566C0F.82A1DACF@dvol.com>...
>
>N2EY wrote:
>
>> In article <3A555F56.A77E10A3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org>
writes:
>>
>> >One ham doesn't need
>> >any bandwidth. Nonsense?
>>
>> >If only one
>> >ham existed, Why would he need any bandwidth? Who would he talk to?
>>
>> Ever hear of radio control?
>
>>
>Good point. There were some very large number of radio control hobbyists
who had to
>pass 13wpm code tests back when just to be allowed to operate up the six
meter band
>where one-way RC ops were permitted. They didn't whine about the code test,
they
>just did what they had to do to get their birds up.
>>
>
>> 73 de Jim, N2EY
>
>>
>w3rv
>
>
As real dyed-in-the-wool hams have for quite a number of years. Almost all
aspects of society are harried by wannabe factions today. Unfortunately,
they are in charge of ham radio now.

Dean Craft -- W4IHK

644. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 02:22:56 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <4kv56.191044$j6.23946114@news1.rdc1.va.home.com>
Source record: 172867

HI Cecil:

I don't what difference it makes, it had me scratching my head when I heard it. I would guess that they were worried about things falling out if you did put something in it.
The food is good, here in Happy valley the mountains are beautiful but the weather is better than when I was in Michigan.

--
John Passaneau, W3JXP
Penn State University,
State College Pa.
w3jxp1@home.com

Cecil <Cecil.A.Moore@IEEE.org> wrote in message news:3A55E0AF.6EF73EEA@IEEE.org...
> John Passaneau wrote:
> > 'Very neat looking setup, but I believe that in Pennsylvania driving a
> > pickup with out a tail gate is illegal. If I remember right, even the net
> > kind of replacement tailgate is not allowed.
>
> If there's nothing in the pickup bed, what does it matter?
> I lived in Penn. for awhile. Good food, lousy weather.
>
> > That looks like the kind of setup that people look at and say "I bet he's
> > not married" .
>
> Beauty is in the eye of the beholder.
> --
> http://www.mindspring.com/~w6rca

645. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 02:24:42 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <9360e1$dh7$2@slb3.atl.mindspring.net>
Source record: 172868

Cecil wrote in message <3A565F77.8C4593C0@IEEE.org>...
>Dick Carroll wrote:
>> I believe some of these guys have never tried learning Morse code
>> because of an irrational fear of failing, ...
>
>That's because you keep telling them how hard it was for you, how much
>effort you expended, and that nocode techs are so dumbed-down already,
>that they will never be any better than CBers.
>--
>http://www.mindspring.com/~w6rca

I have been wondering how long it was gonna take you to start blaming everybody else Cecil. As a libertarian (or whatever it is) I would think that you would be one of the last people on earth who would support a government "give-away" process.

Dean Craft -- W4IHK

646. Re: Working against ground!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 02:43:38 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9360oq$ml8$2@bashir.peak.org>
Source record: 172721

Larry Spinner <lspinner@savvy.net> wrote:
: I've heard of some hams working 160 meters with a 10-80 meters G5RV "worked
: against ground". Exactly what does "worked against ground mean"? If the
: G5RV or any other dipole for that matter is balanced and doesn't require a
: ground, how does one use a ground with it?

The usual method is to short the open line feeders together at the tuner
and treat the whole thing as a long-wire antenna.

--
Bill Nelson (billn@peak.org)

647. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 02:59:54 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9361na$ml8$3@bashir.peak.org>
Source record: 172720

n2ey@aol.com wrote:
:>
:> >1) "HF transceiver" means a rig capable of operation on more than
: one HF
:> >amateur band.
:>
:> Boy, that is stacking the deck almost as bad as my CW SS challenge. :-
:)

: I'll make it even better: Has to be bandswitching - no plug in coils or
: modules.

Isn't that stretching the definition just a tad bit? A transceiver is simply a single piece of communications equipment that is capable of both transmitting and receiving. HF means the HF band. There is nothing in the definition that says the rig must even transmit and receive on the same bands, much less the same frequencies.

Bill Nelson (billn@peak.org)

648. Stealth Antenna Support Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 03:08:58 UTC
From: "Stephen P. Johnson" <stephen.p.johnson@worldnet.att.net>
Message-ID: <e%v56.3285$fj6.264545@bgtnsc05-news.ops.worldnet.att.net>
Source record: 172722

I recently bought some "weed whacker" monofilament
because it was recommended as invisible antenna support line.

It sure seems strong, but how do you tie it up?

None of my Boy Scout knots seem to work with this stuff
because it is too stiff.

Steve, N2FT

649. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 04:17:30 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A569C5A.7E30E791@IEEE.org>
Source record: 172724

Dean Craft wrote:
> As a libertarian (or whatever it is) I would think
> that you would be one of the last people on earth who would support a
> government "give-away" process.

Actually, it was a take-away process. The federal government
expropriated the RF spectrum from the people who homesteaded
it. The RF spectrum should have belonged to the people who
discovered and developed it. Instead, the federal government
nationalized it, just like a socialist/communist state.
--
http://www.mindspring.com/~w6rca

650. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 04:23:54 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A569DDA.E486FF4C@dialpoint.net>
Source record: 172723

FM is allowed where most phone (AM/SSB) transmissions are. There is a limitation on how much deviation (bandwidth) the FM signal can use on some bands. Below about 29 mhz the following applies.

(f) The following standards and limitations apply to transmissions on the
frequencies specified in ï¿½97.305(c) of this Part.

(1) No angle-modulated emission may have a modulation index greater than 1 at the highest modulation frequency.

That means the deviation has to be very low (way under 5 khz) . You can find the rules to the exect band and limitations under the www.arrl.org web site.

In the ham bands above 50 mhz wider deviations than 5 khz can be used.

TruckDrivingMan wrote:
>
> Hi OMs
> I've heard that FM mode is forbidden in the USA.Allowed is only AM and
> SSB.Is that true ?
>
> 73 & 55 de
> 13 TW 071

651. Re: Lightning protection in auto tuners??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:06:51 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93695bfnr0@208.206.142.79>
Source record: 172726

Your effort is laudable but of limited effectiveness. Any lightning
stroke that can travel miles through the air to get to your
tower/antenna isn't likely to be seriously deterred by the need to jump
the airgap on a switch or relay.
If you have the antenna switched directly to a good ground system you
will divert a major portion of the strike directly into ground, but your
tuner and other gear will be exposed to whatever portion of the strike
is attracted by its path to ground.
Bottom line: nothing works as well as unhooking and grounding the
antenna directly. That's what I do with my EDX2 that I use portable with
my camper when the rig is not in use.
I also move the antenna end away from the camper to protect it. If
lightning got into my motorhome it could easily cause damage that would
make a scortched tuner seem trivial.

Dick

Floyd Sense wrote:
>
> Can't speak to those two in particular, but have experience with the SGC-230
> family. My advice is to either:
>
> 1. Install a knife switch(s) and manually ground the antenna and disconnect
> it from the tuner when not in use in lightning season
>
> 2. Install a relay to do the same, powering the relay from the 12V line to
> the tuner so that when the tuner is powered down, the antenna is
> disconnected and grounded.
>
> K8AC
>
> "John P. Franklin" <jpfrankl@teleport.com> wrote in message
> news:0GS46.12160$pA5.835063@nntp1.onemain.com...
> > Does ANYONE know if there is some kind of lightning protection scheme
> for
> > auto-tuners like the ICOM AH-4 or the Alinco EDX-2? Are we expected to
> run
> > out and take it off the wall or tower everytime a nasty looking cell blows
> > through the area?
> >
> > Pat
> >
> >
> >

652. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:08:06 UTC
From: k1bqt@aol.com
Message-ID: <20010106000806.21612.00000115@ng-cp1.aol.com>
Source record: 172725

Hi Dean--

>Almost all aspects of society are harried by wannabe factions today.
Unfortunately,
they are in charge of ham radio now.<

With all due respect, Dean, that sounds like whining bullshit. The fact is there are more licensed hams now than ever before, but we (and our kids) are opting to use our disposible income to buy computers, expensive software packags, digital cameras, flat-screen monitors, CD burners, and a host of new and interesting things that are fun.

Oh, we might turn on our fourty-year old SSB and FM technology so we can compare notes and solve our installation problems. Or, we may turn on our 70-year old technology and work a little CW because we enjoy it. Or we might exercise our instinct for armchair bloodsport by contesting.

But, face it, HF-style ham radio is about as exciting as a stale doughnut most days--and the hobby is booring itself into extinction! If manufacturers are leaving the ham fold in droves to produce more profitable commercial products, and if ham magazines are merging or shutting down for lack of revenue sources, it's because the "hobby" is in sunset mode and starved for cash--not because it's being over-run by idiots. Like ham radio, Hammond organs, Oldsmobiles, phonographs, and drive-in theaters still have their nostelgic supporters, but "mainstream" is no longer part of the lingo.

Not that wireless technology is stale! There's a zillion things happening, people everywhere are using it, and techno-hobbyists will play with it increasingly in their spare time. Why? Because it's new and exciting! But--hang onto your hat--it may not require a license to play--and it surely won't be done on SSB or CW. Instead, it will require a whole new set of skills--more complex ones--to deal with topics like spread spectrum TDM duplex at 2.4 GHz.

Think what the word might be like if you had to "earn a ticket" to run your pc? It's no secret you can talk world-wide, disrupt corporate web sites, and get into a whole lot of trouble with one of these desk-top suckers. But difficult licensure requirements?? Most people somehow manage to stay out of trouble and learn what they need to know without taking a test.

Ham radio is a little like collecting buggy whips. Not everyone wants 'em anymore, but the ones who do only defeat themselves when they fight over who the "real" buggy whippers are. In my view, the whole debate is is both silly and passe'.

Rick K1BQT

653. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:33:40 UTC
From: n2ey@aol.com
Message-ID: <20010106003340.10105.00000014@nso-bh.aol.com>
Source record: 172729

In article <93186h$i98$1@slb1.atl.mindspring.net>, "KB9WFK"
<KB9WFK@mindspring.com> writes:

>> >You don`t pass a horsemanship test to get an automobile driver`s
>> >license.
>>
>> Nope - because most people today don't ever get near horses. Horse use on
>the
>> nation's roads is extremely limited.
>>
>> But the use of Morse on the HF/MF ham bands is extremely common. So it
>makes
>> sense to test for basic Morse skill for access to those bands.
>>
>> >Neither must you pass a test on the design and construction of
>> >automobiles.
>>
>> But you do need to know something about how they work. Like how road
>conditions
>> affect stopping distance.
>>
>> Your analogy is useless.
>
>You enterpretation of his analogy is useless. Those are conditions that one
>must understand to drive safely. Not knowing morse will not make talking on
>the radio any less safe than not knowing Yiddish or how to read brail.

Not knowing Morse on the HF ham bands is a disadvantage. It increases the
possibility of interference and decreases your options.

The analogy is useless. A much better one would be to compare Morse knowledge
to knowing how to drive a stick-shift vehicle today, when most vehicles are
equipped with automatic transmissions.
>
>> >Technology has made such tests no longer needed.
>>
>> Only if the ARS is to become a service where only type-accepted,
>channelized
>> equipment is allowed.

The amateur service has the most freedom of any service. No channels. Wide
choice of modes and bands. Power levels from milliwatts to kilowatts. Almost no
type acceptance. Authority to design, build, repair, align and operate all
types of radio gear.

All that freedom carries with it the responsibility to be knowledgeable about
the technology used.
>>
>> >The same
>> >is true of CW and thorough technical tests for issuance of an amateur
>> >radio license.
>>
>> The current written tests are by no stretch of the imagination "thorough".
>>
>> >There is no need for exclusion of fine people because
>> >they don`t like code or the technical side of radio.
>>
>> WHO are these people?
>>
>> >If they are
>> >competent people without a record of malfeasance, and pass a minimal
>> >test on rules and operating requirements, they should be issued an
>> >unresrricted license to full amateur priveleges in all bands, just like
>> >drivers are licensed.
>>
>> That's not how driver's licensing works in most states.
>>
>> To drive a car requires passing a written and operating test. To drive
>other
>> vehicles requires more testing. Here in PA, a basic driver's license
>doesn't
>> allow you to drive an 18 wheeler or even a truck over a certain gross
>weight.
>
>And if you were required to know how to drive an 18 wheeler and demonstrate
>that you could back it into a loading dock before being given a license for
>your CAR that might mean something. Since you don't intend to drive an 18
>wheeler you aren't tested on that are you?

Nope - and the result is you are not authorized to drive a truck larger than a
pickup, let alone an 18 wheeler.

A full-privileges ham license is like a full-privileges driver's license.
Because of what it authorizes the holder to do, it should test for the
appropriate knowledge and skills.
>
>> >The applicants already are owners of the airways
>> >just as driver applicants are already owners of the roadways.
>>
>> There are about 250,000,000 Americans and about 5,000,000,000 human
>beings. Sit
>> down and figure out how much of the radio spectrum between 3 and 30 MHz
>each of
>> us can claim to "own"
>
>Why? Are we going to divy it up and each take our portion home?

That's exactly what happens when anyone puts a transmitter on the air. Part of the spectrum becomes unusable by others over a certain area. Using the radio spectrum is a special privilege because there are so many of us and so little spectrum.
>.
>> >
>> >The idea that a code or technical test is going to keep miscreants off
>> >the air is illogical.
>>
>> Not true at all. Look at what happened to another radio service that had
>no
>> license tests. Utter chaos just a few years after it was created. The FCC
>has
>> been trying to clean it up for at least three decades without success.

This shows what happens when a radio service is made too "accessible".
>>
>> > The character mix of licensed amateurs is
>> >certainly no better than most random groups.
>>
>> On what studies do you base that assumption?
>
>On what basis do you dispute it?

Personal observation over the past 35 years.
>>
>> >There are saints and
>> >sinners among coders and nocoders and among techies and the clueless in
>> >almost the same proportions.
>>
>> Not from what I've observed for 34 years.
>
>So learning morse code makes someone a better person in general than someone
>that does not know it?

I did not write that. But the USE of Morse does have good effects. See below.

>A what precise point do these benefits become
>bestowed upon a person? 5 wpm? 10? A person capable of 60 or more wpm is
>pretty much guranteed sainthood then right? Is this similar to the magical
>abilities I got upon memorization of the resistor color codes?

In the ham radio context of "saints and sinners", it's logical to consider those who break FCC rules as the "sinners".

Surf on over to qrz.com or arrl.org and look up the FCC enforcement logs. All sorts of enforcement actions for on-air violations like obscenity, deliberate interference, operation outside authorized privileges. Yet notice that NONE of the enforcement actions were against hams using Morse! It's almost always the voice modes that get the NALs.

To my knowledge, there has not been a single NAL issued to a ham for violations committed while using Morse on the ham bands for at least the past 10 years..

Yet it's the second most popular mode on amateur HF - just behind SSB and way ahead of all digital modes combined.

Look up the case of a two-time offender with the call WA6CNQ. The FCC recently stripped him of all amateur radio privileges EXCEPT HF/MF Morse! Why? Because even that guy hadn't committed any offenses using the mode, even though he does use it.

>> >The problem is vanity. Some amateurs prize an amateur license as some
>> >sort of credential of superiority. If everyone could easily get a
>> >license, the credential would lose value. Exclusivity is needed to give
>> >class to the club. I pity them.
>>
>> No, that's not the issue at all.
>>
>> The problem is accomplishment. Some people value it, some don't. Getting a
>ham
>> license used to be more of an accomplishment than it is today. Simple
>fact.
>
>And if they started dropping extra class tickets from airplanes it would in
>what way effect your accomplishment?

It would downgrade the accomplishment level that the license represents.

>The invention of the telephone was a
>great accomplishment. But I guess that now that there is one in almost
>every home and street corner it doesn't mean anything?

Not the same thing at all.

> Why are you so
>concerned about what others want to accomplish unless you in some way feel
>that it is your accomplishment that is being diminished?

No. It's the standards being lowered.

>If it is only a
>personal thing as you claim then set your own standards higher and concern
>yourself less with what people after you do.

I am concerned about the effect lowered standards have on the amateur radio service.
>
>> Here's an example:
>>
>> I've run two marathons (26.2 miles) and a few dozen half-marathons (13.1
>miles)
>> in the past 19 years or so. I'm not a particularly good runner, but
>completing
>> those races was an accomplishment - particularly the marathons.
>>
>> Now suppose the folks in charge of certifying races (TAC) decided that a

>> "marathon" should be redefined as 10 miles and a "half marathon" as 5
>miles.
>> Lots more people would be able to say they were "marathoners" but it would
>not
>> be the same accomplishment at all.
>
>For who? Them?

For anyone.

>What do you care unless you feel that it is taking away from
>your "glory" in being able to say that you are a marathoner?

The term "marathoner" would be redefined to a lesser standard. That's not a good thing.

What is wrong with pride in an accomplishment? What is wrong with having standards? If there's anyhting wrong with modern society, it's lack of standards.

> Would your
>ability to run 26 miles in x amount of time in any way be changed by raising
>or lowering the set distance?

Nope. That's not the point.

>If the distance was redefined as 200 miles I
>guess YOUR sense of accomplishment at being able to run 26 would be totally
>gone then right?

If the distance were lengthened I could no longer claim the title. If the distance is shortened the title means less.
>
>>Doesn't mean the folks who run 10 mile
>> "marathons" are evil or lazy. It DOES mean that the standards would be
>lowered.

And that's the simple fact of it.

What seems to really bother you and a few others is the existence of any standards or requirements for the ARS at all. It's not just the code test - it's the idea of any test, including theory tests, that might require any significant learning in order to pass.

I think most hams wouldn't oppose the removal of the code tests IF there were better written tests and some Morse-only HF subbands. But what you seem to want is a simple reduction of standards to nothing. Toss licenses at anybody who wants 'em. We've seen results from that sort of radio service, yet it's what you want to happen to the ARS.

That's what folks like me oppose.

73 de Jim, N2EY

654. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:33:41 UTC
From: n2ey@aol.com
Message-ID: <20010106003341.10105.00000015@nso-bh.aol.com>
Source record: 172728

In article <935o7c$j75$1@flood.xnet.com>, "Steve Woodruff"
<sjwoodr.nospam@nospam.email.com> writes:

>How does one compute the design of a trap for an HF antenna?
>(ie: # of turns, diameter of insulator, length of conductor around
>the insulator, etc...) End result, if i have X amount of feet to
>rig up a dipole, i need to determine the trap construction parameters.
>
Go to Reg Edwards' website and download his free software called "TRAPDIP".
It's a simple DOS-based program that lets you design 2 band trap dipoles. You
can play with the various parameters to see the effects.

You'll have to convert all of the dimensions to metric units, but that's not
much of a problem.

Fine-tuning will be required, but that's true of any simulation.

I don't have the website URL handy, but any search engine will find it easily.

73 de Jim, N2EY

655. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:33:42 UTC
From: n2ey@aol.com
Message-ID: <20010106003342.10105.00000016@nso-bh.aol.com>
Source record: 172727

In article <3A5659C4.C79A395A@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>n2ey@aol.com wrote:
>>
>> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>> > Get it? CW is certainly outclassed by PACTOR II.
>>
>> No, it isn't. Apples and oranges.
>
>Earth to Jim! That's exactly why PACTOR II outclasses CW.

By that logic, CW also outclasses Pactor2.

>There is no comparison.

Agreed.

>Note that I didn't compare them and say one is "better" than the other.

What does "outclass" mean to you, then?

> Only high class hams can afford PACTOR II. :-)

So class is determined by money but not accomplishment in your book. I see.

>CW is the lower class ham's answer to digital RF.

Uh huh. Nice weasel wording.

>You have always said that anyone could afford a CW rig.

No, I haven't. Produce the post. I have said that Morse gives the most results
for the money invested. That's a good thing. It levels the playing field.That's
another good thing.

What bothers many is that things like skill cannot be bought. They must be
(l)earned.
>
>> > As far as class
>> > goes, cost and equipment doesn't matter.
>>
>> Sure they do.
>
>High class things cost more.

Some do. Others cannot be bought at any price.

> That's what makes them high class.

Not in my book.

>Is a Rolls Royce really any better than a Buick?

A Rolls Royce Merlin is better than any Buick.
>
>> To me, listening to Morse is like listening to somebody talk.
>> Shall we ban talking while driving?
>
>Some places are banning talking on a cell phone while driving.

Because they have had tragic accidents blamed on the distraction of cellphones.

> Call me
>old-fashioned, I believe driving should receive someone's undivided
>attention.

Then you support the banning of talking, eating, smoking, and listening to any
sort of radio while driving.

>If you rode a motorcycle, you would understand.

What difference does that make?

> When I see
>a lady driver curling her eyelashes, I get the heck away from her.

Me too! That task requires looking away from the road. Mobile Morse doesn't.

73 de Jim, N2EY
>--

656. Re: KB1EVA--'Wakefield Killer'?? Looks like it...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:43:31 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936ba3pkr0@208.206.142.79>
Source record: 172730

Fractenna wrote:
>
> >Guess the Times knew what they were doing! Fractenna did not.
> >
> >Rick K1BQT
> >
>
> I think its going to be a LOT more quiet from Chip there "Rick" because the
> legal process has begun. Can't say exactly what's gonna happen, but I gather
> your post office might having something extra special for ya real soon:-)!
>
> Only on this NG can black be white and up be down. Thanks for makin' it that
> way! But not for long.
>
> BTW I'm sittin' next to a HUGE folder of K1BQT posts and there's some real
> good ones. Wonder what they'll be used for??

You might want to consider what the REAL KB1EVA will do when he finds
out your part in his misfortunes re the "Wakefield killer" posts from
your venue....
Your offense might be quickly converted to all defense...and you have
none.

657. Re: KB1EVA IS NOT 'Wakefield Killer' PLEASE READ

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 05:54:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936buupkr1@208.206.142.79>
Source record: 172731

W4JLE wrote:
>
> Let's not forget the strident urgings directed towards ARRL to proceed with
> immediate damage control. Reminds me of a movie... "A ship of fools".
>

Maybe Fractenna, Inc. is the location of the fool factory.

658. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 06:15:01 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936d55$53t$0@208.206.142.79>
Source record: 172732

Cecil wrote:
>
> Dick Carroll wrote:
> > Cecil your ignorance is showing again. When a CW station checks into
> > the net it's *between* the SSB KWs, who are standing by to copy. An
> > ordinary CW signal is no competetion with a KW SSB.
>
> I disagree, Dick. I can usually read CW between the natural pauses
> in human speech. Did you realize that a SSB station emits almost
> no power while the operator pauses between words?

I just don't hear SSB stations leaving long pauses between sylables. I find it curious that you can copy enough of the CW being sent to make out what is being said during the time the SSB op catches his breath. You sure you aren't reading it as some sort of multiplexing? Most SSB yakkers give out with the "Ah's" and "eh's' pretty liberally to fill up gaps in their transmissions. Like the BC boys, dead air time is a no-no. Your assertion is tenuous at best.

659. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 06:26:32 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936dqo$6u0$0@208.206.142.79>
Source record: 172733

Mark Keith wrote:
>
> Cecil wrote:
> >
> > Dick Carroll wrote:
> > > You never heard of me before the code bashing began.
> >
> > That's because reducing the code requirement hurt your vanity and
> > lowered your self esteem.
>
> What??? Being as they lowered the code tests, before too long I'll be a
> "SUPER" code op. Being as most of the newcomers will bypass the code, my
> spread over the average will increase. To these new guys, I'll be so
> blazing fast that they will bow down in humble admiration. Heck, it's
> already happening. When I go to a field day, I get people that will stop
> and just watch me for a while. They will look and stare, and walk off
> shaking their heads. I'm totally serious. It happens every year. Most
> muttering "how the hell does he do it". So I think your estimate of the
> future is quite wrong. MK

Cecil is still trying hard to figure out some way to salvage his own
self esteem because in 50 years of hamming he never did have the moxie
to make Extra until they finally dumbed it down. So he tries to make
give his ego a boost by trashing anyone who just did it. Whatta guy.
Whatta sorry ham. Sorta reminds me of Al Gore.

Dick

660. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 06:37:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936eft$91k$0@208.206.142.79>
Source record: 172734

Richard Harrison wrote:
>
> ehsjr wrote:
> "Essentially, you are arguing for disbanding of the Amateur Radio
> Service, whether you realize it or not."
>
> The "Amateur Radio Service" is a licensing vehicle for non-commercial
> users

So why did you bother go get a ham license at all, of any class if it didn't mean any more to you than "just a licensing vehicle for non-commercial users"?

> The difference from CB is slight. FCC staff has said to me that when
> they scan the CB and Ham spectrum segments with an analyzer, they look
> pretty much the same.

Big deal. RF is RF. And the main difference you see in monitoring AM BC and FM BC with a spectrum analyzer is that the FM's dance around at the modulating frequency. The significance of that statement is.....?

>That`s your quasi-official attitude. But, CB can
> be used for commercial purposes, Ham Radio can`t.
>
> Rules and regulations are different for the two services. They are meant
> to be appropriate for the different intended uses.
>
> I advocate spectrum continue to be allocated for non-commercial users.
> The allocations should be enlarged as h-f spectrum falls from favor with
> traditional commercial users. Hams need more spectrum for the growth in
> numbers of non-commercial users.
>
> Modes allowed should reflect uage, not dictate usage.
>
> The U.S. Army Cavalry no longer rides horses. It consists of armored
> divisions. They ride tanks. The U.S. Army Signal Corps no longer sends
> Morse. It uses modern voice and data communications. Modern modes are
> also more appropriate for amateur communications. But, since amateur
> communications are hobbyist communications, CW should be allowed just
> because an amateur likes to use it and it doesn`t hurt anybody or
> anything. CW is not as effective as other modern modes. That`s the cause
> of its demise. The Signal Corps no longer uses Morse, and no other
> agency of the U.S. Government normally uses Morse, either. The Signal
> Corps no longer needs an Amateur Radio Service as a ready pool of young
> men already trained as Morse operators.

But somehow ham radio always shows up badly needed in emergency cases given the frailties of all those high tech modes the commercials have adopted.

> Morse is obsolete.
>

To you, to be sure. But then you don't do any CW, so that's about what your attitude should be expected to be. Should it ever occur that you desperately need it when it isn't available to you might rethink your position. And I'm well aware that is not likely, especially since you won't know how to use it. The last line of communications for you is one that you never learned.

661. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 06:56:21 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936filbom0@208.206.142.79>
Source record: 172735

Cecil wrote:

> I got a 13wpm Extra license.

No, you got a 5wpm Extra license. There are no 13wpm licenses being issued.
No matter you held an Advanced, you took your General by mailorder as a Conditional way back when, and you even said the other hams who tested you didn't even make you take a code test (against all regulation of the time).

662. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 07:04:11 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <936fu1$n1s$1@slb6.atl.mindspring.net>
Source record: 172736

>
> In the ham radio context of "saints and sinners", it's logical to consider
> those who break FCC rules as the "sinners".
>
> Surf on over to qrz.com or arrl.org and look up the FCC enforcement logs.
All
> sorts of enforcement actions for on-air violations like obscenity,
deliberate
> interference, operation outside authorized privileges. Yet notice that
NONE of
> the enforcement actions were against hams using Morse! It's almost always
the
> voice modes that get the NALs.

It isn't the mode that gets busted. It is the operator. I would also venture to guess that most of those violators have passed the CW test. That kinda kills your observation thing. How many of those violators are no code techs? Someone said in another post that nc techs were the largest group of hams so they should be flooding the offices with complaints against them especially since they are worse operators because they don't know CW. For some reason that isn't happening.

>
> To my knowledge, there has not been a single NAL issued to a ham for
violations
> committed while using Morse on the ham bands for at least the past 10
years..
> Yet it's the second most popular mode on amateur HF - just behind SSB and
way
> ahead of all digital modes combined.
>
> Look up the case of a two-time offender with the call WA6CNQ. The FCC
recently
> stripped him of all amateur radio privileges EXCEPT HF/MF Morse! Why?
Because
> even that guy hadn't committed any offenses using the mode, even though he
does
> use it.
>
> >> >The problem is vanity. Some amateurs prize an amateur license as some
> >> >sort of credential of superiority. If everyone could easily get a
> >> >license, the credential would lose value. Exclusivity is needed to
give
> >> >class to the club. I pity them.
> >>

> >> No, that's not the issue at all.
> >>
> >> The problem is accomplishment. Some people value it, some don't.
Getting a
> >ham
> >> license used to be more of an accomplishment than it is today. Simple
> >fact.
> >
> >And if they started dropping extra class tickets from airplanes it would
in
> >what way effect your accomplishment?
>
> It would downgrade the accomplishment level that the license represents.
>
> >The invention of the telephone was a
> >great accomplishment. But I guess that now that there is one in almost
> >every home and street corner it doesn't mean anything?
>
> Not the same thing at all.
>
> > Why are you so
> >concerned about what others want to accomplish unless you in some way
feel
> >that it is your accomplishment that is being diminished?
>
> No. It's the standards being lowered.
>
> >If it is only a
> >personal thing as you claim then set your own standards higher and
concern
> >yourself less with what people after you do.
>
> I am concerned about the effect lowered standards have on the amateur
radio
> service.
> >
> >> Here's an example:
> >>
> >> I've run two marathons (26.2 miles) and a few dozen half-marathons
(13.1
> >miles)
> >> in the past 19 years or so. I'm not a particularly good runner, but
> >completing
> >> those races was an accomplishment - particularly the marathons.
> >>
> >> Now suppose the folks in charge of certifying races (TAC) decided that
a
> >> "marathon" should be redefined as 10 miles and a "half marathon" as 5
> >miles.
> >> Lots more people would be able to say they were "marathoners" but it

would
> >not
> >> be the same accomplishment at all.
> >
> >For who? Them?
>
> For anyone.
>
> >What do you care unless you feel that it is taking away from
> >your "glory" in being able to say that you are a marathoner?
>
> The term "marathoner" would be redefined to a lesser standard. That's not
a
> good thing.
>
> What is wrong with pride in an accomplishment? What is wrong with having
> standards? If there's anyhting wrong with modern society, it's lack of
> standards.
>
> > Would your
> >ability to run 26 miles in x amount of time in any way be changed by
raising
> >or lowering the set distance?
>
> Nope. That's not the point.
>
> >If the distance was redefined as 200 miles I
> >guess YOUR sense of accomplishment at being able to run 26 would be
totally
> >gone then right?
>
> If the distance were lengthened I could no longer claim the title. If the
> distance is shortened the title means less.
> >
> >>Doesn't mean the folks who run 10 mile
> >> "marathons" are evil or lazy. It DOES mean that the standards would be
> >lowered.
>
> And that's the simple fact of it.
>
> What seems to really bother you and a few others is the existence of any
> standards or requirements for the ARS at all. It's not just the code
test -
> it's the idea of any test, including theory tests, that might require any
> significant learning in order to pass.

It does? thanks for telling me what i feel. I didn't know that untill just
now. I could actually not care less about requirements for HF. I have no
interest in it at all. I never plan to upgrade no matter what the
requirements. My interest is uhf/vhf. I have a degree in electronics that

included 4 terms of communications theory as well as 3 years as commo in the Army so the tests aren't a problem at all. They just don't interest me. I don't enjoy contesting so there goes that draw. If I want to communicate long distances I will use something reliable and do it with someone I want to talk to instead of a random person that is going to give me a signal report and move on to the next guy.

>
> I think most hams wouldn't oppose the removal of the code tests IF there were
> better written tests and some Morse-only HF subbands. But what you seem to want
> is a simple reduction of standards to nothing. Toss licenses at anybody who
> wants 'em. We've seen results from that sort of radio service, yet it's what
> you want to happen to the ARS.

I want nothing of the sort and posted a while back in another forum that i thought there should be CW only areas that require cw testing to operate on. As for the terrible state of CB i still don't understand everyones problem. From what i have heard on HF, cb is 100 times better everywhere i have ever turned one on. I am in Chicago and have never heard any problems on CB. Back home in a smaller town, cb was much friendlier than any of the ham bands.

>
> That's what folks like me oppose.
>
> 73 de Jim, N2EY
>
>

663. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 07:13:39 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936gj3$d6q$1@208.206.142.79>
Source record: 172737

Cecil wrote:
>
> Dick Carroll wrote:
> > I believe some of these guys have never tried learning Morse code
> > because of an irrational fear of failing, ...
>
> That's because you keep telling them how hard it was for you, how much
> effort you expended, and that nocode techs are so dumbed-down already,
> that they will never be any better than CBers.

You really do need to work on your reading comprehension it that's what
you read in my postings. It sure isn't anything near what was said. But
you already know that.

664. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 07:18:39 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936gsf$d6q$2@208.206.142.79>
Source record: 172739

Dean Craft wrote:
>
> Cecil wrote in message <3A565F77.8C4593C0@IEEE.org>...
> >Dick Carroll wrote:
> >> I believe some of these guys have never tried learning Morse code
> >> because of an irrational fear of failing, ...
> >
> >That's because you keep telling them how hard it was for you, how much
> >effort you expended, and that nocode techs are so dumbed-down already,
> >that they will never be any better than CBers.
> >--
> >http://www.mindspring.com/~w6rca
>
> I have been wondering how long it was gonna take you to start blaming
> everybody else Cecil. As a libertarian (or whatever it is) I would think
> that you would be one of the last people on earth who would support a
> government "give-away" process.

Cecil has to justify his own failures.

665. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 07:20:16 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <936gvg$d6q$3@208.206.142.79>
Source record: 172738

Cecil wrote:
>
> Dean Craft wrote:
> > As a libertarian (or whatever it is) I would think
> > that you would be one of the last people on earth who would support a
> > government "give-away" process.
>
> Actually, it was a take-away process. The federal government
> expropriated the RF spectrum from the people who homesteaded
> it. The RF spectrum should have belonged to the people who
> discovered and developed it. Instead, the federal government
> nationalized it, just like a socialist/communist state.
> --

Yeah, just like they stole land to build roads and schools, etc.
> http://www.mindspring.com/~w6rca

666. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 08:58:36 UTC
From: k3ky@erols.com
Message-ID: <936mns$o6o$1@bob.news.rcn.net>
Source record: 172740

Hi, Cecil-
No disrespect intended, but you couldn't get me to ride a motorcycle in traffic for all the tea in China! The odds are just too uneven if you ever tangle with an automobile. Heck, there are even a lot of tinny little cars sold that I wouldn't care to be in because they have all the crashworthiness of a cardboard carton! My brother, who is a volunteer EMT told me that some of his written procedures for dealing with crash victims vary by model, and for some of these sardine tins, they basically read "notify medical examiner". Ride a motorcycle? You gotta be kidding!
I can assure you that you would have been no less safe riding in traffic near me while I was operating mobile-in-motion CW. Face it- there are some risks in life. Technically, we should all drive with both hands on the wheel at all times, and in the right position, too. That is how they taught it way back when I went through driver's ed. in high school. Realistically, folks are going to have only one hand on the wheel quite often for brief intervals, for operating a car audio system or setting the heat or A/C, etc. If it is always done with skill and the right attitude, it can be done safely. Usually the bad accidents are happening because people get too much into dialing a cell phone or get into conversational areas that are too emotionally distracting.

Mobile CW is different because it can be done without the eyes leaving the road. You use your peripheral vision, you occasionally glance over at the radio, but it is really less distracting than popping a cassette or CD in or out. If you haven't actually done it yourself, I can see how you might not know this. My right hand rested on my leg to run the keyer paddles during transmit. It was maybe 4-6 inches away from the steering wheel. I was young and healthy and my reaction time was (and still is) excellent. I could get there *real* darn fast when I needed to. Not quite as good as two hands, but still a better situation than changing audio media, which is lawful and is not, to my knowledge, considered anyway near as dangerous as cell phone use. Again I stress- CW is a spoken language! And the CW conversations on the bands are a darn sight more civil and light-hearted than some of the voice exchanges I hear on the air! :o)
They haven't yet outlawed having conversations while driving.
By all means, do worry about the woman nearby in traffic applying makeup as she drives. That gives me the willies, too. But mobile CW ops, a rare breed, I might add, are no threat to you. Is that what is *really* bothering you? Sincerely & 73, David K3KY

In article <3A565753.F615411F@IEEE.org>
Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Mark Keith wrote:
>> But when you know the code well enough that is not a problem.
>
> IMO, that's like saying, "When you can hold your liquor well
> enough, driving drunk is not a problem." On my motorcycle, I
> would not knowingly share the road with a mobile CW operator.
> --
> http://www.mindspring.com/~w6rca

667. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 09:08:24 UTC
From: k3ky@erols.spamnocom
Message-ID: <936na8rke1@bob.news.rcn.net>
Source record: 172741

Cecil-
While you can read CW underneath a big SSB or RTTY signal, it is distracting as hell and just sheer torture. It is a lot easier on the phone and RTTY boys who are riding over the little CW signal. Mixing these modes together in a band is my idea of a real bad time for a CW op. Abandoning present band plans that give CW some respite from the digital modes, or abandoning phone sub-bands is probably about the most effective way to kill off this still-thriving amateur mode, if that is your objective. 73, David K3KY

In article <3A55E560.EDE940D@IEEE.org>
Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Dick Carroll wrote:
>> Cecil your ignorance is showing again. When a CW station checks into
>> the net it's *between* the SSB KWs, who are standing by to copy. An
>> ordinary CW signal is no competetion with a KW SSB.
>
> I disagree, Dick. I can usually read CW between the natural pauses
> in human speech. Did you realize that a SSB station emits almost
> no power while the operator pauses between words?
> --
> http://www.mindspring.com/~w6rca

668. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 09:59:56 UTC
From: ON4CLN <on4cln@qsl.net>
Message-ID: <w0C56.82693$MA1.2823495@afrodite.telenet-ops.be>
Source record: 172742

Just go to:

http://www.nucleus.com/~field/

and download Coaxtrap...

73's de ON4CLN - Franki
http://www.qsl.net/on4cln

669. Re: Homebrew Antenna sugestions for 462mhz please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 11:07:57 UTC
From: tomfree <tfreeman@blueridge.net>
Message-ID: <t5dv4rogmtm912@corp.supernews.com>
Source record: 172743

I came up with a plan for a ground plane built on a SO-239 panel mount jack. Radiator and radials cut at 6.1", radials bent down from level about thirty degrees. I made one up and did a quick test on a 10' pole with a CB SWR meter (all I have) and came up with a 1.5:1. Will this meter be accurate at these frequencies? Thanks for the previous replies and any help here.

Tom

<tom_bruhns@agilent.com> wrote in message
news:933514$bl1$1@nnrp1.deja.com...
> I assume right now you're using a built-in antenna on the PR-1000. If
> you use a reasonably short length of low-loss line between the radio
> and your roof-mounted antenna, you probably don't need much of an
> antenna up there. I'd suggest a simple "ground-plane" antenna. A web
> search should turn up several ideas for how to build one, but if not,
> ask again here. There's a LOT to be gained by keeping the two ends of
> your radio link line-of-sight or nearly so, so getting practically any
> antenna up high like that is a big plus. But do use good line and
> minimize the length of it. 3dB would be a good maximum line loss to
> shoot for, I'd say, which will be fairly easy with 60 feet or so of RG-8
> foam line or maybe 35 feet of RG-8X. Those are "soft" numbers...a bit
> more won't kill the advantage of height in the clear.
>
> There are antennas you could build with considerably more gain than a
> ground plane, but they're more trouble and most would take instruments
> to get tuned up correctly. A ground plane should work if you are simply
> careful about getting things the right lengths and connected correctly.
>
> Cheers,
> Tom
>
>
> In article <t57b9vhq3fl2f3@corp.supernews.com>,
> "tomfree" <tfreeman@blueridge.net> wrote:
> > I just started using the Cobra PR-1000 to communicate with the house
> when
> > out on my farm. I would like to add an antenna mounted on top of the
> house
> > to make communications more reliable when at the extremes (distance
> wise) of
> > my property. We are talking rolling hills and woods. The house is
> near the
> > middle of the tract of land. It also has a tin roof and I was not
> sure
> > about the effects of this on any installation. The antenna would be

> mounted
> > on a pole about ten feet down from the crest of the roof at one end of
> the
> > house, the pole will extend above the crest. Since the antenna will
> be
> > fairly small at these frequencies (462Mhz) I wanted to try my hand at
> > building one. Any suggestions would be appreciated.
> >
> > Tom
> >
> >
>
> --
> Tom Bruhns -- K7ITM
>
>
> Sent via Deja.com
> http://www.deja.com/

670. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 11:40:01 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <2k0e5tk18usccd6gsob2sl56ctms7p6re4@4ax.com>
Source record: 172744

On Sat, 23 Dec 2000 16:03:30 -0000, "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
>> Details are in any ARRL handbook.
>============================
>Details may very well be be in any ARRL handbook.
>
>But the question arises - how much confidence can be placed
>in such publications ? The managers, the directors, the
>shareholders, the staff, are far more interested in making a
>profit, feeding the wife and kids, than in disseminating the
>true facts of life. Everybody has a price.
>
>Don't believe without very serious criticism the old wives'
>tales, and waffle, bafflegab, etc., which helps to fill in
>the spaces between the antenna and black-box equipent
>adverts.

It is obvious you haven't even seen an ARRL Handbook
or Antenna Book. Otherwise you'd know that they contain
no advertisements.

The texts may not have the academic rigor some would
like, but at least they show their algorithms, unlike a certain
web poser who keeps his proprietary.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

671. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 13:41:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5720A1.BEB138B2@IEEE.org>
Source record: 172745

Dick Carroll wrote:
> I just don't hear SSB stations leaving long pauses between sylables. I
> find it curious that you can copy enough of the CW being sent to make
> out what is being said during the time the SSB op catches his breath.
> You sure you aren't reading it as some sort of multiplexing? Most SSB
> yakkers give out with the "Ah's" and "eh's' pretty liberally to fill up
> gaps in their transmissions. Like the BC boys, dead air time is a no-no.
> Your assertion is tenuous at best.

Dick, this happens during SSB nets. Someone tries and tries to check into
the net using SSB and doesn't make it. He switches to CW for his checkin.
It is extremely obvious that there is a single CW signal in there. The
net control then asks for the CW station to check in, which he does. I
don't know why you are having so much trouble with this concept.
--
http://www.mindspring.com/~w6rca

672. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 13:57:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A57243B.2470F0AC@IEEE.org>
Source record: 172746

David Sinclair wrote:
> While you can read CW underneath a big SSB or RTTY signal, it is
> distracting as hell and just sheer torture.

It is neither. The SSB net control operator simply directs the CW
operator to check in.

> Abandoning present band plans that give CW some respite from the
> digital modes, or abandoning phone sub-bands is probably about the
> most effective way to kill off this still-thriving amateur mode, if that is
> your objective. 73, David K3KY

My objective was to check into a CA SSB net when they couldn't read
my SSB signal from AZ. Here's what I said in my original posting:

"I hear people checking into nets when they can't make it with
SSB and the weak CW signal is readable through the SSB KWs."

I don't know why you guys are having so much trouble with this
concept. From AZ, I could check into a CA net using CW when they
couldn't read my SSB signal. It worked like a charm.
--
http://www.mindspring.com/~w6rca

673. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:07:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5726B8.36F4E07E@IEEE.org>
Source record: 172747

David Sinclair wrote:
> If you haven't actually done it yourself,
> I can see how you might not know this.

I've tried it. That's why I know how dangerous it is.

> Again I stress- CW is a spoken language!

Which is a false statement. From Webster's:
"spoken - delivered by word of mouth: ORAL"
--
http://www.mindspring.com/~w6rca

674. Re: Stealth Antenna Support Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:19:38 UTC
From: Capt'n Mike <mmurdock@fishinglife.com>
Message-ID: <_PF56.4469$Bb2.1233590@typhoon.tampabay.rr.com>
Source record: 172748

Go to a fishing store and get some line crimps... here in florida we sometimes use 100lb test for big groups and there is no way you can tie that stuff... it has to be crimped.

Mike

Stephen P. Johnson <stephen.p.johnson@worldnet.att.net> wrote in message news:e%v56.3285$fj6.264545@bgtnsc05-news.ops.worldnet.att.net...
> I recently bought some "weed whacker" monofilament
> because it was recommended as invisible antenna support line.
>
> It sure seems strong, but how do you tie it up?
>
> None of my Boy Scout knots seem to work with this stuff
> because it is too stiff.
>
> Steve, N2FT
>
>
>

675. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:21:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5729CC.1A9935C4@IEEE.org>
Source record: 172749
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Followups to rec.radio.amateur.policy This is just not an
appropriate subject for rec.radio.amateur.antenna

N2EY wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> writes:
> >High class things cost more.
>
> Some do. Others cannot be bought at any price.
>
> > That's what makes them high class.
>
> Not in my book.

From Webster's: "class - a group sharing the same economic status."

> Because they have had tragic accidents blamed on the distraction of cellphones.

If there were as many mobile CW operators as cellphone operators, they
would also be a big enough problem to be outlawed. Mobile Morse requires
at least as much attention as a cellphone, maybe more.

> > When I see
> >a lady driver curling her eyelashes, I get the heck away from her.
>
> Me too! That task requires looking away from the road. Mobile Morse doesn't.

Mobile Morse requires a hand that should be on the wheel.
Mobile Morse requires attention that should be on the road.
--
http://www.mindspring.com/~w6rca

676. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:24:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A572A97.D52ABA62@IEEE.org>
Source record: 172751

Dick Carroll wrote:
> ... you even said the other hams who tested
> you didn't even make you take a code test (against all regulation of the
> time).

Please stop the obfuscation, Dick. One ham gave me my code exam. Another
gave me my written exam. I don't think that was against the rules.
--
http://www.mindspring.com/~w6rca

677. Re: Latest on CFA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:32:58 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A572C9A.BC8C01E4@oio.net>
Source record: 172750

Reg Edwards wrote:
>
> Doc wrote -
> > Until there is quite a bit more evidence to the
> contrary, I
> > think the CFA can be written off as a scam.
> ==========
> The story so far doesn't allow much praise to be showered on
> latter-day broadcast station engineers and their educational
> standards.
> ---
> Reg.

Reg,
So far, what has struck me about all this is the exageration
and falsification of records and test findings. I will have a
problem believing anything about CFA.
'Doc

678. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:47:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A573004.9A0404DA@IEEE.org>
Source record: 172752
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Followups to: rec.radio.amateur.policy which is where this thread belongs.

N2EY wrote:
> To my knowledge, there has not been a single NAL issued to a ham for violations
> committed while using Morse on the ham bands for at least the past 10 years..
> Yet it's the second most popular mode on amateur HF - just behind SSB and way
> ahead of all digital modes combined.

Look closer, Jim. Many of those NALs were issued for jamming violations
by code-tested hams using CW (continuous waves). Human nature doesn't
change when someone uses Morse code. Morse code simply is not an appropriate
vehicle for supporting emotional outbursts. Spoken language is.
--
http://www.mindspring.com/~w6rca

679. Re: PLEASE READ!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 14:56:02 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A573202.9DC29BAA@IEEE.org>
Source record: 172753

Dick Carroll wrote:
>
> Cecil wrote:
> > That's because you keep telling them how hard it was for you, how much
> > effort you expended, and that nocode techs are so dumbed-down already,
> > that they will never be any better than CBers.
>
> You really do need to work on your reading comprehension it that's what
> you read in my postings.

Give us a break, Dick. You have said all of those things and more.
You have said the extra license was harder for you than it was for
me and that you expended more effort than I did. You have said the
5wpm requirement dumbed-down ham radio and will allow hoards of
CBers and freebanders to invade the ARS.
--
http://www.mindspring.com/~w6rca

680. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 15:16:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5736E9.D16C2A4@IEEE.org>
Source record: 172754

Gary Coffman wrote:
> It is obvious you haven't even seen an ARRL Handbook
> or Antenna Book. Otherwise you'd know that they contain
> no advertisements.

Mine does. Collins 75A-4 for $645 :-)
--
http://www.mindspring.com/~w6rca

681. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 15:29:55 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <5tce5tsiah99jk4rda7fg72qhaid6d2dgt@4ax.com>
Source record: 172755

On Fri, 05 Jan 2001 20:35:28 GMT, Irv Finkleman
<finkirvNOSPAM@home.com> wrote:

>Good info Reg, and there is also a maxim that 'radials need not
>be longer than the antenna is tall'.
OK, I have a top loaded 80 meter vertical, overall height is about 20 feet, I used parts from a old hy-gain antenna, trashed the traps and just used the 80 meter loading coil near the top, the stinger I made up is adjustable so I can go from the CW portion to SSB with just a quick adjustment of the stinger. When the antenna is set for the part of the band I want to work, at the center frequency, the SWR is near 1.2:1 and is about 30khz wide at 2:1 without a tuner in line.

So instead of having 4 66 foot long radials (1/4 wave at 80mtrs) it would be better to have them cut to 20 feet long (height of the antenna)?

My back yard is 50 feet wide and right now I have them bending all over the place just to get them to fit. If the radials were 20 feet long I could have more of them.

With more (maybe 16) 20 foot radials would the bandwidth be better?

This maybe one of those try it and see.

682. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 15:33:18 UTC
From: n2ey@aol.com
Message-ID: <20010106103318.02009.00000035@nso-ma.aol.com>
Source record: 172756

In article <9361na$ml8$3@bashir.peak.org>, Bill Nelson <billn@spock.peak.org>
writes:

>n2ey@aol.com wrote:
>:>
>:> >1) "HF transceiver" means a rig capable of operation on more than
>: one HF
>:> >amateur band.
>:>
>:> Boy, that is stacking the deck almost as bad as my CW SS challenge. :-
>:)
>
>: I'll make it even better: Has to be bandswitching - no plug in coils or
>: modules.
>
>Isn't that stretching the definition just a tad bit?

Not in my book. ;-)

>A transceiver is
>simply a single piece of communications equipment that is capable of both
>transmitting and receiving. HF means the HF band. There is nothing in
>the definition that says the rig must even transmit and receive on the
>same bands, much less the same frequencies.

In the broadest sense, yes. But in typical ham use, a "transceiver" is more
than just a transmitter and receiver in the same box. It's an integrated system
meant for the way hams operate. Plus there are lots of single-band designs.
Bandswitching designs are a lot tougher and rarer. That's the challenge!

Two more things:

- It doesn't all have to be in the same box.
- The same person has to be designer, builder and operator.

Well, Ed?

73 de Jim, N2EY

"It ain't braggin' if ya really done it" - Babe Ruth

683. coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 16:05:23 UTC
From: Mario G&#65533;linas <mariobrosss@cgocable.ca>
Message-ID: <7nH56.2319$Br2.178403@carnaval.risq.qc.ca>
Source record: 172757

Can you tell me which coax (75 ohm) is the best for the uhf-vhf band ? I want the best because I will need 120 feet for the TV reception and I don't want too much loss for the channels between 14 to 69. Thank you.

684. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 16:21:42 UTC
From: jflanders2@home.com
Message-ID: <3a574639.515698360@news>
Source record: 172758

On Thu, 04 Jan 2001 23:12:44 -0800, Martin Hibbs <mhibbs@ipeg.com>
wrote:
>Cecil wrote:
>
>> <SNIP> My HS-1600 with top hat can be
>> viewed at: http://people.delphi.com/cecilmoore/mobnow.htm
>
>And a thing of beauty it is, too!
>
>marty
>N7MX
>

Those wishing for a more conventional looking "top hat" should consider loading a bicycle or two up there on the roof. Where I live, people drive around all the time with bicycles mounted up there. No reason why you couldn't do it permanently. No whip required.

Just don't forget it is there when you get to the McDonald's drive-through.

Jerry W4UK

685. Re: Lattin multiband antenna; model

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 16:22:04 UTC
From: jflanders2@home.com
Message-ID: <3a57464a.515715215@news>
Source record: 172759

Which brings up a question - have the widely-used modeling tools been
validated for non-conventional radiating structures? Back when I had
a real job, we tried to make SURE that a modeling system could be
trusted before placing bets on its result.

What are the validation limits? What kinds of structures are outside
the bounds for Mininec or NEC-2?

Jerry W4UK

On Thu, 4 Jan 2001 20:33:40 -0800, Jim Pennino <jimp@mail.specsol.com>
wrote:

>carkenord@juno.com wrote:
SNIP
>
>> www.wa3rey.com/lattin.htm
>SNIP
>I tried modeling it.
>
>I started out with a 10M section. After a lot of tweaking segments and
>segment alignment to get stable, realistic results, I added a 12M segment,
>expecting to get two resonaces somewhere around 10M and 12M.
>
>I only got one resonance at about 16MHz.
>
>Anyone else tried modeling this thing? Results?
>
>Jim Pennino
>

686. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 16:24:28 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <937gs5$8v09l$1@ID-52642.news.dfncis.de>
Source record: 172760

You seem to using the wrong criterion for determining how "effective" your shortened antenna is. Your observation at the end of your post worries me:

> With more (maybe 16) 20 foot radials would the bandwidth be better?
>

You don't want better bandwidth, assuming you are talking vswr. Higher bandwidth indicates greater loss resistance and lower efficiency.

I think you would be MUCH better off with 16, 20' radials than four full length twisting all over the place (assuming the radials are laying right on the ground or shallowly buried.

The general rule(s) for radials on the ground are:

1. More is better, even if well short of a 1/4 wave.

2. On a shortened vertical, there is little to be gained by making the radials significantly longer than the physical length of the radiator. (especially if the increased length makes it less likely that you can run a large number of them)

If your ground losses are LOW (your radials are effective), then for the same antenna, your vswr bandwidth will be LESS. You will have a narrower bandwidth where the 2:1 vswr points are measured. This is a GOOD sign, not a bad sign. Having a "flat" vswr curve on a shortened vertical means you have a lossy system, either in the antenna, it's loading/matching, or the ground system. Electrically short verticals should ALWAYS have relatively poor vswr bandwidth, if they are operating efficiently.

I'm not asserting that radials have to be straight...that's a totally different point. What I am saying is that you should get as many radials down as possible, whatever their length and don't let length constrain the number. Longer radials can be non-straight, curve, bend, etc....although some would argue that they stop being effective if the bends are too radical, and amount to nothing more than a "shortened" radial in the first place!

So..back to the main point: forget using only four radials on the ground...that is way too few. Go with 16 shortened ones, and leave the four long ones you already have in the system, as they will only help and can't hurt.

(And expect the vswr bandwidth to be narrower than with just the four radials you started with. If it's not...something is not right...you have losses elsewhere in the system that you are not aware of.) Forget bandwidth as a measure of anything good about a shortened vertical. Good bandwidth is

always a BAD sign for this type of antenna.

73

--

hasan schiers
schiers@netins.net
N0AN

"BuzzKenwood" <dontask@wonttell.com> wrote in message
news:5tce5tsiah99jk4rda7fg72qhaid6d2dgt@4ax.com...
> On Fri, 05 Jan 2001 20:35:28 GMT, Irv Finkleman
> <finkirvNOSPAM@home.com> wrote:
>
> >Good info Reg, and there is also a maxim that 'radials need not
> >be longer than the antenna is tall'.
> OK, I have a top loaded 80 meter vertical, overall height is about 20
> feet, I used parts from a old hy-gain antenna, trashed the traps and
> just used the 80 meter loading coil near the top, the stinger I made
> up is adjustable so I can go from the CW portion to SSB with just a
> quick adjustment of the stinger. When the antenna is set for the part
> of the band I want to work, at the center frequency, the SWR is near
> 1.2:1 and is about 30khz wide at 2:1 without a tuner in line.
>
> So instead of having 4 66 foot long radials (1/4 wave at 80mtrs) it
> would be better to have them cut to 20 feet long (height of the
> antenna)?
>
> My back yard is 50 feet wide and right now I have them bending all
> over the place just to get them to fit. If the radials were 20 feet
> long I could have more of them.
>
> With more (maybe 16) 20 foot radials would the bandwidth be better?
>
> This maybe one of those try it and see.

687. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 16:30:58 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <937h7nkrn1@slb6.atl.mindspring.net>
Source record: 172761

Rick Littlefield wrote in message
<20010106000806.21612.00000115@ng-cp1.aol.com>...
>Hi Dean--
>
>>Almost all aspects of society are harried by wannabe factions today.
>Unfortunately,
>they are in charge of ham radio now.<
>
>With all due respect, Dean, that sounds like whining...
> >snip<<
>Rick K1BQT

I would disagree with but little in your response. It is quite obvious that we have different levels of respect and admiration for amateur radio. It is also obvious that we are not addressing the same train of thought.

The freebanders and no coders are the type of people who, having seen the parade want to join. They refuse; however, to wear the red conical hat with the tassel noting that they will wear their own favorite hat. Then they refuse to ride the identically configured motorcycle noting that they will stick with their dune buggy. No doubt they would complain bitterly because the power squadron refused to accept their sail boat entry in the annual power boat race.

These people always have an excuse why everyone else should do something their way. They have decided that everyone else is wrong even before they have become members of the process that they wish to enjoy. They want to participate and enjoy the process but they do not want to expend the effort on the common bond shared by the members.

These are the wannabes and they are indeed the true whiners.

Dean Craft -- W4IHK

688. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 17:27:50 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <sfje5t084jfdonk66rbvdqc1aiuag7kehc@4ax.com>
Source record: 172762

On Sat, 6 Jan 2001 10:24:28 -0600, "hasan schiers"
<schiers@netins.net> wrote:

>You seem to using the wrong criterion for determining how "effective" your
>shortened antenna is. Your observation at the end of your post worries me:
Well I using that to say that it doesn't seem to be too lossey and
that the bandwidth is "reasonable" and that it won't cover the "whole
band with good SWR" so for a real short antenna it must be doing
fair.

>> With more (maybe 16) 20 foot radials would the bandwidth be better?
OK, I goofed with that term, Should have asked: 16 20 foot radials
(height of antenna) better than 4 1/4 wave radials.
>
>You don't want better bandwidth, assuming you are talking vswr. Higher
>bandwidth indicates greater loss resistance and lower efficiency.
>
>I think you would be MUCH better off with 16, 20' radials than four full
>length twisting all over the place (assuming the radials are laying right on
>the ground or shallowly buried.
Yes, the radials are laying on the ground
>The general rule(s) for radials on the ground are:
>
>1. More is better, even if well short of a 1/4 wave.
>
>2. On a shortened vertical, there is little to be gained by making the
>radials significantly longer than the physical length of the radiator.
>(especially if the increased length makes it less likely that you can run a
>large number of them)
Great! I'll try that, 20 foot radials are easier to roll up to get out
of the way to mow the lawn.
>If your ground losses are LOW (your radials are effective), then for the
>same antenna, your vswr bandwidth will be LESS. You will have a narrower
>bandwidth where the 2:1 vswr points are measured. This is a GOOD sign, not a
>bad sign. Having a "flat" vswr curve on a shortened vertical means you have
>a lossy system, either in the antenna, it's loading/matching, or the ground
>system. Electrically short verticals should ALWAYS have relatively poor vswr
>bandwidth, if they are operating efficiently.
OK I'll expect that the bandwidth will be tight.
Kind of figured with more radials one would get better bandwidth and
better efficiency. I really didn't expect the antenna to work because
it was so short, but when I worked EI6S and G4FIV (I know these guys
are EU 80 Meter superstations) from the west coast a few years ago, it
must be doing something.

>I'm not asserting that radials have to be straight...that's a totally
>different point. What I am saying is that you should get as many radials
>down as possible, whatever their length and don't let length constrain the
>number. Longer radials can be non-straight, curve, bend, etc....although
>some would argue that they stop being effective if the bends are too
>radical, and amount to nothing more than a "shortened" radial in the first
>place!
>
>So..back to the main point: forget using only four radials on the
>ground...that is way too few. Go with 16 shortened ones, and leave the four
>long ones you already have in the system, as they will only help and can't
>hurt.
>
>(And expect the vswr bandwidth to be narrower than with just the four
>radials you started with. If it's not...something is not right...you have
>losses elsewhere in the system that you are not aware of.) Forget bandwidth
>as a measure of anything good about a shortened vertical. Good bandwidth is
>always a BAD sign for this type of antenna.
>
>73
Well thanks for the pointers, I'll give them a try, like I said, I
didn't expect the thing to work to begin with. Maybe later on down
the line I'll add another section of tubing to the vertical.

689. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 17:33:25 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <937kv5leo1@iac5.navix.net>
Source record: 172763

Being a "Libertarian" is the easiest thing in the world to be! With no values it is easy to follow and requires no thought or commitment to practice. But the word "Libertarian" sounds neat to describe a valueless way of life, and the other beauty is no one can attack your values, so you are always right and true to your principals. Sounds pretty spineless to me!

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A565CDC.DAD6588C@IEEE.org...
> Liberal is half of being a Libertarian. I'm a social liberal, hence my
> attitudes about amateur radio and abortion. I'm an economic conservative,
> hence my attitudes toward tax supported welfare. I never said I was right
> or left. I am actually 90 degrees away from right and left.
> --
> http://www.mindspring.com/~w6rca

690. Side mount

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 17:51:06 UTC
From: Radio Op <radio_op@netzero.net>
Message-ID: <eWI56.20683$bU.1421057@bgtnsc04-news.ops.worldnet.att.net>
Source record: 172764

I am planning on doing some antenna work after the spring thaw. Due space restrictions on top of my 40' tower, I am planning on side mounting a Ringo Ranger at about the 30' level.

My question is, what should I consider as the minimum distance from the side of the tower? Fortunately, I am on the extreme edge of the area I wish to cover, so a shadow on the backside is not a problem. Is there an optimal distance at which the tower would become beneficial in the 'forward' direction?

I use 2 meters only as a local intercom with others interested in TTY and SSTV and currently am doing quite well with a copper pipe J-pole at 18', so I don't want to peel the paint on the neighbors house with RF or anything. I just don't want to make any blunders that could be avoided by a little forethought.

Thanks

691. Re: Measuring low power (was re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 18:39:29 UTC
From: "Robert S. Stein" <w6nbi@earthlink.net>
Message-ID: <3A576664.6F5CDA87@earthlink.net>
Source record: 172765

"Ed Hare, W1RFI" wrote:
>
> Dick Carroll <dixie@townsqr.com> wrote:
>
> > What I want to know is how did you measure the power output? The margin
> > of error for most all ham instruments are more than that.
>
> I used the W7EL wattmeter, featured in the Feb 1990 QST. It was calibrated
> here in the Lab against our HP microwattmeter.
>
> The article is available for download from: (big file -- about 6 MB):
>
> http://www.arrl.org/tis/info/pdf/9002019.pdf
>
> 73,
> Ed Hare, W1RFI

I'm glad to see that the ARRL is no longer calibrating power meters
against the Bird 43 :-).

Bob, W6NBI

692. Cop Killers took HT's Read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 18:44:15 UTC
From: mdemeo@frontiernet.net
Message-ID: <3a586759.2114831@news.frontiernet.net>
Source record: 172766

Please send to all scanner enthusiasts, SWLers, and hams that you know in the US & Mexico:

==>ESCAPEES MAY HAVE STOLEN RADIOS; HAMS ASKED TO MONITOR

According to news reports, the seven Texas prison escapees still at large and now wanted in connection with the murder of Irving, Texas, police officer Aubrey Hawkins, KC5USI, also may have stolen radios from a Houston Radio Shack store. The radios are said to include Amateur Radio 2-meter H-Ts as well as Business Radio Service (programmed for 156.400 MHz) and Family Radio Service (462.5625-467.7125 MHz) radios.

Hams have been asked to monitor these bands and report any suspicious activity any hour of the day to the Huntsville Command Center, 936-437-6735, and to their local law enforcement agency. Police advise that anyone spotting these suspects not try to approach them but contact local authorities immediately.

More information on the escapees is at http://people.txucom.net/tdcj-iad/

693. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 18:45:43 UTC
From: rwclark@seanet.com
Message-ID: <3a995b3a.1204873045@news.seanet.com>
Source record: 172767

On Fri, 05 Jan 2001 04:31:40 GMT, rwclark@seanet.com (Richard Clark)
wrote:

>On Wed, 3 Jan 2001 19:26:29 -0000, "Gary Peach" <xcg34@dial.pipex.com>
>wrote:
>
>>
>>> The Josephson junction is the new (relatively speaking) and current
>>> champ of the Volt (unless they've aced me with something better).
>>> This standard of the Volt is based on Quantum mechanics and pulls that
>>> formerly ethereal math into the work-a-day world.
>>
>>This is interesting.
>>Do you think that such a standard would be within the realm of the ham
>>shack?
>>Can you think of a method whereby this standard can be used to calibrate a
>>noise standard? i.e. Noise Temperature / noise power in a known bandwidth.
>>perhaps bolometric bridge.
>>
>>> Another stroke of genius is found in the standard capacitor that is
>>> co-axial in design and using laser interferometry to measure the
>>> plunge of the piston into the cylinder to provide a very accurate
>>> delta C. It is instructive that the technique is what provides the
>>> boon in accuracy, and not the component nor the laser (both necessary,
>>> but alone would not suffice without that AHA! of the delta).
>>
>>You sound like a candidate for a copy of my signal calibration method, If
>>interested I will be glad to E-Mail the file. Beware it's a big un.
>>
>>
>>--
>>Gary7SLL
>
>
>Hi Gary,
>
>Your signal calibration method would be of interest, yes. Pass it
>along. I've done a lot of reviewing of technology writing, mostly for
>Gravity detectors, high temperature super conductors and related
>technology patents so I will be steeled for your tome.
>
>As for a shack Volt standard, you might peruse the surplus market for
>Zener based gear (not all that uncommon by now I would 'spect). Years
>back they were just arriving as transfer standards.

>
>As for a noise source, I use a constantly illuminated Photomultiplier
>Tube with a 50 Ohm Load. The trick of course is in the constant
>illumination - use a constant current fed LED (high voltage, big
>resistor is one way - I'm sure you can take the ball on this one).
>This has been an ad-hoc standard (not NIST) for quite a while now
>which will give you noise from DC to GHz. You can stretch your
>imagination and creativity with this angle. And you use a rare term
>here - bolometry. I've burned up a few bolometers in my time. The
>PMT and a variable filter should provide you with any spectrum you
>might want to experiment with.
>
>73's
>Richard Clark, KB7QHC

Hi Gary,

I am responding to you through this posting because I can't find your response (I use several newsreaders and lost your response apparently).

If I recall, the jist of it was how to calibrate the noise spectrum of the PMT, and a question about its bandwidth.

First a source of information:
Photomultiplier Handbook, Burle Industries, Inc., Lancaster PA 17601-5688 (Formerly RCA PMT division)

In this there is a world of data presented for the noise characteristics of PMTs in general, and for several specific models (one of which I have had 10 years experience with).

From that ref, comes the specification of a flat noise spectrum from DC to -6 dB (current noise) 600 MHz. This is not your standard 6 dB/Octave rolloff as the frequency characteristic is established by transit times rather than RC (or RL) mechanisms. the rolloff is a plunge, but the DC to 100 MHZ is absolutely flat (to -0.1 dB with an eye straining interpolation). This spec is for their Type 931A PMT (with which I have long standing experience) which is a very good, but not exotic model. Typically costs around $300.

This says nothing of the absolute noise power (or noise voltage). That is simply because the output is extremely variable. The PMT is one of the greatest amplifiers ever built. When this model is pulsed (the power supply is pulsed on to measure a transient, the pulse of the power supply is to prevent catastrophic failure with runaway gain) it presents an amplification factor of 1,000,000,000. The lowest gain runs about 1,000 (PMT's operate linearly over a dynamic range 160 dB). This all sounds like fantasy for most Hams, especially when I trot out a spec like 20% quantum efficiency (at its absolute best - but I often worked at the 2% end of the spectrum). However, the eye, in comparison, is 50% quantum efficient. And the eye accomodates for

natural light conditions that vary by 80 db with a visual acuity range of 40 dB.

For Cecil (if you are reading this with your IEEE dictionary open), quantum efficiency is simply how many photons are generated for the number of photons striking the cathode). The transition (not transit) time from photon to electron is 1 picosecond.

So, to answer your question of how much noise, that is dependant upon the transfer equations for PMT gain against the source of illumination applied to the PMT. This particular handbook expends 15 pages in that discussion alone in "Appendix G: Statistical Theory of Noise in Photomultiplier Tubes."

This, of course is not the solution you are seeking insofar as finding a signal meter calibrator for the Ham shack. However it may serve as your gold standard for those models you design with the cost driven down to the Ham market (think in terms of an avalanche photodiode in place of the PMT).

For an example of my work with PMT's, Oximetery, and the world's most accurate Oxygen Sensor, visit my page at:
http://www.seanet.com/~rwclark/Tau/index.html

73's
Richard Clark, KB7QHC

694. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 19:17:28 UTC
From: avatar <avatar@frii.com>
Message-ID: <A3L56.721$B9.191603712@news.frii.net>
Source record: 172672

My experience with short, tuned loops is that they "want" to be tuned as a balanced radiator. In your case it appears that the shield should be connected to your chassis and ground. The variable capacitor should be floating above ground. The problem is how to couple this high impedance to the radio's 50 ohm unbalanced input. There are several ways to do it, but the simplest, once the preliminary adjustments are made, is to use a gamma feed.

Dave
W0MAY

Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message
news:3A5776E5.470FF419@cybatek.fsnet.co.uk...
> Hi All!
>
> I'm building a small receiving loop antenna for 160m using 20ft of RG58
> coax
> erected in a 5ft sq configuration.
>
> I am trying to tune it using a large variable capacitor, it's one I've
> bought
> for the tank cct of my home brew linear ...
>
> Anyways, the capacitor is connected to the inner conductor of the
> coaxial loop with the coax
> shield connected together as described in the book I have. I also have
> the 1 inch gap in the
> shield at the top of the loop as detailed in the diagram.
>
> Now the problem I have is that when I connect my MFJ SWR analyser to the
> antenna
> and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by adjusting
> the capacitor however,
> as soon as I let go of the capacitor / mfj analyser the SWR jumps up to
> 5:1 ??
>
> Now I guess me holding these two units is causing some sort of
> capacitance either from the inner
> conductor to the shield or to ground somehow, however I don't seem to be
> able to tune the loop
> to resonance unless I am making a cct with my hands between the
> capacitor and the outer of
> the coax.
>
> Can someone please explain to me what is going on here and how it can be

> corrected ??
>
> What I am trying to do is get the loop antenna to resonance on 1.84mhz
> and then use one of the
> -30db nulls to block out strong signals from europe thus hopefully
> helping me hear the DX stations better.
>
> Any advice, hints / tips etc will be much appreciated!
>
> Cheers!
>
> MikeT ...
> M0AWS
>
> Ps: Please reply to group and cc to me directly as news is somewhat
> unreliable here !!
>
>

695. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 19:31:58 UTC
From: rwclark@seanet.com
Message-ID: <3a9b727a.1210825144@news.seanet.com>
Source record: 172768

On Sat, 06 Jan 2001 18:45:43 GMT, rwclark@seanet.com (Richard Clark)
wrote:

>
>For Cecil (if you are reading this with your IEEE dictionary open),
>quantum efficiency is simply how many photons are generated for the
>number of photons striking the cathode). The transition (not transit)
>time from photon to electron is 1 picosecond.
>
correction:

For Cecil (if you are reading this with your IEEE dictionary open),
quantum efficiency is simply how many ELECTRONS are generated for the
number of photons striking the cathode). The transition (not transit)
time from photon to electron is 1 picosecond.

696. Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 19:49:57 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A5776E5.470FF419@cybatek.fsnet.co.uk>
Source record: 172669

Hi All!

I'm building a small receiving loop antenna for 160m using 20ft of RG58 coax
erected in a 5ft sq configuration.

I am trying to tune it using a large variable capacitor, it's one I've bought
for the tank cct of my home brew linear ...

Anyways, the capacitor is connected to the inner conductor of the coaxial loop with the coax
shield connected together as described in the book I have. I also have the 1 inch gap in the
shield at the top of the loop as detailed in the diagram.

Now the problem I have is that when I connect my MFJ SWR analyser to the antenna
and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by adjusting the capacitor however,
as soon as I let go of the capacitor / mfj analyser the SWR jumps up to 5:1 ??

Now I guess me holding these two units is causing some sort of capacitance either from the inner
conductor to the shield or to ground somehow, however I don't seem to be able to tune the loop
to resonance unless I am making a cct with my hands between the capacitor and the outer of
the coax.

Can someone please explain to me what is going on here and how it can be corrected ??

What I am trying to do is get the loop antenna to resonance on 1.84mhz and then use one of the
-30db nulls to block out strong signals from europe thus hopefully helping me hear the DX stations better.

Any advice, hints / tips etc will be much appreciated!

Cheers!

MikeT ...
M0AWS

Ps: Please reply to group and cc to me directly as news is somewhat unreliable here !!

697. Re: Cop Killers took HT's Read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:02:00 UTC
From: tejmajh <phdr@oorgle.com>
Message-ID: <3A5779B7.DA701A29@oorgle.com>
Source record: 172670

How much is the reward?

mdemeo@frontiernet.net wrote:
>
> Please send to all scanner enthusiasts, SWLers, and hams that you know in
> the US & Mexico:
>
> ==>ESCAPEES MAY HAVE STOLEN RADIOS; HAMS ASKED TO MONITOR
>
> According to news reports, the seven Texas prison escapees still at large
> and now wanted in connection with the murder of Irving, Texas, police
> officer Aubrey Hawkins, KC5USI, also may have stolen radios from a Houston
> Radio Shack store. The radios are said to include Amateur Radio 2-meter H-Ts
> as well as Business Radio Service (programmed for 156.400 MHz) and Family
> Radio Service (462.5625-467.7125 MHz) radios.
>
> Hams have been asked to monitor these bands and report any suspicious
> activity any hour of the day to the Huntsville Command Center, 936-437-6735,
> and to their local law enforcement agency. Police advise that anyone
> spotting these suspects not try to approach them but contact local
> authorities immediately.
>
> More information on the escapees is at http://people.txucom.net/tdcj-iad/

698. Re: Cop Killers took HT's Read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:10:07 UTC
From: kg9qm@nomail.net
Message-ID: <zYK56.645$iV1.367695@news1.iquest.net>
Source record: 172671

```
>> ==>ESCAPEES HAVE STOLEN GUNS; NRA ASKED TO MONITOR

Sorry, couldn't resist ;-)
```

699. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:29:05 UTC
From: rwclark@seanet.com
Message-ID: <3a9c7e8e.1213917671@news.seanet.com>
Source record: 172673

On Sat, 06 Jan 2001 19:49:57 +0000, Mike Tatum
<miket@cybatek.fsnet.co.uk> wrote:

>Hi All!
>
>I'm building a small receiving loop antenna for 160m using 20ft of RG58
>coax
>erected in a 5ft sq configuration.
>
>I am trying to tune it using a large variable capacitor, it's one I've
>bought
>for the tank cct of my home brew linear ...
>
>Anyways, the capacitor is connected to the inner conductor of the
>coaxial loop with the coax
>shield connected together as described in the book I have. I also have
>the 1 inch gap in the
>shield at the top of the loop as detailed in the diagram.
>
>Now the problem I have is that when I connect my MFJ SWR analyser to the
>antenna
>and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by adjusting
>the capacitor however,
>as soon as I let go of the capacitor / mfj analyser the SWR jumps up to
>5:1 ??
>
>Now I guess me holding these two units is causing some sort of
>capacitance either from the inner
>conductor to the shield or to ground somehow, however I don't seem to be
>able to tune the loop
>to resonance unless I am making a cct with my hands between the
>capacitor and the outer of
>the coax.
>
>Can someone please explain to me what is going on here and how it can be
>corrected ??
>
>What I am trying to do is get the loop antenna to resonance on 1.84mhz
>and then use one of the
>-30db nulls to block out strong signals from europe thus hopefully
>helping me hear the DX stations better.
>
>Any advice, hints / tips etc will be much appreciated!
>

>Cheers!
>
>MikeT ...
>M0AWS
>
>Ps: Please reply to group and cc to me directly as news is somewhat
>unreliable here !!
>

Hi Mike,

You might need to decouple the drive point from the drive line with a 1:1 current Balun. Of course there may another problem here with stray capacitance (which would mean a problem of a ground path) as you have already noted. It may also denote you need to feed with a capacitive divider (one of many feed configurations) since your body capacitance to ground seems to be a key component (if it in fact does not reveal the isolation problem that would be solved with the Balun).

73's
Richard Clark, KB7QHC

700. FA: 70 ft tower on eBay

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:34:13 UTC
From: kj6y@aol.com
Message-ID: <20010106153413.00239.00000223@ng-fb1.aol.com>
Source record: 172674

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1204923467
Skip, KJ6Y
Communications Service Co.
http://members.aol.com/kj6y/skip.html
818-887-3569

701. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:39:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A578297.35692CBA@IEEE.org>
Source record: 172675

Richard Clark wrote:
> For Cecil (if you are reading this with your IEEE dictionary open),
> quantum efficiency is simply how many ELECTRONS are generated for the
> number of photons striking the cathode). The transition (not transit)
> time from photon to electron is 1 picosecond.

Egads. I am just sobering up from New Years. What have I missed?
--
http://www.mindspring.com/~w6rca

702. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:44:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5783BF.391D43E1@IEEE.org>
Source record: 172676

Dean Craft wrote:
> These people always have an excuse why everyone else should do something
> their way.

Sounds like an accurate description of yourself who liked the changes
occurring in amateur radio before a certain arbitrary date but hates
the changes that naturally occurred after that arbitrary date.
--
http://www.mindspring.com/~w6rca

703. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:47:26 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A57845E.F502C525@IEEE.org>
Source record: 172677

W4JLE wrote:
> Being a "Libertarian" is the easiest thing in the world to be! With no
> values it is easy to follow and requires no thought or commitment to
> practice. But the word "Libertarian" sounds neat to describe a valueless way
> of life, and the other beauty is no one can attack your values, so you are
> always right and true to your principals.

You contradicted yourself. How can one have principles and no values?
Values and principles are Siamese twins.
--
http://www.mindspring.com/~w6rca

704. Re: Cop Killers took HT's Read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 20:49:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5784E5.C99FE3B3@IEEE.org>
Source record: 172678

tejmajh wrote:
> How much is the reward?

Last I heard on KLIF it is $100,000 and asking for contributions.
--
http://www.mindspring.com/~w6rca

705. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 21:22:08 UTC
From: rwclark@seanet.com
Message-ID: <3a9d8c2e.1217405696@news.seanet.com>
Source record: 172679

On Sat, 06 Jan 2001 14:39:51 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> For Cecil (if you are reading this with your IEEE dictionary open),
>> quantum efficiency is simply how many ELECTRONS are generated for the
>> number of photons striking the cathode). The transition (not transit)
>> time from photon to electron is 1 picosecond.
>
>Egads. I am just sobering up from New Years. What have I missed?

Hi Cecil,

Apparently the longer posting that this was a correction to. :-)

Take an aspirin, go back to bed, and call in the next millennium.

73's
Richard Clark, KB7QHC

706. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 21:42:56 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3a579161$0$77897$1dc6e903@news.corecomm.net>
Source record: 172680

Which book, what year of publication and what page in the book.

Dave Nagel
wd9bdz

Cecil wrote:
>
> Gary Coffman wrote:
> > It is obvious you haven't even seen an ARRL Handbook
> > or Antenna Book. Otherwise you'd know that they contain
> > no advertisements.
>
> Mine does. Collins 75A-4 for $645 :-)
> --
> http://www.mindspring.com/~w6rca

707. Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 22:29:03 UTC
From: spiritbrook <spiritbrook@email.msn.com>
Message-ID: <#0sdmADeAHA.271@cpmsnbbsa07>
Source record: 172682

I'm on a diet, so I have a wonderful supply of nice, heavy, straight-sided cans that I would like to build a "tomato" can antenna with. I can't find any information about how to do it. These cans are about 2-1/2" diameter and 4-3/4" tall. Do I need to take their tops and bottoms off? Do I solder all around the join? Where to I put the connection? What do I use for a base? Guy wires? Before you think I'm entirely crazy, I'm going to use them as a training aid in the "anything will work" department.

Liz Marr KA7MYM
Coos County, Oregon
EC/CRO

708. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 22:32:32 UTC
From: Mike Mayer <mwmayer@tds.net>
Message-ID: <87wvc8ainn.fsf@auberon.circuitfarm.com>
Source record: 172683

>>>>> "Rick" == Rick Littlefield <k1bqt@aol.com> writes:

[...]

> Think what the word might be like if you had to "earn a ticket" to
> run your pc? It's no secret you can talk world-wide, disrupt
> corporate web sites, and get into a whole lot of trouble with one
> of these desk-top suckers. But difficult licensure requirements??
> Most people somehow manage to stay out of trouble and learn what
> they need to know without taking a test.

[...]

Everyone should show proficiency at entering machine code from the front
panel toggle switches before they can operate a computer :-)

--
==========
Mike Mayer

709. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 22:40:37 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A579EE5.4C6D28D8@dialpoint.net>
Source record: 172681

THE BEST FROM WHAT KIND OF LIST AND HOW MUCH DO YOU WANT TO SPEND ?

As a rule you start with rg-59 then rg-6 then rg-11 form the most lost
to the highest.

"Mario Gï¿½linas" wrote:
>
> Can you tell me which coax (75 ohm) is the best for the uhf-vhf band ? I
> want the best because I will need 120 feet for the TV reception and I don't
> want too much loss for the channels between 14 to 69. Thank you.

710. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 22:54:57 UTC
From: rwclark@seanet.com
Message-ID: <3a9ea1df.1222958361@news.seanet.com>
Source record: 172684

On Sat, 06 Jan 2001 22:32:32 GMT, Mike Mayer <mwmayer@tds.net> wrote:

>>>>>> "Rick" == Rick Littlefield <k1bqt@aol.com> writes:
>
>[...]
>
> > Think what the word might be like if you had to "earn a ticket" to
> > run your pc? It's no secret you can talk world-wide, disrupt
> > corporate web sites, and get into a whole lot of trouble with one
> > of these desk-top suckers. But difficult licensure requirements??
> > Most people somehow manage to stay out of trouble and learn what
> > they need to know without taking a test.
>
>[...]
>
>Everyone should show proficiency at entering machine code from the front
>panel toggle switches before they can operate a computer :-)

That's just the code sending proficiency, they should also be able to
read punch tape running at 5 ips. ;-0

73's
Richard Clark, KB7QHC

711. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 23:00:05 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A57A375.3000505@hiwaay.net>
Source record: 172687

The problem is that you are looking for the wrong name- in the fifties, the big deal was the "beer-can" antenna. In those days the cans for the brewed nectar were steel, and could be soldered. Look back into the QST archives.

Bill-W4BSG (This call is 'vanity' now, but was earned by exam in the Customs house offices of the FCC, in Boston, in 1954 as an upgrade.)

spiritbrook wrote:

> I'm on a diet, so I have a wonderful supply of nice, heavy, straight-sided
> cans that I would like to build a "tomato" can antenna with. I can't find
> any information about how to do it. These cans are about 2-1/2" diameter
> and 4-3/4" tall. Do I need to take their tops and bottoms off? Do I solder
> all around the join? Where to I put the connection? What do I use for a
> base? Guy wires? Before you think I'm entirely crazy, I'm going to use them
> as a training aid in the "anything will work" department.
>
> Liz Marr KA7MYM
> Coos County, Oregon
> EC/CRO

712. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 23:06:35 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A57A4D5.C80128A8@GTE.net>
Source record: 172685

"Mario Gï¿½linas" wrote:

> Can you tell me which coax (75 ohm) is the best for the uhf-vhf band ? I
> want the best because I will need 120 feet for the TV reception and I don't
> want too much loss for the channels between 14 to 69. Thank you.

RG6/U would probably be the best choice. You could go to RG11- but for the
expense you could install a good low noise preamp at the antenna and use RG59
and end up with a better C/N

Dale W4OP

713. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 23:08:04 UTC
From: rwclark@seanet.com
Message-ID: <3a9fa281.1223120494@news.seanet.com>
Source record: 172686

On Sat, 6 Jan 2001 14:29:03 -0800, "spiritbrook"
<spiritbrook@email.msn.com> wrote:

>I'm on a diet, so I have a wonderful supply of nice, heavy, straight-sided
>cans that I would like to build a "tomato" can antenna with. I can't find
>any information about how to do it. These cans are about 2-1/2" diameter
>and 4-3/4" tall.
that small? some diet!
>Do I need to take their tops and bottoms off?
All depends how you want your antenna "loaded" (empty the cans first?)

you will have a stronger, stiffer antenna if you keep at least the
base on.
>Do I solder all around the join?
nice sized tack points might do (solder at 3-4 even points for 1"),
but for the dimension you have above 2.5" diameter(?) that would be
nearly all around. If you have trouble with a too small iron (or gun)
try building a heat dam using toothpaste built up around (but not on)
the area you are working with the iron/gun.
>Where to I put the connection?
at the bottom
>What do I use for a
>base?
Coke Bottle for insulator.
>Guy wires?
Dental Floss? Lots of it. OK, OK, 1/16" - 1/8" nylon cord is enough.
At least 3 guys at 45 degrees for 20M.
>Before you think I'm entirely crazy, I'm going to use them
>as a training aid in the "anything will work" department.
>
>Liz Marr KA7MYM
>Coos County, Oregon
>EC/CRO
>
>
Hi Liz,

The description above would be suitable for field day, perhaps more
attention to the guys if this is longer term (not much attention
tho').

Have fun ;-)

73's
Richard Clark, KB7QHC

714. anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-06 23:19:31 UTC
From: Robert Tortajada <bobt@sysadminus.com>
Message-ID: <3A57A80E.1FC06A81@sysadminus.com>
Source record: 172688
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

I am considering buying the MFJ-1788 Magnetic loop antenna that covers 40m-15m. Has anyone used this antenna? I am looking for any user feedback as to how well it works and ease of operation, especially tuning for receive.

I am concerned about the very small bandwidth of this antenna. I have heard the the bandwidth is just a few khz on 40 meters. I know you tune it by transmitting. So, how well does it work if you normally scan the band before transmitting? The manual says that you can tune for receive by manually listening for the capacitor motor sound, anyone tried this?

Thanks in advance
Bob T
N4GPS

715. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:01:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <938bl3$f52$1@slb1.atl.mindspring.net>
Source record: 172689
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Careful guys... fractal radials are most likely copyright by "you know who".

-Peter K1PO

"Mark Keith" <nm5k@wt.net> wrote in message news:3A54CD42.24BB@wt.net...
> Cecil wrote:
> >
> > Mark Keith wrote:
> > > Better than no radials. Yep, the mass of radials at the base of the
> > > antenna the most important place, so many short radials will do pretty
> > > well. Zig zagging is no real problem. Not as good as straight, but
much
> > > better than none.
> >
> > How about spiraling the radials? How about, heaven forbid, fractal
radials?
>
> I have in fact seen people spiral radials. Was just reading an old
> article where the guy did just that to fit a small area. Yep, I guess a
> fractal radial would work too. MK
>
> --
> http://web.wt.net/~nm5k

716. Re: WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:10:50 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <938c6i$m75$1@nntp9.atl.mindspring.net>
Source record: 172690

Richard:

Heh, heh... maybe Reg took a New Years vacation in Rio and, as everyone knows, below the equator one must take the reciprocal of all formulae.

-Peter K1PO, Cary, NC

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:15471-3A5237A5-23@storefull-114.iap.bryant.webtv.net...
> Reg wrote:
> "Efficiency=(Power in)/(Power out)"
>
> Reg isn`t caught in a faux pas often, but the way this came out in
> print, the less the (Power out), the higher the Efficiency. This might
> be ok for a dummy load?
>
> Reg`s calendar flipped with the year change maybe, and took his formula
> upside down in the process, I suppose.
>
> Best regards, Richard Harrison, KB5WZI
>

717. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:14:33 UTC
From: spiritbrook <spiritbrook@email.msn.com>
Message-ID: <#Cx8O8DeAHA.272@cpmsnbbsa07>
Source record: 172691

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a9fa281.1223120494@news.seanet.com...

> that small? some diet!

"Slim Fast" - you should see those cans!

> nice sized tack points might do (solder at 3-4 even points for 1"),
> but for the dimension you have above 2.5" diameter(?) that would be
> nearly all around. If you have trouble with a too small iron (or gun)
> try building a heat dam using toothpaste built up around (but not on)
> the area you are working with the iron/gun.

Nice thing about these cans is that the top 3/8" is smaller than the rest of the can. If I take the bottom off of the previous can, they will overlap probably 1/2". Is soldering good enough? Perhaps brazing would be better? What do you think that the minimum height should be, and which frequencies would work best. I'm thinking that a 50 watt 2-M won't work, that I'll need something with more "oomph".

Thanks for the information so far. I've got about 15 cans empty now and another 3-1/2 dozen to go. (current rate is 1 or 2 per day)

Liz Marr

718. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:31:49 UTC
From: matjake@aol.comns
Message-ID: <20010106193149.04556.00000423@ng-mi1.aol.com>
Source record: 172693

I would not even think of using RG-59. Use RG-6 it does not cost that much more than RG-59. Technically anything over 100 feet you should use RG-11. But since you state it is 120 feet I would not bother. Go with brands like Commscope, Belden, Stay away from RadioShack cable.

719. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:31:53 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a57b73b.31160824@news.azstarnet.com>
Source record: 172692

On Sat, 6 Jan 2001 14:29:03 -0800, "spiritbrook" <spiritbrook@email.msn.com>
wrote:

>I'm on a diet, so I have a wonderful supply of nice, heavy, straight-sided
>cans that I would like to build a "tomato" can antenna with. I can't find
>any information about how to do it. These cans are about 2-1/2" diameter
>and 4-3/4" tall. Do I need to take their tops and bottoms off? Do I solder
>all around the join? Where to I put the connection? What do I use for a
>base? Guy wires? Before you think I'm entirely crazy, I'm going to use them
>as a training aid in the "anything will work" department.
>
>Liz Marr KA7MYM
>Coos County, Oregon
>EC/CRO

As Novice in the fifties I used a beer can vertical on 40m. My old man emptied
the cans for me and I soldered them together. A Coke bottle, (quart sized)
which was glass in those days, made a fine base insulator.

Almost any kind of string or rope will do for guys. Heavy monofilament fishing
line will work fine.

Leave the bottoms in except for the bottom one and solder them all the way
around. Tacking them will work until you try to erect it then one of the joints
will break and you start over.

Next you need a crystal-controlled Millen transmitter and a BC-342 receiver and
you're in business. (I still have both <g>).

73,

Wes N7WS, ex KN7CVT
>
>
>

720. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:42:15 UTC
From: Alan Melia <Alan.Melia@btinternet.com>
Message-ID: <939h01pgn1@uranium.btinternet.com>
Source record: 172631

Hi Mike , the trouble is that the cap should be floating (both sides above earth potential) I think so you need a length of insulated spindle to get your body capacity away. You didnt say how the RX is to be connected. The usual is a coupling loop. Setting it for min SWR does NOT tune it though! You would be better to put a small loop on your MFJ analyser and use it as a signal source to couple a signal into the RX loop. Then tune the loop to a peak on
the RX. The null is at right angles to the plane of the loop so depending where you are it may be difficult to null out Europe if say you want the States. The nulls are sharp and the peaks broad so there is something to be gained usually. Even quite small loops works quite well, I have used a 4 turn 14inch diam device on 160m and 80m mainly to get rig of TV tb. The signal will be 20dB or so down on a wire but the noise will be down as well. So hopefully the S/N on the required signal will be better. The depth of the null depends a lot on the balancing of the loop and not injecting signals into the loop from the coax feed to the RX. You may also need to detune any wire aerials nearby (i.e the TX wire) as they will inject noise and signals into the loop.

I use a 4 ft loop quite successfully for RX on 136kHz, and can hear most things.
Cheers de Alan
Alan.Melia@btinternet.com

Mike Tatum wrote in message <3A5776E5.470FF419@cybatek.fsnet.co.uk>...
>Hi All!
>
>I'm building a small receiving loop antenna for 160m using 20ft of RG58
>coax

721. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:50:53 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <938euj$st0$1@nntp9.atl.mindspring.net>
Source record: 172695

Cecil wrote in message <3A5783BF.391D43E1@IEEE.org>...
>Dean Craft wrote:
>> These people always have an excuse why everyone else should do something
>> their way.
>
>Sounds like an accurate description of yourself who liked the changes
>occurring in amateur radio before a certain arbitrary date but hates
>the changes that naturally occurred after that arbitrary date.
>--
>http://www.mindspring.com/~w6rca

The name of the game is playing by the rules; not setting up the rules to
suit your preferences.

Dean Craft -- W4IHK

722. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 00:52:05 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <938ejo$4va$1@iac5.navix.net>
Source record: 172694

What you are looking for is the old "juicy Two" it was a two meter collinear made from juice cans. Worked really well as I remember

"spiritbrook" <spiritbrook@email.msn.com> wrote in message news:#0sdmADeAHA.271@cpmsnbbsa07...
> I'm on a diet, so I have a wonderful supply of nice, heavy, straight-sided
> cans that I would like to build a "tomato" can antenna with. I can't find
> any information about how to do it. These cans are about 2-1/2" diameter
> and 4-3/4" tall. Do I need to take their tops and bottoms off? Do I solder
> all around the join? Where to I put the connection? What do I use for a
> base? Guy wires? Before you think I'm entirely crazy, I'm going to use them
> as a training aid in the "anything will work" department.
>
> Liz Marr KA7MYM
> Coos County, Oregon
> EC/CRO
>
>
>

723. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:01:10 UTC
From: richardharrison@webtv.net
Message-ID: <4022-3A57BFD6-1@storefull-117.iap.bryant.webtv.net>
Source record: 172696

Dick Carroll wrote:
"The last line of communications for you (CW) is one you never learned."

Your aspersion is unwarrented, just like most of your many specious arguments in this thread.

You, Mr. Carroll, are ignorant or mendacious. Either way you are wrong.

Sincerely, Richard Harrison, KB5WZI

724. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:23:37 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A57C519.B0BCAA15@dvol.com>
Source record: 172697

spiritbrook wrote:

> "Nice thing about these cans is that the top 3/8" is smaller than the rest of
> the can. If I take the bottom off of the previous can, they will overlap
> probably 1/2". Is soldering good enough? Perhaps brazing would be better?

>
The overlapping joint scheme would work nicely. There is no question that brazing all the way around will be much stronger than soldering. Paint needs to be cleaned off the brazing area. You'll need a "serious" torch, oxy-acetylene or MAP gas type. You'll probably burn any zinc or tin plating off the steel can so painting should be considered else the antenna will rust pretty quickly. Keeping the thing straight is a bit of trick if it's long.
>
. . . they are steel cans, right? . . .
>

>
> What do you think that the minimum height should be, and which frequencies
> would work best. I'm thinking that a 50 watt 2-M won't work, that I'll need
> something with more "oomph".

>
Whattaya mean by "oooph"?? There were plenty of 33-34 foot 40m Beer Can Verticals back when. 96 Slim-Fast cans required. Support it with a glass whiskey or wine bottle, feed it at the bottom and spread some radials around the base.

>

> Thanks for the information so far. I've got about 15 cans empty now and
> another 3-1/2 dozen to go. (current rate is 1 or 2 per day)
>
> Liz Marr

>
w3rv
Former FatBoy, PhD from the University of Weight Watchers.
Go for it.

725. Re: WANTED: comments on compact HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:31:18 UTC
From: richardharrison@webtv.net
Message-ID: <4022-3A57C6E6-2@storefull-117.iap.bryant.webtv.net>
Source record: 172699

Peter O Brackett wrote:
"...maybe Reg took a New Years vacation in Rio and as everybody knows,
below the equator one must take the reciprocal of all formulae."

Com certeza. E` verdade! Blame it on the Bossa Nova (E` a culpa da bossa
nova).

Cuprimentos, Richard Harrison, KB5WZI

726. Re: 8' whip on car on 80 with autotuner? Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:33:19 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A57C75F.8446C0B0@IEEE.org>
Source record: 172698

"David G. Nagel" wrote:
> Which book, what year of publication and what page in the book.

That one was a Hudson advertisement on page 124 in The radio
amateur's handbook, ARRL, 34th edition, 1957. There were 136
pages of advertisements with an index. There were 74 advertisers
including: Allied, B&W, Collins, Gonset, Hallicrafters, Hammarlund,
Heath, Johnson, National, and World Radio.
--
http://www.mindspring.com/~w6rca

727. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:37:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A57C867.CB39FEAC@IEEE.org>
Source record: 172700

Dean Craft wrote:
> The name of the game is playing by the rules; not setting up the rules to
> suit your preferences.

The rules change with time. Progress happens. It makes progressive people
happy and rigid people unhappy. Been going on since recorded history -
no doubt before then.
--
http://www.mindspring.com/~w6rca

728. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:42:50 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A57C99A.433ED475@IEEE.org>
Source record: 172702

"Mario Gï¿½linas" wrote:
> Can you tell me which coax (75 ohm) is the best for the uhf-vhf band ? I
> want the best because I will need 120 feet for the TV reception and I don't
> want too much loss for the channels between 14 to 69. Thank you.

Here in Texas, I simply go to the local cable TV office and request
what's left on spools to be thrown away. I have a virtually endless
supply of 75 ohm coax. Y'all got cable TV in Canada?
--
http://www.mindspring.com/~w6rca

729. 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 01:44:25 UTC
From: Buyone@arrl.crap
Message-ID: <no.skill@arrl.crappy.org>
Source record: 172701
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave

Thanks to the organization called the ARRL, you don't have to earn a license anymore. You can go to your local VE group and buy one for $10.
Get one today and join in the Fun!

AOHF ~ assholes on H.F.

730. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 02:22:33 UTC
From: richardharrison@webtv.net
Message-ID: <26615-3A57D2E9-5@storefull-113.iap.bryant.webtv.net>
Source record: 172704

Mario Gelinas wrote:
"Can you tell me which coax (75 ohm) is the best for the uhf-vhf band?"

Loss for RG 59 is about 8 db per hundred feet at 470 MHz and increases to about 11 db at 800 MHz.

Loss for RG 11 at 470 MHz is about 6 db and increases to about 8.5 db at 800 MHz, per 100 ft. So, RG 11 is about 2 db better than RG 59 at these frequencies. For 120 feet, the loss difference is closer to 3db or about twice as much power loss in the smaller cable. A loss of 6 db means you`ve lost 3/4 of the power in the cable.

Loss for 120 feet is 20% greater than loss for 100 feet.

Best regards, Richard Harrison, KB5WZI

731. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 02:33:17 UTC
From: n2ey@aol.com
Message-ID: <20010106213317.02009.00000042@nso-ma.aol.com>
Source record: 172703

In article <3A566849.BE57EDC@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Steve Woodruff wrote:
>> How does one compute the design of a trap for an HF antenna?
>> (ie: # of turns, diameter of insulator, length of conductor around
>> the insulator, etc...) End result, if i have X amount of feet to
>> rig up a dipole, i need to determine the trap construction parameters.
>
>It would be a two-step operation for me. I would model it using EZNEC
>and then use the coil formula in The ARRL Handbook to wind the coil.
>OK, maybe three steps. Fine tuning would, no doubt, be required. Roy,
>does the free demo version of EZNEC handle series impedances/loads?
>--
The free version of EZNEC can be used to model a trap dipole. I've done both dipole and inverted vee configurations. The main limitation is that trying different parameters is very time consuming. And you have to figure out the trap parameters (L, C, and R) externally. This isn't a criticism of Roy's excellent software - it's just the price of using general purpose antenna simulation software for a specific task.

For a two-band trap dipole, it's hard to beat Reg Edwards' TRAPDIP. Simple and easy to use. Comparisons between results obtained with both EZNEC and TRAPDIP models shows good agreement. TRAPDIP tells how to wind the coils, and the value of trap capacitor needed, as part of the results.

Here's a sample. Took me about three minutes, including converting to metric and back to "English" units:

A 50 foot long trap dipole of #14 wire 30 feet up is to be designed. Desired resonant frequencies are 7.05 and 14.05 MHz. Coil forms 1-1/2" are available, and a "square" coil (length = diameter) winding is chosen.

TRAPDIP says the traps should consist of 21.3 turns of wire, and the trap capacitors will be 7.2 pF The traps should be about 17-1/2 feet from the feedpoint. Feedpoint impedance at resonance is about 49 ohms on 40 and 75 ohms on 20 - well under 2:1 SWR. Antenna efficiency over average ground will be about 89% on 40 and 96% on 20. (The model only takes into account losses in the ground, the traps, and the antenna wire, but the same is true of EZNEC). Of course all of this needs to be fine-tuned due to environmental variables, but it gives a good starting point.

I like coax-cable traps, and I use them, but for Steve's application coil-and-capacitor traps may be a better way to go. Coax traps' main advantages are ruggedness, cheapness of construction for medium power use and ease of weatherproofing. An attic antenna doesn't need weatherproofing and doesn't have to withstand wind, rain and ice. Coax traps are hard to trim to frequency.

Their biggest fault, however, is that you have almost no control over the LC ratio. With coil-and-capacitor traps, you have much more flexibility.

Reg's website is:

http://www.btinternet.com/g4fgq.regp/

73 de Jim, N2EY

732. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 02:33:25 UTC
From: spiritbrook <spiritbrook@email.msn.com>
Message-ID: <ev4OpKFeAHA.331@cpmsnbbsa09>
Source record: 172705

"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A57C519.B0BCAA15@dvol.com...

> The overlapping joint scheme would work nicely. There is no question that
> brazing all the way around will be much stronger than soldering. Paint
needs to
> be cleaned off the brazing area. You'll need a "serious" torch,
oxy-acetylene or
> MAP gas type. You'll probably burn any zinc or tin plating off the steel
can so
> painting should be considered else the antenna will rust pretty quickly.
Keeping
> the thing straight is a bit of trick if it's long.
> >
> . . . they are steel cans, right? . . .

Seem to be - and NO paint!

> Whattaya mean by "oooph"?? There were plenty of 33-34 foot 40m Beer Can
> Verticals back when. 96 Slim-Fast cans required. Support it with a glass
whiskey
> or wine bottle, feed it at the bottom and spread some radials around the
base.

Wasn't sure what the resistence would be with that - I guess the better the
welds, the less the resistence? Even got the wine bottle somewhere. 96
cans - that's OK, I've got a long ways to go on the diet as well. I should
have it done by field day. How much trouble was it to tune?

Liz Marr
KA7MYM
Coos County, Oregon
CRO/EC

>
> >
>
> > Thanks for the information so far. I've got about 15 cans empty now and
> > another 3-1/2 dozen to go. (current rate is 1 or 2 per day)
> >
> > Liz Marr
>
> >
> w3rv
> Former FatBoy, PhD from the University of Weight Watchers.
> Go for it.

>
>

733. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 02:52:36 UTC
From: richardharrison@webtv.net
Message-ID: <4021-3A57D9F4-9@storefull-117.iap.bryant.webtv.net>
Source record: 172708

Mario Melendez, TI2DLL wrote:
"The whole idea behind radials is to provide a low loss return path for the signal."

Exactly. Covering a larger area improves contact, but the ideal path for the copper radial is straight away or perpendicular to the tower as that is the direct path the current needs to take for the least loss.

You also need to reach out if you can to a large cross-section of earth to get low resistance from the large number of parallel paths that a large cross-section implies.

Best regards, Richard Harrison, KB5WZI

734. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 02:58:27 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <938m0g$md6$1@nnrp1.deja.com>
Source record: 172707
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <no.skill@arrl.crappy.org>,
Buyone@arrl.crap (peddler) wrote:
> Thanks to the organization called the ARRL, you don't have to earn a
license
> anymore. You can go to your local VE group and buy one for $10.
> Get one today and join in the Fun!

Gee, is this a new program of some kind? I'm confused about the VE
reference; it hasn't been possible to get a license from anyone but a VE
for more than 17 years. Are you new?

> AOHF ~ assholes on H.F.

Just a wild guess, but I'll bet you can't get on.

LRod

Sent via Deja.com
http://www.deja.com/

735. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 03:10:03 UTC
From: Ron Austin <daustin@kalnet.net>
Message-ID: <3A57DE0B.2A322BF2@kalnet.net>
Source record: 172706
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave

sounds like assholes are here and your here for free you saved $10.00

peddler wrote:

> Thanks to the organization called the ARRL, you don't have to earn a license
> anymore. You can go to your local VE group and buy one for $10.
> Get one today and join in the Fun!
>
> AOHF ~ assholes on H.F.

736. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 03:24:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A57E17C.150A@wt.net>
Source record: 172709
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Peter O. Brackett wrote:
>
> Careful guys... fractal radials are most likely copyright by "you know who".
>
> -Peter K1PO

But if I copywrong I can probably get around that. MK
--
http://web.wt.net/~nm5k

737. Re: anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 03:27:21 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <tmR56.11599$Ps.480296@newsread2.prod.itd.earthlink.net>
Source record: 172710
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

I also inquired at a store recently and was told by a dealer of MFJ stuff
just three days ago that, in his words, "it's a pile".

He said they always have gotten returns of them and although they will
continue to handle other MFJ products because they make a lot of great
equipment, they would no longer offer the loop antennas.

Bless,
Dennis, KF2XL

"Robert Tortajada" <bobt@sysadminus.com> wrote in message
news:3A57A80E.1FC06A81@sysadminus.com...
> I am considering buying the MFJ-1788 Magnetic loop antenna that covers
> 40m-15m. Has anyone used this antenna? I am looking for any user
> feedback as to how well it works and ease of operation, especially
> tuning for receive.
>
> I am concerned about the very small bandwidth of this antenna. I have
> heard the the bandwidth is just a few khz on 40 meters. I know you tune
> it by transmitting. So, how well does it work if you normally scan the
> band before transmitting? The manual says that you can tune for receive
> by manually listening for the capacitor motor sound, anyone tried this?
>
> Thanks in advance
> Bob T
> N4GPS
>
>

738. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 03:36:16 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <938o7k$a6v$1@iac5.navix.net>
Source record: 172711

All I know Cecil is that I live between two Libertarians, last year I replaced the needles on their moral compasses with fan blades and kept cool all summer.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message > You contradicted yourself. How can one have principles and no values?
> Values and principles are Siamese twins.
> --
> http://www.mindspring.com/~w6rca

739. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 03:40:57 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A57E549.46AE@wt.net>
Source record: 172712

BuzzKenwood wrote:

> Kind of figured with more radials one would get better bandwidth and
> better efficiency. I really didn't expect the antenna to work because
> it was so short, but when I worked EI6S and G4FIV (I know these guys
> are EU 80 Meter superstations) from the west coast a few years ago, it
> must be doing something.

Yep, it's the other way around usually. As you add more radials , the bandwidth will slowly shrink. Like he said, this is a good indicator that the radials are actually making a difference. The efficiency goes up, but the bandwidth shrinks. Most of the time you will see about rhe same effect in comparing a good loading coil to a lossy one. The higher the Q , the narrower the bandwidth you will see in the antenna it's used in. If you stick a lossy coil in it's place, the bandwidth gets wider. I think using the bandwidth is a reliable way to gauge the effectiveness of adding radials. As you add more, the bandwidth should shrink up until the point you are fairly well saturated with radials, and then the bandwidth reduction should taper off to where adding more radials make little difference. Once you get to that point, adding more a waste of time. The shorter the vertical the more critical the radials. A 20 ft 80m vertical is fairly short, so adding more should help a good bit if you have lossy soil. MK

--
http://web.wt.net/~nm5k

740. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 04:21:08 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A57EEB4.80C1657F@dvol.com>
Source record: 172713

spiritbrook wrote:

>
> > . . . they are steel cans, right? . . .
>
> Seem to be - and NO paint!

>
Find a magnet and see if the cans attract it. If the cans don't attract a magnet
they're probably aluminum cans which you can't solder or braze without a lot of
very special materials and difficult techniques. To the point where I wouldn't
get into the project.
>

>
> Wasn't sure what the resistence would be with that - I guess the better the
> welds, the less the resistence?

>
Nah, the conductive resistance would be very low no matter how the cans are
bonded. The RF flows on the surface and cans have huge surface areas, both
solder and brazing rod materials are plenty conductive. Not an issue.
>
>

> Even got the wine bottle somewhere. 96
> cans - that's OK, I've got a long ways to go on the diet as well. I should
> have it done by field day. How much trouble was it to tune?

>
Not at all fussy. Simply attach the center conductor of the coax to the lowest
can and connect the braid to the radials and run the coax to the radio. The
input impedance should be somewhere in the R25+j? range which very roughly ought
to result in a 2:1 +/- swr at resonance with 50 ohm coax. Most xcvrs should be
able to handle it without any tuners. If the swr proves to be any higher an
autotuner or manual tuner will provide a 1:1 match.
>

> Liz Marr
> KA7MYM

>
w3rv

741. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 04:35:02 UTC
From: spiritbrook <spiritbrook@email.msn.com>
Message-ID: <#MqJ7MGeAHA.348@cpmsnbbsa09>
Source record: 172716

Yup, magnet works.

"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A57EEB4.80C1657F@dvol.com...

> Find a magnet and see if the cans attract it. If the cans don't attract a
magnet
> they're probably aluminum cans which you can't solder or braze without a
lot of
> very special materials and difficult techniques. To the point where I
wouldn't
> get into the project.

742. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 04:39:00 UTC
From: spiritbrook <spiritbrook@email.msn.com>
Message-ID: <OiCeIPGeAHA.296@cpmsnbbsa09>
Source record: 172717

Radials? Hum, another question then - how do you attach the radials? And what do you make them out of?

"Brian Kelly" <kelly@dvol.com> wrote in message news:3A57EEB4.80C1657F@dvol.com...

> Not at all fussy. Simply attach the center conductor of the coax to the lowest
> can and connect the braid to the radials and run the coax to the radio. The
> input impedance should be somewhere in the R25+j? range which very roughly ought
> to result in a 2:1 +/- swr at resonance with 50 ohm coax. Most xcvrs should be
> able to handle it without any tuners. If the swr proves to be any higher an
> autotuner or manual tuner will provide a 1:1 match.

743. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 04:50:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A57F5AA.D17326CC@IEEE.org>
Source record: 172715

W4JLE wrote:
> All I know Cecil is that I live between two Libertarians, last year I
> replaced the needles on their moral compasses with fan blades and kept cool
> all summer.

Libertarianism is a political outgrowth of the philosophy of objectivism.
I know of no more objective philosophy. Ethically, it is pretty rigid.
No person is allowed to initiate the use of force or threat of force
against another. Under objectivism, all force is strictly for self
defense. It is a system of objective ethics, rather than subjective
morals that depend on what type religion one adopts.
--
http://www.mindspring.com/~w6rca

744. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 04:53:33 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <938soi$d6l$1@iac5.navix.net>
Source record: 172714
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Radials must be straight, gay radials suck!

"Mark Keith" <nm5k@wt.net> wrote in message news:3A57E17C.150A@wt.net...
> Peter O. Brackett wrote:
> >
> > Careful guys... fractal radials are most likely copyright by "you know
who".
> >
> > -Peter K1PO
>
> But if I copywrong I can probably get around that. MK
> --
> http://web.wt.net/~nm5k

745. Re: Lattin multiband antenna; model

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 05:30:55 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A57FF0E.2C2D3A9E@dvol.com>
Source record: 172718

Jerry Flanders wrote:

> Which brings up a question - have the widely-used modeling tools been
> validated for non-conventional radiating structures? Back when I had
> a real job, we tried to make SURE that a modeling system could be
> trusted before placing bets on its result.
>
> What are the validation limits? What kinds of structures are outside
> the bounds for Mininec or NEC-2?

>
Bag of worms. Start with http://www.cebik.com/nec.html
>

>
> Jerry W4UK

>
w3rv

746. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 05:58:15 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A580577.9037FC73@oio.net>
Source record: 172619
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave

peddler,
Not much of a 'troll', huh, peddler? Wanna
try again? Or better yet, just sit back and
be quiet... sit on your fingers.
'Doc

747. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 06:08:39 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <939157$i07$0@208.207.71.135>
Source record: 172620

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "The last line of communications for you (CW) is one you never learned."
>
> Your aspersion is unwarrented, just like most of your many specious
> arguments in this thread.
>
> You, Mr. Carroll, are ignorant or mendacious. Either way you are wrong.
>

Nope, Rich, I have reached an entirely different conclusion. What I am
is a damnfool for ever attempting to ralk sense to the senseless.

748. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 06:13:16 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9391ds$21h$6@bashir.peak.org>
Source record: 172621

MatJake <matjake@aol.comns> wrote:
: I would not even think of using RG-59. Use RG-6 it does not cost that much more
: than RG-59. Technically anything over 100 feet you should use RG-11. But since
: you state it is 120 feet I would not bother. Go with brands like Commscope,
: Belden, Stay away from RadioShack cable.

How about 3/4" hardline? He might be able to get that long a length of it
for free, or almost free, from his local TV Cable System. There is a lot
of it that is no longer being used - as the systems convert to fiber.

--
Bill Nelson (billn@peak.org)

749. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 06:18:10 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9391n2$21h$7@bashir.peak.org>
Source record: 172623

BuzzKenwood <dontask@wonttell.com> wrote:

:>You seem to using the wrong criterion for determining how "effective" your
:>shortened antenna is. Your observation at the end of your post worries me:
: Well I using that to say that it doesn't seem to be too lossey and
: that the bandwidth is "reasonable" and that it won't cover the "whole
: band with good SWR" so for a real short antenna it must be doing
: fair.

Everything else being equal, a shorter antenna will have a lower
radiation resistance, meaning that it will have lower efficiency.

--
Bill Nelson (billn@peak.org)

750. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 06:41:47 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <LcU56.2832$iK.329346@monger.newsread.com>
Source record: 172622

Put in double shielded RG-6 and use a preamp *at* the antenna.

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Mario G&#65533;linas" <mariobrosss@cgocable.ca> wrote in message
news:7nH56.2319$Br2.178403@carnaval.risq.qc.ca...
> Can you tell me which coax (75 ohm) is the best for the uhf-vhf band ? I
> want the best because I will need 120 feet for the TV reception and I
don't
> want too much loss for the channels between 14 to 69. Thank you.
>
>

751. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 07:19:46 UTC
From: Dave <cubit@prodigy.net>
Message-ID: <9395dn$2ihc$1@newssvr05-en0.news.prodigy.com>
Source record: 172624
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave

"peddler" <Buyone@arrl.crap> wrote in message
news:no.skill@arrl.crappy.org...
> Thanks to the organization called the ARRL, you don't have to earn a
license
> anymore. You can go to your local VE group and buy one for $10.
> Get one today and join in the Fun!
>
I can send $10 by Paypal to the first to mail me a license.

I'm serious.

cubit@prodigy.net

752. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 07:25:19 UTC
From: DanZ <n3umh@my-deja.com>
Message-ID: <9395kt$1ec$1@nnrp1.deja.com>
Source record: 172626

Alright,

The best ground system is to copper coat the earth.

Ground radials are a way to make your patch of earth as copper-coated as possible and practical.

The more you have the better. If you can lay down a solid disk of copper, the bigger around it is the better. When it comes to approximating this with wires though, there are some considerations to the length vs the number of radials. If you have only a few radials (16, 32, whatever) you're not going to gain much by extending them out very far. Thus the "radials need not be longer than the antenna" rule of thumb. 0.1 wavelength is just as good as longer, because of the area covered.

If you have hundreds of radials, you can get good results by extending them out to 1/2 wavelength.

Spiraling ground radials won't do any good, because then the currents trying to make it back to the base of the antenna will have to spiral. (lossy)

73,
Dan
N3UMH

In article <5tce5tsiah99jk4rda7fg72qhaid6d2dgt@4ax.com>,
BuzzKenwood <dontask@wonttell.com> wrote:
> On Fri, 05 Jan 2001 20:35:28 GMT, Irv Finkleman
> <finkirvNOSPAM@home.com> wrote:
>
> >Good info Reg, and there is also a maxim that 'radials need not
> >be longer than the antenna is tall'.
> OK, I have a top loaded 80 meter vertical, overall height is about 20
> feet, I used parts from a old hy-gain antenna, trashed the traps and
> just used the 80 meter loading coil near the top, the stinger I made
> up is adjustable so I can go from the CW portion to SSB with just a
> quick adjustment of the stinger. When the antenna is set for the part
> of the band I want to work, at the center frequency, the SWR is near
> 1.2:1 and is about 30khz wide at 2:1 without a tuner in line.
>
> So instead of having 4 66 foot long radials (1/4 wave at 80mtrs) it
> would be better to have them cut to 20 feet long (height of the
> antenna)?
>

> My back yard is 50 feet wide and right now I have them bending all
> over the place just to get them to fit. If the radials were 20 feet
> long I could have more of them.
>
> With more (maybe 16) 20 foot radials would the bandwidth be better?
>
> This maybe one of those try it and see.
>

--
Dan Zimmerman
zimmerds@clarkson.XxXxX.edu Remove the Obvious Spamblock.

Groove.

Sent via Deja.com
http://www.deja.com/

753. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 07:25:28 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5819E8.CC6F5F93@dvol.com>
Source record: 172625

spiritbrook wrote:

> Yup, magnet works.

>
You have a viable project.
>

> Radials? Hum, another question then - how do you attach the radials? And
> what do you make them out of?
>
>
There are a gazillion ways to make radials. Maybe ten gazillion. I ran a chunk
of software written by Reg Edwards called "endfeed" and his program indicates
that your 40m FD vertical should be as follows for near-optimum radiation
efficiency:
>
Vertical should be 36 feet tall, 101 cans assuming a half inch overlap between
cans. Make it 36 feet plus or minus one can.
>
12 radials each 8 feet long. Not a critical dimension.
>
Radials can be made from Home Depot #14 insulated copper THHN "house wire". The
stranded type is easier to handle.
>
Radials should be more or less equally spaced in a circle on the ground around
the base of the antenna.
>
The ends of the the radials at the antenna all get soldered together and to the
coax braid. The center conductor of the coax gets attached to the antenna.
>
The far ends of the radials can be held down with wooden clothes pins driven
into the ground.
>
SWRs should be well under 2:1 between 7.000 and 7.300Mhz
>
>
w3rv

754. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 07:42:46 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A581DF5.B83BE929@dvol.com>
Source record: 172627

Dick Carroll wrote:

>
> > You, Mr. Carroll, are ignorant or mendacious. Either way you are wrong.
> >
>
> Nope, Rich, I have reached an entirely different conclusion. What I am
> is a damnfool for ever attempting to ralk sense to the senseless.

>
His real problem is that we ain't gonna go away, there ain't a damned thing he
can do about that and and that really pisses him off.

755. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 08:59:20 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <939b4m$i3m$1@neptunium.btinternet.com>
Source record: 172628

Isolate the tuned loop. Make no connections to it. Couple it to the
receiver as with a magloop - using a smaller loop, 1/5th or 1/4 the
diameter of the main loop.

Reg
--
==========
Regards from Reg, G4FGQ
For free radio design software go to:-
http://www.btinternet.com/~g4fgq.regp
==========
Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message
news:3A5776E5.470FF419@cybatek.fsnet.co.uk...
> Hi All!
>
> I'm building a small receiving loop antenna for 160m using 20ft of
RG58
> coax
> erected in a 5ft sq configuration.
>
> I am trying to tune it using a large variable capacitor, it's one
I've
> bought
> for the tank cct of my home brew linear ...
>
> Anyways, the capacitor is connected to the inner conductor of the
> coaxial loop with the coax
> shield connected together as described in the book I have. I also
have
> the 1 inch gap in the
> shield at the top of the loop as detailed in the diagram.
>
> Now the problem I have is that when I connect my MFJ SWR analyser to
the
> antenna
> and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by
adjusting
> the capacitor however,
> as soon as I let go of the capacitor / mfj analyser the SWR jumps up
to
> 5:1 ??
>
> Now I guess me holding these two units is causing some sort of
> capacitance either from the inner

> conductor to the shield or to ground somehow, however I don't seem
to be
> able to tune the loop
> to resonance unless I am making a cct with my hands between the
> capacitor and the outer of
> the coax.
>
> Can someone please explain to me what is going on here and how it
can be
> corrected ??
>
> What I am trying to do is get the loop antenna to resonance on
1.84mhz
> and then use one of the
> -30db nulls to block out strong signals from europe thus hopefully
> helping me hear the DX stations better.
>
> Any advice, hints / tips etc will be much appreciated!
>
> Cheers!
>
> MikeT ...
> M0AWS
>
> Ps: Please reply to group and cc to me directly as news is somewhat
> unreliable here !!
>
>

756. Re: Cop Killers took HT's Read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 09:27:25 UTC
From: Jim Best <jwbest@earthlink.net>
Message-ID: <hrcf5tgnnrppn9cgrpmrjam0qj550tl16o@4ax.com>
Source record: 172629

On Sat, 06 Jan 2001 18:44:15 GMT, mdemeo@frontiernet.net wrote:
They should be easy to find once they stop to register their
guns. <G>

757. Re: anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 09:29:58 UTC
From: Korinna & Peter <Peter.Hovorka@t-online.de>
Message-ID: <939cra$cu3$01$1@news.t-online.com>
Source record: 172630
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Hi Robert,

I don't know the MFJ-loop's performance...

Have a look at:

http://www.qsl.net/dk5cz/e-home.htm

They are rugged and reliable :-)

73,
Peter

--
Korinna Imle & Peter Hovorka
ICQ #74200239
Peter: DG1GPQ
http://WWW.CYBERCATS.DE

758. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 10:44:16 UTC
From: k3ky@erols.spamnocom
Message-ID: <939ha0$j63$1@bob.news.rcn.net>
Source record: 172633

In article <3A57243B.2470F0AC@IEEE.org>
Cecil <Cecil.A.Moore@IEEE.org> wrote:

> David Sinclair wrote:
>> While you can read CW underneath a big SSB or RTTY signal, it is
>> distracting as hell and just sheer torture.
>
> It is neither. The SSB net control operator simply directs the CW
> operator to check in.

It is so. We are not even talking about the same thing. You could not possibly
have read with understanding what I wrote, as evidenced by your answer.
I am not talking about cross-mode cw on a phone net with a net control op.
I am talking about the chaos that would ensue if we dropped band plans and
sub-bands for phone.

>> Abandoning present band plans that give CW some respite from the
>> digital modes, or abandoning phone sub-bands is probably about the
>> most effective way to kill off this still-thriving amateur mode, if that is
>> your objective. 73, David K3KY
>
> My objective was to check into a CA SSB net when they couldn't read
> my SSB signal from AZ. Here's what I said in my original posting:

My objective is to speak up for the *amateur radio* CW mode when I read
others maligning it. Labeling CW obsolete might be either true or false
depending upon context. In the amateur radio context, CW is undeniably
alive and well, yet some folks feel the need to pronounce it dead.

David Sinclair wrote:
> If you haven't actually done it yourself,
> I can see how you might not know this.

I've tried it. That's why I know how dangerous it is.

> Again I stress- CW is a spoken language!

Which is a false statement. From Webster's:
"spoken - delivered by word of mouth: ORAL"

Cecil, I have looked foreward to reading your posts and have found them
interesting. Sometimes I also shared your viewpoint. This thread has
been a sometimes funny, sometimes distressing no code/pro code bash
that got started by the incorrect association of a tech class ham with the
Wakefield, MA killings. Sadly, it appears you are being quite inflexible,
even defensive, and are more interested in bludgeoning the group with
your own viewpoint than in truly listening and interacting with others in an

unfolding dialectic. (see Webster)
If it makes you feel any better, I will cede you and Noah Webster a small, technical victory over the trifling point that CW isn't an *oral* spoken language, strictly speaking. OK. But in your heart of hearts, you know that it is a language. And it is indeed auditory, as it is used in radio. :o) So it is 'spoken' with the hands, yet heard with the ears and processed in the brain. Just like speech. Wowza! Hey, its sorta like low data rate speech- get it? I could also whistle morse code for you, but that would probably still not convince you. How about if I vocalize it for you using my larynx- am I getting any warmer? No? How 'bout if I record my voice and then play it back for you- am I really 'speaking'? I would say no- I am sending information to you using my hand. Oh well, this is a 'technical' hobby, after all... :o)

You may 'know' that your mobile CW operations were dangerous. Perhaps they were. I certainly agree with listeningly alertly to our feelings and honoring them. You probably did the right thing by stopping, then.
I 'know' with equal certainty that my mobile CW operations were not dangerous. I have the advantage of having been there. You were not.
I'm a pretty cautious person, I might add. Pretty conservative. Real careful. My friends tease me about that from time to time. Now, I actually have done a few questionable things while driving, in my time, but I can assure you that mobile-in-motion CW was *not* one of them. I am no more qualified to state opinions about whether or not you are safe while using your shop tools than are aliens from outer space. I have never observed you do that. Some people are safe, some people saw their fingers off. Are you really going to be so rigid in this discussion that you insist that any and all activities that remove hands from the wheel or eyes from the road are "unsafe"? While you could make a technical case for that, the billions of safe road miles racked up by motorists belies that claim, and are a testimony to their collective skill in executing the task. While many activities do pose a *potential* danger, it really all depends on whether the driver has internalized the 'prime directive' of driving: driving comes first, always- everything else is secondary. There is something so secuctive, so captivating about mobile cell phone use that some folks completely forget their driving. I can see that. It takes a while to dial a number and you pretty much have to look. Folks discuss just about anything on cell phones- can you picture a driver's emotional state after having just heard that a child has been injured or they are getting laid off or fired or their love interest just broke up with them? Ham CW chats are pretty bland by comparison.
I don't intend to get 'tarred with the same brush' over my mobile CW operating and compared with far more risky behaviors just because in your mind they are all lumped together and represent a potential danger to you as a motorcyclist. Again, I must express my respect of you for your transport bravery. I think it is too much of a risk personally, and would not ride a motorcycle even if offered large sums of money to do so. I just value my life too much. To each his own. Like most things in life, it is a question of degree, and I found mobile CW to be an acceptably safe and enjoyable activity. I heartily recommend it to any

ham who is an experienced driver and CW operator and in good physical condition. For these folks, it is not much of a reach, and it is truly one of the joys of ham radio. 73, David K3KY

759. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 10:44:22 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ZLX56.929$Zf.7046@newsfeed.slurp.net>
Source record: 172632

Hi, Cec:

I nominate charity and self-denial as universal morals. Would libertarians agree with the nomination?

73, Dave, K3BHJ

760. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 10:56:30 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A584B5F.4E559A89@cybatek.fsnet.co.uk>
Source record: 172634

Hi Dave!

Thanks for the info.
I am reading this design from an antenna book I have purchased,
The author details that the feed coax from the RX be connected directly to
the loop,
that is inner to inner and outer to outer, there is no mention of any type of
matching
circuit in the article ?

I will now go away and read up on gamma matching !

Cheers!

MikeT ...

avatar wrote:

> My experience with short, tuned loops is that they "want" to be tuned as a
> balanced radiator. In your case it appears that the shield should be
> connected to your chassis and ground. The variable capacitor should be
> floating above ground. The problem is how to couple this high impedance to
> the radio's 50 ohm unbalanced input. There are several ways to do it, but
> the simplest, once the preliminary adjustments are made, is to use a gamma
> feed.
>
> Dave
> W0MAY
>
> Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message
> news:3A5776E5.470FF419@cybatek.fsnet.co.uk...
> > Hi All!
> >
> > I'm building a small receiving loop antenna for 160m using 20ft of RG58
> > coax
> > erected in a 5ft sq configuration.
> >
> > I am trying to tune it using a large variable capacitor, it's one I've
> > bought
> > for the tank cct of my home brew linear ...
> >
> > Anyways, the capacitor is connected to the inner conductor of the
> > coaxial loop with the coax
> > shield connected together as described in the book I have. I also have
> > the 1 inch gap in the
> > shield at the top of the loop as detailed in the diagram.

> >
> > Now the problem I have is that when I connect my MFJ SWR analyser to the
> > antenna
> > and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by adjusting
> > the capacitor however,
> > as soon as I let go of the capacitor / mfj analyser the SWR jumps up to
> > 5:1 ??
> >
> > Now I guess me holding these two units is causing some sort of
> > capacitance either from the inner
> > conductor to the shield or to ground somehow, however I don't seem to be
> > able to tune the loop
> > to resonance unless I am making a cct with my hands between the
> > capacitor and the outer of
> > the coax.
> >
> > Can someone please explain to me what is going on here and how it can be
> > corrected ??
> >
> > What I am trying to do is get the loop antenna to resonance on 1.84mhz
> > and then use one of the
> > -30db nulls to block out strong signals from europe thus hopefully
> > helping me hear the DX stations better.
> >
> > Any advice, hints / tips etc will be much appreciated!
> >
> > Cheers!
> >
> > MikeT ...
> > M0AWS
> >
> > Ps: Please reply to group and cc to me directly as news is somewhat
> > unreliable here !!
> >
> >

761. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 10:59:50 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A584C26.DEB07216@cybatek.fsnet.co.uk>
Source record: 172635

> On Sat, 06 Jan 2001 19:49:57 +0000, Mike Tatum
> <miket@cybatek.fsnet.co.uk> wrote:
>
> >Hi All!
> >
> >I'm building a small receiving loop antenna for 160m using 20ft of RG58
> >coax
> >erected in a 5ft sq configuration.
> >
> >I am trying to tune it using a large variable capacitor, it's one I've
> >bought
> >for the tank cct of my home brew linear ...
> >
> >Anyways, the capacitor is connected to the inner conductor of the
> >coaxial loop with the coax
> >shield connected together as described in the book I have. I also have
> >the 1 inch gap in the
> >shield at the top of the loop as detailed in the diagram.
> >
> >Now the problem I have is that when I connect my MFJ SWR analyser to the
> >antenna
> >and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by adjusting
> >the capacitor however,
> >as soon as I let go of the capacitor / mfj analyser the SWR jumps up to
> >5:1 ??
> >
> >Now I guess me holding these two units is causing some sort of
> >capacitance either from the inner
> >conductor to the shield or to ground somehow, however I don't seem to be
> >able to tune the loop
> >to resonance unless I am making a cct with my hands between the
> >capacitor and the outer of
> >the coax.
> >
> >Can someone please explain to me what is going on here and how it can be
> >corrected ??
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> >What I am trying to do is get the loop antenna to resonance on 1.84mhz
> >and then use one of the
> >-30db nulls to block out strong signals from europe thus hopefully
> >helping me hear the DX stations better.
> >
> >Any advice, hints / tips etc will be much appreciated!
> >

> >Cheers!
> >
> >MikeT ...
> >M0AWS
> >
> >Ps: Please reply to group and cc to me directly as news is somewhat
> >unreliable here !!
> >
>
> Hi Mike,
>
> You might need to decouple the drive point from the drive line with a
> 1:1 current Balun. Of course there may another problem here with
> stray capacitance (which would mean a problem of a ground path) as you
> have already noted. It may also denote you need to feed with a
> capacitive divider (one of many feed configurations) since your body
> capacitance to ground seems to be a key component (if it in fact does
> not reveal the isolation problem that would be solved with the Balun).
>
> 73's
> Richard Clark, KB7QHC

Hi Richard!

Thanks for the info.
According to the article I am getting the design from, the author details
that the
50ohm feed coax just be connected directly to the loop, that is inner to
inner
and outer to outer, there is no mention or even detail in the diagram of any
type
of matching component, just a direct connection.

A current balun makes sense though, I'll read up on how to make one and then
have
another go at tuning the loop.

Cheers!

MikeT ...

762. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 11:07:29 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A584DF1.37F1A17@cybatek.fsnet.co.uk>
Source record: 172637

Hi Alan,

Thanks for the info.

The rx is connected directly to the loop using the same RG58 coax, that is inner to inner
and outer to outer, exactly as detailed in the authors design and indeed diagram.

I've tried the insulated spindle, it does get rid of the problem of the stray capacitance
however the SWR will not drop below 5:1 when checked with the MFJ VSWR analyser.

It looks like I need to work on isolating this loop completely from the ground system, it's abviously
getting a connection back to ground via the RX which is connected to the shack earth system which in turn
connects to the earth radial system outside.

Another article I have read talks of having too much capacitance in cheap RG58 coax making the antenna impossible
to tune ?? I am now also wondering if this is a factor I had not thought of ??

Back to the drawing board I guess :)

I've had a few other replies and things to try so I have plently to experiment with.

Cheers!

MikeT ...

Alan Melia wrote:

> Hi Mike , the trouble is that the cap should be floating (both sides above
> earth potential) I think so you need a length of insulated spindle to get
> your body capacity away. You didnt say how the RX is to be connected. The
> usual is a coupling loop. Setting it for min SWR does NOT tune it though!
> You would be better to put a small loop on your MFJ analyser and use it as a
> signal source to couple a signal into the RX loop. Then tune the loop to a
> peak on
> the RX. The null is at right angles to the plane of the loop so depending
> where you are it may be difficult to null out Europe if say you want the
> States. The nulls are sharp and the peaks broad so there is something to be
> gained usually. Even quite small loops works quite well, I have used a 4
> turn 14inch diam device on 160m and 80m mainly to get rig of TV tb. The
> signal will be 20dB or so down on a wire but the noise will be down as well.

> So hopefully the S/N on the required signal will be better. The depth of the
> null depends a lot on the balancing of the loop and not injecting signals
> into the loop from the coax feed to the RX. You may also need to detune any
> wire aerials nearby (i.e the TX wire) as they will inject noise and signals
> into the loop.
>
> I use a 4 ft loop quite successfully for RX on 136kHz, and can hear most
> things.
> Cheers de Alan
> Alan.Melia@btinternet.com
>
> Mike Tatum wrote in message <3A5776E5.470FF419@cybatek.fsnet.co.uk>...
> >Hi All!
> >
> >I'm building a small receiving loop antenna for 160m using 20ft of RG58
> >coax

763. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 11:09:14 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A584E5A.90DA2970@cybatek.fsnet.co.uk>
Source record: 172636

Hi Reg!

Will a loop of this sort of design still have the two deep nulls that I
am after ?

The book I have does talk of this type of loop antenna, but says nothing
of the deep
nulls that the other single loop design talks of.

MikeT ...

Reg Edwards wrote:

> Isolate the tuned loop. Make no connections to it. Couple it to the
> receiver as with a magloop - using a smaller loop, 1/5th or 1/4 the
> diameter of the main loop.
> ---
> Reg
> --
> ============================
> Regards from Reg, G4FGQ
> For free radio design software go to:-
> http://www.btinternet.com/~g4fgq.regp
> ============================
> Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message
> news:3A5776E5.470FF419@cybatek.fsnet.co.uk...
> > Hi All!
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> > the 1 inch gap in the
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> > and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by
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> > Any advice, hints / tips etc will be much appreciated!
> >
> > Cheers!
> >
> > MikeT ...
> > M0AWS
> >
> > Ps: Please reply to group and cc to me directly as news is somewhat
> > unreliable here !!
> >
> >

764. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 12:55:26 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <939oum$n99$1@slb7.atl.mindspring.net>
Source record: 172638

Cecil

Hmm... doesn't look like an F-150, maybe a Ram? What?

Cec, do you remove the tailgate on the pick-up to reduce em losses or is it
to reduce wind and gasoine losses?

Or perhaps both?

Neat set up.

-Peter K1PO, Cary NC

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A55DECE.36362B5B@IEEE.org...
> Jim Rodenkirch wrote:
> > Mark and Cecil: I was thinking more along the lines of, "what a great
blip
> > that thing would make on a radar screen." Cecil - that was tongue in
> > cheek...that's a great lookin' set up. Regards, Jim R. K9JWV
>
> Note that the blip wouldn't be very big *on edge* which is
> where the wind is.
> --
> http://www.mindspring.com/~w6rca

765. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 13:16:40 UTC
From: richardharrison@webtv.net
Message-ID: <21950-3A586C38-11@storefull-112.iap.bryant.webtv.net>
Source record: 172639

Cecil, W6RCA wrote:
"Libertarianism is a political outgrowth of the philosophy of objectivism."

Times change and most must change with the times. Oscar Wilde said: "It is peronalities, not principles that move the age."

Think about it and you will recall it was the movers and shakers that determined the outcome, not what they were moving and shaking. Movements are sometimes periodic and always temporary.

Best regards, Richartd Harrison, KB5WZI

766. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 14:16:00 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <3ssg5tgj54nngln826iivp0itjksitiqvc@4ax.com>
Source record: 172640

On 7 Jan 2001 10:44:16 GMT, k3ky@erols.spamnocom (David Sinclair) wrote:
>If it makes you feel any better, I will cede you and Noah Webster a small,
>technical victory over the trifling point that CW isn't an *oral* spoken
>language, strictly speaking. OK. But in your heart of hearts, you know that
>it is a language. And it is indeed auditory, as it is used in radio. :o) So it
>is 'spoken' with the hands, yet heard with the ears and processed in the
>brain. Just like speech.

I go away for months, and this old chestnut rears its head again.

Morse is an encoding of the roman alphabet. The words of a language
can be *spelled* using an alphabetic encoding, but it is the words, and
their syntax and grammar that comprise language, not the alphabetic
encoding used to represent their spelling. Example, here is another
encoding of the roman alphabet:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Now is that a language? Of course not. Neither is the Morse encoding
of that same alphabet. A language has words, syntax, and grammar,
an alphabet does not.

When we pronounce a spoken language, we don't just sound out letters,
we pronounce the phonemes for that language. There are 43 of them
for English, and they aren't the same as the alphabet (which often gives
foreigners trying to learn English fits). When we send English text using
Morse alphabetic encodings, we do not generate the phonemes of the
spoken language either.

Morse is neither a written nor spoken language, by any stretch of the
meaning of language. It is an encoding of the roman alphabet, exactly
as are ASCII, Baudot, and a number of other representations of the
roman alphabet used to convey message texts in some actual language
such as English.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

767. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 14:45:34 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A58810E.5EBC@wt.net>
Source record: 172641

Peter O. Brackett wrote:
>
> Cecil
>
> Hmm... doesn't look like an F-150, maybe a Ram? What?

Looking at the tail lights, a chevy or a GMC. MK
--
http://web.wt.net/~nm5k

768. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 15:07:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A58863E.A6E1BDD5@IEEE.org>
Source record: 172642
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Followups to: rec.radio.amateur.policy, the appropriate newsgroup
for this topic.

David Sinclair wrote:
>
> In article <3A57243B.2470F0AC@IEEE.org>
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
> > David Sinclair wrote:
> >> While you can read CW underneath a big SSB or RTTY signal, it is
> >> distracting as hell and just sheer torture.
> >
> > It is neither. The SSB net control operator simply directs the CW
> > operator to check in.
>
> It is so. We are not even talking about the same thing. You could not possibly
> have read with understanding what I wrote, as evidenced by your answer.

That's the pot calling the kettle black, don't you think? Here's what I
wrote three postings ago and what I have been arguing about and defending
in the subsequent postings.

"I hear people checking into nets when they can't make it with SSB
and the weak CW signal is readable through the SSB KWs."

Dick came back and said immediately following that statement,
"Cecil your ignorance is showing again." I defended my above statement
because I accomplished such regularly when I lived in AZ.

> Sadly, it appears you are being quite inflexible,

Refusing to crucify the English language by insisting words mean
what words mean is inflexible????? How about accuracy? Oops, I forgot.
It depends on what the definition of "is" is. :-)

> If it makes you feel any better, I will cede you and Noah Webster a small,
> technical victory over the trifling point that CW isn't an *oral* spoken
> language, strictly speaking.

Actually, the statement was 100% incorrect. CW is not oral and Morse code
is not a language. It is a coding system for a language, like ASCII is.
You can say the Morse short forms make it a language, but those short
forms can just as easily be used with ASCII or any other digital coding
scheme. If you can use PACTOR instead of Morse and get the identical
meanings across using the identical characters, then Morse is not a
language. If I can use an SCS PTC2e for Morse in the same manner that

I use it for RTTY, then Morse is not a language.

> OK. But in your heart of hearts, you know that it is a language.

Nope, it's not. My heart doesn't matter. A thing is what it is no matter how you or I feel about it.

Your language is what it is. Morse is a coding method overlaid over that underlying language and works as long as one knows the correspondence between the coding characters and the alphabet of whatever language is being used. In the absence of any real language, including words and definitions of concepts, coding would be nearly useless, like the grunts of a cave man. Helen Keller is a good example. Until she made the mental connection between the hand coded method of communications and the concepts of the language she remembered as a very young child, those hand coded symbols were meaningless to her.

> I could also whistle morse code for you, but that would probably
> still not convince you.

I can whistle ASCII for you at four baud, but that doesn't make ASCII a language. :-) Morse and ASCII are what they are - coding systems. The fact that Morse is a manual/aural coding system doesn't detract in the least from its functionality and usefulness.
--
http://www.mindspring.com/~w6rca

769. Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 15:14:51 UTC
From: Greg Webb <greg@eon.net.au>
Message-ID: <3A5887EB.332CF8B8@eon.net.au>
Source record: 172643

Hi Folks !

I am after instructions on how to build or buy that excellent HF antenna

the CC CTW travelling wave vertical for 1.8-30MHz it is 33 feet long
with a magical matching section on the bottom (this bit is the holy
grail
of antennas or so it seems..some say a transmatch, some say how can this

thing work, it is almost an artificial dummy load). If memory serves it
was
quoted as being flat SWR across the bands with no ATU needed.

Do they still exist ??

Cheers and 73's,
Greg VK6JGW

--
Please remove the .morse to respond
and anyway is it about time to remove it :-)

770. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 15:15:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A588827.771C4CD6@IEEE.org>
Source record: 172644

"David J. Windisch" wrote:
> I nominate charity and self-denial as universal morals.
> Would libertarians agree with the nomination?

Ethics are how we chose to deal with our fellow humans.
Charity is an ethical thing to do as long as no force
is involved. Denial of self is actually an immoral act.
I'll bet you have never read, "The Virtue of Selfishness",
by Ayn Rand.
--
http://www.mindspring.com/~w6rca

771. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 15:23:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A588A0F.29F4C5EC@IEEE.org>
Source record: 172645

Brian Kelly wrote:
> His real problem is that we ain't gonna go away, there ain't a damned thing he
> can do about that and and that really pisses him off.

I get the impression that it is the exact opposite, Brian, and
he isn't the one who is pi$$ed. :-)
--
http://www.mindspring.com/~w6rca

772. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 15:29:03 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A588B3F.8D748EFB@IEEE.org>
Source record: 172646

"Peter O. Brackett" wrote:
> Hmm... doesn't look like an F-150, maybe a Ram? What?

GMC, the most electrically noiseless vehicle I have ever owned.

> Cec, do you remove the tailgate on the pick-up to reduce em losses or is it
> to reduce wind and gasoine losses? Or perhaps both?

Yep, both. Something for nothing. :-) Wonder if anyone makes a
fiberglas replacement tailgate?
--
http://www.mindspring.com/~w6rca

773. Re: Cop Killers took HT's Read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 15:31:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A588BC1.51CADB09@IEEE.org>
Source record: 172647

Jim Best wrote:
>
> On Sat, 06 Jan 2001 18:44:15 GMT, mdemeo@frontiernet.net wrote:
> They should be easy to find once they stop to register their
> guns. <G>

Yep, if they would only go to Mass. the problem would go away
because Mass. has the strictest gun laws in the nation.
--
http://www.mindspring.com/~w6rca

774. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:09:06 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <pw066.1147$Zf.8975@newsfeed.slurp.net>
Source record: 172648

Ethics are how we chose to deal with our fellow humans.
Charity is an ethical thing to do as long as no force
is involved. Denial of self is actually an immoral act.
I'll bet you have never read, "The Virtue of Selfishness",
by Ayn Rand.
--
http://www.mindspring.com/~w6rca

Force and charity are mutually-exclusive terms .. well, yeah.

I wrote 'self-denial', which you corrupted into 'denial of self', a
different subject.

Bad bet. I have read that and other Rand stuff. Sorta interesting, but
certainly not the heaviest of the heavyweight stuff. I have some
mildly-libertarian views, but don't think municipal garbage collection is an
overly-intrusive-government in action.

Back to square 0. Or square 1, if you prefer.

73, Dave, K3BHJ

775. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:17:28 UTC
From: n2ey@aol.com
Message-ID: <20010107111728.02009.00000047@nso-ma.aol.com>
Source record: 172649

In article <3A523E05.829F7DF3@tir.com>, "J. Mc Laughlin" <n8tt@tir.com> writes:

>N2EY wrote:
>>
><snip>
>>
>> > Had all the tube configs in it:-)
>>
>> No, it didn't.
>>
>> It had a sampling of tubes commonly used by hams. Also some transistor
>data.
>> Lots of practical construction projects.
>> >
>> >Glow lil' glowbug!
>> >
>> Big ones too.
>>
><snip>
>
>AS I recall, the 1956 Handbook was the last one to have almost all of
>the tube references. In other words, the tube section was deminished
>after 1956. (Blue cover). 73 Mac

Hello Mac,

Looking at my Handbooks, here's what I see:

The Handbooks devote about the same space to tubes (about 35 pages) from the earliest one I have (1948) to about 1970. The tubes presented are only a small sample of those made at any time, and the characteristics shown are very limited.
During the late '50s and early '60s, the number of tube types manufactured grew tremendously, but the Handbook space devoted to them did not, so the percentage represented dropped. Just compare the size of the various RCA receiving tube manuals to get an idea! Many of the tubes, though, were not of primary interest to the ham, or were variations on older types (different pinout, different heater voltage, etc.) For example, the 6GE5 (used in many low-end Heathkits like the monoband SSB rigs and the HW-16) is just a 6DQ6B in a single-ended Compactron bottle.

73 de Jim, N2EY

776. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:17:30 UTC
From: n2ey@aol.com
Message-ID: <20010107111730.02009.00000048@nso-ma.aol.com>
Source record: 172650

In article <3A51D7B9.2D3A13F9@mwci.net>, "William E. Sabin" <sabinw@mwci.net>
writes:

>N2EY wrote:
>
>> It was never meant to be an EE level book. It's a practical radio book. EE
>is a
>> lot more than radio.
>
>This is OK, but there is more to it.

Hello, Bill,

Yep, there's alot more to it!
>
>Electronics, as it pertains to Amateur Radio, is no longer the semi-intuitive
>"gut
>feel" type of technology that it used to be.
> It has become very clear that
>this
>approach is not working very well any more. Like it or not, the kind of
>simplistic
>explanations that used to be OK when radio was, at least on the surface, a
>lot
>easier to grab hold of, are just not good enough any more.

I have to disagree in part. It all depends on what part of radio we're talking
about. Things like basic DC theory haven't changed. There's more to know
because there are more options, though.

What HAS changed is that folks can get their hands on very sophisticated
technology at relatively low prices, and that tends to chnage perceptions.
>
>To be more explicit, radio technology has never been all that simple. Look at
>the
>very early Proceedings of IRE and you will see some science that most radio
>amateurs were, and still are, completely unaware of. Nevertheless, amateurs
>could
>understand basic principles and practice well enough to get on the air with
>home
>made gear.

Agreed. Notice also that the old IRE stuff was often intentionally or
accidentally difficult to understand even for the professionals. Often the
theory was way ahead of the technology available.

Most important, by about 1925 (probably earlier) the average ham station was not "state of the art" as defined by the pros. Just wasn't practical for most hams. Ham radio made its contributions on the technical side in specialized areas (the single signal crystal filter and the noise blanker) and by serving as a first step for many people in all walks of life (young ham decides to go to engineering school because ham radio showed the possibilities of engineering).
>
>No longer true, except *maybe* at the most elementary levels. Even the QRP
>rigs
>are carefully thought out examples of solid state "system design".

The good ones are, anyway. But even a simple two-tube regenerative receiver requires a lot of understanding of basic principles if it is to be any good.
>
>If you look through the ARRL Handbook you will see thousands of interesting
>items
>that previous generations could not even imagine (I have a 1938 edition).
>And a
>basic fact is that these matters can no longer be understood or appreciated
>on a
>*purely* intuitive level. The world has changed into a place where math and
>science skills are basic ingredients, not merely icing on the cake or some
>kind of
>ego trip for academic types.

I agree - but at the same time, the math and science skills of much of the US population lag far behind what's needed.

>The ARRL Handbook these days recognizes this,
>and
>tries to get a balance between science and practice that is optimum for
>radio
>amateurs and students, but also challenges the mind in new directions.

I've seen many of the Handbooks from 1938 to the present. All of them have weak and strong points. The projects in many of them aren't "state of the art" by any means - for example, the DCS-500 receiver that was the most complex design presented 40 years ago was not comparable to, say, a 75S1. Several years later, the HB-67 receiver design was no match for a round-emblem 75S3B. They weren't meant to be - they were examples of what a ham could build in a typical basement shop with a reasonable set of tools and test gear.
>
>Like it or not, if we want to be knowledgeable, even at an introductory
>level, we
>have to get tuned in to these new ways of thinking about amateur radio
>technology.
>
>In other words, the word "practical" doesn't mean quite the same thing any
>more.
>And one of my favorite "speeches" is that with the personal computer and
>software

>for math and design and analysis, it is easier than ever and getting easier
>all the
>time to be a lot more scientific about how we deal with the "practical"
>matters
>that pertain to amateur radio.

Agreed! Modeling antennas, for example, sure beats endless cut and try, seeking a solution that may not exist. But modeling is only the first step - the antenna has to actually get put up to do any good. And a modeling program does not automatically instill an understanding of antennas in the user. It can, however, inspire the user to learn and understand more.
>
>And if we are going to move beyond the mythology and folklore and snake-oil
>that
>has pervaded amateur radio for many decades, we have get up to date in our
>skills
>and attitudes.

I have almost always found that the information presented in ARRL publications was accurate and devoid of mythology, folklore and snake-oil. Not so with some other publications!

The trouble, as I see it, is that hams today need more background today than in years past, but the societal trends push the other way. That puts hams and their publishers in the uncomfortable position of swimming against the tide.

One thing I have seen becoming more prevalent is the tendency to seek quick simple answers to complex questions. Sometimes the oversimplified snake-oil answer is given because the questioner will not sit still for a complete answer. (Or the answerer thinks that way!)

This discussion is very apparent in antenna situations because most hams still have to do a little "engineering" of antenna installations. Even a manufactured antenna usually has to be selected, assembled and installed, and the results obtained depend in large part on how those steps are done.

How do we push things in the right direction?

73 de Jim, N2EY

777. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:32:54 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A589A35.51CCF064@dvol.com>
Source record: 172651

Cecil wrote:

> Brian Kelly wrote:
> > His real problem is that we ain't gonna go away, there ain't a damned thing he
> > can do about that and and that really pisses him off.
>
> I get the impression that it is the exact opposite, Brian, and
> he isn't the one who is pi$$ed. :-)

>
You have a lot of backward impressions Cecil, I'm out laughing my ass off at his mindless anti-cw rants.
>

778. Re: anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:34:24 UTC
From: Cap'n Crunch <kcfamily@tir.com>
Message-ID: <bM066.28602$pA5.1885065@nntp1.onemain.com>
Source record: 172594
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Can't speak for the MFJ in particular, but I've worked several happy hams
who were using that type of loop.... very NARROW bandwidth as you describe.
The hams I've met who like them, are in a bad situation when it comes to
antennas.... they're looking for ANYTHING that'll get them on the air from
an apartment or condo.... usually several floors up... in that instance, the
loops seem to be the only way out.... and a HUGE compromise in antenna.
__/__ __ /__
__ /__ __/__
_____/_____/___ /~
\ Cap'n Crunch /
~~~~~~~~~~~~~~~~

"Robert Tortajada" <bobt@sysadminus.com> wrote in message
news:3A57A80E.1FC06A81@sysadminus.com...
> I am considering buying the MFJ-1788 Magnetic loop antenna that covers
> 40m-15m. Has anyone used this antenna? I am looking for any user
> feedback as to how well it works and ease of operation, especially
> tuning for receive.
>
> I am concerned about the very small bandwidth of this antenna. I have
> heard the the bandwidth is just a few khz on 40 meters. I know you tune
> it by transmitting. So, how well does it work if you normally scan the
> band before transmitting? The manual says that you can tune for receive
> by manually listening for the capacitor motor sound, anyone tried this?
>
> Thanks in advance
> Bob T
> N4GPS
>
~~~~~~~~~~~~~~~~

779. Van Gorden Shorty Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:35:57 UTC
From: Lonnie <n1xmo@earthlink.net>
Message-ID: <NV066.15826$Ps.645798@newsread2.prod.itd.earthlink.net>
Source record: 172652

I just bought one of these dipoles from HRO in Atlanta. Due to space limits at my qth I need the smaller length of this Dipole ant. However it came with no Instructions for the placement of the traps. I called HRO and they just sadi that all of the others had no instructions as well. I also tried to reach the Manufacter but with no luck. They don't seem to have a listed phone and no answer to three letters.
Any Help would be helpfull.

TNX N1XMO@EARTHLINK.NET Lonnie Fannie

780. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 16:52:41 UTC
From: Spiritbrook <Spiritbrook@email.msn.com>
Message-ID: <#OqWCpMeAHA.281@cpmsnbbsa09>
Source record: 172653

36 feet? OK, I've got a lot of "Slim Fast" to consume - should be able to get it done by field day. If one was buying "Slim Fast" just to make an antenna, just the cost of the cans alone would be $75 - a person could almost buy a ready-made antenna for that price (but it wouldn't be as fun) I'll be back when I finally get enough cans to put this thing together. No wonder they were so popular when made out of beer cans ;-)

"Brian Kelly" <kelly@dvol.com> wrote in message news:3A5819E8.CC6F5F93@dvol.com...

> Vertical should be 36 feet tall, 101 cans assuming a half inch overlap between
> cans. Make it 36 feet plus or minus one can.
> >
> 12 radials each 8 feet long. Not a critical dimension.
> >

781. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:02:31 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <93a7gnbdm1@neptunium.btinternet.com>
Source record: 172654

Yes Mike. ALL small simple loops have nulls broadside-on to the plane
of the loop. The greater the isolation of the loop from feedline and
ground connection the sharper the null.

Using 2 or 3 turns allows a tuning capacitor of only 1/4 or 1/9 the
size. No need for a screened loop. Just use hefty wire. It will be
more efficient and more simple to construct.

For design of multi-turn receiving loops download in a few seconds
program RJELOOP3 from website below.
--
==========
Regards from Reg, G4FGQ
For free radio design software go to:-
http://www.btinternet.com/~g4fgq.regp
==========
Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message
news:3A584E5A.90DA2970@cybatek.fsnet.co.uk...
> Hi Reg!
>
> Will a loop of this sort of design still have the two deep nulls
that I
> am after ?
>
> The book I have does talk of this type of loop antenna, but says
nothing
> of the deep
> nulls that the other single loop design talks of.
>
> MikeT ...
>
> Reg Edwards wrote:
>
> > Isolate the tuned loop. Make no connections to it. Couple it to
the
> > receiver as with a magloop - using a smaller loop, 1/5th or 1/4
the
> > diameter of the main loop.
> > ---
> > Reg
> > --
> > ==========
> > Regards from Reg, G4FGQ
> > For free radio design software go to:-
> > http://www.btinternet.com/~g4fgq.regp

> > ============================
> > Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message
> > news:3A5776E5.470FF419@cybatek.fsnet.co.uk...
> > > Hi All!
> > >
> > > I'm building a small receiving loop antenna for 160m using 20ft
of
> > RG58
> > > coax
> > > erected in a 5ft sq configuration.
> > >
> > > I am trying to tune it using a large variable capacitor, it's
one
> > I've
> > > bought
> > > for the tank cct of my home brew linear ...
> > >
> > > Anyways, the capacitor is connected to the inner conductor of
the
> > > coaxial loop with the coax
> > > shield connected together as described in the book I have. I
also
> > have
> > > the 1 inch gap in the
> > > shield at the top of the loop as detailed in the diagram.
> > >
> > > Now the problem I have is that when I connect my MFJ SWR
analyser to
> > the
> > > antenna
> > > and tuune for resonance on 1.84mhz I get a perfect 1:1 SWR by
> > adjusting
> > > the capacitor however,
> > > as soon as I let go of the capacitor / mfj analyser the SWR
jumps up
> > to
> > > 5:1 ??
> > >
> > > Now I guess me holding these two units is causing some sort of
> > > capacitance either from the inner
> > > conductor to the shield or to ground somehow, however I don't
seem
> > to be
> > > able to tune the loop
> > > to resonance unless I am making a cct with my hands between the
> > > capacitor and the outer of
> > > the coax.
> > >
> > > Can someone please explain to me what is going on here and how
it

> > can be
> > > corrected ??
> > >
> > > What I am trying to do is get the loop antenna to resonance on
> > 1.84mhz
> > > and then use one of the
> > > -30db nulls to block out strong signals from europe thus
hopefully
> > > helping me hear the DX stations better.
> > >
> > > Any advice, hints / tips etc will be much appreciated!
> > >
> > > Cheers!
> > >
> > > MikeT ...
> > > M0AWS
> > >
> > > Ps: Please reply to group and cc to me directly as news is
somewhat
> > > unreliable here !!
> > >
> > >
>

782. Re: 6 M gamma dimentions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:09:32 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A58A298.B96D130C@earthlink.net>
Source record: 172655

what you can do is take a piece of 3/8th aluminum tubing 14 in long and a piece of rg8 using just the center insulation and center wire cut ie to 15 inches and your set the spacing from the gamma to driven ele is about 1.5 inches

Rosco wrote:

> Can anyont tell me the dimentions of a gamma match for 6 meters.
> I am working on a 4 el beam and would appreciate some help.
>
> The handbook says .5 wavelength but i cannot get it to tune up. I have been
> trying it in the 12" ballpark with no luck.
>
> Thanks
>
> Ross / N0MSS

783. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:14:47 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A58A3E5.F2331CF2@earthlink.net>
Source record: 172656
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

i think what he is refering to is that as of jan 1 the arrl has allowed VEs
to increase there testing fees to $10 up from the $6.75 or what ever it was
the last time i tested to cover there costs and stuff your NOT buying a
license at all just helping the VEs with the costs

LRod wrote:

> In article <no.skill@arrl.crappy.org>,
> Buyone@arrl.crap (peddler) wrote:
> > Thanks to the organization called the ARRL, you don't have to earn a
> license
> > anymore. You can go to your local VE group and buy one for $10.
> > Get one today and join in the Fun!
>
> Gee, is this a new program of some kind? I'm confused about the VE
> reference; it hasn't been possible to get a license from anyone but a VE
> for more than 17 years. Are you new?
>
> > AOHF ~ assholes on H.F.
>
> Just a wild guess, but I'll bet you can't get on.
>
> LRod
>
> Sent via Deja.com
> http://www.deja.com/

784. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:17:04 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <93a8ajnql1@bob.news.rcn.net>
Source record: 172657

"Wes Stewart" <no_spam_n7ws@azstarnet.com> wrote in message > As Novice in the fifties I used a beer can vertical on 40m. My old man emptied
> the cans for me and I soldered them together. A Coke bottle, (quart sized)
> which was glass in those days, made a fine base insulator.
>
> Almost any kind of string or rope will do for guys. Heavy monofilament fishing
> line will work fine.
>
> Leave the bottoms in except for the bottom one and solder them all the way
> around. Tacking them will work until you try to erect it then one of the joints
> will break and you start over.
>
> Next you need a crystal-controlled Millen transmitter and a BC-342 receiver and
> you're in business. (I still have both <g>).
>
> 73,
>
> Wes N7WS, ex KN7CVT
> >
> >
> >

Wes

Unfortunately beer cans are now made of aluminum and don't solder worth a darn. Another ham tradition has vanished.

Peter
>

785. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:20:46 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <93a8go$qu2$1@plutonium.btinternet.com>
Source record: 172658

Dan wrote -
> If you have hundreds of radials, you can get good results by
extending
> them out to 1/2 wavelength.
==========
If you have hundreds of radials you will get very high efficiency with short radials. To extend them out to 1/2-wave will increase signal strength by a insignificant amount. You can't get any more than 100 % efficiency with any length of any number of radials. A waste of copper and digging effort. Money would be better spent on a bigger PA.

Reg

786. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:23:16 UTC
From: matjake@aol.comns
Message-ID: <20010107122316.04733.00000640@ng-mi1.aol.com>
Source record: 172659

How about 3/4" hardline? He might be able to get that long a length of it for free, or almost free, from his local TV Cable System. There is a lot of it that is no longer being used - as the systems convert to fiber.

Bill you are correct however thet may be overkill, same with RG-11. Yes yes I know the difference between 100 feet and 120 feet, but the guy is not building an EME setup here. Keep it simple and lowcost.While you can get hardline for nothing, can he core it? I don't know his particular setup or expertise so I am not sure. I would just go with RG-6 yes double shielded is delightful all the new stuff is quad shielded so if he wants to get that, more power to him. RG-6 with a preamp at antenna. Not a radio shack preamp, get a Blonder and Tongue amp if you can. That way you put the amp in once and hopefully that is all.

787. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:25:15 UTC
From: Peter Bertini <commquart@erols.com>
Message-ID: <93a8ptqgp1@bob.news.rcn.net>
Source record: 172660

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:LcU56.2832$iK.329346@monger.newsread.com...
> Put in double shielded RG-6 and use a preamp *at* the antenna.
>
> --
>
I would agree, even the worst UHF preamp would yield a lot of improvement
at the higher UHF channels given the cable losses.

Pete

788. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:32:06 UTC
From: Liz Marr <Spiritbrook@email.msn.com>
Message-ID: <#8l#F$MeAHA.282@cpmsnbbsa09>
Source record: 172663

Want to have a "Slim Fast" party? V-8 should also have steel cans.

"Peter Bertini" <commquart@erols.com> wrote in message
news:93a8ajnql1@bob.news.rcn.net...

> Unfortunately beer cans are now made of aluminum and don't solder worth a
> darn. Another ham tradition has vanished.

789. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:32:58 UTC
From: n2ey@aol.com
Message-ID: <20010107123258.07873.00000050@nso-mo.aol.com>
Source record: 172662

In article <3A565CDC.DAD6588C@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Dick Carroll wrote:
>> Cecil swears he's an ultra rightist but in fact he'd make a very good
>> practicing Liberal.
>
>Liberal is half of being a Libertarian. I'm a social liberal, hence my
>attitudes about amateur radio and abortion. I'm an economic conservative,
>hence my attitudes toward tax supported welfare.

In other words, Cecil wants the rights and the freedoms but not the economic responsibilities.

> I never said I was right
>or left. I am actually 90 degrees away from right and left.

Hmmm. Right is purely real. Left is purely real. Left and right are opposites. 90 degrees away from right and left, therefore, is purely imaginary.

Now it all makes sense.

73 de Jim, N2EY

790. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:34:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93a9be$r6k$1@208.207.71.148>
Source record: 172661

"David J. Windisch" wrote:
>
> Hi, Cec:
>
> I nominate charity and self-denial as universal morals. Would libertarians
> agree with the nomination?
>
> 73, Dave, K3BHJ

No way-that's not "free" enough for them.

791. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 17:42:53 UTC
From: richardharrison@webtv.net
Message-ID: <6742-3A58AA9D-38@storefull-116.iap.bryant.webtv.net>
Source record: 172667

Dave, K3BHJ wrote:
"I have some mildly-libertarian views, but don`t think municipal garbage collection is an overly-intrusive-government action."

That`s a good example of pragmatism in the experience of my community. Reformers have gotten privatization several times with worse results every time, so far.

In my book, libertarianism is advocacy of free will and freedom of choice. I see practical problems with citizens getting fee relief for hiring a private removal service for their own trash, while the municipal service continues in competition. But, the right to private garbage removal should not be abridged.

I think Morse should be allowed on the ham bands, but expect a steady decline in its use. Many avid ham CW operators came from the ranks of former military Morse operators. This is ending and with no more supply from the military, Morse code operation will dwindle.

Best regards, Richard Harrison, KB5WZI

792. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 18:01:32 UTC
From: Richard Clark <rwclark@seanet.com>
Message-ID: <nsah5t8sl9nrlj9736r63r07q5ttkcg1ru@4ax.com>
Source record: 172664

On 07 Jan 2001 16:17:28 GMT, n2ey@aol.com (N2EY) wrote:

>In article <3A523E05.829F7DF3@tir.com>, "J. Mc Laughlin" <n8tt@tir.com> writes:
>
>>N2EY wrote:
>>>
>><snip>
>>>
>>> > Had all the tube configs in it:-)
>>>
>>> No, it didn't.
>>>
>>> It had a sampling of tubes commonly used by hams. Also some transistor
>>data.
>>> Lots of practical construction projects.
>>> >
>>> >Glow lil' glowbug!
>>> >
>>> Big ones too.
>>>
>><snip>
>>
>>AS I recall, the 1956 Handbook was the last one to have almost all of
>>the tube references. In other words, the tube section was deminished
>>after 1956. (Blue cover). 73 Mac
>
>Hello Mac,
>
>Looking at my Handbooks, here's what I see:
>
>The Handbooks devote about the same space to tubes (about 35 pages) from the
>earliest one I have (1948) to about 1970. The tubes presented are only a small
>sample of those made at any time, and the characteristics shown are very
>limited.
>During the late '50s and early '60s, the number of tube types manufactured grew
>tremendously, but the Handbook space devoted to them did not, so the percentage
>represented dropped. Just compare the size of the various RCA receiving tube
>manuals to get an idea! Many of the tubes, though, were not of primary interest
>to the ham, or were variations on older types (different pinout, different
>heater voltage, etc.) For example, the 6GE5 (used in many low-end Heathkits
>like the monoband SSB rigs and the HW-16) is just a 6DQ6B in a single-ended
>Compactron bottle.
>
>73 de Jim, N2EY

Hi Jim,

Your mention of the handbook containing tubes of interest to hams is right on, but back in the 60's I was more concerned with finding out what a particular military tube was (like the 6201). Most of my tube books were crossguides (cheapest solution) which often lead right back to the handbook's selections. Having just the tube base chart was worth it.

You mention the explosion of tube types in the 50's and 60's. Yes, most of them for TV's with combination functions. Some compactrons (if I recall the term) contained three tubes in one glass envelope. Sort of bottled circuits instead of integrated circuits...
BC's - IC's

The TV tube industry strove to drive production costs down to the point where they could build the equivalent to the radio's all-american 5 (5 tube receivers). Solid state moved faster. There was also a time when some business analyst crowed no one could undercut the price of cheap hong kong gear watches - a couple of years later they were dumped into the trashbin when the two component watch ('tronics - display with a dab of epoxy to seal everything) took over.

73's
Richard Clark, KB7QHC

793. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 18:10:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93abejaoc0@208.207.71.148>
Source record: 172665

Gary Coffman wrote:
>
> On 7 Jan 2001 10:44:16 GMT, k3ky@erols.spamnocom (David Sinclair) wrote:
> >If it makes you feel any better, I will cede you and Noah Webster a small,
> >technical victory over the trifling point that CW isn't an *oral* spoken
> >language, strictly speaking. OK. But in your heart of hearts, you know that
> >it is a language. And it is indeed auditory, as it is used in radio. :o) So it
> >is 'spoken' with the hands, yet heard with the ears and processed in the
> >brain. Just like speech.
>
> I go away for months, and this old chestnut rears its head again.
>
> Morse is an encoding of the roman alphabet. The words of a language
> can be *spelled* using an alphabetic encoding, but it is the words, and
> their syntax and grammar that comprise language, not the alphabetic
> encoding used to represent their spelling. Example, here is another
>encoding of the roman alphabet:

> ABCDEFGHIJKLMNOPQRSTUVWXYZ

> Now is that a language? Of course not. Neither is the Morse encoding
> of that same alphabet. A language has words, syntax, and grammar,
> an alphabet does not.

Well, you might just as well mark your calander so you can come back in
a few months and replay it all over again, cause "Morse as a Language"
is not going away. It's here to stay, for longer than anyone reading
this. And it has been so for longer than any of us has been around.

Any Morse operator who has learned and practiced the skill *to fluency*
knows full well that it IS a language, and in fact it meets all the
dictionary criteria for definition as one.
It is only those who never learned to hear words as CW sounds who
continually harp on the incorrect assertion that it is nothing more than
an encoding of an alphabet. That's because for them that's all it ever
is. When one must decode every dit and dah to letters which then must be
strung together as words, it is not a language for them, for sure. But
they certainly should be cognizant of the fact that their personal
experience is not all-encompassing of the human experience on this
subject, just the same as in other subjects. Just because I've read a
little on nuclear science doesn't mean that I'm an authority on the
subject. Just because they have worked CW doesn't mean that they are
fluent to the level of language in it.
I suspect that they really are that smart. That means that an Agenda is
in progress, that of further attempting to destroy radiotelegraphy in

ham radio.

The conclusion seems inescapable. Destroy all attractive attributes and there can be no reason to retain it.

Dick W0EX

794. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 18:12:03 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93abhjaoc1@208.207.71.148>
Source record: 172666

Greg Webb wrote:
>
> Hi Folks !
>
> I am after instructions on how to build or buy that excellent HF antenna
>
> the CC CTW travelling wave vertical for 1.8-30MHz it is 33 feet long
> with a magical matching section on the bottom (this bit is the holy
> grail
> of antennas or so it seems..some say a transmatch, some say how can this
>
> thing work, it is almost an artificial dummy load). If memory serves it
> was
> quoted as being flat SWR across the bands with no ATU needed.
>
> Do they still exist ??

Could that matching section have a DC impedance of 50 ohms?

795. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 18:20:15 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <bpch5tcdjnra3dondj328a37e2ss7o69n6@4ax.com>
Source record: 172668

"Peter Bertini" <commquart@erols.com>
shared these priceless pearls of wisdom:

->Unfortunately beer cans are now made of aluminum and don't solder worth a
->darn. Another ham tradition has vanished.

There are several brands of Mexican beer that still come in steel. Does that
mean if you make a vertical this way you will have to get an XE call?

{;-)

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

796. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 18:32:29 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A58B63C.EF9CEB2C@mwci.net>
Source record: 172569

Hello Jim,

Thanks for the nice comments.

N2EY wrote:

> Sabin said: > Like it or not, the kind of
> >simplistic
> >explanations that used to be OK when radio was, at least on the surface, a
> >lot
> >easier to grab hold of, are just not good enough any more.
>
> I have to disagree in part. It all depends on what part of radio we're talking
> about. Things like basic DC theory haven't changed. There's more to know
> because there are more options, though.

The thing that I see missing is an indepth comprehension and comfort-zone of *basic, fundamental principles*. I am convinced that this is much more important than any of the intuitive and arm-waving methods that we use to try to get a handle on higher levels of things. By that I mean the ability to strip a question or a problem down to its most basic and simple ideas, rather than trying to leapfrog to (and getting confused at) higher levels. As I get older and no longer struggling to earn a Company engineer's pay check I find myself focusing on the beginning principles and mathematics (from the ground up) of various topics that I am interested in.

Maxwell's equations are a good example. They are about as fundamental and trustworthy as we can get in the field of engineering-type electromagnetics applications. Textbooks take these four equations and explain zillions of applications (at the engineering level) in ways that we can trust. But this is not an *easy* process. I keep struggling with it.

About DC theory. I have recently been learning about DC biasing and feedback methods in integrated circuit opamp design, just as general interest. There are a lot of nifty ideas there that stretch our understanding of DC design.

> Notice also that the old IRE stuff was often intentionally or
> accidentally difficult to understand even for the professionals.

The real problem here is the *art* of explaining topics in a clear and straightforward way. Many very smart people do not know how to do that. They do not communicate well. It is not an intentional thing, nearly always. On the other hand, people at the cutting edge of some subject talk to their peers and really do not want to communicate with those of us who are at the novice level. We should not be too critical. Einstein wrote a nice article on Relativity for Scientific American.

> (young ham decides to go
> to engineering school because ham radio showed the possibilities of
> engineering).

A-OK on that, big time. One outstanding example in science is Paul Horowitz, who wrote nifty articles for QST while in High School. Also engineer Terman and very many others.

> But even a simple two-tube regenerative receiver
> requires a lot of understanding of basic principles if it is to be any good.

There is a lot to learn about these "simple" receivers. Ask Charles Kitchin, N1TEV.

> math and science skills of much of the US
> population lag far behind what's needed.

Educators are busting their buns to deal with this. We radio amateurs can help, by example and by encouragement.

Snip the rest. I am sure we are on the same channel here.

Bill W0IYH

797. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 18:48:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93admbgtu0@208.207.71.148>
Source record: 172570

Reg Edwards wrote:
>
> Dan wrote -
> > If you have hundreds of radials, you can get good results by
> extending
> > them out to 1/2 wavelength.
> ==========
> If you have hundreds of radials you will get very high efficiency with
> short radials. To extend them out to 1/2-wave will increase signal
> strength by a insignificant amount. You can't get any more than 100 %
> efficiency with any length of any number of radials. A waste of copper
> and digging effort. Money would be better spent on a bigger PA.
>

So, Reg, where is the breakover point, the spot where diminishing returns is reached where one can have a number of radials and wishes to, or must, keep them short? How long should they be for "reasonable" efficiency when, say, 8 to 12 are used? Maybe we should say, what portion of a wavelength should they be as a minimum?
I've read for years, from a number of sources, that several short rsdials are as good as fewer a 1/4 wavelength long.
This could turn out to be a quite important factor in amateur radio vertical antenna installations as more hams are forced to smaller real estate plots.

Dick W0EX

798. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 19:23:07 UTC
From: jamesrhampton@my-deja.com
Message-ID: <93afmm$v7g$1@nnrp1.deja.com>
Source record: 172571
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Don't waste the money. That has been done in the past - and, in many instances, it has been uncovered. The problem then is that the FCC wants all the folks who tested before those 'questionable' VEs to take the exam again - this time in front of an FCC examiner. Failure to do so results in revocation of the license (and you don't get the money back!). Should this happen in my city (Rochester, NY), that means a trip to the FCC in Buffalo - 60 miles away. In many cases, someone is going to have to travel a lot further. Not pleasant.

73 from Rochester, NY
Jim

In article <9395dn$2ihc$1@newssvr05-en0.news.prodigy.com>,
"Dave" <cubit@prodigy.net> wrote:
>
> "peddler" <Buyone@arrl.crap> wrote in message
> news:no.skill@arrl.crappy.org...
> > Thanks to the organization called the ARRL, you don't have to earn a
> license
> > anymore. You can go to your local VE group and buy one for $10.
> > Get one today and join in the Fun!
> >
> I can send $10 by Paypal to the first to mail me a license.
>
> I'm serious.
>
> cubit@prodigy.net
>
>

Sent via Deja.com
http://www.deja.com/

799. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 19:33:25 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A58C485.615FF936@oio.net>
Source record: 172573

Greg,
I haven't heard about this 'CC CTW' antenna, so not
knowing anything about it. All I can tell you is that
it sounds 'too good to be true'. A traveling wave antenna
is usually one that is quite long in relation to the
particular frequency it's used on. The antenna you
speak of doesn't sound like it's long enough to be a
travelling wave antenna anywhere. If you find any
information about it, I'd like to see what it is.
'Doc

800. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 19:33:26 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A58C44F.99FAFF03@att.net>
Source record: 172572

What material are the cans made from?

72/73, George W5YR - the Yellow Rose of Texas NETXQRP 6
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756 PRO #02121 (9/00) Kachina #91900556 (12/99) IC-765 (6/90)

spiritbrook wrote:
>
> "Richard Clark" <rwclark@seanet.com> wrote in message
> news:3a9fa281.1223120494@news.seanet.com...
>
> > that small? some diet!
>
> "Slim Fast" - you should see those cans!
>
> > nice sized tack points might do (solder at 3-4 even points for 1"),
> > but for the dimension you have above 2.5" diameter(?) that would be
> > nearly all around. If you have trouble with a too small iron (or gun)
> > try building a heat dam using toothpaste built up around (but not on)
> > the area you are working with the iron/gun.
>
> Nice thing about these cans is that the top 3/8" is smaller than the rest of
> the can. If I take the bottom off of the previous can, they will overlap
> probably 1/2". Is soldering good enough? Perhaps brazing would be better?
> What do you think that the minimum height should be, and which frequencies
> would work best. I'm thinking that a 50 watt 2-M won't work, that I'll need
> something with more "oomph".
>
> Thanks for the information so far. I've got about 15 cans empty now and
> another 3-1/2 dozen to go. (current rate is 1 or 2 per day)

801. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 19:48:17 UTC
From: ccom2@socket.net
Message-ID: <3a58c77a.4233366@news.socket.net>
Source record: 172574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave

What a jerk'
The FCC sets the amount that can be collected for test
maybe he found his idiot license in a cracker Jack box

Buyone@arrl.crap (peddler) wrote:

>Thanks to the organization called the ARRL, you don't have to earn a license
>anymore. You can go to your local VE group and buy one for $10.
>Get one today and join in the Fun!
>
>AOHF ~ assholes on H.F.
>
>

802. Re: Van Gorden Shorty Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 20:11:44 UTC
From: Ed Cregger <ecregger@earthlink.net>
Message-ID: <44466.17344$Ps.713573@newsread2.prod.itd.earthlink.net>
Source record: 172575

If you bought a Shorty Dipole like the one that I used, the
traps are already wired in place where they should be.

I had to run mine as a sloper and it worked better than any
commercially made vertical that I paid ten times more for.
Poor sentence structure, but I hope you get the idea.
--
Ed Cregger, NM2K
ecregger@earthlink.net

"Lonnie" <n1xmo@earthlink.net> wrote

> I just bought one of these dipoles from HRO in Atlanta.
Due to space limits
> at my qth I need the smaller length of this Dipole ant.
However it came with
> no Instructions for the placement of the traps. I called
HRO and they just
> sadi that all of the others had no instructions as well. I
also tried to
> reach the Manufacter but with no luck. They don't seem to
have a listed
> phone and no answer to three letters.
> Any Help would be helpfull.
>
> TNX N1XMO@EARTHLINK.NET Lonnie Fannie
>
>
>

803. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 20:17:03 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <93airr$1js$1@nnrp1.deja.com>
Source record: 172576
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Now why would I go and PAY for a license when I got my license, AND upgrades for free.. Oh, sorry, I did have to earn them with a little studying and such.. My club offers testing free.. No money exchanges hands.. And I can now talk world-wide on the Extra bands..

Just quit tryin to cheat the system, sit down with the manuals and get studying.. And if you want to take a test for free.. First Saturday of the month, Geo-Physics Institute, UAF, Fairbanks, Alaska.

73
Paul Jordan
kl0an

In article <no.skill@arrl.crappy.org>,
Buyone@arrl.crap (peddler) wrote:
> Thanks to the organization called the ARRL, you don't have to earn a license
> anymore. You can go to your local VE group and buy one for $10.
> Get one today and join in the Fun!
>
> AOHF ~ assholes on H.F.
>
>

--
Don't Sweat the Petty Things.
Don't Pet the Sweaty Things.

Sent via Deja.com
http://www.deja.com/

804. Thanks for the help!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 20:31:06 UTC
From: Webqaz <webqaz@i-is.com>
Message-ID: <3a5da870_5@nntp.I-IS.COM>
Source record: 172406

Thanks
"K7jy" <k7jy@aol.com> wrote in message
news:20010104225648.27346.00000011@ng-mp1.aol.com...
> Out here in the Pacific Northwest, where we grow trees to hundreds of feet
in
> height, a number of enterprising hams have placed HF yagis on rotators in
live
> trees. I have personally assisted my friend Phil Heintz, K7XS, in putting
his
> cushcraft A4 into a 100 footer. K7IR has also done work in trees with hf
beams.
> Usually, they trim the top off to get a solid trunk area to attach the
rotator
> assembly and prevent the upper tree branches from interfering with the
rotating
> elements. Tree climbing is very tricky and dangerous. Only climb them if
you
> know what you're doing and take the proper safety precautions. Or hire a
> professional tree surgeon to do the climbing for you. Or hire a bucket
lift,
> staying out of the tree and going right to the top. A bucket lift can take
the
> fully assembled antenna right to the top too. Good luck! K7JY, Seattle.

805. Gap Titan Vertical - Tuning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 20:45:07 UTC
From: "Vernon D. Matheson" <vmath@nf.sympatico.ca>
Message-ID: <3a58d4ec.0@209.128.1.3>
Source record: 172577

Can anyone tell me which tuning rods tune each band on the Gap Titan DX Vertical

Thanks

Vernon - VO1VM

806. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 21:11:27 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <93am4n$k7v$1@slb2.atl.mindspring.net>
Source record: 172578

Dick Carroll wrote in message <93abejaoc0@208.207.71.148>...
>
>>snip<<
>That means that an Agenda is
>in progress, that of further attempting to destroy radiotelegraphy in
>ham radio.
>
> The conclusion seems inescapable. Destroy all attractive attributes and
>there can be no reason to retain it.
>
>Dick W0EX

You could not have stated it any simpler. Anyone following the postings of several no-coders and freebanders on the newsgroup could come to no other conclusion.

Dean Craft -- W4IHK

807. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 21:24:42 UTC
From: Liz Marr <Spiritbrook@email.msn.com>
Message-ID: <OQ0$PBPeAHA.275@cpmsnbbsa07>
Source record: 172579

They are some sort of bright colored steel. The same type of finish you get on coffee cans - except heavier duty. The cans themselves are more heavy duty - at least as thick as a coffee can, only they don't have the horizontal "ridges" that are on food cans - they are straight sided and smooth. The magnet works pretty good on them.

"George, W5YR" <w5yr@att.net> wrote in message news:3A58C44F.99FAFF03@att.net...

> What material are the cans made from?

808. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 21:33:16 UTC
From: n2ey@aol.com
Message-ID: <20010107163316.17176.00000086@nso-ba.aol.com>
Source record: 172580

In article <3A573004.9A0404DA@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Followups to: rec.radio.amateur.policy which is where this thread belongs.

Nope. Keep it right here. You started this, but you want to move it because you're losing.

Why is this not appropriate for rraa, but discussion of libertarianism is?
>
>N2EY wrote:
>> To my knowledge, there has not been a single NAL issued to a ham for
>violations
>> committed while using Morse on the ham bands for at least the past 10
>years..
>> Yet it's the second most popular mode on amateur HF - just behind SSB and
>way
>> ahead of all digital modes combined.
>
>Look closer, Jim. Many of those NALs were issued for jamming violations
>by code-tested hams using CW (continuous waves).

Hold it right there. You're trying to weasel word by using two different definitons for "CW".

I wrote "MORSE". Not "CW". My statement:

"To my knowledge, there has not been a single NAL issued to a ham for violations committed while using Morse on the ham bands for at least the past 10 years.."

is still true.

Do you have a counter example? Point us to an NAL in the past ten years where the FCC says a ham was jamming or doing obscenity/profanity using Morse.

I regularly check the enforcement logs. They do NOT say the offenders were "using CW". They do say the offenses are things like "deliberate and malicious interference", "use of obscenity" and such. Other offenses include license test irregularities, operation of uncoordinated 2 meter FM VOICE repeaters in such a way as to cause interference with coordinated ones, operation outside the ham bands or the licensees privileges (on VOICE). Nothing about Morse. Not a peep. Nada. Nil. Nothing. Zip. Zero. Zilch.

Of course that may change, 'specially since one guy had his license changed so that HF Morse is the only mode he can use on the ham bands.

> Human nature doesn't
>change when someone uses Morse code.

Maybe it changes, maybe it doesn't. Doesn't matter. What matters is the BEHAVIOR. And from FCC enforcement actions, the BEHAVIOR of hams USING Morse on the ham bands isn't a problem at all. The behavior of some hams using VOICE on the ham bands IS so much of a problem that most of the FCC's enforcement actions are aimed at violations committed using the voice modes.

Just simple facts.

>Morse code simply is not an appropriate vehicle for supporting emotional
>outbursts.

Maybe it is, maybe it isn't. Again, it doesn't matter. What matters is the BEHAVIOR. From FCC enforcement actions, it's clear that the BEHAVIOR of hams USING Morse on the ham bands isn't a problem at all.

What you're saying, Cecil, is that Morse use causes hams to behave themselves much better on the air. That's a good thing!

Spoken language is.

Maybe yes, maybe no. To those fluent in Morse, one is as easy as the other. I can send obscenities as easy as I can say them - maybe even easier - but I choose to do neither on the air.

73 de Jim, N2EY

>--

809. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 21:42:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A58E2BF.F881C46@IEEE.org>
Source record: 172581

Dick Carroll wrote:
> Any Morse operator who has learned and practiced the skill *to fluency*
> knows full well that it IS a language, and in fact it meets all the
> dictionary criteria for definition as one.

So Dick, exactly where is the necessary "Dictionary of the Morse
Code Language" located? My enclyclopedia lists all the known
languages in the world. Morse code is not listed.
--
http://www.mindspring.com/~w6rca

810. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 21:56:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A58E5F6.6F44856D@IEEE.org>
Source record: 172582

N2EY wrote:
> In other words, Cecil wants the rights and the freedoms but not the economic
> responsibilities.

The government has the responsibility to provide me with protection from
foreign governments and criminals. That requires an armed forces, a police
system, and a court system. Those are the rights I want and I'm willing to
pay my fair share for those services. What I object to, for instance, is
using the money I paid in taxes to finance partial birth abortions.
--
http://www.mindspring.com/~w6rca

811. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:01:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A58E740.431BFE5A@IEEE.org>
Source record: 172583

N2EY wrote:
>
> In article <3A573004.9A0404DA@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:
> >Followups to: rec.radio.amateur.policy which is where this thread belongs.
>
> Nope. Keep it right here. You started this, but you want to move it because
> you're losing.

I want to move it because it violates the newsgroup rules for this newgroup.
All subsequent postings of mine under the Subject of "No-code kills" will
not be posted on r.r.a.a but instead will be routed to r.r.a.p. I have
had some email objections to these off-topic postings. Feel free to continue
to violate the r.r.a.a rules. After this last posting on Morse code, I'm going
to stick to antenna topics.
--
http://www.mindspring.com/~w6rca

812. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:13:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <93apncund1@nntp9.atl.mindspring.net>
Source record: 172584

Thread:

I'm not an expert on this radial stuff.

But FWIW...

I do recall a series of articles in QST by Jerry Sevick [W2FMI?] a few years back where he conducted and documented, what I would call, definitive experiments on this matter.

He experimentally tested various ground mounted verticals and published lots of results for the tests over radial fields with varying numbers of radials over quite a wide range. He actually put the radials out in bundles and then separated the bundles one by one to see the effects, etc...

I believe a search through old QST's looking for the author Sevick on the subject of ground mounted verticals should come up with the pertinent articles.

Me...?? I just throw out all of my old ham magazines... heh, heh.

-Peter K1PO, Cary NC

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:93admbgtu0@208.207.71.148...
>
>
> Reg Edwards wrote:
> >
> > Dan wrote -
> > > If you have hundreds of radials, you can get good results by
> > extending
> > > them out to 1/2 wavelength.
> > ================================
> > If you have hundreds of radials you will get very high efficiency with
> > short radials. To extend them out to 1/2-wave will increase signal
> > strength by a insignificant amount. You can't get any more than 100 %
> > efficiency with any length of any number of radials. A waste of copper
> > and digging effort. Money would be better spent on a bigger PA.
> >
>
> So, Reg, where is the breakover point, the spot where diminishing
> returns is reached where one can have a number of radials and wishes to,
> or must, keep them short? How long should they be for "reasonable"
> efficiency when, say, 8 to 12 are used? Maybe we should say, what
> portion of a wavelength should they be as a minimum?
> I've read for years, from a number of sources, that several short

> rsdials are as good as fewer a 1/4 wavelength long.
> This could turn out to be a quite important factor in amateur radio
> vertical antenna installations as more hams are forced to smaller real
> estate plots.
>
> Dick W0EX

813. Need HyGain 12AVQ Help ! !!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:17:24 UTC
From: Dennis Recla <recla@magick.net>
Message-ID: <pfqh5tk2ehru0av1bi42k0akg6i1qj2bd9@4ax.com>
Source record: 172585

Hello
I have just gotten an Old HyGain 12AVQ 10,15,20 meter vertical.
I think I have all the pieces, but it sure dosen't tune up very
well.

Anyone have a copy of the old manual, or could help me with
setting the various lengths of tubing, etc.

How long should the traps be apart? How long is the top small
tube go. Any help will be appreciated.

Dennis

814. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:25:26 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A58ECD6.7AFD3F8E@IEEE.org>
Source record: 172586

"Peter O. Brackett" wrote:
> I believe a search through old QST's looking for the author Sevick on the
> subject of ground mounted verticals should come up with the pertinent
> articles.

Some such articles are in his books, e.g. Appendix I, II, III in
"Building and Using Baluns and Ununs". I'll try to review them
and summarize them here.
--
http://www.mindspring.com/~w6rca

815. Re: Homebrew Antenna sugestions for 462mhz please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:34:35 UTC
From: tom_bruhns@agilent.com
Message-ID: <93aqtr$82d$1@nnrp1.deja.com>
Source record: 172588

The CB SWR meter probably won't be very good at 460MHz. You could,
however, test it if you can come up with a decent 460MHz load. If you
happen to have 100 feet or so of RG-58, try terminating that in a
nominally 50 ohm load. (47 ohms is fine...even a short or open isn't
too bad!) On the other end, you should measure pretty close to 1:1 SWR.
The coax attenuation will make any load show a fairly low SWR. But in
any event, I wouldn't worry too much about a 1.5:1 SWR. Question is,
does it WORK to communicate with?

Cheers,
Tom

In article <t5dv4rogmtm912@corp.supernews.com>,
"tomfree" <tfreeman@blueridge.net> wrote:
> I came up with a plan for a ground plane built on a SO-239 panel mount
jack.
> Radiator and radials cut at 6.1", radials bent down from level about
thirty
> degrees. I made one up and did a quick test on a 10' pole with a CB
SWR
> meter (all I have) and came up with a 1.5:1. Will this meter be
accurate at
> these frequencies? Thanks for the previous replies and any help here.
>
> Tom
>
> <tom_bruhns@agilent.com> wrote in message
> news:933514$bl1$1@nnrp1.deja.com...
> > I assume right now you're using a built-in antenna on the PR-1000.
If
> > you use a reasonably short length of low-loss line between the radio
> > and your roof-mounted antenna, you probably don't need much of an
> > antenna up there. I'd suggest a simple "ground-plane" antenna. A
web
> > search should turn up several ideas for how to build one, but if
not,
> > ask again here. There's a LOT to be gained by keeping the two ends
of
> > your radio link line-of-sight or nearly so, so getting practically
any
> > antenna up high like that is a big plus. But do use good line and
> > minimize the length of it. 3dB would be a good maximum line loss to
> > shoot for, I'd say, which will be fairly easy with 60 feet or so of
RG-8
> > foam line or maybe 35 feet of RG-8X. Those are "soft" numbers...a

bit
> > more won't kill the advantage of height in the clear.
> >
> > There are antennas you could build with considerably more gain than
a
> > ground plane, but they're more trouble and most would take
instruments
> > to get tuned up correctly. A ground plane should work if you are
simply
> > careful about getting things the right lengths and connected
correctly.
> >
> > Cheers,
> > Tom
> >
> >
> > In article <t57b9vhq3fl2f3@corp.supernews.com>,
> > "tomfree" <tfreeman@blueridge.net> wrote:
> > > I just started using the Cobra PR-1000 to communicate with the
house
> > when
> > > out on my farm. I would like to add an antenna mounted on top of
the
> > house
> > > to make communications more reliable when at the extremes
(distance
> > wise) of
> > > my property. We are talking rolling hills and woods. The house
is
> > near the
> > > middle of the tract of land. It also has a tin roof and I was not
> > sure
> > > about the effects of this on any installation. The antenna would
be
> > mounted
> > > on a pole about ten feet down from the crest of the roof at one
end of
> > the
> > > house, the pole will extend above the crest. Since the antenna
will
> > be
> > > fairly small at these frequencies (462Mhz) I wanted to try my
hand at
> > > building one. Any suggestions would be appreciated.
> > >
> > > Tom
> > >
> > >
> >
> > --

> > Tom Bruhns -- K7ITM
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

816. Cushcraft R7000 Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:35:23 UTC
From: Carl Sherman <csherman@flash.net>
Message-ID: <3A58EEE2.119943CA@flash.net>
Source record: 172587

Have an R7000 HF vertical. At about six months Cushcraft replaced two of the three traps for me, to repair an intermittent problem. That fixed the problem for eight months--now it has failed again in the same way. 10 and 12 meter bands are okay, but the others show high VSWR with intermittent brief periods of proper VSWR.

Two years ago, this was a hot new antenna with Cushcraft, but it has since been completely discontinued. The antenna must have a serious design flaw. Has anyone had any experience that would assist me to determine what the mode of failure is for the R7000's, and what one could do to permanently fix the problem. I typically run continuous digital modes at about 50 watts or less. Don't think that should hurt the antenna.

Any experience out there with repairing R7000 traps?

Any assistance would be appreciated. Live in a "Restricted" community, and the R7000 has the most pleasing appearance of all the multi-band verticals I know.

73,
Carl Sherman W5SBH

817. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 22:48:26 UTC
From: richardharrison@webtv.net
Message-ID: <18223-3A58F23A-3@storefull-118.iap.bryant.webtv.net>
Source record: 172589

N2EY wrote:
"They do say the offenses are things like deliberate and malicious interference. "Use of obscenity" and such."

Maybe miscreants should be sentenced to communicate only in Morse if that cleans up their acts. Punishment enough too. Be sentenced to master Morse. Would it work? The languages I know have about the assortment of expletives and I`ve seen little difference in their usage. Why they would not encode into Morse as easily as Baudot or ASCII, or why that should make any difference to the user seems extremely strange to me.

Best regards, Richard Harrison, KB5WZI

818. GAP TUNING INFO SITE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 23:37:31 UTC
From: ardujenski@aol.com
Message-ID: <20010107183731.09556.00000344@ng-me1.aol.com>
Source record: 172590

See
http://www.mellinger.com/wa0sxv/titandx.html
for Gap Titan tuning info

Alan KB7MBI in Woodinville, WA

819. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-07 23:46:59 UTC
From: Mike Mayer <mwmayer@tds.net>
Message-ID: <87u27ba4qt.fsf@auberon.circuitfarm.com>
Source record: 172591

>>>>> "Richard" == Richard Clark <rwclark@seanet.com> writes:

> That's just the code sending proficiency, they should also be able
> to read punch tape running at 5 ips. ;-0

That's right. And you should be able to keypunch FORTRAN at 5 lines per
minute before being allowed to use Visual BASIC.

--
==========
Mike Mayer

820. Re: anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 00:16:44 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <MF766.194188$j6.24646930@news1.rdc1.va.home.com>
Source record: 172593
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Hi Robert:

I don't have that model, I have the one that covers 10 to 30MHz. Here is my take on the device. The lower the tuned frequency, the narrower the bandwidth. On 28MHz the bandwidth is about 200KHz at 10MHz is only 10KHz. You will notice that as you tune away from the tune point the signal levels will drop allot, but you will still be able to hear everything you could if the antenna was tuned to the listening frequency. Remember receivers have a very large dynamic range. As for tuning it by the motor noise, this is a design feature/bug. The motor makes allot of RF hash when it runs, so as you tune the antenna through the frequency your listening to the noise will peak. This is very useful as there is no way to tell what frequency you last tuned the antenna to if you forget, so using the motor noise to get close is a big help. You will find the performance compared to a full size dipole gets better as you go higher in frequency. If you mount the loop horizontal, do what the manual says about minimum height. Get it too low and it will not work. The narrow bandwidth can be a help. I used mine at field day on the PSK31 digital station and I was able to operate on 20m at the same time as the 1KW (we went QRU) phone station was. My loop had some problems when I first received it. There were very many bad solder joints inside the loop its self and a loose bit of solder shorted out the power on the feed line whenever I put the antenna horizontal. After I fixed it everything worked well. The only other problem was the performance dropped slowly off and sometimes on damp days I couldn't get the swr down. I opened the loop housing up and found 7 wasp nests inside and 50 wasps living inside the metal tubing that made the loop. The answer is to make the plastic housing fit a bit tighter so the bugs can't get in. Don't make it air tight or you will have water problems, just keep the bugs out.
Anyway it worked for me

--
John Passaneau, W3JXP
Penn State University,
State College Pa
w3jxp@arrl.net

Robert Tortajada <bobt@sysadminus.com> wrote in message
news:3A57A80E.1FC06A81@sysadminus.com...
> I am considering buying the MFJ-1788 Magnetic loop antenna that covers
> 40m-15m. Has anyone used this antenna? I am looking for any user
> feedback as to how well it works and ease of operation, especially
> tuning for receive.
>
> I am concerned about the very small bandwidth of this antenna. I have

> heard the the bandwidth is just a few khz on 40 meters. I know you tune
> it by transmitting. So, how well does it work if you normally scan the
> band before transmitting? The manual says that you can tune for receive
> by manually listening for the capacitor motor sound, anyone tried this?
>
> Thanks in advance
> Bob T
> N4GPS
>

821. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 00:16:54 UTC
From: k3ky@erols.spamnocom
Message-ID: <93b0tmdfl1@bob.news.rcn.net>
Source record: 172592

In article <3ssg5tgj54nngln826iivp0itjksitiqvc@4ax.com>
Gary Coffman <ke4zv@bellsouth.net> wrote:

> On 7 Jan 2001 10:44:16 GMT, k3ky@erols.spamnocom (David Sinclair) wrote:
>>If it makes you feel any better, I will cede you and Noah Webster a small,
>>technical victory over the trifling point that CW isn't an *oral* spoken
>>language, strictly speaking. OK. But in your heart of hearts, you know that
>>it is a language. And it is indeed auditory, as it is used in radio. :o) So it
>>is 'spoken' with the hands, yet heard with the ears and processed in the
>>brain. Just like speech.
>
> I go away for months, and this old chestnut rears its head again.
>
> Morse is an encoding of the roman alphabet. The words of a language
> can be *spelled* using an alphabetic encoding, but it is the words, and
> their syntax and grammar that comprise language, not the alphabetic
> encoding used to represent their spelling. Example, here is another
> encoding of the roman alphabet:
>
> ABCDEFGHIJKLMNOPQRSTUVWXYZ
>
> Now is that a language? Of course not. Neither is the Morse encoding
> of that same alphabet. A language has words, syntax, and grammar,
> an alphabet does not.
>
> When we pronounce a spoken language, we don't just sound out letters,
> we pronounce the phonemes for that language. There are 43 of them
> for English, and they aren't the same as the alphabet (which often gives
> foreigners trying to learn English fits). When we send English text using
> Morse alphabetic encodings, we do not generate the phonemes of the
> spoken language either.
>
> Morse is neither a written nor spoken language, by any stretch of the
> meaning of language. It is an encoding of the roman alphabet, exactly
> as are ASCII, Baudot, and a number of other representations of the
> roman alphabet used to convey message texts in some actual language
> such as English.
>
> Gary Coffman KE4ZV

Hi, Gary-
I have always looked foreward to reading your posts. You have a sharp
mind and have contributed so much to past discussions. It is a shame that
the no/pro code debate has proven so divisive.
Language is a living, breathing thing. It is adaptable. It changes, it evolves

over time. People use it in different ways, and for different reasons. Some seek to enlighten, some to obfuscate. When emotion clouds the mind, reason suffers.
I can do a callsign lookup on you and note your license class and surmise some things about your ham radio CW politics that seem to fit your newsgroup personality. That is sheer guesswork, of course.
You apparently chose not to overcome the 'hazing ritual' and obtain an extra class ticket. Makes no difference to me. I don't respect you one bit less for that. Your presence in this newsgroup has been very positive and enlightening.
Getting overly precise and technical can lead us away from the truth.
I use the english language in a different way than you. My adaptation is equally valid and constructive, whether you wish to accept it or not.
Take my assertion above that language is "living". You can tear that argument apart on technical grounds if you like- point out that language is a dry, technical thing, a symbolic construct used to communicate information and no more alive than, say, mathematics. Well, math is a language too. I choose to speak in metaphor, perhaps you do not. If I succeed in making myself understood, my approach is as valid as yours.

CW is both an encoding of language (you agree) AND a spoken language unto itself. The second point would not be valid if I were the only person who believed it. The fact that it is a shared belief (and reality!) makes it so. You can split hairs so as to either support or refute this. The most elegant of proofs cannot make what is true untrue, however.
Pig latin is a spoken language. It is actually a language superimposed on a language. 'Speaking in code' (using special code words) is a spoken language. Again, it is a language superimposed on a language. Used often at boring social gatherings to persuade spouses to 'call it a night'. The simple fact that CW is communciated through atmospheric vibrations into the ear/brain interface makes it a spoken language just as surely as human speech is. That fact CW is derivative, an encoding of spoken language is irrelevant. The fact that it would not exist if the spoken language did not first exist is irrelevant. CW has taken on a life of its own, has its own accents and other nuances, has words (yes, encoded spoken words) which are apprehended by skilled operators AS words, has its own culture, and evolves over time just as spoken language does. As always, it devolves down to an experiential dilemma- "you just had to be there". If you have not personally experienced the fact certain that CW is more than encoded language, that it is a spoken language, your denial is understandable. It is like the classical grade school experiment with permanent magnet, paper, and iron filings, which establishes experientially to a near certainty the existence of invisible magnetic fields (further substantiated later with very rigorous mathematical proofs for the technically minded). Language can be your servant or it can make you its slave. It is your choice. But truth is.
And the truth here is that a lot of us use CW as a spoken language. It matters not whether you accept this as truth. Our viewpoint is every bit as valid as yours. I use language to paint with a broad brush. I use a lot of metaphor. You choose to use language with laser, micro-surgical

accuracy. That is OK, that is equally valid. I sometimes use grammatically incorrect constructions as a part of my conversational style (incomplete sentences). It still succeeds in communicating.
It all reminds me of those cute television ads a generation ago in which two cute models nearly get into a fist fight about whether Certs is a breath mint or a candy mint. (Turns out Certs is two, two, two mints in one. Kaching!) Or maybe it is like the three blind men and the elephant- no code, pro code, and "why don't you guys all shut up and go back to operating!"
Please let us live, Gary- CW ops are actually pretty nice folks, too. :o)
73, David

822. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 00:44:26 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93b2hahid0@208.207.71.168>
Source record: 172595

Cecil wrote:
>
> Dick Carroll wrote:
> > Any Morse operator who has learned and practiced the skill *to fluency*
> > knows full well that it IS a language, and in fact it meets all the
> > dictionary criteria for definition as one.
>
> So Dick, exactly where is the necessary "Dictionary of the Morse
> Code Language" located? My enclyclopedia lists all the known
> languages in the world. Morse code is not listed.

Could it be that the folks who wrote your dictionary were not fluent in Morse?
Nor knew of anyone who was?
By any reasonable definition -and there are several that apply in my Funk and Wagnalls Standard College Dictionary- when a Morse operator is proficient to the point that he hears the code sounds directly as words, and does not go through the code-to-letters-to words translation, Morse is indeed a language, and you know it. Your assertions to the contrary just show your lack of knowledge on the subject, your tenure as a ham notwithstanding. Also shows your efforts toward destroy your "favorite" mode.

823. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 00:56:26 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A59103A.CBA428A1@dvol.com>
Source record: 172596

Peter Bertini wrote:

> Wes
>
> Unfortunately beer cans are now made of aluminum and don't solder worth a
> darn. Another ham tradition has vanished.

>
Cold 807s is still cold 807s, they've only gotten better and solderable or not
they're still a mainstay of The Service.
>
>Peter
>
w3rv, ex-wn3yik

824. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 01:06:40 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5912A0.809E1A9D@dvol.com>
Source record: 172597

Spiritbrook wrote:

> 36 feet? OK, I've got a lot of "Slim Fast" to consume - should be able to
> get it done by field day. If one was buying "Slim Fast" just to make an
> antenna, just the cost of the cans alone would be $75 - a person could
> almost buy a ready-made antenna for that price (but it wouldn't be as fun)

>
Certianly. A big difference is that the guys who put away all that beer to get
a vertical up got even fatter. You're putting away all that Slim-Fast to get
skinnier. Which is worth more? Good luck with it.
>
w3rv

825. coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 01:12:55 UTC
From: Mario G&#65533;linas <mariobrosss@cgocable.ca>
Message-ID: <ru866.2574$Br2.221892@carnaval.risq.qc.ca>
Source record: 172598

Some guys told me for the reception on TV for UHF-VHF that RG6 is a good coax (not the best but a good one...) and I would like to know if there are many kinds of RG6 because you specify that it must be double shielded. Are there RG6 single shielded ? I know that Radio-shack sells RG6.

I have to say again that I will need about 120 feet of coax...

Also I have an amplifier from Radio-Shack that I can install near the antenna.

I'm living in Canada.

826. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 01:16:25 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5914E9.EEB2614F@dvol.com>
Source record: 172599

Dick Carroll wrote:

> The conclusion seems inescapable. Destroy all attractive attributes and
> there can be no reason to retain it.

>
Right on the money. Thank you.
>

> Dick W0EX

>
w3rv

827. The N1IR End Game

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 01:50:18 UTC
From: k1bqt@aol.com
Message-ID: <20010107205018.22636.00000379@ng-co1.aol.com>
Source record: 172600

As many of us silently await promised parcels of registered mail from Belmont, it brings to mind Samuel Beckett's morbid story entiled "Engame". The central character, an eccentric yet powerless tyrant (ironically) named Hamm, perches on his throne made from a mechanic's creeper topped by a chair and entertains fantasies of royalty. Waxing phiolosophical, Hamm proclaims, "Nothing is funnier than unhappiness. We still find it funny, but we don't laugh anymore." An off-stage voice responds lamentingly, "Then have you not had enough???" But Hamm clearly has not, and he goes on--and on--and on--until his life-weary head drops to his chest.

Rick K1BQT

828. Apartment Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 02:06:26 UTC
From: Curtis Bidulock <bidulock@powersurfr.com>
Message-ID: <Cg966.185$3h.11378@news-rep.ab.videon.ca>
Source record: 172602

I am currently in the process of requesting for permission to mount a 2m/70cm vertical on the roof of the appartment building. I have 1 storey above me so cable loss will be minimal but I am looking for suggestions on mounting the antenna. Tripod, bracket screwed to edge of the roof etc. Any suggestions are greatly appriciated.

--
Curtis Bidulock
http://www.bidulock.com
mailto:bidulock@powersurfr.com
Amateur Radio Station VE6-AEW

829. FS: ATB-34 traps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 02:20:28 UTC
From: lucascom <lucascom@email.msn.com>
Message-ID: <OAhttmReAHA.288@cpmsnbbsa09>
Source record: 172601

I have a full set (10 pieces) of traps from an old Cushcraft ATB-34 for sale to anyone needing to rebuild theirs. The traps are in excellent condition, but do not include covers. Make an offer if you need 'em, as my xyl (W4ZOR) wants some of her storage space back!.

Mike Lucas W5CHR
Memphis, Tenn.

830. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 02:35:03 UTC
From: richardharrison@webtv.net
Message-ID: <21950-3A592757-74@storefull-112.iap.bryant.webtv.net>
Source record: 172603

Dick Carroll wrote:
"When a Morse operator is proficient to the point where he hears the code sounds directly as words, and does not go through the code-to-letters-to words translation, Morse is indeed a language,---."

You can create your own definitions as long as you like. They become fact when generally accepted. I think that will never happen.

Language, the word, derives from the Latin word for tongue,"lingua". Sounds come from many sources. Those that roll off the tongue are "language".

The sound of a bell may mean food to a conditioned dog. It is not language even to the dog.

"ARSK" may be a tune that means the end of a Morse message to you. It didn`t come from a tongue as a normal practice and it is not language, no matter how little you must think of it to gain its significance. The fact that you don`t have to recognize individual letters, or even words, or much less parse the sentance, has nothing to do with the definition of language. Morse is a code, and not a language. Repeating your mistake a thousand times will never make Morse a language. Dr. Paul Joseph Goebbels was without any doubt correct in declaring that if you repeat something often enough, a lot of people are going to believe it. But repetition won`t make it correct. A fact is a fact.

As Cecil said, Morse is relegated to hobby service and is no longer used for serious pursuits. The word hobby can be properly contrasted against the word serious to gain a perspective of their meanings in which one excludes the other.

I am not trying to destroy Morse code. I am delivering a factual message that you don`t want to hear. Crying, "No! No!, it`s not so!" does not alter the truth in the slightest.

The smartest thing to do is to make the best of the situation.

Best regards, Richard Harrison, KB5WZI

831. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 02:55:22 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A592C1A.C2C5D9C1@wgcr.org>
Source record: 172604

David Sinclair wrote:
> Please let us live, Gary- CW ops are actually pretty nice folks, too. :o)

Let me see if I understand this:

CW is the greatest thing since sliced bread, is its own langauge, etc
etc.

Yet CW will _die_ if the testing is eliminated?!??!?

What's wrong with this picture?

Hey, don't get me wrong: I have nothing against CW the mode -- I may
even learn it one day -- but I won't learn it just because it's a
required knowledge -- it's just another mode, not the Holy Grail.

Fifty years ago Morse testing made sense, for more than one reason. Not
the least of which that Morse had valid miltiary, merchant marine, etc,
uses. Those uses are now gone. Hams are the only ones using Morse. (As
Cecil would say, we're not really using Morse per se).

Why test? Can Morse not survive without the forced learning in order to
access the amateur HF allocations? If CW requires forced learning and
testing in order to survive, then it deserves to die.

I, of course, believe that CW will survive and thrive even without the
forced testing. The technical tests will do an admirable job of keeping
out the trash that's not already here (check out 75 meters phone... I
even know one (young) Extra (_old_ 20 wpm code Extra!) who much prefers
code -- it doesn't betray his age, and other inconsiderate ops don't
tell him to stop playing with Daddy's radio because of his voice.

I don't expect to change many minds with that statement, but I thought
it needed stating.

But, yes, most CW ops on 80 meters (and elsewhere) are much more polite
than the stench on 75.
--
Lamar Owen
KF4MYT (who will upgrade and learn code one of these here days....)

832. tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 03:10:59 UTC
From: Mario G&#65533;linas <mariobrosss@cgocable.ca>
Message-ID: <7da66.2594$Br2.230337@carnaval.risq.qc.ca>
Source record: 172605

Some guys told me for the reception on TV for UHF-VHF that RG6 is a good coax (not the best but a good one...) and I would like to know if there are many kinds of RG6 because you specify that it must be double shielded. Are there RG6 single shielded ? I know that Radio-shack sells RG6.

I have to say again that I will need about 120 feet of coax...

Also I have an amplifier from Radio-Shack that I can install near the antenna.

I'm living in Canada.

833. Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 03:11:24 UTC
From: bozekk@my-deja.com
Message-ID: <93bb4pkhu1@nnrp1.deja.com>
Source record: 172606

Apartment dweller and a ham new to HF having reception problems. I am using a 20 meter ham-stick and PSK-20 20M QRP kit. I have a Vice Grip based hamstick mount from Transel. I simply screw the ham stick in and clamp the vice grips to anything I can. I am also using a 50 foot RG58 coax cable.

I have a few questions please:
1) I am considering adding a tuner to balance the antenna to the load.
2) I do not think that I am not getting a good ground plane. I am on the second fllor of an apartment and am placing the antenna on a small deck we have. There is a drain pipe not far from where I mount the antenna. Is this a good item to connect to make a ground plane.

Sent via Deja.com
http://www.deja.com/

834. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 03:19:21 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93bbk6$5ed$1@iac5.navix.net>
Source record: 172607

I think in the not too distant future, those that understand CW will start to die out. However, it will become a status symbol of something belonging to the "old timers". Next you will see many learning it to gain the status. CW will never die out.

"Lamar Owen" <lamar.owen@wgcr.org> wrote in message news:3A592C1A.C2C5D9C1@wgcr.org...
> David Sinclair wrote:
> > Please let us live, Gary- CW ops are actually pretty nice folks, too. :o)
>
> Let me see if I understand this:
>
> CW is the greatest thing since sliced bread, is its own langauge, etc
> etc.
>
> Yet CW will _die_ if the testing is eliminated?!??!?
>
> What's wrong with this picture?
>
> Hey, don't get me wrong: I have nothing against CW the mode -- I may
> even learn it one day -- but I won't learn it just because it's a
> required knowledge -- it's just another mode, not the Holy Grail.
>
> Fifty years ago Morse testing made sense, for more than one reason. Not
> the least of which that Morse had valid miltiary, merchant marine, etc,
> uses. Those uses are now gone. Hams are the only ones using Morse. (As
> Cecil would say, we're not really using Morse per se).
>
> Why test? Can Morse not survive without the forced learning in order to
> access the amateur HF allocations? If CW requires forced learning and
> testing in order to survive, then it deserves to die.
>
> I, of course, believe that CW will survive and thrive even without the
> forced testing. The technical tests will do an admirable job of keeping
> out the trash that's not already here (check out 75 meters phone... I
> even know one (young) Extra (_old_ 20 wpm code Extra!) who much prefers
> code -- it doesn't betray his age, and other inconsiderate ops don't
> tell him to stop playing with Daddy's radio because of his voice.
>
> I don't expect to change many minds with that statement, but I thought
> it needed stating.
>
> But, yes, most CW ops on 80 meters (and elsewhere) are much more polite

> than the stench on 75.
> --
> Lamar Owen
> KF4MYT (who will upgrade and learn code one of these here days....)

835. 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 03:40:01 UTC
From: oar9fi@aol.com
Message-ID: <20010107224001.08371.00000406@ng-fv1.aol.com>
Source record: 172608

hello there. I just purchased a htx-100 for 10 meters. when it arrived i went out & got the "Deluxe" 10m/11m antenna also from radio shack. my problem is this. with this antenna the radio only lights two of the "rf power" lights while talking loudly. now when i hooked up my cheap crappy cb antenna the radio produced full output (while talking) and recieved at least more noise. although it's smaller & i'm sure not as effective as the "deluxe" how could this be? One idea i had was to return the deluxe antenna & buy one of those white whip antennas rs has for cb do those work on 10? ok well if anyone has ideas please respond. thanks... 73
justin (n2ujz)

836. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 03:55:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A593A4D.A677DB03@IEEE.org>
Source record: 172609

Oar9fi wrote:
>
> hello there. I just purchased a htx-100 for 10 meters. when it arrived i went
> out & got the "Deluxe" 10m/11m antenna also from radio shack. my problem is
> this. with this antenna the radio only lights two of the "rf power" lights
> while talking loudly. now when i hooked up my cheap crappy cb antenna the radio
> produced full output (while talking) and recieved at least more noise. although
> it's smaller & i'm sure not as effective as the "deluxe" how could this be?

Could it be that one is AM and one is SSB? The carrier is always there during
AM transmitting. The carrier is suppressed for SSB and RF is effectively only
there during speaking.
--
http://www.mindspring.com/~w6rca

837. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 03:59:07 UTC
From: richardharrison@webtv.net
Message-ID: <17315-3A593B0B-98@storefull-114.iap.bryant.webtv.net>
Source record: 172611

Dick Carroll wrote:
"Also shows your efforts to destroy your "favorite" mode."

Dick was complaining about Cecil`s refutation of Morse as a language.

The most apt parallel useful to understanding this stange exchange may come from a statement by Harry S. Truman in 1948.

Thomas E.Dewey had complained Truman`s criticisms were too harsh. Truman replied, "I`m not giving them hell. I`m telling the truth, and they just think it`s hell."

Best regards, Richard Harrison, KB5WZI

838. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:02:50 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A593BEA.4FBC169B@IEEE.org>
Source record: 172610

```
Oar9fi wrote:
>
> hello there. I just purchased a htx-100 for 10 meters. when it arrived i went
> out & got the "Deluxe" 10m/11m antenna also from radio shack. my problem is
> this. with this antenna the radio only lights two of the "rf power" lights
> while talking loudly. now when i hooked up my cheap crappy cb antenna the radio
> produced full output (while talking) and recieved at least more noise. although
> it's smaller & i'm sure not as effective as the "deluxe" how could this be?

Obviously, if both antennas are functional, one antenna is resonant and the
other is off-resonance and needs to be tuned. Got an SWR meter?
--
http://www.mindspring.com/~w6rca
```

839. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:03:25 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <93bfev$g0k$1@slb2.atl.mindspring.net>
Source record: 172613

Richard Harrison wrote in message
<21950-3A592757-74@storefull-112.iap.bryant.webtv.net>...
>
>>snip<<
>
>I am not trying to destroy Morse code. I am delivering a factual
>message that you don`t want to hear. Crying, "No! No!, it`s not so!"
>does not alter the truth in the slightest.
>
>The smartest thing to do is to make the best of the situation.

>Best regards, Richard Harrison, KB5WZI

Your posts over the last year certainly would lead one to believe
differently. Your support of the freebander and no-code groups has been
amply noted by yourself any number of times.

What purpose, constituency or group are you now serving? Why do you think
you have to "...deliver a message..." to anyone?

Perhaps you could just "...make the best of the situation..." and enjoy the
no-code status that you have helped bring about. Continuing a crusade
against CW surely isn't going to help you win friends and influence people.

Dean Craft -- W4IHK

840. Need paperwork for Cushcraft R5 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:18:08 UTC
From: kb9olm@hotmail.com
Message-ID: <93bf1snjn1@nnrp1.deja.com>
Source record: 172614

Attention owners of Cushcraft R5 antennas:

Please help me. I just bought a used Cushcraft R5 antenna with no
paperwork.
Please let me know if you can send me (or fax) a copy of the paperwork.
Please reply directly to Vlad at: kb9olm@hotmail.com

Thank you,
vlad
kb9olm

Sent via Deja.com
http://www.deja.com/

841. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:19:43 UTC
From: D Ostroy <ostroy@att.net>
Message-ID: <3A593FE1.56A30B80@att.net>
Source record: 172612
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

jamesrhampton@my-deja.com wrote:
>
> Don't waste the money. That has been done in the past - and, in many
> instances, it has been uncovered. The problem then is that the FCC
> wants all the folks who tested before those 'questionable' VEs to take
> the exam again - this time in front of an FCC examiner. Failure to do
> so results in revocation of the license (and you don't get the money
> back!). Should this happen in my city (Rochester, NY), that means a
> trip to the FCC in Buffalo - 60 miles away. In many cases, someone is
> going to have to travel a lot further. Not pleasant.
>
> 73 from Rochester, NY
> Jim
>

Jim, I don't know where you are getting your information from, but I think
your information is not correct. The number of re-tests is usually very
limited and focused on a specific exam session in question. They usually
ask you to test at a different VEC, not necessarily an FCC office.

K2UL

842. Re: Cushcraft R7000 Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:28:19 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <3A5941E3.1AEE@rpi.edu>
Source record: 172617

Carl Sherman wrote:
>
> Have an R7000 HF vertical. At about six months Cushcraft replaced two
> of the three traps for me, to repair an intermittent problem. That
> fixed the problem for eight months--now it has failed again in the same
> way. 10 and 12 meter bands are okay, but the others show high VSWR with
> intermittent brief periods of proper VSWR.
>
> Two years ago, this was a hot new antenna with Cushcraft, but it has
> since been completely discontinued. The antenna must have a serious
> design flaw. Has anyone had any experience that would assist me to
> determine what the mode of failure is for the R7000's, and what one
> could do to permanently fix the problem. I typically run continuous
> digital modes at about 50 watts or less. Don't think that should hurt
> the antenna.
>
> Any experience out there with repairing R7000 traps?
>
> Any assistance would be appreciated. Live in a "Restricted" community,
> and the R7000 has the most pleasing appearance of all the multi-band
> verticals I know.
>
> 73,
> Carl Sherman W5SBH

Butternut HF6VX and HF9VX both are more aesthetic looking than the
Cushcraft, and perform quite well with a few ground radials.

Curt Breneman
KC2EBP

843. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:32:21 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A5942D5.141FAAA8@wgcr.org>
Source record: 172615

Oar9fi wrote:
>
> hello there. I just purchased a htx-100 for 10 meters. when it arrived i went
> out & got the "Deluxe" 10m/11m antenna also from radio shack. my problem is
> this. with this antenna the radio only lights two of the "rf power" lights
> while talking loudly. now when i hooked up my cheap crappy cb antenna the radio
> produced full output (while talking) and recieved at least more noise. although
> it's smaller & i'm sure not as effective as the "deluxe" how could this be? One
> idea i had was to return the deluxe antenna & buy one of those white whip
> antennas rs has for cb do those work on 10? ok well if anyone has ideas please
> respond. thanks... 73

A CB antenna will present a mismatch for 10m, although not very large.
A high enough mismatch can cause the RF output meter to lie to you as to
actual radiated power. If you have access to a dummy load sufficiently
large to handle the HTX-100's output, I'd check the radio on the dummy
first. Then, see if another ham's 10m capable HF rig can produce
reasonable power on the 'deluxe'.

But the CB antenna will not be optimal, unless you shorten it for best
SWR. The fiberglass helical whip is going to be difficult to tune
properly, unless you use an external tuner.

Also, test in FM mode (the 100 has FM, right?) as the power will remain
constant regardless of audio. I know the new HTX-10 has SSB/AM and FM
at 25 watts.... but I forget what the 100 had.

Good luck!
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

844. Re: Need paperwork for Cushcraft R5 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:43:12 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A594560.4E5D0692@worldnet.att.net>
Source record: 172616

Check the Cushcraft web page and you should find what you need.
Go to: http://www.cushcraft.com/support/tlai.htm and down load the pdf
file for that antenna.

Dick K7RNZ

kb9olm@hotmail.com wrote:

> Attention owners of Cushcraft R5 antennas:
>
> Please help me. I just bought a used Cushcraft R5 antenna with no
> paperwork.
> Please let me know if you can send me (or fax) a copy of the paperwork.
> Please reply directly to Vlad at: kb9olm@hotmail.com
>
> Thank you,
> vlad
> kb9olm
>
> Sent via Deja.com
> http://www.deja.com/

845. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:53:21 UTC
From: jamesrhampton@my-deja.com
Message-ID: <93bh3v$p32$1@nnrp1.deja.com>
Source record: 172519
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Neat. Someone actually thought of not charging. Of course, my first licenses cost nothing - it was just the 60 mile (one way) drive to Buffalo that cost a bit of time and money (gas, thruway tolls, parking, etc.). The cost is actually minimal anywhere. I think I paid $5.90 when I decided to get back into amateur radio and tested out in 1993 (after letting my tickets expire over 10 years earlier). Whats the cost today?

73 from Rochester, NY
Jim (AA2QA)

In article <93airr$1js$1@nnrp1.deja.com>,
BamBam <kl0an@my-deja.com> wrote:
> Now why would I go and PAY for a license when I got my license, AND
> upgrades for free.. Oh, sorry, I did have to earn them with a little
> studying and such.. My club offers testing free.. No money exchanges
> hands.. And I can now talk world-wide on the Extra bands..
>
> Just quit tryin to cheat the system, sit down with the manuals and get
> studying.. And if you want to take a test for free.. First Saturday of
> the month, Geo-Physics Institute, UAF, Fairbanks, Alaska.
>
> 73
> Paul Jordan
> kl0an
>
> In article <no.skill@arrl.crappy.org>,
> Buyone@arrl.crap (peddler) wrote:
> > Thanks to the organization called the ARRL, you don't have to earn a
> license
> > anymore. You can go to your local VE group and buy one for $10.
> > Get one today and join in the Fun!
> >
> > AOHF ~ assholes on H.F.
> >
> >
>
> --
> Don't Sweat the Petty Things.
> Don't Pet the Sweaty Things.
>
> Sent via Deja.com
> http://www.deja.com/
>

Sent via Deja.com
http://www.deja.com/

846. Re: Homebrew Antenna sugestions for 462mhz please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 04:57:40 UTC
From: tomfree <tfreeman@blueridge.net>
Message-ID: <t5ii6nnrtu1q99@corp.supernews.com>
Source record: 172618

Trying to come up with a SWR meter that will work at 460MHz. I have tried receive on it mounted about 15ft up and it definitely does better than the antenna on the HT. Don't want to fry the output of my HT so I am waiting till I can get a reliable check of SWR before I really try out the transmit, also ordered some LR400 cable to use on it. I will post more later. Thanks for all the help and advise.

Tom

<tom_bruhns@agilent.com> wrote in message
news:93aqtr$82d$1@nnrp1.deja.com...
> The CB SWR meter probably won't be very good at 460MHz. You could,
> however, test it if you can come up with a decent 460MHz load. If you
> happen to have 100 feet or so of RG-58, try terminating that in a
> nominally 50 ohm load. (47 ohms is fine...even a short or open isn't
> too bad!) On the other end, you should measure pretty close to 1:1 SWR.
> The coax attenuation will make any load show a fairly low SWR. But in
> any event, I wouldn't worry too much about a 1.5:1 SWR. Question is,
> does it WORK to communicate with?
>
> Cheers,
> Tom
>
>
> In article <t5dv4rogmtm912@corp.supernews.com>,
> "tomfree" <tfreeman@blueridge.net> wrote:
> > I came up with a plan for a ground plane built on a SO-239 panel mount
> jack.
> > Radiator and radials cut at 6.1", radials bent down from level about
> thirty
> > degrees. I made one up and did a quick test on a 10' pole with a CB
> SWR
> > meter (all I have) and came up with a 1.5:1. Will this meter be
> accurate at
> > these frequencies? Thanks for the previous replies and any help here.
> >
> > Tom
> >
> > <tom_bruhns@agilent.com> wrote in message
> > news:933514$bl1$1@nnrp1.deja.com...
> > > I assume right now you're using a built-in antenna on the PR-1000.
> If
> > > you use a reasonably short length of low-loss line between the radio
> > > and your roof-mounted antenna, you probably don't need much of an
> > > antenna up there. I'd suggest a simple "ground-plane" antenna. A

> web
> > > search should turn up several ideas for how to build one, but if
> not,
> > > ask again here. There's a LOT to be gained by keeping the two ends
> of
> > > your radio link line-of-sight or nearly so, so getting practically
> any
> > > antenna up high like that is a big plus. But do use good line and
> > > minimize the length of it. 3dB would be a good maximum line loss to
> > > shoot for, I'd say, which will be fairly easy with 60 feet or so of
> RG-8
> > > foam line or maybe 35 feet of RG-8X. Those are "soft" numbers...a
> bit
> > > more won't kill the advantage of height in the clear.
> > >
> > > There are antennas you could build with considerably more gain than
> a
> > > ground plane, but they're more trouble and most would take
> instruments
> > > to get tuned up correctly. A ground plane should work if you are
> simply
> > > careful about getting things the right lengths and connected
> correctly.
> > >
> > > Cheers,
> > > Tom
> > >
> > >
> > > In article <t57b9vhq3fl2f3@corp.supernews.com>,
> > > "tomfree" <tfreeman@blueridge.net> wrote:
> > > > I just started using the Cobra PR-1000 to communicate with the
> house
> > > when
> > > > out on my farm. I would like to add an antenna mounted on top of
> the
> > > house
> > > > to make communications more reliable when at the extremes
> (distance
> > > wise) of
> > > > my property. We are talking rolling hills and woods. The house
> is
> > > near the
> > > > middle of the tract of land. It also has a tin roof and I was not
> > > sure
> > > > about the effects of this on any installation. The antenna would
> be
> > > mounted
> > > > on a pole about ten feet down from the crest of the roof at one
> end of
> > > the

> > > > house, the pole will extend above the crest. Since the antenna
> will
> > > > be
> > > > > fairly small at these frequencies (462Mhz) I wanted to try my
> hand at
> > > > > building one. Any suggestions would be appreciated.
> > > > >
> > > > > Tom
> > > > >
> > > > >
> > > >
> > > > --
> > > > Tom Bruhns -- K7ITM
> > > >
> > > >
> > > > Sent via Deja.com
> > > > http://www.deja.com/
> > >
> > >
> >
> > --
> > Tom Bruhns -- K7ITM
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/

847. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 05:02:17 UTC
From: no_spam_n7ws@azstarnet.com
Message-ID: <3a59491c.47937498@news.azstarnet.com>
Source record: 172520

On Sun, 7 Jan 2001 12:17:04 -0500, "Peter Bertini" <commquart@erols.com> wrote:

>
>"Wes Stewart" <no_spam_n7ws@azstarnet.com> wrote in message > As Novice in
>the fifties I used a beer can vertical on 40m. My old man emptied
>> the cans for me and I soldered them together. A Coke bottle, (quart
>sized)
>> which was glass in those days, made a fine base insulator.
>>
>> Almost any kind of string or rope will do for guys. Heavy monofilament
>fishing
>> line will work fine.
>>
>> Leave the bottoms in except for the bottom one and solder them all the way
>> around. Tacking them will work until you try to erect it then one of the
>joints
>> will break and you start over.
>>
>> Next you need a crystal-controlled Millen transmitter and a BC-342
>receiver and
>> you're in business. (I still have both <g>).
>>
>> 73,
>>
>> Wes N7WS, ex KN7CVT
>> >
>> >
>> >
>
>Wes
>
>Unfortunately beer cans are now made of aluminum and don't solder worth a
>darn. Another ham tradition has vanished.
>
>Peter

Yes, Peter, I'm aware of that. In fact, I'm somewhat of an expert on beer cans
(bottles too).

If I had all of the money I've spent on beer, I could have an FT1000 and Henry
8K on each band and stacked monobanders on 160 <g>.

Wes

848. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 05:03:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93bhnm$rb6$0@208.207.71.164>
Source record: 172521

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "When a Morse operator is proficient to the point where he hears the
> code sounds directly as words, and does not go through the
> code-to-letters-to words translation, Morse is indeed a language,---."
>
> You can create your own definitions as long as you like. They become
> fact when generally accepted. I think that will never happen.
>

Think whatever you want. My wife is a schoolteacher and there are several dictionaries in the house. I've even got a couple here in my radio room. Every one shows you to be wrong. And the definition of CW as a language is not mine, I inherited it along with many other CW fans - those who have learned it to fluency.

> Language, the word, derives from the Latin word for tongue,"lingua".
> Sounds come from many sources. Those that roll off the tongue are
> "language".

It's curious that you, who might otherwise seem to be an educated fellow, insists on holding this single word -language- true to its ancient Latin roots, while the remainder of the English language has mutated and evolved continuously over the millennia, even vastly over the past century. That is most curious, and clearly indicative of the blinding bias that has clearly led to your posture.

> The sound of a bell may mean food to a conditioned dog. It is not
> language even to the dog.

You might as well begin your argument with the many publishers of dictionaries, for you could indeed call such a means of communication a language under some dictionary definitions.

>
> "ARSK" may be a tune that means the end of a Morse message to you.

No, actually it means I'm signing clear with that station and turning it back to him for his last transmission. The "end of message" prosign is BT. Usually means there is another to come.

It
> didn`t come from a tongue as a normal practice and it is not language,
> no matter how little you must think of it to gain its significance.

So since none of the words we're exchanging here via keyboard rolls off the tongue I guess we're not really using a language, then. Gotta be spoken, right!

The
> fact that you don`t have to recognize individual letters, or even words,
> or much less parse the sentance, has nothing to do with the definition
> of language.

So lets just review the definition of the word language in a couple of REAL sources:

1. "Webster's New World Dictionary of the American Language" shows five definitions,two of which would apply, one directly:

"Any means of communicating; the ability to express or communicate by any means".

2. "The Harcourt - Brace School Dictionary" has a very good one:

"Any means of expressing ideas or emotions".

3. "Webster's New World Dictionary" : "Any means of communicating".

4. Then there's the "Funk and Wagnalls Standard College Dictionary", over 2K pages: "Language, n.: Transmission of emotions or ideas between any living creatures by any means".

Surely those are sufficient to make the case.

>Morse is a code, and not a language. Repeating your mistake
> a thousand times will never make Morse a language.

Golly, Rich, did you ever consider updating *your* language set out of the Roman era and into the 20th century? Perhaps, even, to the 21st?

> As Cecil said, Morse is relegated to hobby service and is no longer used
> for serious pursuits.

You are more than welcome to hang on Cecil's every word. Most of us know better than anything like that. Cecil's veracity is always suspect and subject to his Agenda du jour.

> The word hobby can be properly contrasted against
> the word serious to gain a perspective of their meanings in which one
> excludes the other.

Amateur radio is unique among hobbies. If you don't know that your knowledge of the Service is less than complete.

> I am not trying to destroy Morse code.

Just doing your part, of course

> I am delivering a factual
> message that you don`t want to hear. Crying, "No! No!, it`s not so!"
> does not alter the truth in the slightest.

So you might want to take your own advice and stop it, then.
You seem to think that just because you (along with everyone else, by the way) know that the world outside ham radio has moved away from radiotelegraphy that we hams who still know it, like it and use it should just consider it dead as a useful mode for handling traffic -and just ignore its lengthy history exactly that - eminently successful handling of communications traffic.

We say is that is nonsense. Regardless of what technology has brought, the usability of radiotelegraphy has not diminished at all. In fact it, too, benefits from advances in technology such as DSP and other signal enhancing techniques, right along with the other modes. If DSP is good for enhancing SSB communications should we just assume that it is no help whatever to CW? That's stupidity.

So kindly stop the assault. It will be countered. Depend on it. We know the end game that is desired by the Anti-Code crowd is to eliminate radiotelegraphy from the bands, regardless of what they say. It's an incremental game plan.
So all your posturing is for nothing. Maybe you don't intend to help see CW from the scene, maybe you do. In either case, you need to understand that you're helping to do just that by your derogatory comments. So you can expect them to be countered with true facts.

> The smartest thing to do is to make the best of the situation.

So who is not? You seem to think that you can't benefit from a little education yourself and continually show your dearth of knowledge on the subject of radiotelegraphy. Moreover, you try to foreclose anyone from even stating facts about it. If that's not dodging reality I can't imagine what you'd call it.
Nothing you have said that was truly factual has been challenged. What you stated that is known to be less than factual has been, and I can assure you, will continue to be.

849. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 05:06:40 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93bht0$rb6$1@208.207.71.164>
Source record: 172522

Lamar Owen wrote:
>
> Why test? Can Morse not survive without the forced learning in order to
> access the amateur HF allocations? If CW requires forced learning and
> testing in order to survive, then it deserves to die.

Substitute "technical knowledge" for "Morse" in the above rant and you have the current mantra of those who would further dumb down the ARS.

850. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 05:33:41 UTC
From: n2ey@aol.com
Message-ID: <20010108003341.17176.00000089@nso-ba.aol.com>
Source record: 172523

In article <936fu1$n1s$1@slb6.atl.mindspring.net>, "KB9WFK"
<KB9WFK@mindspring.com> writes:

(N2EY previously wrote):
>> In the ham radio context of "saints and sinners", it's logical to consider
>> those who break FCC rules as the "sinners".
>>
>> Surf on over to qrz.com or arrl.org and look up the FCC enforcement logs.
>All
>> sorts of enforcement actions for on-air violations like obscenity,
>deliberate
>> interference, operation outside authorized privileges. Yet notice that
>NONE of
>> the enforcement actions were against hams using Morse! It's almost always
>the
>> voice modes that get the NALs.
>
>It isn't the mode that gets busted. It is the operator.

Agreed! The point is that the operators who get NALs are NOT using Morse.
Almost all of them that get NALs for operating violations are using voice
modes.

> I would also
>venture to guess that most of those violators have passed the CW test.

Sure - at varying speeds. But I'm not talking about the test at all. I'm
talking about the USE of the mode, and how its users behave themselves on the
air.

All of the violators also passed WRITTEN tests, which included questions about
the regs they violated. The written tests didn't stop them from breaking the
rules.

> That
>kinda kills your observation thing.

Nope. Not at all. The observation is about the USE of the mode, not the TEST.

>How many of those violators are no code
>techs?

A few.

>Someone said in another post that nc techs were the largest group of
>hams so they should be flooding the offices with complaints against them
>especially since they are worse operators because they don't know CW. For

>some reason that isn't happening.

Technicians are the largest single license class, but not the largest single group. (They make up about 30% of the licenses).
>
>> To my knowledge, there has not been a single NAL issued to a ham for >violations
>> committed while using Morse on the ham bands for at least the past 10 >years..
>> Yet it's the second most popular mode on amateur HF - just behind SSB and >way
>> ahead of all digital modes combined.

Simple fact.

>> What seems to really bother you and a few others is the existence of any
>> standards or requirements for the ARS at all. It's not just the code >test -
>> it's the idea of any test, including theory tests, that might require any
>> significant learning in order to pass.
>
>It does? thanks for telling me what i feel.I didn't know that untill just >now.

You're welcome. Note that I wrote "seems to really bother you".

> I could actually not care less about requirements for HF. I have no >interest in it at all. I never plan to upgrade no matter what the >requirements.

Then what's the beef?

>My interest is uhf/vhf. I have a degree in electronics that >included 4 terms of communications theory as well as 3 years as commo in the >Army so the tests aren't a problem at all.

I have BSEE and MSEE. No big deal. I got the Novice in the seventh grade, Advanced in eighth and Extra between sophomore and junior years in high school. I was delayed by the old 2 year experience requirement.

> They just don't interest me. I >don't enjoy contesting so there goes that draw. If I want to communicate >long distances I will use something reliable and do it with someone I want >to talk to instead of a random person that is going to give me a signal >report and move on to the next guy.

Then what's the problem with folks who have other interests? Both the contest and the random ragchew are big draws for lots of us.

>> I think most hams wouldn't oppose the removal of the code tests IF there >were
>> better written tests and some Morse-only HF subbands. But what you seem to >want
>> is a simple reduction of standards to nothing. Toss licenses at anybody

>who
>> wants 'em. We've seen results from that sort of radio service, yet it's
>what
>> you want to happen to the ARS.
>
>I want nothing of the sort and posted a while back in another forum that i
>thought there should be CW only areas that require cw testing to operate on.

I never saw that. Sounds like a great idea. I've posted very similar ideas.

You posted that "thorough" written tests weren't needed.

>As for the terrible state of CB i still don't understand everyones problem.
>From what i have heard on HF, cb is 100 times better everywhere i have ever
>turned one on. I am in Chicago and have never heard any problems on CB.
>Back home in a smaller town, cb was much friendlier than any of the ham
>bands.

The experience of many others is quite difference. I've never transmitted on cb, but I've listened there many times in the past 35 years. All sorts of rules violations were and are common. Excessive power, spurious emissions that cause RFI, off frequency operation, jamming, obscenity, all sorts of stuff. Most of all, an attitude that the rules don't matter. Are all cb's like this? No, of course not. But far too many are.

What cb folks do on their channels doesn't bother me. But when they invade the ham bands illegally, or when hams get blamed for problems caused by illegal cb operation - that bothers me.

>> That's what folks like me oppose.
>>
73 de Jim, N2EY

851. It's not a 12AVQ its a 14AVQ HELP !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 06:39:43 UTC
From: Dennis Recla <recla@magick.net>
Message-ID: <n2oi5t4pd3r20db74rseo575eh2i5i6ov7@4ax.com>
Source record: 172525

Hello

I have just gotten an Old HyGain 14AVQ 10,15,20 and 40 meter vertical. I found out from looking at pictures it wasn't a 12AVQ as I had thought.

I think I have all the pieces, but it sure dosen't tune up very well. --- I think I might be missing some little thingee that goes on the top ??

Anyone have a copy of the old manual, or could help me with setting the various lengths of tubing, etc.

How long should the traps be apart? How long is the top small tube go. Any help will be appreciated.

Dennis

852. Re: EZNEC treatment of two metals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 06:43:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A59618D.EDD3158D@eznec.com>
Source record: 172524

Metal resistance seldom makes a significant difference with these antennas, so you can choose the resistance of either one without affecting the result noticeably. In other antennas, loss in one part of the antenna usually dominates, so you should select the values appropriately for this part. For example, if you have a small loop made from copper tubing which is mounted on a steel tower, use copper.

The loss in an antenna is proportional to the square of the current, all else being equal. So another way to determine what part is likely to have the most loss is to look at the current. (Of course, wire diameter is also a factor, but looking at current alone is a useful rule of thumb.) In the above case of the loop, the loop current is a great deal more than the current in the tower, so copper is chosen. If you have both a quad and Yagi in one model, chances are you're exciting one of them, and the other is parasitic. If so, the excited one will typically have a lot more current, so its loss will dominate and its metal should be used in the model (although, as I mentioned earlier, quads and Yagis generally aren't very sensitive to wire resistance -- except perhaps for actual wire Yagis or very short ones).

This limitation came about simply because of lack of space on the DOS version screen for another column. Time prevented adding it to the Windows version, and I have yet to see a case where the limitation has prevented accurate modeling, so individual wire loss didn't have a high priority. Widening the Wires Window might create a problem with plain VGA adapters, but these are getting scarce now, so you'll probably see individual wire loss specification in a future version. Not because it's really needed for accurate modeling, but because quite a few people feel they need it.

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>
> Statement from EZNEC manual:
> "Currently, only one type of metal or one amount of resistivity and
> permeability can be specified for the entire antenna model."
>
> What is the best workaround to treat antennas like vertical made of aluminum
> tubing and with copper wire radials, or copper wire Quad elements and aluminum
> Yagi elements in one antenna or model?
>
> Yuri, K3BU

853. Mini Quad Web Page Up

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 07:22:41 UTC
From: Antenna <stopthespam@attcanada.net>
Message-ID: <UUd66.970$Oe.6877@tor-nn1.netcom.ca>
Source record: 172527

If your interested in the mini-quad or as we prefer to call it, the BABY BOOMER QUAD.

Please visit our page at www.degendesigns.com

Thanks for your interest.

854. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 07:24:23 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A596B27.1E6BA4C4@oio.net>
Source record: 172526

bozekk,
It sounds like you may not have a ground for that
antenna. The ground acts as the 'other half' of a
1/4 wave vertical and with out it, I doubt if your
getting a very good match to the radio. A counterpoise
connected to the 'V-grips' as a ground may help a lot.
A counterpoise is merely a 1/4 wave of wire, or an
elevated radial, if you will.
'Doc

855. Re: Apartment Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 07:28:10 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A596C0A.9308D9C@oio.net>
Source record: 172528

Curtis,
I would say it just depends on what would be easiest
for you, and what the roof looks like. As long as it
has a good mechanical connection to the roof, and you
follow the instructions for the particular antenna you
have, it should work fine.
'Doc

856. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 08:34:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A597B80.72CE@wt.net>
Source record: 172530

Oar9fi wrote:
>
> hello there. I just purchased a htx-100 for 10 meters. when it arrived i went
> out & got the "Deluxe" 10m/11m antenna also from radio shack. my problem is
> this. with this antenna the radio only lights two of the "rf power" lights
> while talking loudly. now when i hooked up my cheap crappy cb antenna the radio
> produced full output (while talking) and recieved at least more noise. although
> it's smaller & i'm sure not as effective as the "deluxe" how could this be? One
> idea i had was to return the deluxe antenna & buy one of those white whip
> antennas rs has for cb do those work on 10? ok well if anyone has ideas please
> respond. thanks... 73
> justin (n2ujz)

If it's the deluxe magmount that is about 54-58 inches tall, it's a
fairly decent antenna. Much better than the smaller white ones. Where is
the antenna mounted? If used on 10m, it will likely need to be trimmed.
The length is set for 11m as it is. There should be a chart with the
antenna that show appx how much to trim. You'll need an SWR meter to do
this as the car will effect. Your length may not exactly match the
chart. I don't know the metering on that radio. But if the meter reads
average power, you should only show about 1/3 the CW output readings on
voice peaks. Say if you had an average meter, and did 25 watts CW. On
SSB voice peaks you will only show about 8-10 watts on peak if the mike
gain is correct. A true peak reading meter would show appx 25w. I've
used those antennas mounted on the roofs of cars and vans and they did
quite well. Assumming yours the deluxe magmount. It'a about the equal of
a K-40 CB antenna. MK
--
http://web.wt.net/~nm5k

857. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 09:26:52 UTC
From: k3ky@erols.spamnocom
Message-ID: <93c14s$305$1@bob.news.rcn.net>
Source record: 172529

In article <21950-3A592757-74@storefull-112.iap.bryant.webtv.net>
richardharrison@webtv.net (Richard Harrison) wrote:

> Dick Carroll wrote:
> "When a Morse operator is proficient to the point where he hears the
> code sounds directly as words, and does not go through the
> code-to-letters-to words translation, Morse is indeed a language,---."
> You can create your own definitions as long as you like. They become
> fact when generally accepted. I think that will never happen.

Exactly. It is generally accepted among a significant portion of radio
amateurs (who know and like code.) Demographics which even you
might acknowledge point to this obvious conclusion. Lots of hams
still use CW.

> Language, the word, derives from the Latin word for tongue,"lingua".
> Sounds come from many sources. Those that roll off the tongue are
> "language".
> The sound of a bell may mean food to a conditioned dog. It is not
> language even to the dog.

You are the one clinging to the archaic here. The modern definitions and
uses of "language" are numerous, including many non-spoken forms such
as american sign language, computer programming languages, the
language of mathematics, and of course the Morse Code language.
Useage precedes definition, in any case, with dictionaries regularly getting
revised. Remember, language is a living thing. We (humanity) make it up
as we go along. Even my very old 83 Websters Unabridged, which is mute
on the subject of the many computer programming languages of this era,
does clearly state:

" 2. Any means of expressing or communicating, as gestures, signs,
animal sounds, etc." QED. Note the word "any".

You are demonstrating extreme rigidity to insist that the word "language"
only applies to spoken tongues; many will disagree with that view.
You sre so obviously not expert in this area. You are out of your element.
Cunning you are in your linguistic bobbing and weaving, but you will
never succeed in twisting the issue as badly out of shape as your
ham politics demand. Relax, and in 30-40 years we will all die off and
maybe you can then have the last word. As it is, the no code faction has
essentially 'won' anyway, so what the heck is your beef? You derive some
satisfaction from flogging a dead horse? Well, you are the one who
insists that this horse is dead...
>
> "ARSK" may be a tune that means the end of a Morse message to you. It

> didn`t come from a tongue as a normal practice and it is not language,
> no matter how little you must think of it to gain its significance. The
> fact that you don`t have to recognize individual letters, or even words,
> or much less parse the sentance, has nothing to do with the definition
> of language. Morse is a code, and not a language. Repeating your mistake
> a thousand times will never make Morse a language. Dr. Paul Joseph
> Goebbels was without any doubt correct in declaring that if you repeat
> something often enough, a lot of people are going to believe it. But
> repetition won`t make it correct. A fact is a fact.

That is exactly what you do. Indeed, endless repetition will not make a lie
the truth, but spoken often enough, it can sure fool a lot of people. I bit
my tongue and watched you badmouth amateur CW for many, many months,
until I could no longer stand it. In your comments about repetition, you
are projecting your own behavior onto others.

> As Cecil said, Morse is relegated to hobby service and is no longer used
> for serious pursuits. The word hobby can be properly contrasted against
> the word serious to gain a perspective of their meanings in which one
> excludes the other.
> I am not trying to destroy Morse code.=A0I am delivering a factual
> message that you don`t want to hear. Crying, "No! No!, it`s not so!"
> does not alter the truth in the slightest.
> The smartest thing to do is to make the best of the situation.
> Best regards, Richard Harrison, KB5WZI

You speak so obviously from emotion, despite your reasoned posturing.
Note your value-laden word choices above: "relegated", and "serious" vs.
"hobby". No amount of words can bury the fact of what a central part
Morse played in the emergence and growth of radio, nor can they change
the fact that large numbers of us "relegated" folks still use Morse on the
radio every day, that it is a *spoken* language to us, and that we love it and
intend to defend it from scurrilous assaults. It will likely survive in amateur
use well into the new century, in harmony with all the other modes,
barring any concerted efforts to prematurely kill it off.
If Morse is so darn lame, as
you make it out to be, why, then, has it survived a century now, why is it
so popular? Why havent *all* hams stopped using it, once they satisfied
statutory requirements for skill? No clique here, either. CW use cuts
right across the entire ham demographic, even today. Because people
like it. Go ahead, blame the overblown 'demise' of ham radio on Morse
skill requirements. The real world is, as always, ever more rich and
complex than that. The personal computer revolution is so obviously
a major factor in our present situation, with Morse requirements a minor
player. What use do todays pampered youth have for ham radio when
mom and pop buy them a cell phone as well as a computer? We will
continue to draw the curious and technically inclined, in small numbers.
73, David K3KY

858. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 12:43:52 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A59B5E8.8085EC5C@GTE.net>
Source record: 172531

Oar9fi wrote:

> hello there. I just purchased a htx-100 for 10 meters. when it arrived i went
> out & got the "Deluxe" 10m/11m antenna also from radio shack. my problem is
> this. with this antenna the radio only lights two of the "rf power" lights
> while talking loudly. now when i hooked up my cheap crappy cb antenna the radio
> produced full output (while talking) and recieved at least more noise. although
> it's smaller & i'm sure not as effective as the "deluxe" how could this be? One
> idea i had was to return the deluxe antenna & buy one of those white whip
> antennas rs has for cb do those work on 10? ok well if anyone has ideas please
> respond. thanks... 73
> justin (n2ujz)

The LED lights on the front panel of the radio are most likely voltage derived- so the higher the impedance at the connector end of the coax the more LED's that will light. No antenna at all would most likely light them all up (not recommended). Get a wattmeter and/or a V.S.W.R. meter and find out what is going on.

Dale W4OP

859. Re: anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 13:06:05 UTC
From: gelleric@wgelleri.boeblingen.de.ibm.com
Message-ID: <93cdvt$es0$1@ausnews.austin.ibm.com>
Source record: 172532
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Hi Bob,

My experience with a homemamde loop is that tuning becomes quite simple after a few hours experience. Concerning the MFJ loop: there have been several reviews in ham radio magazines that you might find interesting. The references are on my home page

www.qsl.net/dj3tz

73s, Wolfgang DJ3TZ

860. Re: Apartment Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 13:45:22 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A59C472.AEC8B119@dvol.com>
Source record: 172533

Curtis Bidulock wrote:

> I am currently in the process of requesting for permission to mount a
> 2m/70cm vertical on the roof of the appartment building. I have 1 storey
> above me so cable loss will be minimal but I am looking for suggestions on
> mounting the antenna. Tripod, bracket screwed to edge of the roof etc. Any
> suggestions are greatly appriciated.

>
You'll need a lightning ground, could get tricky.
>--

> Curtis Bidulock

>
w3rv

861. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 13:48:22 UTC
From: 2w8ji@contesting.com
Message-ID: <3a59be5e.9894569@news.akorn.net>
Source record: 172534

On Fri, 05 Jan 2001 13:22:06 -0600, Mark Keith <nm5k@wt.net> wrote:

>conditions. If you run a plot on a 160 vertical, comparing 2 radials to
>60 using average ground, maybe a 1.4 db increase. Not much. But then you
>hear reports of 10 db difference when comparing in real life. "Say for
>Toms example". Thats quite a difference from the theoretical.

Yes, and others report similar changes also. Some people do not.

It depends on many things. When you only have two radials, you are
absolutely dreaming if you think the system is predictable.

One problem is very high levels of RF excite the earth around the base
of the antenna. A second problem is the radials themselves have very
strong fields coupled into the earth. A third problem is the shield
of the coax is part of the system unless you choke the cable at a few
points leaving the antenna.

People have the misplaced notion that because the two radials run
opposite directions radiation from those radials "cancels" . It does
NOT. Radiation cancels only directly above the radials along a line
running at right angles to the two radials, and that is the far-field
pattern where the radials look like a single point in space and the
induction fields are weak enough to be ignored.

No one can assure ANY level of performace when a marginal
radiating ground system is used, and the radiator itself is
exposed to earth and whatever other stuff is around it. Performance is
all over the place.

Another issue is the loss from the soil being exposed to the fields of
the radiator right where they are highest.

All of these losses do not necessarily show up as a high base
impedance, as some think.

For example, I can place an antenna on my truck with a large hat over
the truck, and read a very low base impedance. I can read a resistance
of only loading coil ESR plus an ohm or two on 80 meters.

If anyone thinks the actual ground losses of that system are reflected
in that two ohms, they are dreaming. The high displacement currents
between the hat and truck "short circuit" the ground losses, and make
them less noticable. Yet those losses are still all there!

The system simply starts to act like a "loop", and I see an
artifically low base impedance that makes me think the ground system
is "good".

The only way to know the radiating efficiency actually is through field strength changes when a known good system is installed. It's less bother to just bite the bullet and use 30 or so radials and KNOW things are reasonably good than to spend time making measurements or taking a guess that might not mean anything at all.

Some people do OK with crappy grounds, and some almost can't be heard. The interesting thing is thouse who almost can't be heard always greatly improve and come up to the rest of the boys when they do a modest amount of work.

There are those among us who know all about antennas, yet have had very few antennas to compare and NEVER had a decent signal on any band.

When you look at how many people use verticals on 160 and A-B those verticals against low dipoles, you will find the ONLY people who report nearly equal success with low dipoles are those with small ground systems on the verticals.

862. Re: It's not a 12AVQ its a 14AVQ HELP !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 13:57:11 UTC
From: "Kenneth D. Grimm" <grimm@NOSPAMlynchburg.net>
Message-ID: <qlhj5tsphai7q5qrprbn3n19g1lbcn6hti@4ax.com>
Source record: 172535

On Sun, 07 Jan 2001 22:39:43 -0800, Dennis Recla <recla@magick.net>
wrote:

>Hello
>
>I have just gotten an Old HyGain 14AVQ 10,15,20 and 40 meter
>vertical. I found out from looking at pictures it wasn't a 12AVQ
>as I had thought.
>
>I think I have all the pieces, but it sure dosen't tune up very
>well. --- I think I might be missing some little thingee that
>goes on the top ??
>
>Anyone have a copy of the old manual, or could help me with
>setting the various lengths of tubing, etc.
>
>How long should the traps be apart? How long is the top small
>tube go. Any help will be appreciated.
>
>Dennis

The BoatAnchor Manual Archive http://bama.sbc.edu has several hundred
manuals that can be downloaded free of charge. You are in luck. The
14AVQ manual is one of them.

73,

Ken K4XL
Remove NOSPAM from address to reply by Email
Boatanchor Manual Archive - http://bama.sbc.edu

863. Re: EZNEC treatment of two metals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 14:03:46 UTC
From: k3bu@aol.com
Message-ID: <20010108090346.22907.00000433@ng-mn1.aol.com>
Source record: 172536

W7EL writes:

>This limitation came about simply because of lack of space on the DOS
>version screen for another column. Time prevented adding it to the
>Windows version, and I have yet to see a case where the limitation has
>prevented accurate modeling, so individual wire loss didn't have a high
>priority.

Thanks for explanation Roy.
It would help to have a note in the manual to that effect, so some of (new to EZNEC) us don't have to worry.
Thanks one more time for the great tool!

Yuri, K3BU

864. Re: W7EL Malicious Libel and Pirating W7EL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 14:07:20 UTC
From: 2w8ji@contesting.com
Message-ID: <3a59c566.11694978@news.akorn.net>
Source record: 172537

On 02 Jan 2001 02:28:53 GMT, fractenna@aol.com (Fractenna) wrote:

>Phil speaks for himself on aol and he ID's as Phil.
>
>73
>Chip N1IR

Dear Chip,

You are either totally crazy and can't help presenting yourself this way, or you are the ham radio's biggest jerk.

You are destroying what was once a nice newsgroup, either through intenitionally baiting people or because you are so totally screwed up in the head you actually believe the crap you post.

Which one is it? I really want to know. Are you intentionally screwing up this newsgroup, or are you just totally crazy?

Or is it a mixture of the two problems?

73 Tom

865. Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 14:17:31 UTC
From: k3bu@aol.com
Message-ID: <20010108091731.22907.00000435@ng-mn1.aol.com>
Source record: 172538

Talking about radials.
Has anyone done some real life tests and comparison between few radials (2,4,8) and many (60, 120) when over salt water or marsh (or soaked salty beach)?
The point of question is: does the salt water ground (close to perfect) reduce the losses in return currents to the point where few radials are sufficient?
6Y2A - Team Vertical (and mine) experiences with few elevated radials show excellent performance, but could it be (worthwhile) improvement by laying many radials (elevated or on ground) over salt water "ground"?
Practical experiences please.

Yuri, K3BU

866. Re: Apartment Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 14:32:25 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <D85ZOuueqjyIKYvgDa7q5ZbpvEP6@4ax.com>
Source record: 172539

"Curtis Bidulock" <bidulock@powersurfr.com> wrote:

>I am currently in the process of requesting for permission to mount a
>2m/70cm vertical on the roof of the appartment building. I have 1 storey
>above me so cable loss will be minimal but I am looking for suggestions on
>mounting the antenna. Tripod, bracket screwed to edge of the roof etc. Any
>suggestions are greatly appriciated.

You don't mention whether you're using a mobile vertical or one
designed for home use.

If it's one for home use, I'd just go to Radio Shack and get a little
5-foot mast & mounting hardware to get the vertical off the roof and
away from apartment wiring, but without being too much of an
"eyesore."

Radio Shack might also have hardware for mounting to a vent pipe.

I'd look at your roof and then go see what RS has.

Bob
k5qwg

867. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 14:40:29 UTC
From: richardharrison@webtv.net
Message-ID: <27319-3A59D15D-3@storefull-113.iap.bryant.webtv.net>
Source record: 172540

Dick Carroll wrote:
"Webster`s New World Dictionary":
"Any means of communicating". (Language Definition)

Ah ha!, so you have a broad definition, and I have a narrow definition.

Did you look up Morse code?

My dictionary defines Morse as a set of dot and dash symbols used in place of letters and numerals.

My dictionary`s definition implies symbols representing yet other symbols.

A Morse code message combines Morse symbols to represent the language of the message. It isn`t the language itself. Never mind, symbols are often confused with the real thing.

I`ll use some symbology. Sailng vessels once upon a time plied the oceans with cargo. Now, they are replaced by motorships. The sailing ships were slow and labor intensive.

Morse code is like the sailing ships above. Motorships are like today`s voice and data transmissions.

Best regards, Richard Harrison, KB5WZI

868. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 15:20:08 UTC
From: richardharrison@webtv.net
Message-ID: <7445-3A59DAA8-6@storefull-112.iap.bryant.webtv.net>
Source record: 172542

David Sinclair wrote:
"No amount of words can bury the fact of what a central part Morse played in the emergence and growth of radio, nor can they change the fact that large numbers of "relegated" folks still use Morse on the radio every day."

Steam played a central part in the emergence and growth of the railroads. How many steam locomotives are at work today?

Diesel works better for railroads today. This doesn`t stop aficionados from loving steam.

Best regards, Richard Harrison, KB5WZI

869. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 15:40:09 UTC
From: oar9fi@aol.com
Message-ID: <20010108104009.08541.00000393@ng-ft1.aol.com>
Source record: 172541

I think maybe the Deluxe antenna (trimmed for 10m) may be defective- the difference seems to be in the base. when i put the long whip from the deluxe on the crappy cb antenna mount (and co-ax) it lit up more output lights. (on ssb voice peaks- the 100 dosen't have fm or am)What is the spiral disk (like a copper spiral) in the antenna for? does this affect tuning? it seems like the deluxe dosent recieve as well as the crappy ant. well i'm sorta confused. maybe i'll get the swr/power meter rs has just to try & figure out the problem then return it. ok thanks... justin

870. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 16:28:55 UTC
From: richardharrison@webtv.net
Message-ID: <4803-3A59EAC7-38@storefull-118.iap.bryant.webtv.net>
Source record: 172543

Yuri, K3BU wrote:
"Talking about radials. Has anyone done real life tests and comparison between few radials (2,4,8) and many (60, 120) when over salt water or marsh (or soaked salty beach)?"

Yuri can reason the results. Elevated radials over poor earth are effective when they hide the earth from displacement current which would produce loss in the earth.

Elevated radials over a good conducting surface need only to provide sufficient capacitive coupling to that good surface.

Best regards, Richard Harrison, KB5WZI

871. Autek Research impedance meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 17:13:40 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A59F544.D21F400B@wgcr.org>
Source record: 172544

Ok, question for those who have used them: how well do you like your
Autek VA-1 or the VHF RF-3 (I think that's the right number)? Does it
give accurate results? Is it built ruggedly? Any caveats? Anyone here
at all have any experience with these? I'm looking to buy one of each.
--
Lamar Owen
KF4MYT
WGCR Internet Radio
1 Peter 4:11

872. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 17:14:42 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A59F582.BBE145A8@wgcr.org>
Source record: 172545

David Sinclair wrote:
> [Richard Harrison is] demonstrating extreme rigidity to insist that the word "language"
> only applies to spoken tongues; many will disagree with that view.

While I disagree that CW qualifies as a distinct language (it is a medium for conveying language, similar to e-mail or newsgroups, which have their own shorthand expressions too, right? :-)), there are other seeming encodings that do indeed qualify -- American Sign Language is one of the best examples, as the signs are not just alphabetic. Likewise, a computer language isn't spoken (unless I'm talking Z80 in my sleep again -- I have that on tape that my wife recorded....), but only written. Although I'm not rigid about it -- if you want to consider CW a distinct language, then feel free to do so -- but I will continue to feel free to disagree. It's a free country (and internet).

> If Morse is so darn lame, as
> you make it out to be, why, then, has it survived a century now, why is it
> so popular?

Because learning it had been required in order to get your ticket. Period. To get a higher ticket meant you had to get proficient -- getting proficient means using it. Use it enough, and you learn to like it -- just like teaching a kid to eat his vegetables. The statutory requirement wasn't based on 'because it is a useful mode, let's require learning it.' -- no, it was mandated because it was in the Public Interest for hams to know the code to effectively function in communicating with non-hams in emergencies. That reason is no longer valid -- the only reason pro-code-test people want to keep the test around now is that they fear the death of CW as a mode because of eliminating the statutory requirement for learning it -- and you're not a Real Ham (TM) if you don't do CW.

And some like CW, mostly for nostalgic reasons -- although there are those that like it for other reasons. Like a speech impediment. Or a hearing deficiency (code doesn't have to be received by ear, after all). Or a young-sounding voice. Or they're female and don't want the Good Old Boys to know it during QSO. There's lots of reasons to like CW the mode -- but there are no valid reasons to keep the code test in today's world. And CW use won't go away just because the test does -- or is that the real fear? If code learning is mandatory, maybe the Good Little Boys and Girls will learn to like what to some tastes foul and offensive.

> Why havent *all* hams stopped using it, once they satisfied
> statutory requirements for skill? No clique here, either. CW use cuts

If you have to learn a skill by mandate, might as well use it, right?
Or you learned to like it. Why force the issue by testing though -- is
CW not attractive enough to get new folks using it by itself? Is
mandated testing the only way to bring new CW blood in? I think not.
CW can stand on its own, by its own merits, without any mandate.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

873. Re: QUESTION: Can shortened radials be effective?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 17:28:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93cu2niil1@neptunium.btinternet.com>
Source record: 172546

When analysing performance of antenna systems it is important to be quantitative and not confuse antenna and ground losses with propagation loss along the path - especially that loss in the path which is very near the antenna.

Reg.

874. Help Re-building KT34XA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 17:55:59 UTC
From: Tim Taylor <tim-taylor@home.com>
Message-ID: <Pan66.150666$65.1131898@news1.rdc1.fl.home.com>
Source record: 172547

I'm in the process of re-building a KT34XA. My biggest problem is how to remove the residue/hardening material left behind from KLM's "protective paste". The material has hardened like a rock and although I could leave it there any reassemble the antenna, I would feel much better if it was removed.

Second question. What is the current thinking on a material to replace the KLM "protective paste" ? I have more of it, but after seeing it harden, I don't think I want to use it again. Is NoLox (?) (the material sold at Home depot for AL to CU connections) any good?

Your thoughts.

Thanks,

Tim K8XS

875. Re: Measuring low power (was re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 18:04:28 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Xjn66.631$e5.1545381@news.ntplx.net>
Source record: 172548

Robert S. Stein <w6nbi@earthlink.net> wrote:

> I'm glad to see that the ARRL is no longer calibrating power meters
> against the Bird 43 :-).

Kind of hard to calibrate a 100 milliwatt scale on a power meter vs the Bird 43. :-)

73,
Ed Hare, W1RFI

876. What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 18:41:57 UTC
From: TruckDrivingMan <tansorg@cs.tu-berlin.de>
Message-ID: <93d1ha$5ji$02$1@news.t-online.com>
Source record: 172549

[No readable article body recovered]

877. Telrex 40M beam restoration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 18:49:59 UTC
From: Chris Kepus <ckepus@no.spam.calweb.com>
Message-ID: <01c079a3$ca493780$d88dadcf@chris>
Source record: 172550

I am in the process of restoring a Telrex 40M329 beam. I would like to contact anyone with experience with this fine antenna.

Also am interested if anyone has tried using this on 20M by altering the feed system and using an antenna tuner?

Thanks es 73,
Chris
W7JPG

878. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 19:10:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5A1095.1BC1@wt.net>
Source record: 172551

Oar9fi wrote:
>
> I think maybe the Deluxe antenna (trimmed for 10m) may be defective- the
> difference seems to be in the base. when i put the long whip from the deluxe on
> the crappy cb antenna mount (and co-ax) it lit up more output lights. (on ssb
> voice peaks- the 100 dosen't have fm or am)What is the spiral disk (like a
> copper spiral) in the antenna for? does this affect tuning? it seems like the
> deluxe dosent recieve as well as the crappy ant. well i'm sorta confused. maybe
> i'll get the swr/power meter rs has just to try & figure out the problem then
> return it. ok thanks... justin

It may well have a bad coax connection inside. That sounds like a
different antenna than the one I was refering to. If yours has a big
coil, it's the type I've seen lately on trucks that look like mini-10m
bugcatchers. Seems they should do ok normally with a coil like that. You
can't go by the output lights on the rig. You need to buy or borrow a
SWR meter and see whats really happening. If the antenna sounds dead to
the cheaper one, it probably is dead. Receiving is generally reciprical
to transmitting. If one antenna receives better than another, usually it
will also transmit better. Some exceptions, but 95% of the time this
will prove true. Where is the antenna mounted? Thats very important. It
really needs to be on the car metal somewhere. Trunk, roof , etc. And be
grounded well to the body also. "A magmount doesn't require this if
planted on an area of metal". But any other antenna does. Your meter
probably is reading more than normal because of the high SWR when
mismatching whips. Don't worry about what the lights do on the radio.
They could be set to show anything. Make sure the antenna is right
first, and then just adjust the mike by saying x-ray over and over while
slowly increasing the mike gain. When the meter reading quits going any
higher on the peaks, then lower the mike gain just a bit,and thats it.
If you try to get a high meter reading, you will just end up
overdriving, and will sound trashy, and splatter 10 kc each way your
freq. Or maybe worse..The radio shack meter will work just fine.
Actually, they are pretty accurate for the price. And come with a FS
meter which can come in handy at times. MK
--
http://web.wt.net/~nm5k

879. Re: What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 19:17:29 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93d3ou$3d5$1@iac5.navix.net>
Source record: 172552

The National Oceanic and atmospheric administration - Translation - the weather bureau.

"TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message news:93d1ha$5ji$02$1@news.t-online.com...

880. Imax 2000 vs. Maco V58 - opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 19:42:44 UTC
From: Cowboy <cowboy_krs21208@my-deja.com>
Message-ID: <93d57h$4af$1@nnrp1.deja.com>
Source record: 172553

I am looking for a vertical that can be used across 10, 11 and 12 meter operations. I've heard that the Imax 2000 is broadbanded enough and handles the 3 meters fine and without tuning. I've also heard that the Imax 2000 is prone to causing a greater amount of RFI to neighbors.

Does anyone have any experience related to the Imax a/o the Maco, their ability to work across the 3 meters I've mentioned, and their relative RFI.

--
73's
Cowboy

Sent via Deja.com
http://www.deja.com/

881. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 19:54:04 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93d5tk$4es$1@iac5.navix.net>
Source record: 172554

So by your definition you would eliminate the American sign LANGUAGE for the deaf?

How about the tonal language of drums used by African tribes? The tone of the drum conveys meaning as is accomplished in speech. No tongue involved here, simply the movement of the hand on the drum surface.

And talking about communication by movement of the hand, sounds to me like CW falls in their somewhere. And before you respond that a computer can send CW without a hand, my computer talks without a tongue. This argument has reached a par with how many angels can set on the head of a pin and the results are the same.

I think I would accept a broader definition as being able to communicate. That is, unless it is more fun to argue than agree...

> > Language, the word, derives from the Latin word for tongue,"lingua".
> > Sounds come from many sources. Those that roll off the tongue are
> > "language".
> > The sound of a bell may mean food to a conditioned dog. It is not
> > language even to the dog.
>

882. Counterpoise for multiband

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 20:00:57 UTC
From: Robert Tortajada <bobt@sysadminus.com>
Message-ID: <3A5A1C85.B02D964F@sysadminus.com>
Source record: 172557

I live in an apartment on the second floor. I have an outbacker mobile antenna and plan to set it up on the balcony and setup counterpoises for the 10-80 meter bands. I have a few question.

1) Can I hook up all the counterpoises at the same time, or if I can only have the one for the correct band hooked up at any one time?

2) I plan to run them all tie-wrapped together, is that OK, or do they need to be spaced?

3) the counterpoises for the 10-20 meters bands will drop vertically to the ground, however, the lower bands will have to run to ground level then run along the ground. Will that work?

Bob T

883. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 20:08:00 UTC
From: k3ky@erols.spamnocom
Message-ID: <93d6n0ncj1@bob.news.rcn.net>
Source record: 172555

In article <3A59F582.BBE145A8@wgcr.org>
Lamar Owen <lamar.owen@wgcr.org> wrote:

> David Sinclair wrote:
>>
>> If Morse is so darn lame, as
>> you make it out to be, why, then, has it survived a century now, why is it
>> so popular?

>
> Because learning it had been required in order to get your ticket.
> Period. To get a higher ticket meant you had to get proficient --
> getting proficient means using it. Use it enough, and you learn to like
> it -- just like teaching a kid to eat his vegetables. The statutory
> requirement wasn't based on 'because it is a useful mode, let's require
> learning it.' -- no, it was mandated because it was in the Public
> Interest for hams to know the code to effectively function in
> communicating with non-hams in emergencies. That reason is no longer
> valid -- the only reason pro-code-test people want to keep the test
> around now is that they fear the death of CW as a mode because of
> eliminating the statutory requirement for learning it -- and you're not
> a Real Ham (TM) if you don't do CW.
>
> And some like CW, mostly for nostalgic reasons -- although there are
> those that like it for other reasons. Like a speech impediment. Or a
> hearing deficiency (code doesn't have to be received by ear, after
> all). Or a young-sounding voice. Or they're female and don't want the
> Good Old Boys to know it during QSO. There's lots of reasons to like CW
> the mode -- but there are no valid reasons to keep the code test in
> today's world. And CW use won't go away just because the test does --
> or is that the real fear? If code learning is mandatory, maybe the Good
> Little Boys and Girls will learn to like what to some tastes foul and
> offensive.
>
>> Why havent *all* hams stopped using it, once they satisfied
>> statutory requirements for skill? No clique here, either. CW use cuts
>>across the entire ham demographic
>
> If you have to learn a skill by mandate, might as well use it, right?
> Or you learned to like it. Why force the issue by testing though -- is
> CW not attractive enough to get new folks using it by itself? Is
> mandated testing the only way to bring new CW blood in? I think not.
> CW can stand on its own, by its own merits, without any mandate.
> --
> Lamar Owen

> WGCR Internet Radio
> 1 Peter 4:11

You make some very good points, Lamar- thank you. This entire discussion will become moot in any case when the WARC boys get together and drop the world requirement for Morse proficiency. Our FCC will soon follow. What I find hard to imagine is that we will be testing for everything else we authorize- with the exception of CW. Yet we continue to authorize the use of the mode on the bands? It sounds like a prescription for chaos. Would we continue to have FCC-mandated sub-bands for other modes? How about CW sub-bands? Seems to me it leads to a sort of progression where CW loses existing exclusive band segments, however they presently happen to exist. Mix the modes all together and CW would definitely be the first casualty. It is a lot easier for the phone and digital mode ops to tolerate on-frequency OOK, the converse is not true. Trying to copy CW under the racket of these other modes is oppressive. Your arguments above are persuasive, and my initial reaction is to agree- sure CW could stand on its own merits because people like it. The more I think about it, however, the more I am reminded of the pressures for bandwidth among 'competing' modes, especially phone, which is such a big user. I am reminded of the open hostility arrayed against CW, and I reach the conclusion that dropping CW testing in return for authorization to use the mode essentially pulls the plug on it. I hope I am wrong on that point. We start to see in a few years. You can fit a whole bunch of stations in a small sub-band with CW, and theres a lot of fun to be had with plenty of hams who do like the mode. In the same bandwidth you can fit only a small handful of phone chats. It makes sense to me to try to preserve the mode if demand continues, and so far, the demand is definitely there. But that is not the direction we are heading.
Nostalgia does not explain my love for morse, nor do I have any of the impediments, deficiencies, or other hangups you alude to above. I just love the mode, and find it has a special and unique quality. There is more of a sense of adventure than I find in the other modes. They get the job done, and I inhabit them fairly often, but CW is where I truly live.
Whether it is or isn't a language is a minor point. Most every dictionary in the english language supports my view. Basically, if it is a means of communication, you can call it a language. It doesn't really matter to me whether everyone can see that or not. Morse, spoken english, ASL, C++, mathematics- they all convey thoughts, feelings, instructions between complex intelligent systems, whether living or not, and the ones which utilize air vibration and enter the ear/brain interface of a human being most certainly qualify. Those who share my love of CW generally also see this. Where we have consensus, we begin to build 'reality', and when we have a sufficiently large and stable consensus, that reality is affirmed by means such as printing dictionaries. Most of these I have seen lately are unequivocal on the subject. 73, David K3KY

884. Re: What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 20:13:10 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <93d6sbghg01$1@news.t-online.com>
Source record: 172556

And what does it ? I've heard something of 162,5 MHz,but there's nothing

"W4JLE" <Fred@w4jle.com> schrieb im Newsbeitrag
news:93d3ou$3d5$1@iac5.navix.net...
> The National Oceanic and atmospheric administration - Translation - the
> weather bureau.
>
> "TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message
> news:93d1ha$5ji$02$1@news.t-online.com...
>
>

885. Re: Help Re-building KT34XA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:00:12 UTC
From: Tony Seaton <tony.seaton@turner.com>
Message-ID: <3A5A2A5C.9DDC7F52@turner.com>
Source record: 172559

I have used NoLox on two KY34XA's with good results

Tim Taylor wrote:

> I'm in the process of re-building a KT34XA. My biggest problem is how to
> remove the residue/hardening material left behind from KLM's "protective
> paste". The material has hardened like a rock and although I could leave it
> there any reassemble the antenna, I would feel much better if it was
> removed.
>
> Second question. What is the current thinking on a material to replace the
> KLM "protective paste" ? I have more of it, but after seeing it harden, I
> don't think I want to use it again. Is NoLox (?) (the material sold at Home
> depot for AL to CU connections) any good?
>
> Your thoughts.
>
> Thanks,
>
> Tim K8XS

886. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:04:02 UTC
From: keith.bozek@kodak.com
Message-ID: <93d9vr$8r5$1@nnrp1.deja.com>
Source record: 172560

Hi Doc,

Does the counterpoise need to be oriented in a specific way. Since it
is a radial, I assuming that it needs to me mounted in some orientation
that is perpendicular to the antenna.

Also, what kind of wire should I use?

N3HGN

Sent via Deja.com
http://www.deja.com/

887. Re: Counterpoise for multiband

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:20:51 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5A2F33.46BCE4B2@oio.net>
Source record: 172561

Robert,
1. Either way.
2. Yes
3. Yes.

'Doc

888. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:33:42 UTC
From: n2ey@aol.com
Message-ID: <20010108163342.10105.00000085@nso-bh.aol.com>
Source record: 172563

In article <nsah5t8sl9nrlj9736r63r07q5ttkcg1ru@4ax.com>, Richard Clark
<rwclark@seanet.com> writes:

>>Looking at my Handbooks, here's what I see:
>>
>>The Handbooks devote about the same space to tubes (about 35 pages) from the
>>earliest one I have (1948) to about 1970. The tubes presented are only a
>small
>>sample of those made at any time, and the characteristics shown are very
>>limited.
>>During the late '50s and early '60s, the number of tube types manufactured
>grew
>>tremendously, but the Handbook space devoted to them did not, so the
>percentage
>>represented dropped. Just compare the size of the various RCA receiving tube
>>manuals to get an idea! Many of the tubes, though, were not of primary
>interest
>>to the ham, or were variations on older types (different pinout, different
>>heater voltage, etc.) For example, the 6GE5 (used in many low-end Heathkits
>>like the monoband SSB rigs and the HW-16) is just a 6DQ6B in a single-ended
>>Compactron bottle.
>>
>>73 de Jim, N2EY
>
>Hi Jim,
>
>Your mention of the handbook containing tubes of interest to hams is
>right on, but back in the 60's I was more concerned with finding out
>what a particular military tube was (like the 6201). Most of my tube
>books were crossguides (cheapest solution) which often lead right back
>to the handbook's selections. Having just the tube base chart was
>worth it.

Agreed! My comments were not meant as a put-down of the Handbook, but simply an
explanation of what its role was meant to be. There was hardly a book with more
radio-info-per-dollar.

There was at least one case of a serviceman stranded on a captured Japanese
island in WW2 who evaded capture and used the ARRL Handbook to build radio gear
so he could listen to the outside world.
>
>You mention the explosion of tube types in the 50's and 60's. Yes,
>most of them for TV's with combination functions. Some compactrons
>(if I recall the term) contained three tubes in one glass envelope.
>Sort of bottled circuits instead of integrated circuits...

>BC's - IC's

Yep! Compactrons often simply repackaged existing designs.
>
>The TV tube industry strove to drive production costs down to the
>point where they could build the equivalent to the radio's
>all-american 5 (5 tube receivers).

And they did, in relative terms. A compactron (and its socket) that did the work of two or three older types did not cost 2 or 3 times as much to manufacture. I think there was a set of 2 or 3 compactrons that were meant to do the AA5 thing.

Another driving force was simplifying wiring layouts and PC board design. An outfit like RCA could easily justify a new tube type if it saved a few pennies manufacturing cost because PC board traces were simplified. They could also develop new types that used fewer/cheaper other components.

> Solid state moved faster.

A bunch of things happened there. "Solid state" was "sexy" back then - it implied space age modernism and progress, even if the TVs didn't actually produce a better picture. Once the sales folks got the public believing solid state was better, tube sets were doomed, no matter how good they were.

The size, weight, and power advantages of solid state meant lower manufacturing costs, and smaller/lighter chassis, too. End of story.

Similar stuff happened to hamgear in the '70s. Often the new solid-state gear had poorer specs than the tube stuff, but lots of folks didn't understand "blocking dynamic range" and "third order dynamic range" and "phase noise" so they bought Kenwoods and Icoms instead of Collins and Drakes.

>There
>was also a time when some business analyst crowed no one could
>undercut the price of cheap hong kong gear watches - a couple of years
>later they were dumped into the trashbin when the two component watch
>('tronics - display with a dab of epoxy to seal everything) took over.

Yep - and I remember arguments over spending hundreds of dollars for a 30 MEG hard drive because "you don't need that much - you'll never fill it up!"

73 de Jim, N2EY

889. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:35:53 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A5A32B9.2D38FF93@wgcr.org>
Source record: 172564

David Sinclair wrote:
> Lamar Owen <lamar.owen@wgcr.org> wrote:
> > And CW use won't go away just because the test does --
> > or is that the real fear?

> You make some very good points, Lamar- thank you. This entire discussion
> will become moot in any case when the WARC boys get together and drop
> the world requirement for Morse proficiency. Our FCC will soon follow.

Yes, the handwriting is on the wall -- "NoCode, NoCode, total gone
Morsetestin'"

> What I find hard to imagine is that we will be testing for everything else we
> authorize- with the exception of CW. Yet we continue to authorize the use
> of the mode on the bands? It sounds like a prescription for chaos.

Why? We don't test that one can understand frequency-shifted SSB
transmissions now. It is assumed that an operator can understand such.
We can't (without programmed help) understand PSK31 raw from the
receiver -- but the mode is authorized. CW can be received and sent
from computer -- no manual codec required.

> Would
> we continue to have FCC-mandated sub-bands for other modes? How about
> CW sub-bands? Seems to me it leads to a sort of progression where CW
> loses existing exclusive band segments, however they presently happen to
> exist.

Eliminating the CW test != Eliminating the bandwidth for the mode.
Although lower CW usage might cause the FCC to reduce the CW band
allocations, the FCC isn't likely to do away with the CW subbands
anytime soon.

> I am reminded of the
> open hostility arrayed against CW, and I reach the conclusion that dropping
> CW testing in return for authorization to use the mode essentially pulls the
> plug on it.

Methinks the open hostility is mostly due to those who are hostile
feeling pressured into learning what they feel is an archaic mode of
communication. Like the adults who will not eat cauliflower now simply
because they were forced to do so as kids (and there are many examples).

[snip discussion on why he loves CW]

No arguments there -- feel free to enjoy CW long after morse proficiency
testing is eliminated.

--
Lamar Owen
KF4MYT
WGCR Internet Radio
1 Peter 4:11

890. Re: Code Quick System

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:46:06 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <705k5tga2hc8oe2cn4t1iuganm8epu16se@4ax.com>
Source record: 172565

On Thu, 04 Jan 2001 15:41:04 GMT, "Pete" <pete@etep.com> wrote:

>I've seen where this system has been mentioned a few times in this NG.
>Where can I get some information on it? Thanks

http://www.cq2k.com/

73,

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

891. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 21:57:52 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5A383E.82E20C92@bellatlantic.net>
Source record: 172566

Richard Harrison wrote:

> David Sinclair wrote:
> "No amount of words can bury the fact of what a central part Morse
> played in the emergence and growth of radio, nor can they change the
> fact that large numbers of "relegated" folks still use Morse on the
> radio every day."
>
> Steam played a central part in the emergence and growth of the
> railroads. How many steam locomotives are at work today?
>
> Diesel works better for railroads today. This doesn`t stop aficionados
> from loving steam.

Correct. Some people enjoy flying kites, too, even though there are
numerous other types of flying craft available. By your own words,
you have destroyed your argument that CW should be abandoned
because, in your view, it is outmoded. Clearly, it is enjoyable to some,
whether they, you, or anyone else views it as outmoded or not.

As to "outmoded" in general: outmoded does not equate to
"unuseable", "not useful", "of questionable utility" etc. CW,
whether you consider it outmoded or not, can be and is used
as a means to get the message through, whether or not other
means fail.

It is also used as a means I built of controlling electrical devices
for three disabled people, when all that was needed was
easily satisfied by counting pulses. This is not a ham radio
application - but I wouldn't have had the capability to do
it without understanding CW as a communications means,
and I gained that through ham radio. And therein is the
relationship to ham radio. This does not say that someone
else could have done it by some other means, without knowing
about CW or ham radio. But it does say that CW has utility,
and that the CW requirement I had to fulfill for ham licensing
meant at least 3 bedridden people had a small measure of
assistance and independence.

>
>
> Best regards, Richard Harrison, KB5WZI

892. Re: What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 22:31:32 UTC
From: Omigosh Emier of Smoe <Omigosh@smhoe.net>
Message-ID: <8dr66.5263$MX.171680@newsread1.prod.itd.earthlink.net>
Source record: 172567

This is the Main NOAA Page- there should be links there for your Local Forcast offices-

http://www.nws.noaa.gov/

"W4JLE" <Fred@w4jle.com> wrote in message news:93d3ou$3d5$1@iac5.navix.net...
> The National Oceanic and atmospheric administration - Translation - the
> weather bureau.
>
> "TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message
> news:93d1ha$5ji$02$1@news.t-online.com...
>
>
>

893. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 22:48:00 UTC
From: L&M <poppy@nw.com.au>
Message-ID: <3A5A43A0.CD0DF744@nw.com.au>
Source record: 172469

the only TWA i know off is about 25 meters long and is available
here in Australia for 300 aussie dollars
its made off wire and the VSWR does not go above 2.0 from 3.0-30MHz
i have a copy off the magazine piece in front off me so if you want me
to post it let me know

'Doc wrote:
>
> Greg,
> I haven't heard about this 'CC CTW' antenna, so not
> knowing anything about it. All I can tell you is that
> it sounds 'too good to be true'. A traveling wave antenna
> is usually one that is quite long in relation to the
> particular frequency it's used on. The antenna you
> speak of doesn't sound like it's long enough to be a
> travelling wave antenna anywhere. If you find any
> information about it, I'd like to see what it is.
> 'Doc

894. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 22:52:48 UTC
From: rwclark@seanet.com
Message-ID: <3aa52fd2.1390369435@news.seanet.com>
Source record: 172568

On Mon, 8 Jan 2001 14:54:04 -0500, "W4JLE" <Fred@w4jle.com> wrote:

>So by your definition you would eliminate the American sign LANGUAGE for the
>deaf?
>
>How about the tonal language of drums used by African tribes? The tone of
>the drum conveys meaning as is accomplished in speech. No tongue involved
>here, simply the movement of the hand on the drum surface.
>
>And talking about communication by movement of the hand, sounds to me like
>CW falls in their somewhere. And before you respond that a computer can send
>CW without a hand, my computer talks without a tongue. This argument has
>reached a par with how many angels can set on the head of a pin and the
>results are the same.
>
>I think I would accept a broader definition as being able to communicate.
>That is, unless it is more fun to argue than agree...
>
>> > Language, the word, derives from the Latin word for tongue,"lingua".
>> > Sounds come from many sources. Those that roll off the tongue are
>> > "language".
>> > The sound of a bell may mean food to a conditioned dog. It is not
>> > language even to the dog.
>>
>

Hi All,

This "language" issue seemed to be messed up by factors that were rhetorically forced upon the Code. One of those artificial factors was the declaration that Morse has a one-to-one mapping to a Roman character, which is nearly true, but has a weak bearing on the nature of language.

Yes di-dah maps to A, but that does not make di-dah equivalent to one character in Morse. It is more than obvious that dit is one character in Morse and dah is another. The pairing of di-dah is what is called a morpheme which is a linguistic element of language denoting a larger, more abstract language component. di-di-di-dah is another morpheme composed of the elements di and dah with repetitions in an unique pattern. Each morpheme has a one-to-one mapping with a Roman character and as such presents a lowering of efficiency in coding the translation. The lowering of efficiency is the mapping of a Morse morpheme to a Roman character (rather than a Morse character to Roman character), hence a step backwards in translation.

So the more basic question is what constitutes a language? A character set (spoken or written) that combines into morphemes that combine into tokens is one good start for a defintion (or at least its expressions). Syntax is higer, more abstract element of language which is the relationship of tokens composed of morphemes which are composed of characters. However, Morse as a language begins to strain when it comes to this analysis. There are no syntactical rules in Morse that are uniquely different from the language in which the message is intended to be translated into. This is probably more the issue that some posters were trying to communicate when they averred that Morse is not a language. So to simplify:
dit Morse character
dah Morse character
di-dah Morse morpheme (or possible token)
di-di-dah another Morse morpheme
di-di-di-dah yet another Morse morpheme
di-di-di-dit_di-dit Morse token
di-dah__dah-dah_di-dah_dah-dit a Morse syntactical expression of two tokens.

Is Morse a language? It conforms to commonly held definitions (no, not those found in Webster's) and is not simply a mapping. Is this language efficient? That is not a functional requirement, but given a limitation in the conduit of information, it is a matter of those limitations enforcing its use, rather than one of choice for convenience. Are there better mechanisms? Yes, but they too exhibit the same issues when it comes to efficiency. They may be more efficient than Morse, but in and of themselves they are also steps back (especially Baudot).

73's
Richard Clark, KB7QHC

895. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 23:14:36 UTC
From: burke_br@freemark.com
Message-ID: <3a5a4991.7384208@news.surfree.com>
Source record: 172470

Infant formula cans, that's what you want. They're plated steel and are neary a foot long. You can make a decent 2M BP filter with them too.

Regards,

Bruce
Hitting Reply is Futile
*Use the folllowing:
(flzapped@fcmail.com)

896. Re: What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 23:43:22 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93djbhctj1@iac5.navix.net>
Source record: 172471

Correct, however it is very unlikely you would copy any of the NOAA stations in Germany. They transmit on freqs around 162.55 MHz

Most are line of sight range and here in the US we have many of them. Local weather and regional weather announcements are transmitted by computer synthesized voice.

They also have the ability to transmit an alert tone that turns on weather radios to warn of tornadoes, severe thunderstorms, and any other life threatening weather.

"TruckDrivingMan" <truckdrivingman@hotmail.com> wrote in message news:93d6sbghg01$1@news.t-online.com...
> And what does it ? I've heard something of 162,5 MHz,but there's nothing
>
>
> "W4JLE" <Fred@w4jle.com> schrieb im Newsbeitrag
> news:93d3ou$3d5$1@iac5.navix.net...
> > The National Oceanic and atmospheric administration - Translation - the
> > weather bureau.
> >
> > "TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message
> > news:93d1ha$5ji$02$1@news.t-online.com...
> >
> >
>
>

897. Re: What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-08 23:48:24 UTC
From: rwclark@epicedge.com
Message-ID: <3aa850e9.1398840686@news.seanet.com>
Source record: 172472

On Mon, 8 Jan 2001 19:41:57 +0100, "TruckDrivingMan"
<tansorg@cs.tu-berlin.de> wrote:

Hi OM,

In spite of other postings, NOAA does far more than weather watching.
They also are responsible for keeping the sea lanes clear of ice at
the poles. There is a moderately large fleet of ice-breakers and
other scientific exploratory ships here in Seattle.

73's
Richard Clark, KB7QHC

898. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 00:38:11 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <93dmh3$sr6$1@neptunium.btinternet.com>
Source record: 172473

Cecil, I'm sorry once again to state what John Cleese would refer to as the bleeding obvious.

Way back in the 1930's 3 people floundered about with digging implements making some measurements AT MEDIUM FREQUENCIES on field strength, or whatever, with a large number of shallow-buried radials. They didn't even bother to measure the conductivity of the ground their radials were buried in. If they didn't have call signs they were still clearly amateurs ! Nothing the matter with amateurs of course.

Then we have ONE radio amateur who, in the 2nd half of the century, makes a few measurements at HF with different numbers and lengths of radial. And even HE doesn't bother to measure ground conductivity either.

And the whole of the amateur radio antenna antenna grounding philosophy is based, according to you and some other believers, on these remarkably few measurements, from only TWO practical experiments. Over a period of 65 years ?

Fortunately, genuine radio engineers have more logical ideas - except the few poorly educated ones who have been brainwashed by the CFA philosophy. Who was it who said "There's one born every minute" ?
--
==========
Regards from Reg, G4FGQ
For free radio design software go to:-
http://www.btinternet.com/~g4fgq.regp
==========

Cecil <Cecil.A.Moore@IEEE.org> wrote in message news:3A58ECD6.7AFD3F8E@IEEE.org...
> "Peter O. Brackett" wrote:
> > I believe a search through old QST's looking for the author Sevick on the
> > subject of ground mounted verticals should come up with the pertinent
> > articles.
>
> Some such articles are in his books, e.g. Appendix I, II, III in
> "Building and Using Baluns and Ununs". I'll try to review them
> and summarize them here.
> --
> http://www.mindspring.com/~w6rca

899. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 01:37:11 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5A6B47.46EB0D0E@IEEE.org>
Source record: 172474

Reg Edwards wrote:
> Then we have ONE radio amateur who, in the 2nd half of the century,
> makes a few measurements at HF with different numbers and lengths of
> radial. And even HE doesn't bother to measure ground conductivity
> either.

Yes he did, Reg. Not only once, but every day for three months.
It's Figure III-2 on page 105 of "Building and Using Baluns and
Ununs". At the end of December, his earth's conductivity was about
half of what it was at the beginning of October.
--
http://www.mindspring.com/~w6rca

900. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 01:51:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93dqrf$d0l$0@208.206.142.96>
Source record: 172475

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "Webster`s New World Dictionary":
> "Any means of communicating". (Language Definition)
>
> Ah ha!, so you have a broad definition, and I have a narrow definition.
>

Right. And a definition that fits, in either case. When a prificient Morse operator says that he copies Morse as a language, as you would hear spoken words and you say he's lying, that just means you do not understand what he said.

To you Morse will never be a language, and I clearly understand that. But you are simply wrong to insist that Morse is never a language. Clearly under the circumstances described it is. That should be good enough for the both of us.
If not, they you are welcome continue to fight on. I've already wasted far too much time attempting to convey understanding where clearly there is no opening to receive it. End of story.

901. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 01:58:41 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <93drl0$2dpk$1@nntp1.ba.best.com>
Source record: 172476

Hi "L&M" -

I'm interested in your article. Is it about the Sommer vertical?
They make a couple of antennas of this type. I have posted
here a couple of times to see if anyone has had experience
with them, but no luck so far.

...73, Ed W6LOL

"L&M" <poppy@nw.com.au> wrote in message news:3A5A43A0.CD0DF744@nw.com.au...
> the only TWA i know off is about 25 meters long and is available
> here in Australia for 300 aussie dollars
> its made off wire and the VSWR does not go above 2.0 from 3.0-30MHz
> i have a copy off the magazine piece in front off me so if you want me
> to post it let me know
>
>
> 'Doc wrote:
> >
> > Greg,
> > I haven't heard about this 'CC CTW' antenna, so not
> > knowing anything about it. All I can tell you is that
> > it sounds 'too good to be true'. A traveling wave antenna
> > is usually one that is quite long in relation to the
> > particular frequency it's used on. The antenna you
> > speak of doesn't sound like it's long enough to be a
> > travelling wave antenna anywhere. If you find any
> > information about it, I'd like to see what it is.
> > 'Doc

902. FA: TIC RING ROTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:14:00 UTC
From: Randy <rbkb8iii@erinet.com>
Message-ID: <3a5a73e9$0$1499$53a6afc1@news.erinet.com>
Source record: 172478
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1206710241

903. Re: Counterpoise for multiband

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:14:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <93ds4d$95s$1@slb7.atl.mindspring.net>
Source record: 172477

Robert:

[snip]
> 1) Can I hook up all the counterpoises at the same time, or if I can
> only have the one for the correct band hooked up at any one time?
[snip]

You can hook them all up at the same time, since they are "resonant" at substantially different frequencies they will have only a small interaction with each other.

[snip]
> 2) I plan to run them all tie-wrapped together, is that OK, or do they
> need to be spaced?
[snip]

They need to be spaced. Space them as far apart as possible. If you bundle them all together, then... they simply act as one!

[snip]
> 3) the counterpoises for the 10-20 meters bands will drop vertically to
> the ground, however, the lower bands will have to run to ground level
> then run along the ground. Will that work?
[snip]

Yes that will work, but keep them "spaced" as above.

Note that the counterpoises should be an "electrical" 1/4 wavelength for each frequency/frequency band in use. This means that it is advantageous to "tune in situ" to an electrical 1/4 wave, since parasitic effects due to the counterpoises lying on the ground or close by conducting objects will cause the "electrical" length to deviate from the physical length.

A good way to "tune in situ" is to startwith the counterpoises intially too long, and then trim them to shorter lengths while measuring [not simultaneously while energized to avoid RF burns, heh, heh.] the counterpoise current. Cutting the counterpoise to the length that causes maximum counterpoise current flow will result in exactly 1/4 wave electrical length. If you cut off too much and overshoot, then simply solder the remainder back on. In almost all practical cases the 1/4 wave electrical length will be less than 1/4 wave physical length.

I have used this method of cutting counterpoises to 1/4 wave length "in situ" on several sites and found it to be quite effective in terms of increased transmitted signal strength. Often the 1/4 wave electrical length is almost 1/2 that of the physical length, especially when the counterpoises are buried an inch or so underground.

-Peter K1PO, Cary NC

904. Re: Autek Research impedance meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:18:14 UTC
From: scott_evans50@hotmail.com
Message-ID: <93dsd3ock1@nnrp1.deja.com>
Source record: 172480

In article <3A59F544.D21F400B@wgcr.org>,
Lamar Owen <lamar.owen@wgcr.org> wrote:
> Ok, question for those who have used them: how well do you like your
> Autek VA-1 or the VHF RF-3 (I think that's the right number)? Does it
> give accurate results? Is it built ruggedly? Any caveats? Anyone
here
> at all have any experience with these? I'm looking to buy one of
each.
> --
> Lamar Owen
> KF4MYT
> WGCR Internet Radio
> 1 Peter 4:11
I have the one for HF and love it! It's small and light weight. I only wish it had a loop so I could attach it to my belt or wrist or something while hanging on the side of a tower. I did make a small leather bag for it so I could attach it to myself. It is light enought that you can hang it from the end of a short coax jumper attached to the coax connector on the antenna and let it hang there while you work on the antenna. I have checked it and it's accurate enought to get by with on HF. I have never carried a bird meter up a tower and checked the swr readings between them. I don't really like the idea of someone transmitting while up a tower below an HF antenna even at a low power! I really wish I had the more expencive "do it all" meter they have now for HF but as I did not get one on 25 DEC I think I will order one now.

Sent via Deja.com
http://www.deja.com/

905. Re: RE: CREUTZFELDT-JAKOB DISEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:25:21 UTC
From: richardharrison@webtv.net
Message-ID: <23720-3A5A7691-34@storefull-115.iap.bryant.webtv.net>
Source record: 172485

Enrique Molina posted a curious assortment of messages of questionable connection with either radio or antennas.

Enrique apparently accuses John Woodgate of "sci.electronics.design" fame with casting aspersions on Spaniards.

A rigmarole from various authors is attached which ends with a statement from Roberto in Portuguese which says:
I agree with you as to the racism encountered by Latin-Americans when I travel to the United Kingdom and to the United States.

Hey! We get that in Europe and Latin America too. Let`s live and let live.

Best regards, Richard Harrison, KB5WZI

906. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:26:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <93dss6ijn1@slb0.atl.mindspring.net>
Source record: 172479

Reg, Cec:

I support Cec's assesment, and I believe that Reg is being too cynical here.

I believe that Jerry Sevick did a very thorough job of measuring and documenting the effects of varying of numbers of radials, and their lengths, on short ground mounted verticals including the "relative" effects of ground conductivity.

I believe that he did this at HF and in the second half of the twentieth century. At least that's what he said he did and the publication dates are between 1950 and 2000! So Reg, what's your point?

Jerry is definitely not a lightweight when it comes to tests and measurements. He documented his measurements very well.

Reg, what are your objection to Jerry's results? What are your concerns?

-Peter K1PO, Cary NC

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A5A6B47.46EB0D0E@IEEE.org...
> Reg Edwards wrote:
> > Then we have ONE radio amateur who, in the 2nd half of the century,
> > makes a few measurements at HF with different numbers and lengths of
> > radial. And even HE doesn't bother to measure ground conductivity
> > either.
>
> Yes he did, Reg. Not only once, but every day for three months.
> It's Figure III-2 on page 105 of "Building and Using Baluns and
> Ununs". At the end of December, his earth's conductivity was about
> half of what it was at the beginning of October.
> --
> http://www.mindspring.com/~w6rca

907. Re: Need paperwork for Cushcraft R5 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:26:29 UTC
From: scott_evans50@hotmail.com
Message-ID: <93dssioql1@nnrp1.deja.com>
Source record: 172483

In article <93bf1snjn1@nnrp1.deja.com>,
kb9olm@hotmail.com wrote:
> Attention owners of Cushcraft R5 antennas:
>
> Please help me. I just bought a used Cushcraft R5 antenna with no
> paperwork.
> Please let me know if you can send me (or fax) a copy of the
paperwork.
> Please reply directly to Vlad at: kb9olm@hotmail.com
>
> Thank you,
> vlad
> kb9olm
>
> Sent via Deja.com

If you have trouble getting it to operate properly or find the low SWR points on some or all band are outside the amateur bands you will need to remove the heat shrink covering the trap inductors. Water collects in them and simply wont go away untill you remove the heat shrink. I did this to an R-5 I had and it work great after that. Don't worry about replacing the heat shrink covering the trap inductors. I left my R-5 up for years without anymore problems without the inductors covered.
> http://www.deja.com/
>

Sent via Deja.com
http://www.deja.com/

908. Re: Best Discone Antennna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:35:10 UTC
From: yardleyite@aol.com
Message-ID: <20010108213510.00639.00000757@ng-cu1.aol.com>
Source record: 172482

Andy,
You want any discone that covers from 50 MHZ to 1300 MHZ. In other words; any one that has a vertical radiating element at a 90 degree angle to the main horizontal radials. It's really nothing more than a short loaded whip but it will increase your tx pleasure. Don't think of putting more than 100 watts into it though or you may burn out the loading coil.
73 de Joe Cro N3IBX

909. Re: Telrex 40M beam restoration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:35:38 UTC
From: mike.luther@ziplog.com
Message-ID: <t5ku7qn7ge56bc@corp.supernews.com>
Source record: 172481

In <01c079a3$ca493780$d88dadcf@chris>, "Chris Kepus" <ckepus@no.spam.calweb.com> writes:

>I am in the process of restoring a Telrex 40M329 beam. I would like to
>contact anyone with experience with this fine antenna.
>
>Also am interested if anyone has tried using this on 20M by altering the
>feed system and using an antenna tuner?
>
>Thanks es 73,
>Chris
>W7JPG

Chris, I don't know the call(s), but Max Busek (Now deceased) had two sons, also hams, who were involved with him at Madison Electronics in Houston, Texas. This was quite a number of years ago. It's my recall that Max had one of these TelRex antennas. I seem to recall actually seeing it at the family place out in the west side of Houston just before or after Max died. If you have access to a call book lookup program, you might look up that last name and see it it matches anyone still in Houston. Memory says that one son was named Don Busek.

The family crew did a substantial amount of work with TelRex and the product line all those years ago. I bet Don Busek can give you a lot of data on the antenna. Memory, very foggy, says that one of the weak points in the beam was an insulation problem somewhere in the system which they had to overcome. The family was darned resourceful and machine shop work and so on was easily in their style of approaching problems if they needed it.

Just a lead, you can run it down if you like.

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

910. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:45:10 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A5A7B36.318321DF@haertig.com>
Source record: 172484

And if the far end isn't terminated, it's not a traveling wave antenna.

The defining characteristic of a traveling wave antenna is that there
are no standing waves (reflections) on the antenna. The only way to
achieve this is to terminate the far end of the antenna, or have an
antenna of sufficient length that an appreciable portion of the power on
the antenna radiates before it reaches the far end.

If the far end is terminated, but the antenna isn't several wavelengths
long, most of your power will be wasted in the termination.

Gray

L&M wrote:
>
> the only TWA i know off is about 25 meters long and is available
> here in Australia for 300 aussie dollars
> its made off wire and the VSWR does not go above 2.0 from 3.0-30MHz
> i have a copy off the magazine piece in front off me so if you want me
> to post it let me know
>
> 'Doc wrote:
> >
> > Greg,
> > I haven't heard about this 'CC CTW' antenna, so not
> > knowing anything about it. All I can tell you is that
> > it sounds 'too good to be true'. A traveling wave antenna
> > is usually one that is quite long in relation to the
> > particular frequency it's used on. The antenna you
> > speak of doesn't sound like it's long enough to be a
> > travelling wave antenna anywhere. If you find any
> > information about it, I'd like to see what it is.
> > 'Doc

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

911. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 02:55:46 UTC
From: richardharrison@webtv.net
Message-ID: <23719-3A5A7DB2-62@storefull-115.iap.bryant.webtv.net>
Source record: 172486

Cecil, W6RCA wrote:
"At the end of December, his earth`s conductivity was about half of what
it was at the beginning of October."

Did he mention ground frost?

Best regards, Richard Harrison, KB5WZI

912. SOLVED: Re: Question: Vertical noise lines on NOAA APT image

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 03:31:50 UTC
From: Pervert_Extraordinaire <valued_customer1@att.com>
Message-ID: <3A5A8627.F5AC637@att.com>
Source record: 172487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

<Vertical lines on NOAA images thread snipped>

I confirmed the noise was coming from remote source.

I never determined exactly where.... but the problem
was "solved" via a Hamtronix Preselector installed just
prior to the input of the weather receiver. This is a filter
designed to reduce out of band interference from APT freqs.
The noise is now only evident at very low (weak) elevations.

Thanks to all (speakerman, marsgal, jim, richard, etc)

Now I need a bigger hard drive to store the .wav's, .bmp's

;-ï¿½

913. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 03:43:06 UTC
From: L&M <poppy@nw.com.au>
Message-ID: <3A5A88CA.5B31CC31@nw.com.au>
Source record: 172488

for more details on the twa antennas
go here
http://www.tepng.com/bushcomm.htm
some info i hope
i just rang grey and he has not heard off a vertical TWA which really
works
the SWE100 is 240.45 australian dollars
the BBA100 is 450.45 australian dollars

regards
mc

Gray Frierson Haertig wrote:
>
> And if the far end isn't terminated, it's not a traveling wave antenna.
>
> The defining characteristic of a traveling wave antenna is that there
> are no standing waves (reflections) on the antenna. The only way to
> achieve this is to terminate the far end of the antenna, or have an
> antenna of sufficient length that an appreciable portion of the power on
> the antenna radiates before it reaches the far end.
>
> If the far end is terminated, but the antenna isn't several wavelengths
> long, most of your power will be wasted in the termination.
>
> Gray
>
> L&M wrote:
> >
> > the only TWA i know off is about 25 meters long and is available
> > here in Australia for 300 aussie dollars
> > its made off wire and the VSWR does not go above 2.0 from 3.0-30MHz
> > i have a copy off the magazine piece in front off me so if you want me
> > to post it let me know
> >
> > 'Doc wrote:
> > >
> > > Greg,
> > > I haven't heard about this 'CC CTW' antenna, so not
> > > knowing anything about it. All I can tell you is that
> > > it sounds 'too good to be true'. A traveling wave antenna
> > > is usually one that is quite long in relation to the
> > > particular frequency it's used on. The antenna you
> > > speak of doesn't sound like it's long enough to be a
> > > travelling wave antenna anywhere. If you find any

> > > information about it, I'd like to see what it is.
> > > 'Doc
>
> --
> Telecommunications Engineering
> Gray Frierson Haertig & Assoc.
> 820 North River Street, Suite 100
> Portland, Oregon 97227
> 503-282-2989
> 503-282-3181 FAX
> gfh@haertig.com

914. PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 03:59:55 UTC
From: kr2v@aol.com
Message-ID: <20010108225955.29484.00000915@ng-cs1.aol.com>
Source record: 172489

Greetings:

I'm looking for design ideas to home-brew dipole center insulators. I know there's not much to it, just looking for some ideas (PVC parts, etc.) that work well together.

Thanks,
Joe - KR2V

915. Re: Must radials be straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 04:12:37 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5A8FB5.20D6D677@IEEE.org>
Source record: 172490

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "At the end of December, his earth`s conductivity was about half of what
> it was at the beginning of October."
>
> Did he mention ground frost?

Nope, he just said, "It is interesting to note ..." and also
talked about the short term effects of rain.
--
http://www.mindspring.com/~w6rca

916. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 04:35:22 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5A950A.7F59@wt.net>
Source record: 172491

Kr2v wrote:
>
> Greetings:
>
> I'm looking for design ideas to home-brew dipole center insulators. I know
> there's not much to it, just looking for some ideas (PVC parts, etc.) that work
> well together.
>
> Thanks,
> Joe - KR2V

Myself, I usually use a strip of thick circuit board material with all
the copper peeled off. I drill a hole on the center for a SO-239 coax
connector, and I drill a hole in each end to hook the wires to. The
antenna wires are run through the holes and looped back into a knot.
Then I run a wire from the coax connectors to each leg of the dipole.
This way there is no stress on the coax connector. Solder all the
connections. Also I drill a hole above the coax connector to hang from
whatever support. With this type of insulator, I use a coax choke for a
balun. There are many other ways, but I like using the so-239 so I can
plug whatever coax I want. MK
-
http://web.wt.net/~nm5k

917. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 04:37:52 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5A95A0.EBF43BAB@oio.net>
Source record: 172492

Kr2v wrote:
>
> Greetings:
>
> I'm looking for design ideas to home-brew dipole center insulators. I know
> there's not much to it, just looking for some ideas (PVC parts, etc.) that work
> well together.
>
> Thanks,
> Joe - KR2V

Joe,
A sheet of plexiglas, few SO-239's, 1/2" hole drill bit
and a skill saw = thousands of center insulators.
'Doc
PS - (well, hundreds anyway...)

918. Re: Autek Research impedance meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 04:44:53 UTC
From: rb <rbigg@pcola.gulf.net>
Message-ID: <t5l5s0bsag6379@corp.supernews.com>
Source record: 172493

I have the small hf RF-1 and like it very much. The only downside to it, and that is only a nuisance, is that tuning precise freqs in the digital window is "jumpy". but, you can readily get close enough, if not right on the mark.

919. Re: Travelling wave HF vertical help ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 04:54:17 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A5A9979.BD7F5A2C@haertig.com>
Source record: 172494

The Bushcomm antennas do appear to have a load, which probably qualifies
them as traveling wave antennas. But they are not terribly long
electrically, so the load is going to waste most of your transmitter
power. But the match will be good!

If efficiency isn't a major concern, you could probably make a
satisfactory vertical TWA by suspending a piece of coax vertically.
Feed the inner conductor against a ground system. At the top tie the
inner to the outer. At the bottom tie the outer to ground through a resistor.

Gray

L&M wrote:
>
> for more details on the twa antennas
> go here
> http://www.tepng.com/bushcomm.htm
> some info i hope
> i just rang grey and he has not heard off a vertical TWA which really
> works
> the SWE100 is 240.45 australian dollars
> the BBA100 is 450.45 australian dollars
>
> regards
> mc
>
> Gray Frierson Haertig wrote:
> >
> > And if the far end isn't terminated, it's not a traveling wave antenna.
> >
> > The defining characteristic of a traveling wave antenna is that there
> > are no standing waves (reflections) on the antenna. The only way to
> > achieve this is to terminate the far end of the antenna, or have an
> > antenna of sufficient length that an appreciable portion of the power on
> > the antenna radiates before it reaches the far end.
> >
> > If the far end is terminated, but the antenna isn't several wavelengths
> > long, most of your power will be wasted in the termination.
> >
> > Gray
> >
> > L&M wrote:
> > >
> > > the only TWA i know off is about 25 meters long and is available
> > > here in Australia for 300 aussie dollars

> > > its made off wire and the VSWR does not go above 2.0 from 3.0-30MHz
> > > i have a copy off the magazine piece in front off me so if you want me
> > > to post it let me know
> > >
> > > 'Doc wrote:
> > > >
> > > > Greg,
> > > > I haven't heard about this 'CC CTW' antenna, so not
> > > > knowing anything about it. All I can tell you is that
> > > > it sounds 'too good to be true'. A traveling wave antenna
> > > > is usually one that is quite long in relation to the
> > > > particular frequency it's used on. The antenna you
> > > > speak of doesn't sound like it's long enough to be a
> > > > travelling wave antenna anywhere. If you find any
> > > > information about it, I'd like to see what it is.
> > > > 'Doc
> > >
> > --
> > Telecommunications Engineering
> > Gray Frierson Haertig & Assoc.
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--
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Portland, Oregon 97227
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503-282-3181 FAX
gfh@haertig.com

920. Re: Telrex 40M beam restoration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 05:14:29 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <U6x66.21795$HE2.5331237@news1.onlynews.com>
Source record: 172495

<mike.luther@ziplog.com> wrote in message
news:t5ku7qn7ge56bc@corp.supernews.com...
> In <01c079a3$ca493780$d88dadcf@chris>, "Chris Kepus"
<ckepus@no.spam.calweb.com> writes:
>
> >I am in the process of restoring a Telrex 40M329 beam. I would like to
> >contact anyone with experience with this fine antenna.
> >
> >Also am interested if anyone has tried using this on 20M by altering the
> >feed system and using an antenna tuner?
> >
> >Thanks es 73,
> >Chris
> >W7JPG

Chris, I had one at my contest station for 10 years between 1976 and 1986. At 150 feet it survived several near misses with FL hurricanes. I gave the antenna to W3AU when I took the station down and I believe he still has it in use. I had the blueprints for it until only a few months ago when I finally discarded them. Believe that Ed may still have a copy.

It worked with zero problems for the 10 years, no arc-overs with some pretty good sized amplifiers through rain and shine. I never modified anything on it, had other antennas for other bands. Took the skill out of working the world on 40 meters.

W4ZCB

921. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 05:28:43 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <fkx66.103025$A06.3560669@news1.frmt1.sfba.home.com>
Source record: 172496

I haven't tested radials over salt water, but I have tested them over my 230 foot diameter ground screen. The ground screen has wires running north-south and east-west on 3 foot centers, with all the crossovers soldered. On 40 meters, I did ground wave far field signal strength tests with a vertical and found that was no difference in signal strength between a few elevated radials and 120 half wave radials whose ends were soldered into the ground screen. The number of radials did however affect the driving point impedance. As W8JI indicated in another thread, driving point impedance is very misleading as an indicator of antenna performance.

I believe N6BT when he says you only need 2 or 4 elevated radials over salt water and you're all set.

Rick Karlquist N6RK

Yuri Blanarovich <k3bu@aol.com> wrote in message news:20010108091731.22907.00000435@ng-mn1.aol.com...
> Talking about radials.
> Has anyone done some real life tests and comparison between few radials (2,4,8)
> and many (60, 120) when over salt water or marsh (or soaked salty beach)?
> The point of question is: does the salt water ground (close to perfect) reduce
> the losses in return currents to the point where few radials are sufficient?
> 6Y2A - Team Vertical (and mine) experiences with few elevated radials show
> excellent performance, but could it be (worthwhile) improvement by laying many
> radials (elevated or on ground) over salt water "ground"?
> Practical experiences please.
>
> Yuri, K3BU

922. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 05:33:17 UTC
From: n2ey@aol.com
Message-ID: <20010109003317.07873.00000112@nso-mo.aol.com>
Source record: 172497

In article <20010103190154.12249.00001243@ng-cr1.aol.com>, w1rfi@aol.com (W1RFI) writes:

>>From: n2ey@aol.com
>
>>I am breathing easier already. Whew! I was afraid somebody would want
>>the basing diagram for a Type 80, and I'd be facing a moral, ethical
>>and legal crisis.
>
>Well, maybe I can put an end to your crisis. How about I put up the old
>Handbook tube data and tables on the ARRL TIS web pages
>(http://www.arrl.org/tis) and you can then just link to them? :-)
>

Works for me! NJ7P beat you to it, though.

Used RCA tube manuals are still pretty reasonable. One guy scanned his RC-10 (the first real RCA receiving tube manual) and you can see it at:

http://www.nmr.mgh.harvard.edu/~reese/RC10/

--

You probably already know this, but Loren Windom, 8GZ-W8GZ, inventor of the antenna that bears his name (see the article "Ethereal Adornments" in QST, about 1927), was a QRP buff. Worked Australia with but a few milliwatts back in the twenties.

73 de Jim, N2EY

923. Re: What is NOAA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 05:35:09 UTC
From: Dan Yemiola <Dyemiola@LexComInc.Net>
Message-ID: <3A5AA30D.D8EF85B2@LexComInc.Net>
Source record: 172498

N ational O ceanic and A tmospheric A dministration.
Its acronym is a pun which makes it a pretty good nmemonic device
for the agency's function.
NOAA is pronounced the same way as the name of the NOAH in the bible
story who warned the people about the coming 40 days and 40 nights of
rain and flood.
NOAA's task is to predict the weather and to warn people about impending
severe weather.

TruckDrivingMan wrote:

924. RE: CREUTZFELDT-JAKOB DISEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 07:15:02 UTC
From: .
Message-ID: <3a5a2451@news.arrakis.es>
Source record: 172558
Cross-posted to: rec.radio.amateur.antenna,microsoft.public.visio.general,alt.music.4-track,comp.sys.cbm,sci.lang.translation

The abuse report attached below shows the net-abuse performed by the user
Phil
Dragoman (Road Runner).
--
A Spanish Citizen
SPAIN

----- Mensaje original -----
De: RAC
Para: abuse@rr.com
CC: security@rr.com ; busdevel@va.rr.com ; advertising@va.rr.com ;
bussol@va.rr.com ; customercare@va.rr.com ; postmaster@mediaone.net ;
abuse@mediaone.net
Enviado: martes 2 de enero de 2001 12:21
Asunto: Net-abuse from your user PHIL DRAGOMAN

##
For the Attention of the Net-Abuse Service.
##

The user Phil Dragoman (Road Runner) is commiting net-abuse again and
infringing the Acceptable Use Policy for AT&T Road Runner Newsgroups.

He keeps sending libellous, sexual, offensive and racist Usenet posts.

Please find enclosed his last offensive posts (these posts are about
fucking the mother and father of Spanish citizens, and he use to employ
terms like: whore mother, asshole, bitch, fuck, etc. This is a sample of his
Usenet post using Road Runner:

Phil Dragoman <phil.dragoman@literally.com> escribi&#65533; en el mensaje de
noticias 6kv26.21303$1M.4882122@typhoon.ne.mediaone.net...
>Vete tomar por el culo, tu hijo de la chingada. Chupa la polla de tu
> padre. Vete darle el beso negro a tu madre, t&#65533; mula. T&#65533; cobarde
> sin pelotas. Perro sin honor. Mr. Nobody.
>
> Phil
>

The translation into English is:
"Put it up your rear end, you son of an indecent woman. Perform fellatio
with your father. Lick your mother's anus, you she-mule. You are a coward
without testicles. Dishonourable dog."

Another post attached below says:

Phil Dragoman wrote: CHINGA TU PUTA MADRE
(Translation into English: FUCK YOUR WHORE MOTHER)

Yet another post attached below against a Spanish citizen below says:

>Phil Dragoman wrote: "Ahora puedes hacerse puta tu mismo. Viene de
familia, &#65533;no?"

Translation into English: You can become a whore now, since all the women of
your family are whores.

##
I have informed of this NET-ABUSE
against Spanish Citizens to the Spanish Government
and to the Spanish Authorities.
##

Please, take the proper action against this deranged user, he use to call
himself a "former politician" in his posts to Usenet.

Regards,

RAC
SPAIN

==========
Phil Dragoman <phil.dragoman@literally.com> escribi&#65533; en el mensaje de
noticias 6kv26.21303$1M.4882122@typhoon.ne.mediaone.net...

>Vete tomar por el culo, tu hijo de la chingada. Chupa la polla de tu
> padre. Vete darle el beso negro a tu madre, t&#65533; mula. T&#65533; cobarde
> sin pelotas. Perro sin honor. Mr. Nobody.
>
> Phil
>
==========
From: "Phil Dragoman" <phil.dragoman@literally.com>
Newsgroups: sci.lang.translation
References:
<3a3e8f01_3@news.arrakis.es><91mju5$67l$3@newsflood.tokyo.att.ne.jp>
<CzalaFABFxP6EwbZ@jmwa.demon.co.uk> <3a3f67ed_4@news.arrakis.es>
<L7306.639$4g4.6517@tengri.easynet.fr> <91qlnq$68r$1@nnrp1.deja.com>
<3a4103f0_3@news.arrakis.es>
Subject: Re: Espa&#65533;a es estrictamente la PROVINCIA de la imprevisible
INQUISICION-1
Lines: 32
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8bit
X-Newsreader: Microsoft Outlook Express 4.72.3110.1
X-MimeOLE: Produced By Microsoft MimeOLE V4.72.3110.3
Message-ID: <Qao06.11766$1M.3122828@typhoon.ne.mediaone.net>

Date: Thu, 21 Dec 2000 14:09:52 GMT
NNTP-Posting-Host: 24.218.180.117
X-Complaints-To: abuse@mediaone.net
X-Trace: typhoon.ne.mediaone.net 977407792 24.218.180.117 (Thu, 21 Dec 2000
09:09:52 EST)
NNTP-Posting-Date: Thu, 21 Dec 2000 09:09:52 EST
Organization: Road Runner
Path:
caladan.arrakis.es!news.bt.es!newsfeed.bt.es!btnet-peer!btnet!news.maxwell.s
yr.edu!newsfeed.cwix.com!chnws02.mediaone.net!chnws05.ne.mediaone.net!24.91.
0.34!typhoon.ne.mediaone.net.POSTED!not-for-mail
Xref: caladan.arrakis.es sci.lang.translation:60663

Marta Oribe wrote in message <3a4103f0_3@news.arrakis.es>...
>Phil Dragoman te llamas ¿no? ¿Dragoman es un apodo?
>Perdona que te diga, pero tu mensaje en ingl¿s me ha costado bastante
>entenderlo, sobre todo los insultos, ¿no ser¿s otro de esos racistas de los
>que se queja RAC?, este grupo es muy tranquilo y la pelea ya parec¿a que
>hab¿a terminado, ahora apareces tu insultando y diciendo todo tipo de
>estupideces a un espa¿ol; por favor, para este tipo de cosas es mejor que
no
>vuelvas a este grupo.
>

Oye, Se¿orita Ramiro alias Se¿or Marta,

¿Ya eres una mujer? ¿La cirug¿a era exitosa? ¿Bi¿n hecho!
Ahora puedes hacerse puta tu mismo. Viene de familia, ¿no?
Aqui tienes un nombre mejor para ti, Ramera Almeja Culera.
Di me, ¿d¿nde guardas tus cojones, en el bote de mayonesa?

Ramiro quijote marta fernando no user - ¿personalidades multiples?
o mejor dicho, un sm¿rg¿sbord esquizofr¿nico.

Hasta luego, Ramona, o cualquiera personalidad que eres hoy.

Phil

==========

From: Phil Dragoman <phil.dragoman@literally.com>
Newsgroups: sci.lang.translation
Subject: RE: qualifiziert
Date: Fri, 15 Dec 2000 21:19:04 GMT
Organization: Deja.com
Lines: 19
Message-ID: <91e1s0jog1@nnrp1.deja.com>
References: <3a3a56f5.0@d2o313.teliauk.com> <91do9ranr1@nnrp1.deja.com>
<3a3a7c23_3@news.arrakis.es>
NNTP-Posting-Host: 24.218.180.117
X-Article-Creation-Date: Fri Dec 15 21:19:04 2000 GMT
X-Http-User-Agent: Mozilla/4.73 [en] (Win98; U)

X-Http-Proxy: 1.0 x51.deja.com:80 (Squid/1.1.22) for client 24.218.180.117
X-MyDeja-Info: XMYDJUIDphil_dragoman
Path:
caladan.arrakis.es!news.bt.es!newsfeed.bt.es!btnet-peer!btnet!news.maxwell.s
yr.edu!nntp2.deja.com!nnrp1.deja.com!not-for-mail
Xref: caladan.arrakis.es sci.lang.translation:60229

RAC wrote:
>
> En Espa&#65533;ol decimos antes estas situaciones:
>
> NO TENEIS NI PUTA IDEA.
>

En Ingl&#65533;s decimos antes los capullos como t&#65533;

CHINGA TU PUTA MADRE

Phil

_____
Get free email and a permanent address at http://www.netaddress.com/?N=1

--
Posted from nwcst282.netaddress.usa.net [204.68.23.27]
via Mailgate.ORG Server - http://www.Mailgate.ORG
Roberto Ferreira Reis <arcoiris@latinmail.com> escribi&#65533; en el mensaje de
noticias 3a59a535@news.arrakis.es...
>
> Fernando Hinojosa <nando@nospam.telecar.org> escribi&#65533; en el mensaje de
> noticias 3a599ced$1@news.arrakis.es...
> >
> > Luis Cotado <cotado@tfr.net> escribi&#65533; en el mensaje de noticias
> > 3a5999af@news.arrakis.es...
> > >
> > > No User <no.user@anon.xg.nu> escribi&#65533; en el mensaje de noticias
> > > 1c91ccb1c91af2b7ef5c8bb2c4b5c299@anon.xg.nu...
> > > > **********
> > > > WARNING: MAD PIG DISEASE:
> > > > JOHN WOODGATE
> > > > jmwa@jmwa.demon.co.uk
> > > > from JMWA & Associates (Essex, UK)
> > > > **********
> > > > This is a report alerting doctors to the fact that JOHN GATE OF WOOD
> is
> > a
> > > > victim of CREUTZFELDT-JAKOB DISEASE presented with symptoms mistaken
as
> > > > psychiatric. He really thinks that Spain is the *Province of the Saint
> > > > Inquisition* and wants *to execute all the Spanish translators*
because

> > the
> > > *Spanish temperature is too high for their Spanish silicon brains*.
> > > > CJ Disease, like ALS, is a relentless, presently incurable,
> > deterioration
> > > of
> > > > brain tissue. It is a subacute (weeks, months....) dementia leading
to
> > > > death. EEG findings may be absent in the early stages, but at
autopsy
> > > there is
> > > > always something to see: the gray matter of the temporal lobes and
> > > > diencephalon especially, - parts of the anatomical substrate for
> memory
> > > and
> > > > emotion - are preferentially damaged. These are microscopic views of
> > gray
> > > matter in CJ disease with the notorious
> > > >
> > > >
> > > >
> > > >
> > > > ---
> > > > This message did not originate from the Sender address above.
> > > > It was posted with the use of anonymizing software at
> > > > http://anon.xg.nu
> > > > ---
> > > >
> > > >
> > >
> > > This information is absolutely true, further information in
www.deja.com
> > > (sci.lang.translation) using power search.
> > >
> > > --
> > > Luis Cotado
> > > Espa&#65533;a
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> >
> > Seconded!
> >
> > Fernando
> > - Madrid. Espa&#65533;a -
> >

> >
> >
>
> Eu concordo com voc&#65533;, o racism de encontro aos povos latino-americanos
> quando eu viajo ao Reino Unido e aos estados unidos.
>
> Roberto
>
>
>
>

925. RE: CREUTZFELDT-JAKOB DISEASE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 08:49:56 UTC
From: Enrique Molina <enrique@ctv.es>
Message-ID: <3a5a27f5@news.arrakis.es>
Source record: 172562
Cross-posted to: rec.radio.amateur.antenna,microsoft.public.visio.general,alt.music.4-track,comp.sys.cbm,sci.lang.translation

No User <no.user@anon.xg.nu> escribi&#65533; en el mensaje de noticias
18d084e173fc93c5adc6a1cf10571e2b@anon.xg.nu...
> John Woodgate (jmwa@jmwa.demon.co.uk) from JMWA & Associates called most
of the Spanish ladies by name either witches or prostitutes, and likened
many of the men by name to the most despicable characters in history.
> John Woodgate (jmwa@jmwa.demon.co.uk) from JMWA & Associates is a mental
patient who wrote deranged phrases like:
> .when I, [Spanisn name][First Spanish Surname][Second Spanish Surname], go
out to the grave of my sainted
> father, [Father's name][1st father's surname][2nd father's surname](who
married his mother, that's why he has the same matronymic as I), dig him up
and have my way with his rotting corpse.
>

Roberto Ferreira Reis <arcoiris@latinmail.com> escribi&#65533; en el mensaje de
noticias 3a59a535@news.arrakis.es...
>
> Fernando Hinojosa <nando@nospam.telecar.org> escribi&#65533; en el mensaje de
> noticias 3a599ced$1@news.arrakis.es...
> >
> > Luis Cotado <cotado@tfr.net> escribi&#65533; en el mensaje de noticias
> > 3a5999af@news.arrakis.es...
> > >
> > > No User <no.user@anon.xg.nu> escribi&#65533; en el mensaje de noticias
> > > 1c91ccb1c91af2b7ef5c8bb2c4b5c299@anon.xg.nu...
> > > > **********
> > > > WARNING: MAD PIG DISEASE:
> > > > JOHN WOODGATE
> > > > jmwa@jmwa.demon.co.uk
> > > > from JMWA & Associates (Essex, UK)
> > > > **********
> > > > This is a report alerting doctors to the fact that JOHN GATE OF WOOD
> is
> > a
> > > victim of CREUTZFELDT-JAKOB DISEASE presented with symptoms mistaken
as
> > > psychiatric. He really thinks that Spain is the *Province of the Saint
> > > Inquisition* and wants *to execute all the Spanish translators*
because
> > the
> > > *Spanish temperature is too high for their Spanish silicon brains*.
> > > > CJ Disease, like ALS, is a relentless, presently incurable,
> > deterioration

> > > of
> > > > brain tissue. It is a subacute (weeks, months....) dementia leading
to
> > > > death. EEG findings may be absent in the early stages, but at
autopsy
> > > there is
> > > > always something to see: the gray matter of the temporal lobes and
> > > > diencephalon especially, - parts of the anatomical substrate for
> memory
> > > and
> > > > emotion - are preferentially damaged. These are microscopic views of
> > gray
> > > matter in CJ disease with the notorious
> > > >
> > > >
> > > >
> > > >
> > > > ---
> > > > This message did not originate from the Sender address above.
> > > > It was posted with the use of anonymizing software at
> > > > http://anon.xg.nu
> > > > ---
> > > >
> > > >
> > >
> > > This information is absolutely true, further information in
www.deja.com
> > > (sci.lang.translation) using power search.
> > >
> > > --
> > > Luis Cotado
> > > Espa&#65533;a
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> > Seconded!
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> > Fernando
> > - Madrid. Espa&#65533;a -
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> >
>
> Eu concordo com voc&#65533;, o racism de encontro aos povos latino-americanos

> quando eu viajo ao Reino Unido e aos estados unidos.
>
> Roberto
>
>
>
>

926. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 12:03:42 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93euln$qg2$1@neptunium.btinternet.com>
Source record: 172499

Richard Karlquist wrote
> I believe N6BT when he says you only need 2 or 4 elevated
> radials over salt water
==========
When over salt water NO radials are necessary. All that's needed is a small
ground plate immersed just under the surface.

Reg

927. Radial Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 13:05:21 UTC
From: J Titcomb <kimoloka@hawaii.rr.com>
Message-ID: <l0E66.61167$Z36.434546@typhoon.hawaii.rr.com>
Source record: 172500

This is going to sound dumb, but here goes anyway. Are the radials supposed to be connected to the base of a vertical antenna, or do they just radiate out from around the base, but are not actually physically connected? Its hard to tell from a schematic diagram. Sometimes it looks as if they are not actually connected to the base of the antenna. If the radial system were to be connected to the base of the vertical, and if one were to make a homebrew vertical antenna fed with coax, would one solder the shield to the radial system, and the center connector to the vertical portion of the antenna? That seems like a short to me.

928. Re: SOFTWARE BETA TESTERS URGENTLY REQUIRED

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 13:23:20 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93f3b6$pl6$1@plutonium.btinternet.com>
Source record: 172501
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

The advertiser spammed -
>Please ignore this mail and/or accept our apologies if it is not >relevant
to your newsgroup
==========
Do just that ! There's a sucker born every minute.

929. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 13:37:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93f4jd$o76$1@uranium.btinternet.com>
Source record: 172502

Rick wrote -
> As W8JI indicated in another thread, driving point
> impedance is very misleading as an indicator of antenna performance.
==========
I disagree.

Measurement of driving point impedance of a vertical antenna is the most
informative indication of efficiency and performance which can be made.

Do you know of any other on-site measurements which will tell you more ?

Reg, G4FGQ

930. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 15:10:54 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <93f9ld$oj0$1@slb3.atl.mindspring.net>
Source record: 172503

Reg Edwards wrote in message <93f4jd$o76$1@uranium.btinternet.com>...
>Rick wrote -
>> As W8JI indicated in another thread, driving point
>> impedance is very misleading as an indicator of antenna performance.
>==========
>I disagree.
>
>Measurement of driving point impedance of a vertical antenna is the most
>informative indication of efficiency and performance which can be made.
>
>Do you know of any other on-site measurements which will tell you more ?
>----
>Reg, G4FGQ
>
>

Reg -- Think about that overnight and let us know if you have changed your view in the morning.

Dean Craft -- W4IHK

931. Re: Radial Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 15:23:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5B2CFA.2C9D9736@oio.net>
Source record: 172504

J Titcomb wrote:
>
> This is going to sound dumb, but here goes anyway. Are the radials supposed
> to be connected to the base of a vertical antenna, or do they just radiate
> out from around the base, but are not actually physically connected? Its
> hard to tell from a schematic diagram. Sometimes it looks as if they are not
> actually connected to the base of the antenna. If the radial system were to
> be connected to the base of the vertical, and if one were to make a homebrew
> vertical antenna fed with coax, would one solder the shield to the radial
> system, and the center connector to the vertical portion of the antenna?
> That seems like a short to me.

"J",
The vertical part of the antenna is connected to the
center conductor of the coax, the radials to the braid.
The radials are physically at the 'base' of the antenna,
but insulated from it.
'Doc

932. Re: Radial Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 15:28:04 UTC
From: Kevin Alfred Strom <kevin.strom@innocent.com>
Message-ID: <3A5B2E03.24A8B653@innocent.com>
Source record: 172505
Cross-posted to: alt.radio.amateur,rec.radio.shortwave,rec.radio.amateur.antenna

J Titcomb wrote:
>
> This is going to sound dumb, but here goes anyway. Are the radials supposed
> to be connected to the base of a vertical antenna, or do they just radiate
> out from around the base, but are not actually physically connected? Its
> hard to tell from a schematic diagram. Sometimes it looks as if they are not
> actually connected to the base of the antenna. If the radial system were to
> be connected to the base of the vertical, and if one were to make a homebrew
> vertical antenna fed with coax, would one solder the shield to the radial
> system, and the center connector to the vertical portion of the antenna?
> That seems like a short to me.

In a normal series-fed vertical, the most common variety, the base
of the antenna is insulated from the ground system. The radials are
connected to the shield of the coaxial feedline, and (assuming that
direct coax feed is used) the center conductor of the feedline is
connected to the lowest point of the vertical element.

There are other methods, such as slant-wire shunt feed and the
folded unipole (in which the element is grounded and fed at an
elevated tap point), and often antenna couplers are used at the base
of the vertical, but what I have sketched out is the most basic
arrangement possible.

With all good wishes,

Kevin, WB4AIO.
--

Kevin Alfred Strom.

News, links, and pictures: http://www.kevin-strom.com

933. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 15:52:47 UTC
From: Kevin J Wren <ktwren@earthlink.net>
Message-ID: <3A5B342C.4C17551B@earthlink.net>
Source record: 172506

Gentlemen, there is an easy way that can settle this, both of you find a neutral arbitration body (like a computer lab in a university possibly).

Mr Lewallen, you send the alledged "pirated" file to the lab and Mr Cohen send the file of which you are copyright holder to the lab also.

Get the IT staff at the lab to make a bit for bit comparison on the files, if they are different there is no case (possible case for Mr Lewallen). If there are identical binary patterns in the file there is a posibility the file has been copied and modified(thus a case for Mr Cohen), any good it lab can do this.

Once the results have been verified you can both settle this away from the NG

easy uh!

Kev

PS. I'm as sick of this as the next man and I just wish we could get back to antennas :), Happy & Prosperous new year to you all.

Roy Lewallen wrote:

> Fractenna wrote:
> >
> > >All the deadlines have come and gone. The letter he or his alleged
> > >lawyer allegedly sent never arrived. (I'm franky disappointed. I was
> > >looking forward to it.)
> >
> > Mr. Lewallen--
> >
> > This is your last opportunity to remove the copyrighted MI2 file from your web
> > site. You have pirated this file, which belongs to me.
> >
> > As of today, any and all copyright violations will initiate legal actions.
> >
> > Nathan Cohen. Ph.D.
>
> Sorry, Chip. You've used up what remaining credibility you had. Too many
> "last opportunities" have come and gone, and your threatened legal
> actions are nothing but bluster.
>
> I do not have, nor have I ever had, any material on my web site for
> which you hold the copyright. If you did have the fortitude to sue me,
> I'd be glad to let you try to prove otherwise. But you don't.
>
> Roy Lewallen, W7EL

934. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 15:57:50 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <93fce5$g7f$1@slb0.atl.mindspring.net>
Source record: 172507

Reg:

Heh, heh... a 38 Ohm resistor would do as well by that test.

-Peter K1PO

"Dean Craft" <w4ihk@mindspring.com> wrote in message
news:93f9ld$oj0$1@slb3.atl.mindspring.net...
>
> Reg Edwards wrote in message <93f4jd$o76$1@uranium.btinternet.com>...
> >Rick wrote -
> >> As W8JI indicated in another thread, driving point
> >> impedance is very misleading as an indicator of antenna performance.
> >==========
> >I disagree.
> >
> >Measurement of driving point impedance of a vertical antenna is the most
> >informative indication of efficiency and performance which can be made.
> >
> >Do you know of any other on-site measurements which will tell you more ?
> >----
> >Reg, G4FGQ
> >
> >
>
> Reg -- Think about that overnight and let us know if you have changed
your
> view in the morning.
>
> Dean Craft -- W4IHK
>
>
>

935. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 16:09:25 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5B37B5.4E16@wt.net>
Source record: 172508

Richard Karlquist wrote:
>
> I haven't tested radials over salt water, but I have tested them over my 230
> foot diameter ground screen. The ground screen has wires running
> north-south and east-west on 3 foot centers, with all the crossovers
> soldered. On 40 meters, I did ground wave far field signal strength tests
> with a vertical and found that was no difference in signal strength between
> a few elevated radials and 120 half wave radials whose ends were soldered
> into the ground screen. The number of radials did however affect the
> driving point impedance. As W8JI indicated in another thread, driving point
> impedance is very misleading as an indicator of antenna performance.
>
> I believe N6BT when he says you only need 2 or 4 elevated radials over salt
> water and you're all set.
>
> Rick Karlquist N6RK

All this talk is starting to lead me to believe the "theoretical gains"
of adding radials may be over stated for areas of good ground, and
understated for areas of poor ground. Note that at Tom's QTH he saw
about a 10 db increase in comparing 2 radials to 60. He states many see
this increase, but some do not. So I assume the ones that do not are
sitting on fairly conductive ground. Being most are not on very good
ground, they are seeing the large differences. In my case I have an inv
L that I can compare to my low dipole. I only have 2 1/4 wl radials and
and about 5 short ones at this time. And to dx, my inv L is winning over
the dipole. Now, I know for a fact that the ground conditions here are
better than most. Probably better than 75% of the rest of the country.
So with my few radials and the decent ground I do seem to be working ok.
But more radials would still improve a good bit, I'm almost sure. The
reason I know this is I've compared a 40m 1/4 wl vertical ground mounted
with 32 radials, against the same antenna at 36 ft with 4 sloping
elevated radials. Both over the same "decent" ground. Being as 4 radials
at 1/4 wl up, are appx equal to 50-60 at ground level, I know about what
it should do. Pretty accurately. If the ground here was really good , as
in close to sea water cdx, I should have seen the same appx performance
from both antennas, or close anyway. The results? The elevated antenna
was way better than the ground mount version. Night-day difference
really. So that could show that even with my "fairly good" ground, I
still need radials for optimum performance. As you get near sea water, I
could see where 4 radials could do well. They would be one of the "other
guys" that Tom referred to that didn't see much difference. I'm myself
in that category a bit. I can run a inv-l on 160 with no radials and get
out. But I've never confused myself to thinking adding radials won't

help what I have. I'm not over sea water. MK
--
http://web.wt.net/~nm5k

936. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 17:16:18 UTC
From: n2ey@aol.com
Message-ID: <93fh0tuvt1@nnrp1.deja.com>
Source record: 172509

In article <3A58E5F6.6F44856D@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> > In other words, Cecil wants the rights and the freedoms but not the
economic
> > responsibilities.
>
> The government has the responsibility to provide me with protection
from
> foreign governments and criminals.

OK so far.

> That requires an armed forces, a police
> system, and a court system.

That's all? No executive branch beyond the armed forces and police? Who determines when the armed forces fight and who they fight? Who negotiates with foreign governments?

What about the legislative branch? You don't mention them at all. Who determines what the power of the police and courts are? Who makes the laws for the police and courts to enforce?

As is typical of simplistic political systems like libertarianism, the hard details are glossed over.

> Those are the rights I want and I'm willing to
> pay my fair share for those services.

Collected by whom? And who determines what your fair share is?

>What I object to, for instance, is
> using the money I paid in taxes to finance partial birth abortions.

I see. You want the rights but not the financial responsibilities. Just like I said. How many abortions are paid for with tax dollars?

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

937. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 17:57:54 UTC
From: rwclark@epicedge.com
Message-ID: <3aab4578.1461447440@news.seanet.com>
Source record: 172510

On Tue, 09 Jan 2001 15:52:47 GMT, Kevin J Wren <ktwren@earthlink.net>
wrote:

>Gentlemen, there is an easy way that can settle this, both of you find a neutral
>arbitration body (like a computer lab in a university possibly).
>
>Mr Lewallen, you send the alledged "pirated" file to the lab and Mr Cohen send the
>file of which you are copyright holder to the lab also.
>
>Get the IT staff at the lab to make a bit for bit comparison on the files, if they
>are different there is no case (possible case for Mr Lewallen). If there are
>identical binary patterns in the file there is a posibility the file has been copied
>and modified(thus a case for Mr Cohen), any good it lab can do this.
>
>Once the results have been verified you can both settle this away from the NG
>
>easy uh!
>
>Kev
>

Hi Kev,

Your solution is dead-on and certain - there is at least one problem.

Before Steve Best revealed his version of the MI2, there was NO
publically available copy circulating to be pirated. Hence there was
no way to infringe on a document not already public (it may have been
privately circulated, but absolutely no one has claimed that status
except myself and I have not circulated it).

Another problem lies in your method above. If those two copies were
submitted (from the presumed, "offended author" and from Steve Best)
and found to be identical, then it must be the "offended author" that
is the one who is in actual violation of copyright. Why do I say
this? Because I have copies of both and THEY DO NOT MATCH. With this
knowledge already apparent to the "offended author," it is more than
obvious that no comparison will be made. With no comparison made
(outside of my own), there can be no forward movement to resolution -
hence the lack of closure (and the continuous cat-calls from the
"offended author").

These issues were warned against by myself long ago, Kev. There will
be no further movement and given the nature of recent outrageous
claims by that "offended author" (this thread title is a glaring
example), there is unlikely to be any further discussion beyond

trotting out the old claims. You (we) will be treated to repetition, but no revelations.

One solution (that is, positive forward movement) will be coming from Steve Best in the form of his published study of his designs and the much weaker player MI2. Steve has in the past disclosed more than half a dozen designs that whipped the best offered from this "offended author;" giving good reason for offense (but only in the competition of scientific challenge). Having browsed the copy, it gives me every impression that there will be one more serious player in the discussion of fractals to replace the intellectual void. The first lesson Steve may hope to pass along is that the "Fractal" form has little to do with the claims that have been ascribed to it. This, of course, could be considered to be very "offensive," but only to a very defensive and weak proponent of those claims.

The last issue of this folderol is:
Where did the $1000 go for this unregistered Lottery (the so-called "Challenge")? Does the state of Mass. regard such activity as benign?

73's
Richard Clark, KB7QHC

938. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 18:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5B51A0.1520@wt.net>
Source record: 172511

Kevin J Wren wrote:
>
> Gentlemen, there is an easy way that can settle this, both of you find a neutral
> arbitration body (like a computer lab in a university possibly).
>
> Mr Lewallen, you send the alledged "pirated" file to the lab and Mr Cohen send the
> file of which you are copyright holder to the lab also.
>
> Get the IT staff at the lab to make a bit for bit comparison on the files, if they
> are different there is no case (possible case for Mr Lewallen). If there are
> identical binary patterns in the file there is a posibility the file has been copied
> and modified(thus a case for Mr Cohen), any good it lab can do this.

Heck, I can do it here with a 1992 copy of pctools. Not much to
comparing a set of files. MK
--
http://web.wt.net/~nm5k

939. Re: Help Re-building KT34XA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 18:24:36 UTC
From: dinod@deltanet.com
Message-ID: <EHI66.16418$ge4.7832301@news2.rdc2.tx.home.com>
Source record: 172512

I was going to recommend Noalox too! It works for all my antennas!

Dino...K6RIX

>
>
>I have used NoLox on two KY34XA's with good results

940. Re: Telrex 40M beam restoration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 18:24:40 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A5B5768.7F0FA5B2@ix.netcom.com>
Source record: 172513

For what it is worth -- N6KI restored a Telrex Beam -- For Details see URL:
http://ac6v.com/telrex.htm
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========

mike.luther@ziplog.com wrote:

> In <01c079a3$ca493780$d88dadcf@chris>, "Chris Kepus" <ckepus@no.spam.calweb.com> writes:
>
> >I am in the process of restoring a Telrex 40M329 beam. I would like to
> >contact anyone with experience with this fine antenna.

941. Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 18:27:40 UTC
From: Kevin <h175a@multipro.com>
Message-ID: <93fl6l$2ko$1@nnrp1.deja.com>
Source record: 172515
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap

Hi,I have a modified FT-50 and it seems to have a problem on 440 out of band,Particularly FRS use.It may be over modulating,How do you turn the modulation to half modulation for only temporary use? Also does anyone know what kind of power this radio put out on 144 and 440 out of band transmissions,Because It seems to not have much power on 440 out of band! Please help. Kevin- h175a@multipro.com

Sent via Deja.com
http://www.deja.com/

942. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 18:33:55 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <nQI66.16448$ge4.7842871@news2.rdc2.tx.home.com>
Source record: 172514

I use 14 ga. wire on my groundplane but I don't think it's too important whether it's 12 or 16 ga. (assuming you are running 100 watts). Be advised, though, that the end of the radial will be electrically hot so it should be where nobody can touch it.

Pete, KA�TZK

> Does the counterpoise need to be oriented in a specific way. Since it
> is a radial, I assuming that it needs to me mounted in some orientation
> that is perpendicular to the antenna.
>
> Also, what kind of wire should I use?
>
> N3HGN

943. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 19:00:25 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5B6030.3626CF30@bellatlantic.net>
Source record: 172516

Kevin,

There is nothing to be settled in terms of the authorship of
the file. When a lawsuit is finally brought - if ever - then and
only then will there be an issue requiring investigation.
You've been suckered in by the constant bullshit emanating
from an apparently psychotic party.

What people don't seem to realize is that said party seems
more interested in stirring up controversy than anything else,
and will stoop to whatever means that party finds necessary.
The simple answer is to totally - and I mean TOTALLY ignore
ANYTHING that party posts. Sometimes, a posting from that
party seems legitimate. But we often find the thread degrades,
due to that party's further posts, into the crap we find here.
I do not think that reasonable conversation with that party is
possible.

I leave it to you and others to determine to whom the phrase
"that party" applies.

Kevin J Wren wrote:

> Gentlemen, there is an easy way that can settle this, both of you find a neutral
> arbitration body (like a computer lab in a university possibly).
>
> Mr Lewallen, you send the alledged "pirated" file to the lab and Mr Cohen send the
> file of which you are copyright holder to the lab also.
>
> Get the IT staff at the lab to make a bit for bit comparison on the files, if they
> are different there is no case (possible case for Mr Lewallen). If there are
> identical binary patterns in the file there is a posibility the file has been copied
> and modified(thus a case for Mr Cohen), any good it lab can do this.
>
> Once the results have been verified you can both settle this away from the NG
>
> easy uh!
>
> Kev
>
> PS. I'm as sick of this as the next man and I just wish we could get back to
> antennas :), Happy & Prosperous new year to you all.
>
> Roy Lewallen wrote:
>
> > Fractenna wrote:

> > >
> > > >All the deadlines have come and gone. The letter he or his alleged
> > > >lawyer allegedly sent never arrived. (I'm franky disappointed. I was
> > > >looking forward to it.)
> > >
> > > Mr. Lewallen--
> > >
> > > This is your last opportunity to remove the copyrighted MI2 file from your web
> > > site. You have pirated this file, which belongs to me.
> > >
> > > As of today, any and all copyright violations will initiate legal actions.
> > >
> > > Nathan Cohen. Ph.D.
> >
> > Sorry, Chip. You've used up what remaining credibility you had. Too many
> > "last opportunities" have come and gone, and your threatened legal
> > actions are nothing but bluster.
> >
> > I do not have, nor have I ever had, any material on my web site for
> > which you hold the copyright. If you did have the fortitude to sue me,
> > I'd be glad to let you try to prove otherwise. But you don't.
> >
> > Roy Lewallen, W7EL

944. Thanks to Doc & Kevin

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 19:00:58 UTC
From: J Titcomb <kimoloka@hawaii.rr.com>
Message-ID: <KdJ66.62897$Z36.440687@typhoon.hawaii.rr.com>
Source record: 172517

Thanks, you answered my question.

945. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 19:07:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5B6174.BD5832F8@IEEE.org>
Source record: 172419

n2ey@aol.com wrote:
> That's all? No executive branch beyond the armed forces and police? Who
> determines when the armed forces fight and who they fight? Who
> negotiates with foreign governments?
>
> What about the legislative branch? You don't mention them at all. Who
> determines what the power of the police and courts are? Who makes the
> laws for the police and courts to enforce?

My basic posture assumes a government as provided for by The Constitution
but you already knew that.

> How many abortions are paid for with tax dollars?

My WAG is tens of thousands per year.
--
http://www.mindspring.com/~w6rca

946. W8JI - Good fist

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 19:15:43 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5B63C2.6875DABC@bellatlantic.net>
Source record: 172518

Tom,

Heard you on the air in around 1 am EST today (01/09) with S6??? (maybe EAG?) (I wish I wrote it down). The frequency was 35?? (3515?) I just caught the tail end of your QSO. You not only have good antennas and good comments here, you have a good fist!

947. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 20:19:29 UTC
From: tom_bruhns@agilent.com
Message-ID: <93froc$7t0$1@nnrp1.deja.com>
Source record: 172420

RG-6 is pretty standard for TV signal distribution within a home.
There are differences in brands of RG-6-type cables, but without some
instruments it will be difficult to evaluate them. "Anecdotal
evidence" (personal cudos or horror stories) are probably worth
something. But with an amplifier mounted near the antenna, I'd expect
performance to be dominated by the amplifier rather than by the cable,
unless it's really bad cable. It's unlikely you'd notice a difference
in a home TV distribution system between single-shielded and
multi-shielded...the inherent symmetry of coaxial cable makes external
fields quite low for either. It's maybe more important to worry about
how long the coax will last when exposed to whatever environment it's
going to see, espeically if part of the run will be built into a wall
where it's not easy to replace.

Cheers,
Tom

In article <7da66.2594$Br2.230337@carnaval.risq.qc.ca>,
"Mario G&#65533;linas" <mariobrosss@cgocable.ca> wrote:
> Some guys told me for the reception on TV for UHF-VHF that RG6 is a
good
> coax (not the best but a good one...) and I would like to know if
there are
> many kinds of RG6 because you specify that it must be double shielded.
Are
> there RG6 single shielded ? I know that Radio-shack sells RG6.
>
> I have to say again that I will need about 120 feet of coax...
>
> Also I have an amplifier from Radio-Shack that I can install near the
> antenna.
>
> I'm living in Canada.
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

948. Calling all Portland hams

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 20:46:51 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <sNK66.1760$rB.45044@news2-win.server.ntlworld.com>
Source record: 172421

I am organising a Portland on the air weekend and would like to hear
from interested parties from all "Portland's" around the world. I know that
there are quite a few in North America so please get in touch if interested
so I can organising. I live on the Isle of Portland in Dorset, England and
think it
would be a good event to get us all on air for a weekend friendly contest
with certificates for working all of them etc. If you or your club are
interested
please let me know the best dates during the summer and I will set a date
soon.

Jon M0BQQ

949. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 21:58:56 UTC
From: rclark@seanet.com
Message-ID: <3aac878b.1478362072@news.seanet.com>
Source record: 172422

On Tue, 09 Jan 2001 20:19:29 GMT, tom_bruhns@agilent.com wrote:

> It's unlikely you'd notice a difference
>in a home TV distribution system between single-shielded and
>multi-shielded...the inherent symmetry of coaxial cable makes external
>fields quite low for either.

Hi Tom,

That "should" be true, but I have very ordinary results that confound that expectation. That is, due to cable leakage (going in, not coming out). I often encounter visual beat signals for local over the air transmissions (channels 5, 9 and 11 here in Seattle as you may well know) that mix with the video feed. The mixing is obvious in that the stronger cable signal is always much later in the scan than the ghost that over-rides it (much later being roughly 10 scan lines or roughly 0.5 mS). The channel 5 over the air signal, combined with the cable feed, is enough to drive my AGC into saturation. Now, given that AT&T laid new cable to my feed point, it is undoubtedly the Radio Shack line that I've used here at home that is the inferior component. My solution for these channels is to simply remove the cable feed and allow the short coax to the TV to pick up the signal over the air.

73's
Richard Clark, KB7QHC

950. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 22:02:24 UTC
From: Mike Dixon <mdixon@na800.net>
Message-ID: <3A5B8A70.FC0534B6@na800.net>
Source record: 172427

tjp wrote:
>
> I have read *hours* worth of "Apartment Antenna" threads from the
> various usenet groups via deja.com. I have one question for the
> group:
>
> I'm new to all of this so please be kind.
>
> Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> from inside. I can grab quite a few repeaters in my area from inside
> with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> table? Would that work OK?? Is 50w too much to push out in a setup
> like this etc??
>
> Thanks in advance.

As you can tell from all the answers you are getting, there are a lot of things that work even in apartments. I had a 4 element quad AND rotor on some short pieces of pvc pipe stuck in a Christmas tree stand that I could just move on and off the balcony when needed. I was able to work simplex all over central Florida (and beyond quite a few times as well) with no problem on just 25 watts.
Just use your imagination and you will be pleasantly surprised at all the things that can work.

951. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 22:04:42 UTC
From: n2ey@aol.com
Message-ID: <93g1tmcnc1@nnrp1.deja.com>
Source record: 172423

In article <3A58E8D9.FF57ABB4@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> > Point us to an NAL in the past ten years where
> > the FCC says a ham was jamming or doing obscenity/profanity using
Morse.
>
> What are all those jammers using for keys to do their jamming using
continuous
> waves if not Morse code keys?

What the heck are you talking about, Cecil?

None of the NALs I looked at mentioned how the jamming was done. Many
were for obscenity/profanity, not jamming.

How does anyone know what is being used at the jamming transmitter
unless they are at the transmitter location?

The challenge was:

"Point us to an NAL in the past ten years where the FCC says a ham was
jamming or doing obscenity/profanity using Morse."

Not "using a morse code key" but USING MORSE. None of your typical
weasel-wording and mealy-mouthing will get you out of the basic fact
that you can't find an NAL to answer my challenge.

If a person bops another on the head using a Morse code key, does that
mean an assault was committed with Morse code? Of course not.
>
> > What you're saying, Cecil, is that Morse use causes hams to behave
themselves
> > much better on the air. That's a good thing!
>
> Maybe it causes them to behave, maybe it doesn't. Doesn't matter.
> If someone is determined to misbehave, they will simply choose
> another mode like Continuous Waves.

But not Morse. Which means the mode DOES influence behavior. Which is
exactly what I claimed. Thanks for the confirmation.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

952. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 22:22:06 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5B8FA0.9DF7B1A4@bellatlantic.net>
Source record: 172424

Is that the tape running at 5 ips - or the person. Or both?

Richard Clark wrote:

> On Sat, 06 Jan 2001 22:32:32 GMT, Mike Mayer <mwmayer@tds.net> wrote:
>
> >>>>>> "Rick" == Rick Littlefield <k1bqt@aol.com> writes:
> >
> >[...]
> >
> > > Think what the word might be like if you had to "earn a ticket" to
> > > run your pc? It's no secret you can talk world-wide, disrupt
> > > corporate web sites, and get into a whole lot of trouble with one
> > > of these desk-top suckers. But difficult licensure requirements??
> > > Most people somehow manage to stay out of trouble and learn what
> > > they need to know without taking a test.
> >
> >[...]
> >
> >Everyone should show proficiency at entering machine code from the front
> >panel toggle switches before they can operate a computer :-)
>
> That's just the code sending proficiency, they should also be able to
> read punch tape running at 5 ips. ;-0
>
> 73's
> Richard Clark, KB7QHC

953. Re: coax tv

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 22:37:32 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <OaIz7HAsK5W6Ewxy@g3ohx.demon.co.uk>
Source record: 172429

In article <93a8ptqgp1@bob.news.rcn.net>, Peter Bertini
<commquart@erols.com> writes
>
>"Roger Halstead" <rdhalste@tm.net> wrote in message
>news:LcU56.2832$iK.329346@monger.newsread.com...
>> Put in double shielded RG-6 and use a preamp *at* the antenna.
>>
>> --
>>
>I would agree, even the worst UHF preamp would yield a lot of improvement
>at the higher UHF channels given the cable losses.
>
>Pete
>
>

While I agree absolutely with those who have recommended a preamp at the antenna and 'pretty lossy' coax, be aware that such preamps are prone to overloading from amateur transmissions. Those covering nominally 'DC to blue light' (eg 50 to 860MHz) may be affected even by 160m transmissions. Some front-end filtering, shielding of the preamp, and filtering of the power feed may be necessary.

If you scrounge some low-loss coax from you local friendly cable company, save it for transmitting! (Even if it is 75 ohms).

Ian.

954. Help: Alarm system RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 22:37:43 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <3a5b92b8@news.microsoft.com>
Source record: 172425

A neighbor is asking for advice about how to cure RFI that is getting into his alarm system when I'm on the air. When I'm on the air, both his alarm keypad(s) LEDs start to flicker, sometimes causing his alarm system to "turn on".

I"ve ordered some torriods from Amidon (FT-240-77). Will ask him to install as close to the keypads as possible. Does he need to install the torriods on the keypad inputs at the alarm system also?

Any other suggestions?

-rob N7QT

955. FA: MOTOROLA RIB BOX AND CABLES 9HRS LEFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 22:43:58 UTC
From: David <kb9lpk@telocity.com>
Message-ID: <3A5B942E.179021B4@telocity.com>
Source record: 172426
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.antenna

Let the trading begin-- NO RESERVE! Complete Motorola RIB and programing
cable listed!

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1205558878

Title of item: Motorola RIB Interface Box w/program cables
Reserve price (if any): $0.00
Quantity: 1
Auction Ends on: Wednesday, Jan 10, 2001 at 00:18:59 PST

The item number is: 1205558878

956. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 23:01:55 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <WMM66.654$e5.1665963@news.ntplx.net>
Source record: 172428

<n2ey@aol.com> wrote:

> If a person bops another on the head using a Morse code key, does that
> mean an assault was committed with Morse code? Of course not.

No, but I think it likely that a person who uses a Morse key to bop someone on the head probably also uses it to send Morse code. Do you think that the jammers who send a series of dits with a keyer bought the keyer just to send a series of dits?

> But not Morse. Which means the mode DOES influence behavior. Which is
> exactly what I claimed. Thanks for the confirmation.

I don't think you are quite confirmed yet, Jim. The fact that hams who would violate FCC rules don't generally do so using sent Morse code simply means that they find other forms of operating (from continuous waves to dits to voice) more convenient or enjoyable (?) to use to wreak havoc. If you want confirmation, analyze the percentage of hams who are given NALs that have also passed a code test. *IF* any correlation exists, it should be apparent there.

73,
Ed Hare, W1RFI

957. Re: W8JI - Good fist

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 23:35:22 UTC
From: k1bqt@aol.com
Message-ID: <20010109183522.09755.00000765@ng-me1.aol.com>
Source record: 172430

> You not only have good antennas and good comments here, you have a good fist!<

I'm especially impressed with his left hook--a real good man to have along at Lonnies House of Leggs in Dayton on Saturday night!

Rick K1BQT

PS: Tom not only sends great CW, he can actually decipher stuff people send back. I really admire that!!

958. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-09 23:59:10 UTC
From: Dan/W4NTI <w4nti@my-deja.com>
Message-ID: <93g8kdhni1@nnrp1.deja.com>
Source record: 172431
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap

In article <93fl6l$2ko$1@nnrp1.deja.com>,
Kevin <h175a@multipro.com> wrote:
> Hi,I have a modified FT-50 and it seems to have a problem on 440 out
of
> band,Particularly FRS use.It may be over modulating,How do you turn
the
> modulation to half modulation for only temporary use? Also does anyone
> know what kind of power this radio put out on 144 and 440 out of band
> transmissions,Because It seems to not have much power on 440 out of
> band! Please help. Kevin- h175a@multipro.com
>
> Sent via Deja.com
> http://www.deja.com/
>
This is an Amateur Radio forum. This is not a 'how can I trash up
other bands with my illegally modified radio forum'. Get it Kevin?

Dan/W4NTI

--
"Just tellin the truth, and they cain't stand it."

Sent via Deja.com
http://www.deja.com/

959. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 00:44:00 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A5BB050.F41EAA75@wgcr.org>
Source record: 172432

Dick Carroll wrote:
>
> Lamar Owen wrote:
> >
> > Why test? Can Morse not survive without the forced learning in order to
> > access the amateur HF allocations? If CW requires forced learning and
> > testing in order to survive, then it deserves to die.

> Substitute "technical knowledge" for "Morse" in the above rant and you
> have the current mantra of those who would further dumb down the ARS.

Technical know-how is still a valid mandate of the ARS as per part 97.
The technical know-how is not a communications mode, a language, or a
Holy Grail of radiotelegraphers world-wide. Technical know-how is one
of our reasons to exist -- CW isn't. It is non sequitur to substitute as
yu suggested.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

960. Re: Autek Research impedance meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 00:46:51 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A5BB0FB.2A45DC3A@wgcr.org>
Source record: 172433

rb wrote:
>
> I have the small hf RF-1 and like it very much. The only downside to it,
> and that is only a nuisance, is that tuning precise freqs in the digital
> window is "jumpy". but, you can readily get close enough, if not right on
> the mark.

How close? 1kHz? 5kHz? 10kHz? How big is the jitter? My application
requires step measurements at 5kHz intervals with +/- 500Hz. +/- 1kHz
acceptable, as I have an external frequency counter I can use.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

961. Re: Help: Alarm system RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 01:14:12 UTC
From: kr2v@aol.com
Message-ID: <20010109201412.04714.00001656@ng-fi1.aol.com>
Source record: 172434

Hi Rob,

I'm having the same problem with my own alarm system and look forward to the suggestions from the News Group.

Joe - KR2V

962. Re: Alarm system RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 01:19:28 UTC
From: George Benko <GBENKO@prodigy.net>
Message-ID: <93gdb3$5dqs$1@newssvr06-en0.news.prodigy.com>
Source record: 172435

Rob,

Had the same problem with my neighbor. I advised him to call the installer. That did the trick. They had a service bulletin for RFI. If no installer, call the manufacturer.

73, George
K8BRW

"Robert Fanfant" <fanfant@ix.netcom.com> wrote in message news:3a5b92b8@news.microsoft.com...
> A neighbor is asking for advice about how to cure RFI that is getting into
> his alarm system when I'm on the air. When I'm on the air, both his alarm
> keypad(s) LEDs start to flicker, sometimes causing his alarm system to "turn
> on".
>
> I"ve ordered some torriods from Amidon (FT-240-77). Will ask him to install
> as close to the keypads as possible. Does he need to install the torriods
> on the keypad inputs at the alarm system also?
>
> Any other suggestions?
>
> -rob N7QT
>
>

963. Re: Alarm system RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 02:10:10 UTC
From: jeffreys@cyburban.com
Message-ID: <3a5bc3d7$0$59050$45beb828@newscene.com>
Source record: 172436

Choke the hell out of all of the leads coming into the master processing unit (both alarm leads and power). Most alarm installations use unshielded cables so they are really big antennas given the lengths.

Make sure all of the cables do multiple wraps around "donought" shape chokes. I used the ones from palomar engineering. They have an interesting one that clamps together with plastic shell. Radio Shack sells the same one but for a higher price.

Also, make sure the ground is connected. Many installers skip this step because the alarm box is usually not easily grounded.

Jeffrey Steinberg, KC2GUC
Scarsdale, NY

In article <93gdb3$5dqs$1@newssvr06-en0.news.prodigy.com>, GBENKO@prodigy.net says...
>
>Rob,
>
>Had the same problem with my neighbor. I advised him to call the installer.
>That did the trick. They had a service bulletin for RFI. If no installer,
>call the manufacturer.
>
>73, George
>K8BRW
>
>"Robert Fanfant" <fanfant@ix.netcom.com> wrote in message
>news:3a5b92b8@news.microsoft.com...
>> A neighbor is asking for advice about how to cure RFI that is getting into
>> his alarm system when I'm on the air. When I'm on the air, both his alarm
>> keypad(s) LEDs start to flicker, sometimes causing his alarm system to
>"turn
>> on".
>>
>> I"ve ordered some torriods from Amidon (FT-240-77). Will ask him to
>install
>> as close to the keypads as possible. Does he need to install the torriods
>> on the keypad inputs at the alarm system also?
>>
>> Any other suggestions?
>>
>> -rob N7QT
>>
>>

>
>

964. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 02:11:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5BC4E4.295F77B9@IEEE.org>
Source record: 172438

n2ey@aol.com wrote:
> But not Morse. Which means the mode DOES influence behavior. Which is
> exactly what I claimed.

I didn't disagree because it doesn't matter. Morse code tested hams
use their Morse code keys to jam other hams. I have heard it.
--
http://www.mindspring.com/~w6rca

965. Re: SOFTWARE BETA TESTERS URGENTLY REQUIRED

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 02:14:10 UTC
From: kg9qm@nomail.net
Message-ID: <SzP66.780$iV1.459531@news1.iquest.net>
Source record: 172437
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

I did not see the original post, but bear in mind that this approach has been used in the past as a way to deliver virus code to the unwary.

Software developers (I'm one) usually have ample beta testers without "urgent" pleas to the general population, so if that's what this was - beware!

966. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 02:30:47 UTC
From: ggg@mediaoneBADGES.net
Message-ID: <a7in5t0msm0avpfl06sqd6f90n5n54rluv@4ax.com>
Source record: 172439

Does a car roof get electrically hot when used as a ground plane? Does this
also happen when using a balcony railing?

"Pete Holden" <peholden@home.com> wrote:

>I use 14 ga. wire on my groundplane but I don't think it's too important
>whether it's 12 or 16 ga. (assuming you are running 100 watts). Be advised,
>though, that the end of the radial will be electrically hot so it should be
>where nobody can touch it.
>
>Pete, KAï¿½TZK

--
Gerald
ggg@mediaone.net

967. Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 02:44:28 UTC
From: HUMINT@opsyhopsy.com
Message-ID: <jUsT.aNoTheR.mEsSaGe.iD.97909466522967@opsyhopsy.com>
Source record: 172440

Michael A. Kaufman

16 Harcourt Street, #3C

Boston MA 02116

Admitted to the bar on 6/20/1995
Current status is Active

--
Posted from host4.websitesource.com [209.239.38.252]
via Mailgate.ORG Server - http://www.Mailgate.ORG

968. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 02:58:52 UTC
From: k1bqt@aol.com
Message-ID: <20010109215852.09581.00000553@ng-me1.aol.com>
Source record: 172441

Hi Kevin--

Most amateur radio service tranceivers are preset for 5-kHz peak deviation at the factory. Commercial radio service transceivers, on the other hand, may be set lower---say 2-3 kHz--to reduce the potential for adjacent channel interference in congested high signal areas. If a commercial repeater is involved in the link, 5-kHz of robust modulation could easily bust out of the receiver's passband and cause your signal to sound distorted--or to cut out on peaks. As a practical matter, you transceiver's audio must conform to prevailing practices on the channel of interest, or your radio may sound like horse poopie to other users!

Moreover, communication law dictates we avoid using non-FCC type-accepted radios on ANY commercial circuit--even if we're otherwise authorized to use the channel and have "numbers" becuase of our occupation. It's no secret that some off-duty cops, fire, public works, boaters, and paramedics use opened up ham rigs to communicate because they make really affordable back-up radios! But its not legal!

Best advice? Get a cell phone!

Rick K1BQT

969. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 03:49:09 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93gm3l$l5n$1@208.207.71.172>
Source record: 172442

It's half the antenna isn't it?

> Does a car roof get electrically hot when used as a ground plane? Does this
> also happen when using a balcony railing?
>
> "Pete Holden" <peholden@home.com> wrote:
>
> >I use 14 ga. wire on my groundplane but I don't think it's too important
> >whether it's 12 or 16 ga. (assuming you are running 100 watts). Be advised,
> >though, that the end of the radial will be electrically hot so it should be
> >where nobody can touch it.
> >
> >Pete, KAï¿½TZK
>
> --
> Gerald
> ggg@mediaone.net

970. Re: Help: Alarm system RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 03:51:27 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3A5BDC6A.A47FF8B3@pobox.com>
Source record: 172443

I had this problem on mostly 80 meters with 100 watts.

I installed a 100uh choke AND a .01 disc capacitor on EVERY lead into
the panel.

one of the keypads would beep I used three or four turns around a radio
shack torrid at the keypad.

I am now running 1500Watts no problem.

971. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 04:58:59 UTC
From: dennis@wawa.juniper.net
Message-ID: <93gq6j$1l5i$1@heap.juniper.net>
Source record: 172444

Richard Clark <rwclark@epicedge.com> wrote:
>Your solution is dead-on and certain - there is at least one problem.
>
>Before Steve Best revealed his version of the MI2, there was NO
>publically available copy circulating to be pirated. Hence there was
>no way to infringe on a document not already public (it may have been
>privately circulated, but absolutely no one has claimed that status
>except myself and I have not circulated it).

Richard,

In a practical sense this is not a problem, or at least is a problem
that will fix itself. I also note that you are assuming you have
knowledge of the material whose copyright is claimed to have been
infringed, but there is no need to make this assumption.

Before a copyright infringement suit can be initiated (and, in fact,
before it makes sense to send letters informing of the infringement)
the copyright on the material in question needs to be registered,
with a copy of the material thus being deposited with the Library
of Congress. When this happens you will know exactly what the
material is of which infringement is claimed, and can make any
comparisons you want. Until this happens it doesn't matter, since
there can be no suit for copyright infringement of unregistered
material.

Copyright registrations are included in the catalog accessible
at http://www.loc.gov/copyright/. Other than a Fractal Antenna Systems
logo, I can't find anything even remotely related to the topic at hand.
Without the copyright registration this is all much ado about nothing.

Dennis Ferguson

972. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 05:09:48 UTC
From: brian <lib_mrducks@yahoo.com>
Message-ID: <w8S66.18246$dZ5.497724@typhoon.austin.rr.com>
Source record: 172445
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap

I have two modded FT-50's, had good audio reports everywhere. Works fine with the kid's FRS radios, get good signal reports on local repeaters. Maybe just something wrong with that unit....as far as power output goes, I assume it's pretty close to in-band, as it seems to have comparable transmit capability to my commercial HT's.

"Kevin" <h175a@multipro.com> wrote in message news:93fl35$2dd$1@nnrp1.deja.com...
> Hi,I have a modified FT-50 and it seems to have a problem on 440 out of
> band,Particularly FRS use.It may be over modulating,How do you turn the
> modulation to half modulation for only temporary use? Also does anyone
> know what kind of power this radio put out on 144 and 440 out of band
> transmissions,Because It seems to not have much power on 440 out of
> band! Please help. Kevin- h175a@multipro.com
>
>
> Sent via Deja.com
> http://www.deja.com/

973. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 05:49:03 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <pES66.459$s6.354126@nntp2.onemain.com>
Source record: 172446
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap

Take it over to the CB use group, I'm sure those idiots can help you butcher the FT-50! The FT-50 was not designed for FRS, so it doesn't surprize me that the output is low...BOOO HOOOOO!

Pat

WB7FFI

974. Re: Apartment antenna woes for newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 07:26:23 UTC
From: Rex Pearson <perisonr@dingoblue.net.au>
Message-ID: <3a5c0e9b$0$15470$7f31c96c@news01.syd.optusnet.com.au>
Source record: 172447

When I first moved to Sydney I had to live in an apartment so came up with a multiband antenna that worked well.

Get 2 extendable antenna's (transistor radio aerials), mount them onto a piece on insulation and feed with coax. Adjust the antenna lengths for the band you want to use, I could get 50/144 and 432 from the antenna 's that I used (55ins long fully extended).

The assembly clamps to the balcony to get good outside radiation and can be either vertical or horizontal depending what you want to work.

Hope this helps

Rex VK8RH

"Mike Dixon" <mdixon@na800.net> wrote in message
news:3A5B8A70.FC0534B6@na800.net...
> tjp wrote:
> >
> > I have read *hours* worth of "Apartment Antenna" threads from the
> > various usenet groups via deja.com. I have one question for the
> > group:
> >
> > I'm new to all of this so please be kind.
> >
> > Can I simply stick a oh, say a little Cushcraft AR-270 in the corner
> > of my apartment? I would like to work 2M/440 on a Kenwood TM-D700A
> > from inside. I can grab quite a few repeaters in my area from inside
> > with my HT and a Comet SMA-24. What about a 20'' mag mount on a
> > table? Would that work OK?? Is 50w too much to push out in a setup
> > like this etc??
> >
> > Thanks in advance.
>
>
> As you can tell from all the answers you are getting, there are a lot of
> things that work even in apartments. I had a 4 element quad AND rotor on
> some short pieces of pvc pipe stuck in a Christmas tree stand that I
> could just move on and off the balcony when needed. I was able to work
> simplex all over central Florida (and beyond quite a few times as well
>) with no problem on just 25 watts.
> Just use your imagination and you will be pleasantly surprised at all
> the things that can work.

975. Re: Autek Research impedance meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 07:42:31 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <4gaIBxAnJBX6EAtu@ifwtech.plus.net>
Source record: 172448

Lamar Owen wrote:
>rb wrote:
>>
>> I have the small hf RF-1 and like it very much. The only downside to it,
>> and that is only a nuisance, is that tuning precise freqs in the digital
>> window is "jumpy". but, you can readily get close enough, if not right on
>> the mark.
>
>How close? 1kHz? 5kHz? 10kHz? How big is the jitter? My application
>requires step measurements at 5kHz intervals with +/- 500Hz. +/- 1kHz
>acceptable, as I have an external frequency counter I can use.

I found the "coarse" tuning far too fast, and the "fine" tuning far too narrow in range. Unless you have the fingers of a safebreaker, the Autek won't meet your requirements.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

976. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 09:40:14 UTC
From: n2ey@aol.com
Message-ID: <20010110044014.04061.00000190@nso-mh.aol.com>
Source record: 172449

In article <WMM66.654$e5.1665963@news.ntplx.net>, "Ed Hare, W1RFI"
<w1rfi@arrl.net> writes:

><n2ey@aol.com> wrote:
>
>> If a person bops another on the head using a Morse code key, does that
>> mean an assault was committed with Morse code? Of course not.
>
>No, but I think it likely that a person who uses a Morse key to bop someone
>on the head probably also uses it to send Morse code.

Maybe, Ed. But that's not the point at all. The claim was that Morse was used
for jamming, which has not been proven at all.

> Do you think that the
>jammers who send a series of dits with a keyer bought the keyer just to send
>a series of dits?

Could be. How do you even know a keyer was used unless you are at the jamming
site?

One of the NALs cited a fellow who transmitted RTTY on top of another ham's
transmission. But no mentions of Morse at all.

Show us the NALs.
>
>> But not Morse. Which means the mode DOES influence behavior. Which is
>> exactly what I claimed. Thanks for the confirmation.
>
>I don't think you are quite confirmed yet, Jim.

I'm definitely not disproven, either.

> The fact that hams who
>would violate FCC rules don't generally do so using sent Morse code

"Don't GENERALLY do so?" Nonsense. They are so rare that NO NALs have been
issued by the FCC for such use of Morse. None. Not any at all.

I'm not saying it never happens. But compare ZERO to the number of NALs in any
of the enforcement logs.

> simply
>means that they find other forms of operating (from continuous waves to
>dits to voice) more convenient or enjoyable (?) to use to wreak havoc.

And what mode are they interfering with? Who are they jamming?

How about the profanity and obscenity? Were they spelled out in Morse or spoken?

Where are the NALs?

> If
>you want confirmation, analyze the percentage of hams who are given NALs
>that have also passed a code test. *IF* any correlation exists, it should
>be apparent there.
>
Nope. That's not logical. You taking reasoning lessons from Cecil? ;-)

The point is not the TEST at all. Code testing is essentially a dead issue. FCC has dropped it to its bare minimum, and only the treaty is keeping it alive. If the treaty goes in 2003, kiss any US code testing goodbye. Not because of anything hams or ham groups say, do or want, either. FCC wants a simpler life, that's all.

The fact that somebody has a non-Tech ticket simply proves that once upon a time they managed to pass a code test. Might have been decades ago. Says nothing about their current level. And the same goes for the written tests.

My point is that violations WHILE USING MORSE on the ham bands are so rare that they are off the FCC's radar. Just not a problem. Even though Morse is the second most popular HF mode in ham radio.

It's the USE, not the TEST, that I'm talking about. And so far I've seen nothing to disprove or even challenge my assertions.

But it's electro-politically incorrect to point out any advantages of Morse to some people. Not you, Ed, of course, but there are some folks who deny ANY good thing said about the mode.

73 de Jim, N2EY

977. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 12:23:22 UTC
From: ggg@mediaoneBADGES.net
Message-ID: <msko5t4l9um7lmu9266bt7fbk24fb2oljh@4ax.com>
Source record: 172450

I was fixated on "end of the radial will be electrically hot." Is the whole
radial electrically hot? And if insulated the end may be the only part
exposed to the touch? I am new to this.

Dick Carroll <dixie@townsqr.com> wrote:

> It's half the antenna isn't it?
>
>
>> Does a car roof get electrically hot when used as a ground plane? Does this
>> also happen when using a balcony railing?
>>
>> "Pete Holden" <peholden@home.com> wrote:
>>
>> >I use 14 ga. wire on my groundplane but I don't think it's too important
>> >whether it's 12 or 16 ga. (assuming you are running 100 watts). Be advised,
>> >though, that the end of the radial will be electrically hot so it should be
>> >where nobody can touch it.
>> >
>> >Pete, KAï¿½TZK

--
Gerald
ggg@mediaoneBADGES.net (Don't need no stinkin BADGES to email)

978. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 13:34:46 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A5C64F6.167EB0E7@rupert.tds-az.lmco.com>
Source record: 172452

Steve Woodruff wrote:
>
> How does one compute the design of a trap for an HF antenna?
> (ie: # of turns, diameter of insulator, length of conductor around
> the insulator, etc...) End result, if i have X amount of feet to
> rig up a dipole, i need to determine the trap construction parameters.
>
> --steve

Hi Steve,

I read all the other answers to your query, but I am wondering if you really are asking for "trap" design or simply "loading coil design". If you are only interested in shortening a single band dipole you can do all the calculations with a program called HamCalc.

There is a program in HamCalc that allow you to enter the space available and it will calculate the value of the loading coil. It also give you an idea of efficiency since you are no longer operating at the preferred lengths.

Once you know the value of the loading coil, you can use another HamCalc program to determine the "# of turns, diameter of insulator, length of conductor around the insulator, etc..". It's a nice program and runs on just about any PC.

Check out:

http://people.delphi.com/slott/ham/index.html

For a good description of HamCalc and it's contents.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

979. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 13:36:03 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5C6543.F6526D02@oio.net>
Source record: 172451

The whole radial/counterpoise has voltage on it. It's just that the voltage is much higher at the end. Same for a car's roof, etc.
'Doc

980. Re: Autek Research impedance meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 14:38:46 UTC
From: "Joe Giacobello, K2XX" <k2xx@swva.net>
Message-ID: <3A5C73F6.E901B4C1@swva.net>
Source record: 172455

I agree that the coarse frequency control is too sensitive. I've replaced the original knob with a small vernier control that I picked up at a hamfest. It helps considerably.

I also have had problems with erratic, erroneous read-outs. I believe, but have not confirmed, that the problem is the connection of the coax connector to the PC board. There have been several other reports that the connector-PCB integrity is a chronic problem with the RF-1.

73, Joe

"Ian White, G3SEK" wrote:

> Lamar Owen wrote:
> >rb wrote:
> >>
> >> I have the small hf RF-1 and like it very much. The only downside to it,
> >> and that is only a nuisance, is that tuning precise freqs in the digital
> >> window is "jumpy". but, you can readily get close enough, if not right on
> >> the mark.
> > >
> >How close? 1kHz? 5kHz? 10kHz? How big is the jitter? My application
> >requires step measurements at 5kHz intervals with +/- 500Hz. +/- 1kHz
> >acceptable, as I have an external frequency counter I can use.
>
> I found the "coarse" tuning far too fast, and the "fine" tuning far too
> narrow in range. Unless you have the fingers of a safebreaker, the Autek
> won't meet your requirements.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

981. W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 14:46:59 UTC
From: cjg <cgalbrai@removethis.umich.edu>
Message-ID: <bB_66.4$JH6.105@e420r-atl2.usenetserver.com>
Source record: 172453

Can anyone point me to articles or books covering the W8JK antenna? I've done Google, deja searches and haven't come up with anything. I'd like to understand the design and eventually build one. Thanks for any leads! 73, Chris KA8WFC

982. FS Crankups

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 14:58:49 UTC
From: Bruce Brackin <bbrackin@bellsouth.net>
Message-ID: <3A5C78A9.664F650A@bellsouth.net>
Source record: 172454

Have three 40', two 60' and one 80' crankups for sale. Light duty, custom made for wireless cable. Used for site survey. Galvanized. 40' are 2 section, 60' has 3 and 80' has 4 sections. (about 2-1/2' overlap per section) Have driven rod type base for most. Will throw in guy wire and set of 4' earth anchor screws. All neck down to 6" face on top section. Each has 1-1/2" center brackets at top for mast mounting. Would be good for verticals or small/medium VHF/UHF beams.

Asking $125 for the 40' ones, $175 for the 60's and $250 for the 80'

LOCAL PICKUP (I've moved them all once!) Central Mississippi area.

Email direct for details. I am in and out so don't fret reply takes a day or two. - Bruce, KD5IUG

983. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 15:23:39 UTC
From: richardharrison@webtv.net
Message-ID: <7663-3A5C7E7B-2@storefull-113.iap.bryant.webtv.net>
Source record: 172457

Ed Hare wrote:
"Do you think that the jammers who send a series of dits with a keyer bought a keyer just to send a series of dits?"

Jammers jam to disrupt and to demonstrate their power to do so.

Some jammers insert their own message to the audience on the channel. Jammers may want to be known, but not necessarily accessible. Jammers may want to remain unknown, or they may not care if they are identified.

CW is less able to cover up a channel than modulation. A series of dits might be offensive enough to evict channel users. Voice may be more insulting or otherwise offensive. All sorts of noise has been tried.

Jamming has become a science as well as an art. In the wars, hot and cold, jamming has been a tool to affect communications and information. Modulation has been thought the best way to jam.

Best regards, Richard Harrison, KB5WZI

984. re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 15:43:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93hvt3orv1@neptunium.btinternet.com>
Source record: 172456

Richard Karlquist wrote
> I believe N6BT when he says you only need 2 or 4 elevated
> radials over salt water
==========
When over salt water NO radials are necessary. All that's needed is a small
ground plate immersed just under the surface.

Reg

985. Re: trap construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 15:54:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93i0oucsu1@plutonium.btinternet.com>
Source record: 172458

For antenna trap L and C values and location along dipole for 2-band operation, download program TRAPDIP.

For loading coil value and location along vertical or inverted L, dimensions and number of turns, download program VERTLOAD.

For inductance, dimensions, number of turns of any solenoid, download program SOLNOID2

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

986. Re: W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 15:56:15 UTC
From: Spencer Webb <webb@alum.mit.edu>
Message-ID: <93i0n0$6k4$1@pyrite.mv.net>
Source record: 172459

ARRL Antenna Book, 19th ed., page 8-49

J.D. Kraus, _Antennas_, 2nd ed., pp 453-459, pp 468-470

"cjg" <cgalbrai@removethis.umich.edu> wrote in message
news:bB_66.4$JH6.105@e420r-atl2.usenetserver.com...
> Can anyone point me to articles or books covering the W8JK antenna? I've
> done Google, deja searches and haven't come up with anything. I'd like to
> understand the design and eventually build one. Thanks for any leads!
73,
> Chris KA8WFC
>
>

987. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 16:50:22 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <nvso5ton39frrq8ell9k7oee5qbpnh4571@4ax.com>
Source record: 172461

On 7 Jan 2001 18:10:27 GMT, Dick Carroll <dixie@townsqr.com> wrote:
>Gary Coffman wrote:
>>
>> On 7 Jan 2001 10:44:16 GMT, k3ky@erols.spamnocom (David Sinclair) wrote:
>> >If it makes you feel any better, I will cede you and Noah Webster a small,
>> >technical victory over the trifling point that CW isn't an *oral* spoken
>> >language, strictly speaking. OK. But in your heart of hearts, you know that
>> >it is a language. And it is indeed auditory, as it is used in radio. :o) So it
>> >is 'spoken' with the hands, yet heard with the ears and processed in the
>> >brain. Just like speech.
>>
>> I go away for months, and this old chestnut rears its head again.
>>
>> Morse is an encoding of the roman alphabet. The words of a language
>> can be *spelled* using an alphabetic encoding, but it is the words, and
>> their syntax and grammar that comprise language, not the alphabetic
>> encoding used to represent their spelling. Example, here is another
>>encoding of the roman alphabet:
>
>> ABCDEFGHIJKLMNOPQRSTUVWXYZ
>
>> Now is that a language? Of course not. Neither is the Morse encoding
>> of that same alphabet. A language has words, syntax, and grammar,
>> an alphabet does not.
>
>
> Well, you might just as well mark your calander so you can come back in
>a few months and replay it all over again, cause "Morse as a Language"
>is not going away. It's here to stay, for longer than anyone reading
>this. And it has been so for longer than any of us has been around.
>
> Any Morse operator who has learned and practiced the skill *to fluency*
>knows full well that it IS a language, and in fact it meets all the
>dictionary criteria for definition as one.

So, can you give some examples of the unique words (nouns, verbs, adverbs
and adjectives), grammar, and syntax of this Morse language? I can give such
examples for actual languages such as English, German, Spanish, Russian,
etc, but not for "Morse language". That's because Morse isn't a language, of
course. It doesn't have its own words, grammar, and syntax independent of the
message texts being sent via Morse encoding.

The texts that you send via Morse encodings *do* have those attributes
of language, however, because the texts are in a real language, IE English,
Spanish, French, etc. Encoding them via Morse for transmission doesn't

translate those texts to a different language. They are still English, Spanish, French, German, Russian, etc language texts that just happen to be encoded for transmission with Morse characters instead of ASCII characters, or Baudot characters, or printed font characters on paper or on a computer screen.

No matter how proficient a Morse operator is in decoding Morse, he still won't understand the message text unless he understands the language in which it was composed. If Morse were an actual language, then he would understand what was being sent, because it would have been translated to a language (Morse) with which he is fluent. But it doesn't work that way because Morse isn't a language. It is merely an alphabetic encoding, no different in principle from ASCII or Baudot. The messages are still in their native languages.

This can easily be confusing to a monolingual person. He is so used to thinking in only one language that he may not even realize what language is. To someone fluent in several languages, however, the distinction between language and the means used to convey it is quite clear.

Language doesn't have to be aural, of course. It can be written or signed or represented in some other way. Nor does it have to be a natural human language. For example, computer languages are languages because they have their own words, their own grammar, and their own syntax. Mathematics can be a language too. It has its own symbolic equivalents of words (variables and constants), its own rules of grammar (2+2=4), its own syntactic forms (equations), etc. Like conventional natural languages, these artificial constructs are also languages which convey meaning to those who understand them. But the ASCII often used to *spell* the words of these languages to a computer is not a language. Neither is Morse.

The ITU correctly calls it a "telegraphic alphabet". We can use that telegraphic alphabet to convey messages in any language which can be spelled by that alphabet. But those messages are still in their native languages, not in a separate Morse language.

Now the Q signals, and certain other abbreviations that are in common use by radio operators, are a sort of very limited pidgeon language. But these aren't part of Morse, and should not be mistaken for Morse simply because radio operators commonly convey them via Morse. They convey the same meaning if transmitted via ASCII, Baudot, etc. They are independent of the encoding system used to convey them.

That's true of any real language. An example is that this entire message has been conveyed to you via ASCII encoding, but it isn't an ASCII language message. It is still English, regardless of the transmission coding used to deliver it to you. If I'd laborously keyed it in Morse, it would still be English language text, not Morse language text. Someone not fluent in the English language still wouldn't know what it says, *no matter how good a Morse operator he might be*.

But if I'd translated it into *another language*, for example German, then anyone fluent in German would understand the message. If Morse actually were a language, then translating the message into Morse would make it understandable

by anyone fluent in Morse, whether they knew English or not. But of course that isn't true, because Morse isn't a language.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

988. Re: EZNEC treatment of two metals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 16:53:33 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <%o076.1571$JH6.8262@e420r-atl2.usenetserver.com>
Source record: 172460

As Roy says, wire loss is usually not a dominant factor.
A test: run program with no loss, then one metal, then the other. Look at gain and loss or efficieny. If there is much difference, try a redesign or break the antenna into elements and try to fing the lighest loss, and redisign that element.
A tenth of a Db is probably the accuracy of NEC, so don't worry about small losses.
w4mb

989. Re: What is a ground loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 17:14:27 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <FI076.2013$G_6.12156@e420r-atl1.usenetserver.com>
Source record: 172462

A common way of generating ground loops is to use multiple ground points to a metal chassis. Many times this is OK since the chassis is a low impedance circuit element. However, if there is a high current between one pair of grounds, and there is another pair in the high current area which is sensitive to small voltages, with a relation between the sensitive and high current, there will be feedback. The inate pervisity principle states that the feedback will always be damaging (confirmed by experience!). Power Amplifiers, in particular, can oscillate when fed a little signa l, develop a parasitic, or even destroy the tubes/transistors.

The cures are: use a single ground point:; make the chassis very low resistance; keep high current grounds away from low voltage input points; use toothed lockwashers or direct solder to the ground, & some others.

Grounding is an art: it helps to keep your fingers crossed, or other protective actions. And to expect a problem with a new design.
w4mb

990. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 17:16:02 UTC
From: n2ey@aol.com
Message-ID: <93i5c7$2v8$1@nnrp1.deja.com>
Source record: 172464

In article <3A58B63C.EF9CEB2C@mwci.net>,
sabinw@mwci.net wrote:
> Hello Jim,
>
> Thanks for the nice comments.

Thanks for reading them, Bill.
>
> N2EY wrote:
>
> > Sabin said: > Like it or not, the kind of
> > >simplistic
> > >explanations that used to be OK when radio was, at least on the
surface, a
> > >lot
> > >easier to grab hold of, are just not good enough any more.
> >
> > I have to disagree in part. It all depends on what part of radio
we're talking
> > about. Things like basic DC theory haven't changed. There's more to
know
> > because there are more options, though.
>
> The thing that I see missing is an indepth comprehension and comfort-
zone of
> *basic, fundamental principles*. I am convinced that this is much
more important
> than any of the intuitive and arm-waving methods that we use to try
to get a handle
> on higher levels of things.

I absolutely agree. Concepts like SWR and transmission line loss aren't
really that difficult to understand, but one has to be willing to put
in the time and effort to really get a handle on what it means and all
the implications.

> By that I mean the ability to strip a question or a
> problem down to its most basic and simple ideas, rather than trying
to leapfrog to
> (and getting confused at) higher levels.

Yup. Thoreau went to Walden Pond for exactly that reason in another
area of thought. He was willing to put in the time and effort. Your use
of the phrase "strip a question or a problem down to its most basic and
simple ideas" really fits.

> As I get older and no longer struggling to
> earn a Company engineer's pay check I find myself focusing on the
beginning
> principles and mathematics (from the ground up) of various topics
that I am
> interested in.

I know what you mean.
>
> Maxwell's equations are a good example. They are about as
fundamental and
> trustworthy as we can get in the field of engineering-type
electromagnetics
> applications. Textbooks take these four equations and explain
zillions of
> applications (at the engineering level) in ways that we can trust.
But this is not
> an *easy* process. I keep struggling with it.

Same here. Most of the work we do is actually simplifications and
specializations of those four equations.
>
> About DC theory. I have recently been learning about DC biasing and
feedback
> methods in integrated circuit opamp design, just as general
interest. There are a
> lot of nifty ideas there that stretch our understanding of DC design.
>
> > Notice also that the old IRE stuff was often intentionally or
> > accidentally difficult to understand even for the professionals.
>
> The real problem here is the *art* of explaining topics in a clear and
> straightforward way. Many very smart people do not know how to do
that. They do
> not communicate well. It is not an intentional thing, nearly
always. On the other
> hand, people at the cutting edge of some subject talk to their peers
and really do
> not want to communicate with those of us who are at the novice
level. We should
> not be too critical. Einstein wrote a nice article on Relativity for
Scientific
> American.

Agreed. Look at what happened to Armstrong and Farnsworth.

Technical writing is among the most difficult because the author must
function on several levels at once. He/she must both have the knowledge
to be passed to the reader, and yet imagine being the reader who does
not have the knowledge.

One of the main functions of books like the ARRL ones is to bridge that
gap, using the most basic (but accurate) writing possible.

One of the best examples of good writing of this type is found in the ARRL Antenna Books, explaining the Smith Chart. I don't know if they still use the explanation I'm referring to - I first saw it in an edition from the early '70s. Takes the reader through the whole process without bogging down.
>
> > (young ham decides to go
> > to engineering school because ham radio showed the possibilities of
> > engineering).
>
> A-OK on that, big time. One outstanding example in science is Paul Horowitz, who
> wrote nifty articles for QST while in High School. Also engineer Terman and very
> many others.

TERMAN was a ham?? omigod...
>
> > But even a simple two-tube regenerative receiver
> > requires a lot of understanding of basic principles if it is to be any good.
>
> There is a lot to learn about these "simple" receivers. Ask Charles Kitchin, N1TEV.

Yup. Or NR5Q, Bruce Vaughn

Main problem is that to build up that basic knowledge requires the time and willingness to do the "simple" stuff first. Like wading through the dipoles and 8JKs first and really understanding them.
>
> > math and science skills of much of the US
> > population lag far behind what's needed.
>
> Educators are busting their buns to deal with this. We radio amateurs can help, by
> example and by encouragement.

Yep. The example speaks the loudest though, but it's the hardest to change. When a newbie visits a shack or FD site and sees nothing but expensive manufactured antennas and rigs, it says volumes about those using them.
>
> Snip the rest. I am sure we are on the same channel here.

Agreed. Closer than I thought. TNX

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

991. Re: Help Re-building KT34XA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 17:20:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5C99CD.689@wt.net>
Source record: 172463

Tim Taylor wrote:
>
> I'm in the process of re-building a KT34XA. My biggest problem is how to
> remove the residue/hardening material left behind from KLM's "protective
> paste". The material has hardened like a rock and although I could leave it
> there any reassemble the antenna, I would feel much better if it was
> removed.

Scrape with a sharp razorblade knife??? Maybe heating it up a bit would
help. Dunno...
>
> Second question. What is the current thinking on a material to replace the
> KLM "protective paste" ? I have more of it, but after seeing it harden, I
> don't think I want to use it again. Is NoLox (?) (the material sold at Home
> depot for AL to CU connections) any good?
>
> Your thoughts.
>
> Thanks,
>
> Tim K8XS

As already posted nolox will work. I wouldn't put it back together
without it. The protective name really should be changed to
protective/conductive. It really helps avoid bad connections in the
element junctions. Without it, you start to build up that nasty grey
corrosion and start getting bad connections. Usually will see the swr go
south, and then when you crank alot of rf into it, it will fix it for a
little while. I've had this problem on verticals many times when I
didn't use paste or connecting hardware. It takes quite a while to build
up, but when it does, it will drive you crazy, and you'll have to pull
the beam to fix it. Not worth the work for the fairly cheap price of the
paste. MK
--
http://web.wt.net/~nm5k

992. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 18:02:01 UTC
From: n2ey@aol.com
Message-ID: <93i82i$5s3$1@nnrp1.deja.com>
Source record: 172465

In article <3A5BC4E4.295F77B9@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> n2ey@aol.com wrote:
> > But not Morse. Which means the mode DOES influence behavior. Which
is
> > exactly what I claimed.
>
> I didn't disagree because it doesn't matter.

Sure it matters. You haven't responded to my challenge because you
can't.

> Morse code tested hams
> use their Morse code keys to jam other hams.

That doesn't mean they were using Morse. You just want to badmouth the
mode.

>I have heard it.

But have you SEEN it? If not, how do you KNOW they were using "Morse
code keys"? A simple 555 circuit will generate a pulse train for such
purposes. Computer software can do the same. A tape recording played
into a mike will do as well.

If someone uses a microphone to drive nails, it doesn't mean they
were "using voice".

Point us to the NALs. Otherwise you're just blowing smoke and
badmouthing.

73 de Jim, N2EY
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

993. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 18:17:11 UTC
From: rclark@seanet.com
Message-ID: <3aafa010.1550175214@news.seanet.com>
Source record: 172466

On 10 Jan 2001 04:58:59 GMT, dennis@wawa.juniper.net (Dennis Ferguson) wrote:

>Richard Clark <rwclark@epicedge.com> wrote:
>>Your solution is dead-on and certain - there is at least one problem.
>>
>>Before Steve Best revealed his version of the MI2, there was NO
>>publically available copy circulating to be pirated. Hence there was
>>no way to infringe on a document not already public (it may have been
>>privately circulated, but absolutely no one has claimed that status
>>except myself and I have not circulated it).
>
>Richard,
>
>In a practical sense this is not a problem, or at least is a problem
>that will fix itself. I also note that you are assuming you have
>knowledge of the material whose copyright is claimed to have been
>infringed, but there is no need to make this assumption.
>
>Before a copyright infringement suit can be initiated (and, in fact,
>before it makes sense to send letters informing of the infringement)
>the copyright on the material in question needs to be registered,
>with a copy of the material thus being deposited with the Library
>of Congress. When this happens you will know exactly what the
>material is of which infringement is claimed, and can make any
>comparisons you want. Until this happens it doesn't matter, since
>there can be no suit for copyright infringement of unregistered
>material.
>
>Copyright registrations are included in the catalog accessible
>at http://www.loc.gov/copyright/. Other than a Fractal Antenna Systems
>logo, I can't find anything even remotely related to the topic at hand.
>Without the copyright registration this is all much ado about nothing.
>
>Dennis Ferguson

Hi Dennis,

Your assessment of the need for registration is certainly an alternative, but it is not a necessity for the author who wishes to pursue violators. Copyright exists from the moment of completion, not through the act of appending a c enclosed in a circle or with the notice of copyright and a year date. There is certainly more protection through registration.

As for your statement:
> I also note that you are assuming you have
>knowledge of the material whose copyright is claimed to have been
>infringed, but there is no need to make this assumption.
This is not an assumption. I do in FACT have a copy of MI2 direct from the author, not indirect through a third party or through myself cloaked in the appearance of a third party to the author. The author presented this file to me, I did not seek it - except to show interest to the offer.

The two files have no points with which they agree in totality. The two files have no points in which they agree in description - they are simply similar and this is not a basis of copyright infringement. You cannot copyright an idea, that is the provence of patent. I have my own MI2 which is different from these two and it too reveals no particular gain or loss in the quality to the process of evaluating the form.

The last compelling blow to the logic of copyright infringement is found in the author's own announcement to copy and test and to respond in kind with an improved design or better design. Steve Best took up that challenge and demonstrated that the MI2 is NOT a particularly good example of the best characteristics for the given physical limitations made in the challenge.

The last, last compelling blow to the logic of copyright infringement is found in the author's complaint of it without pursuit. The law does not allow you to sit idly by without penalty. There is a particular term for this in patent law (which escapes me at the moment), and the gist of it is that if you do not pursue your rights, you cannot complain or recover for that period that you abandoned to your obvious indifference. (All may note the complete silence that now attends these issues.)

There is NO ONE here that will suffer any consequence but nuisance.

I will amend that last statement to point out that there may be one in this party to suffer for running an illegal Lottery - hope this helps.

73's
Richard Clark, KB7QHC

994. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 18:42:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <E7S3H3AG0KX6EA7L@ifwtech.plus.net>
Source record: 172370

Reg Edwards wrote:
>Richard Karlquist wrote
>> I believe N6BT when he says you only need 2 or 4 elevated
>> radials over salt water
>==========
>When over salt water NO radials are necessary. All that's needed is a small
>ground plate immersed just under the surface.

... and an antenna that floats up and down with the tide?

What N6BT actually said was that you only need 2 or 4 elevated radials over the *beach*. That stabilizes the performance as the tide goes in and out.

Radials laid *on* the beach were notably poorer, which is not surprising because the conductivity could vary anywhere between that of dry sand and salt water.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

995. Re: W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 18:53:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A5CAFAB.A4210181@eznec.com>
Source record: 172467

EZNEC, including the free demo version, comes with an example of a W8JK antenna. You can get the demo version at http://eznec.com.

Roy Lewallen, W7EL

Spencer Webb wrote:
>
> _ARRL Antenna Book_, 19th ed., page 8-49
>
> J.D. Kraus, _Antennas_, 2nd ed., pp 453-459, pp 468-470
>
> "cjg" <cgalbrai@removethis.umich.edu> wrote in message
> news:bB_66.4$JH6.105@e420r-atl2.usenetserver.com...
> > Can anyone point me to articles or books covering the W8JK antenna? I've
> > done Google, deja searches and haven't come up with anything. I'd like to
> > understand the design and eventually build one. Thanks for any leads!
> 73,
> > Chris KA8WFC
> >
> >

996. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 19:12:14 UTC
From: tom_bruhns@agilent.com
Message-ID: <93ic64$a4k$1@nnrp1.deja.com>
Source record: 172468

In light of the posts that W8JI-Tom has made here on the subject, do you really think it's leakage from single shielded coax, or some other cause? In any event, for a home antenna distribution system...will it make any practical difference if there is -40dB vs -200dB of leakage from the line?

Cheers,
Tom

In article <3aac878b.1478362072@news.seanet.com>,
rclark@seanet.com (Richard Clark) wrote:

> That "should" be true, but I have very ordinary results that confound
> that expectation. That is, due to cable leakage (going in, not coming
> out). I often encounter visual beat signals for local over the air
> transmissions (channels 5, 9 and 11 here in Seattle as you may well
> know) that mix with the video feed. The mixing is obvious in that the
> stronger cable signal is always much later in the scan than the ghost
> that over-rides it (much later being roughly 10 scan lines or roughly
> 0.5 mS). The channel 5 over the air signal, combined with the cable
> feed, is enough to drive my AGC into saturation. Now, given that AT&T
> laid new cable to my feed point, it is undoubtedly the Radio Shack
> line that I've used here at home that is the inferior component. My
> solution for these channels is to simply remove the cable feed and
> allow the short coax to the TV to pick up the signal over the air.
>
> 73's
> Richard Clark, KB7QHC
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

997. Maspro or Tonna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 19:31:57 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <93id9ihnl1@news6.svr.pol.co.uk>
Source record: 172369

Both good quality,looking for small size 144 beam.
Tnks G8IXN

998. A3S HF Beam Users

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 20:22:45 UTC
From: Denis O' Flynn <denisf@eircom.net>
Message-ID: <Zu376.5592$s4.3921@news.indigo.ie>
Source record: 172371

Hi All,
Can anyone give me the positives and negatives of the Cushcraft A3S HF Beam. Having looked at a number of beams, I think the A3S would be more suitable. all replies appreciated.

de Denis EI6HB
denisf@eircom.net

999. Re: Maspro or Tonna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 20:31:08 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <3A5CC68C.6DD63372@tpi.net>
Source record: 172372

Keith,
We (Elk Antennas) make a small, (24 inch boom) 5 element log periodic
for 2M
has good gain (measured by others at 6 dBd) 20 dB front to back ratio,
light weight 1.4 pounds, great for attic, RVing, backpacking, fox
hunting, great all round gen purpose antenna. We also make LPs for 220
and 440 bands plus specials for ATV.
If interested, e-mail and I'll send SWR,directivity plots plus photos.

Best wishes and happy new year from ray, w6fya

Keith wrote:

> Both good quality,looking for small size 144 beam.
> Tnks G8IXN

1000. Re: W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 20:50:04 UTC
From: ray gaschk <rgaschk@tpi.net>
Message-ID: <3A5CCAFC.19430B2C@tpi.net>
Source record: 172373

chris,
I have a copy of John Kraus' book second edition "ANTENNAS" on pages 453 through 458 he writes about six different W8JK close spaced antennas and gives lots of info, showing effects of spacing and phasing. He talks about the article that gave him the idea for his antennas and how the designs evolved.

I'm sure there are articles in QST regarding this antenna type and there must be references in some issues of the ARRL antenna handbook.

You should be able to find one of his books in your local library, but if not there in a local university library. You should be able to put in a request to borrow a copy through your local library.

Let me know if you encounter any difficulty, I'll do a bit more searching.

Best wishes from ray, w6fya for Elk Antennas
cjg wrote:

> Can anyone point me to articles or books covering the W8JK antenna? I've
> done Google, deja searches and haven't come up with anything. I'd like to
> understand the design and eventually build one. Thanks for any leads! 73,
> Chris KA8WFC

1001. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 21:11:17 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5CCF7B.9DFB06BA@bellatlantic.net>
Source record: 172374

Gary Coffman wrote:

> So, can you give some examples of the unique words (nouns, verbs, adverbs
> and adjectives), grammar, and syntax of this Morse language?

Yes. Any combination of Morse sounds that strike your eardrum and directly create an idea without the need for translation. A good morse op does not hear characters, he hears ideas. He uses whichever written language he knows if he writes those ideas down, or whichever spoken language he knows, if he speaks those ideas.

Unique words are not required for something to be a language. I am sure you would agree that French, Italian, Chinese, English etc are all languages. Each uses different words to express the same ideas. Morse words are sounds in a particular combination. The difference is fluency. When you are first learning any language, it is hard, and you struggle to grasp the idea behind the particular set of sounds associated with the idea. When learning a second language, you struggle to translate it into your native tongue. But when you become fluent in a language, you no longer struggle and you no longer translate. You "think in" that language. You don't even need fluency in morse to see that beginning to happen. Some sets of sounds - for example the sounds that make CQ, test, the, hihi come to mind are probably those where morse fluency starts. After hearing those sounds enough, they no longer appear mentally as distinct letters they become words, then concepts.

In Mexico at the airport in Merida back in the early 70's, I spoke with the radio operator there while he was working. He cocked one earphone off while we spoke, ran a bug with his right hand and typed with his left. And we spoke in English and in Spanish. He did not miss a beat - was copying and sending at 50 wpm. He told me that he had to read what he typed to know what he heard. The process for him was automatic - what came in his ear went onto the paper without conscious effort. (He used only a couple of letters, and the rest were numbers. He told me he was receiving information on windspeed and direction at various altitudes from other airports. I did not ask what he was transmitting - I assume it was the same info for the Merida location, being sent to other airports.)

Spoken language simply "encodes" ideas into sounds. Morse is no different - it is a means of "encoding" ideas into sounds. In the beginning use, we do translate those sounds into whatever language we know - but with fluency, no translation is necessary. That man in Merida

actually "thought in Morse".

> I can give such
> examples for actual languages such as English, German, Spanish, Russian,
> etc, but not for "Morse language". That's because Morse isn't a language, of
> course.

And your "of course" is simply wrong.

1002. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 21:15:25 UTC
From: dennis@wawa.juniper.net
Message-ID: <93ijddqsj1@heap.juniper.net>
Source record: 172375

Richard Clark <rclark@seanet.com> wrote:
>Your assessment of the need for registration is certainly an
>alternative, but it is not a necessity for the author who wishes to
>pursue violators. Copyright exists from the moment of completion, not
>through the act of appending a c enclosed in a circle or with the
>notice of copyright and a year date. There is certainly more
>protection through registration.

Richard,

I don't think your first sentence is correct. You certainly have
copyright from the moment a work is completed, but you need to register
the copyright before you can take action against violators. Here is the
wording from U.S.C. 17.411:

(a) Except for an action brought for a violation of the rights of
the author under section 106A(a), and subject to the provisions of
subsection (b), no action for infringement of the copyright in any
United States work shall be instituted until registration of the
copyright claim has been made in accordance with this title.

This is pretty clear. Neither the 106A(a) nor the subsection (b)
exception applies in the case we're talking about, so no copyright
registration means no law suit.

Dennis Ferguson

1003. Antenna: design for HDTV

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 21:53:43 UTC
From: calabella@webtv.net
Message-ID: <22880-3A5CD9E7-48@storefull-291.iap.bryant.webtv.net>
Source record: 172377

Has any body the formula for element length= frequency? As I was
thinking of building and aiming for the Boston HDTV UHF channels?
4=30@566-572mhz
5=20@506-512mhz
7=42@638-644mhz
>
~~~Surfdog___

http://community.webtv.net/calabella/WELCOMETOCHUCKSWEBTV
~~~

1004. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 22:16:59 UTC
From: rclark@epicedge.com
Message-ID: <3ab5cc5c.1561515971@news.seanet.com>
Source record: 172376

On Wed, 10 Jan 2001 19:12:14 GMT, tom_bruhns@agilent.com wrote:

>In light of the posts that W8JI-Tom has made here on the subject, do you
>really think it's leakage from single shielded coax, or some other
>cause? In any event, for a home antenna distribution system...will it
>make any practical difference if there is -40dB vs -200dB of leakage
>from the line?
>
>Cheers,
>Tom
>

Hi Tom,

Perhaps I am guilty of not having followed the thread of discussion,
but I was responding to the topic. Insofar as TV coax goes, I
presumed this was on the subscriber's side rather than the service
side. I say this because, to my problems described, I already
expected that my radio shack coax was sub-grade compared to the
service coming to me. In that regard leakage is obvious and
differentiable - of this there can be no doubt. I do not think it is
a problem of leakage into the service cable, but rather the
subscriber's cable. My home is completely wired with cable (I did it
myself, and have only myself to blame), and I did observe proper
termination conditions so no cable is floating.
As for the difference between -40 and -200 I can only say that this is
relative if it in fact is applicable to my discussion at all.

Sorry if my inclusion into this thread was confusing the issue.

73's
Richard Clark, KB7QHC

1005. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 22:27:07 UTC
From: richardharrison@webtv.net
Message-ID: <8016-3A5CE1BB-18@storefull-111.iap.bryant.webtv.net>
Source record: 172379

ehsjr wrote:
"He told me that he had to read what he typed to know what he heard."

Then he hadn`t understood what he typed. His keystrokes were "conditioned responses" to the unique sounds of Morse characters. It`s the same as monkeys do when they are trained to push certain buttons when they see certain lamps flash on.

Morse code is a set of symbols used to represent letters and numerals. It is only a language if poetic license is taken with the word, "language". In the sense that there is the languages of love and that there is body language, these interest me, Morse is called a language, too. With such a broad definition, anything of significance is a language. Ideas can`t be exchanged with clarity if fuzzy definitions are used for their words of expression. Fuzzy definitions are fine for poetry, comedy and other entertainment, but not for serious communications.

Best regards, Richard Harrison, KB5WZI

1006. Re: KB1EVA as 'Wakefield Killer'---ARRL response??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 22:29:59 UTC
From: rclark@epicedge.com
Message-ID: <3ab6dfc5.1566484455@news.seanet.com>
Source record: 172378

On 10 Jan 2001 21:15:25 GMT, dennis@wawa.juniper.net (Dennis Ferguson) wrote:

>Richard Clark <rclark@seanet.com> wrote:
>>Your assessment of the need for registration is certainly an
>>alternative, but it is not a necessity for the author who wishes to
>>pursue violators. Copyright exists from the moment of completion, not
>>through the act of appending a c enclosed in a circle or with the
>>notice of copyright and a year date. There is certainly more
>>protection through registration.
>
>Richard,
>
>I don't think your first sentence is correct. You certainly have
>copyright from the moment a work is completed, but you need to register
>the copyright before you can take action against violators. Here is the
>wording from U.S.C. 17.411:
>
> (a) Except for an action brought for a violation of the rights of
> the author under section 106A(a), and subject to the provisions of
> subsection (b), no action for infringement of the copyright in any
> United States work shall be instituted until registration of the
> copyright claim has been made in accordance with this title.
>
>This is pretty clear. Neither the 106A(a) nor the subsection (b)
>exception applies in the case we're talking about, so no copyright
>registration means no law suit.
>
>Dennis Ferguson

Hi Dennis,

I shall defer to your obvious work and superior effort.

I think we can both agree that NO ONE here will suffer any consequence but nuisance. Myself, I have never taken any threat seriously, and I am simply amused at the feeble nuisance attempts that go to confirm the lack of character. However, having said that - I am simply preaching to the converted.

Do you have any insight into the Gaming Regulations for Mass.? It seems to me that there should be some interesting laws in regard to setting up and operating an unregistered Lottery. The penalties phase may be anticipated already given that the "offended author" seems to have gone to ground (hunting term, not an RF pun).

73's
Richard Clark, KB7QHC

1007. FA::: TIC RING ROTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-10 23:18:09 UTC
From: Randy <rbkb8iii@erinet.com>
Message-ID: <3a5cedb1$0$1505$53a6afc1@news.erinet.com>
Source record: 172380
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1206710241

1008. Need help in Building FM receiver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 01:55:25 UTC
From: nitecapt*nospam*@optonline.net
Message-ID: <3a5d10f7.5326089@news-server.optonline.net>
Source record: 172381

I have just moved into a condo about 40 miles from NY City. We are not allowed to put an antenna on the roof and theres no way to run a wire from the attic to where the stereo is. The indoor dipole is pretty much useless. The condo has an outside balcony with a railing and I had an idea that I might be able to build something inconspicuous to put on the underside of the railing or between the railing posts and the edge of the balcony. Interestingly, the balcony faces New York City. My thoughts were that I might build a multi element antenna, using thin copper elements and spacing them very close together. My question is, is there a minimum distance required between the elements or can they be real close together? What effect does the diameter of each element have on its ability to receive? What lengths should the elements be? How do I link the elements to each other and then to the lead? Is there a better alternative? Any other suggestions?
Look forward to learning from your expertise.
Thanks
Ray

1009. Re: Counterpoise for multiband

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 02:32:52 UTC
From: "Rudy Marcelletti, K8SWD" <rudym@net-link.net>
Message-ID: <3a5d19ba$0$30011$44a10c7e@news.net-link.net>
Source record: 172382

> I live in an apartment on the second floor. I have an outbacker mobile
> antenna and plan to set it up on the balcony and setup counterpoises for
> the 10-80 meter bands. I have a few question.
>
> 1) Can I hook up all the counterpoises at the same time, YES or if I can
> only have the one for the correct band hooked up at any one time?
>
> 2) I plan to run them all tie-wrapped together, is that OK, or do they
> need to be spaced? YOU SHOULD SPREAD THEM OUT--THE BIGGER FOOTPRINT THE
BETTER.
>
> 3) the counterpoises for the 10-20 meters bands will drop vertically to
> the ground, however, the lower bands will have to run to ground level
> then run along the ground. Will that work? YES--YOU CAN ALSO RUN THEM
AROUND THE BASEBOARD OR YOUR APARTMENT, AND ALSO DOWN THE SIDE OR THE BLDG
AND EVEN AROUND CORNERS. IF YOU HAVE A METAL RAILING, USE IT AS WELL.
>
> Bob T
>

1010. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 02:54:06 UTC
From: n2ey@aol.com
Message-ID: <20010110215406.14870.00000495@nso-fr.aol.com>
Source record: 172383

In article <7445-3A59DAA8-6@storefull-112.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>David Sinclair wrote:
>"No amount of words can bury the fact of what a central part Morse
>played in the emergence and growth of radio, nor can they change the
>fact that large numbers of "relegated" folks still use Morse on the
>radio every day."
>
>Steam played a central part in the emergence and growth of the
>railroads. How many steam locomotives are at work today?

A few. They were mostly replaced by diesel-electric locos for one reason: The
diesels are cheaper to run. Railroads in the USA are almost all private
companies, and cost reduction demanded they use the less expensive method.

But diesel-electric locomotives are not the most efficient, nor the cleanest,
nor the most powerful. Electric locomotives are. But the cost of electrifying
the right of way is so great, and the tax burden so oppressive, that most
American railroads are not electrified.
>
>Diesel works better for railroads today.

Cheaper. The diesel/electric system was not originally developed for railroads,
though.

>This doesn`t stop aficionados from loving steam.

Nope. Railroads that are "amateur" (that is, done for their own sake) are
almost all steam. That tells you something.
>
73 de Jim, N2EY

1011. Re: A3S HF Beam Users

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 04:10:34 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3A5D3267.915A0432@pobox.com>
Source record: 172384

I have a A3s up for about 6 years. The plastic caps that protect the traps have cracked and have fallen off.

Otherwise it's ok for it's size.

1012. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 04:12:16 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5D32A0.6A041093@IEEE.org>
Source record: 172385

ehsjr@bellatlantic.net wrote:
>
> Gary Coffman wrote:
>
> > So, can you give some examples of the unique words (nouns, verbs, adverbs
> > and adjectives), grammar, and syntax of this Morse language?
>
> Yes. Any combination of Morse sounds that strike your eardrum and
> directly create an idea without the need for translation. A good morse
> op does not hear characters, he hears ideas.

Actually, in text based Morse he hears either characters of the alphabet
or words of a particular language. Morse code is an Input/Output function.
It is NOT a central processor function. Language exists at the central
processor function level, i.e. in the brain. How many ways are there to
input the word "tree"?

You can hear "tree" spoken. You can hear "tree" sent
in Morse code. You can read the word "tree" in text. You can read the
word "tree" in braille. You can read the word "tree" sent as letters
in American sign "language". All those are Input functions. The point
where you start dealing with the word-concept "tree" in your brain
is common to all the above methods of input. "Tree" is an English word.
If you were dealing with a different language, it wouldn't be the word
"tree" with which you are dealing. The Morse code word "tree" is a word
from the English language, it is not some separate Morse code language
word. Human beings usually think in their native language and that's
never Morse code. When you hear - .-. . . you are converting a
coded English word into an English language concept which represents
an object in reality. You could learn to do the same thing in ASCII
at a slow baud rate.
--
http://www.mindspring.com/~w6rca

1013. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 04:22:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5D351D.BBE3F5B9@IEEE.org>
Source record: 172386

n2ey@aol.com wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> > I didn't disagree because it doesn't matter.
>
> Sure it matters. You haven't responded to my challenge because you
> can't.

There's no argument about the mode so why should I respond to any
challenge about the mode? It would be a waste of time.

> > Morse code tested hams
> > use their Morse code keys to jam other hams.
>
> That doesn't mean they were using Morse. You just want to badmouth the
> mode.

I've already said they didn't use Morse code. I am certainly not badmouthing
the mode. I am badmouthing code-tested hams using Morse code equipment
to jam ham frequencies. What is it about a string of 'dits' or a
string of 'dahs' that you do not understand?

> >I have heard it.
>
> But have you SEEN it? If not, how do you KNOW they were using "Morse
> code keys"? A simple 555 circuit will generate a pulse train for such
> purposes. Computer software can do the same. A tape recording played
> into a mike will do as well.

Of course, a ham is going to whip up a 555 circuit to send a pulse
train when he has an electronic keyer sitting there on the desk - or
program a computer or play a tape recording. Give us an ever-loving
break, Jim. You are just blowing smoke.

> Point us to the NALs. Otherwise you're just blowing smoke and
> badmouthing.

Look at the NALs issued to code-tested hams for jamming. I've have
personally heard them using electronic keyers to do their jamming.
I'm sure you have also and refuse to admit it.
--
http://www.mindspring.com/~w6rca

1014. Re: W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 04:38:50 UTC
From: Dan Yemiola <Dyemiola@LexComInc.Net>
Message-ID: <3A5D38DA.13C3EC4A@LexComInc.Net>
Source record: 172387

W8JK (Kraus) Wrote a textbook entitled appropriately enough "antennas" Check
with your schools EE librarian, they probably have a copy even though he was a
faculty member at Ohio State..
Also, he wrote a popular book entitled "The Big Ear" in the 1970's. I bought an
autographed copy of it from him one year at Dayton.
Its partly autobiographical and in it he discusses developing the W8JK antenna
and early helix antennas.

cjg wrote:

> Can anyone point me to articles or books covering the W8JK antenna? I've
> done Google, deja searches and haven't come up with anything. I'd like to
> understand the design and eventually build one. Thanks for any leads! 73,
> Chris KA8WFC

W8JK antennas are big suckers!basically they are multiple wavelengths of
fractional wave sections connected by other sections at right angles.
imagine the size of a 160m W8JK.
4 or 5 times 160 meters long and 1/4 of 160m tall.
4x160=640m (0.64KM) 0.25x160=40m
(over 3/10mile long by 130ft tall)

Questions?
feel free to E-mail
Dan
AI8O

1015. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 05:03:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93jerq$9m5$0@208.207.71.156>
Source record: 172388

In a halfwave antenna, the current is at maximum at the feedpoint and
the voltage is at maximum at the ends. Same for a 1/4 wave vertical and
its 1/4 wave radial. That's what Pete was referring to. If you're using
a magmount two meter antenna on the roof (or anywhere else) on your car,
you don't really have an accurate 1/4 wave ground plane, so..... all
bets are off on the ground plane part. It makes a good ground plane for
returning antenna currents but since it's no longer a resonant 1/4 wave
the voltage won't be the same as if it was. I've never experienced a
"hot" car body from being used as a ground plane, and I've been around a
LOT of them (mostly non-amateur installations).

Dick

don't need no stinkin BADGES to email Gerald wrote:
>
> I was fixated on "end of the radial will be electrically hot." Is the whole
> radial electrically hot? And if insulated the end may be the only part
> exposed to the touch? I am new to this.
>

1016. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 05:19:15 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93jfojbrm0@208.207.71.156>
Source record: 172389

Gary Coffman wrote:
>
> No matter how proficient a Morse operator is in decoding Morse, he still won't
> understand the message text unless he understands the language in which
> it was composed. If Morse were an actual language, then he would understand
> what was being sent, because it would have been translated to a language
> (Morse) with which he is fluent. But it doesn't work that way because Morse
> isn't a language. It is merely an alphabetic encoding, no different in principle
> from ASCII or Baudot. The messages are still in their native languages.

What all you code bashers refuse to recognize is that written or spoken
words have meanings. So do the sounds of Morse code when learned to
fluency.

Your definition of the word'language' has support in most any
dictionary.
So does mine.

1017. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 05:29:48 UTC
From: Liz Marr <Spiritbrook@email.msn.com>
Message-ID: <#Z3LL#4eAHA.269@cpmsnbbsa07>
Source record: 172390

More fun to drink Slim Fast - don't know of anyone with an infant!

"Bruce Burke" <burke_br@freemark.com> wrote in message
news:3a5a4991.7384208@news.surfree.com...

> Infant formula cans, that's what you want. They're plated steel and
> are neary a foot long. You can make a decent 2M BP filter with them
> too.

1018. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 05:33:16 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5D459C.850E1669@IEEE.org>
Source record: 172391

Dick Carroll wrote:
> What all you code bashers refuse to recognize is that written or spoken
> words have meanings. So do the sounds of Morse code when learned to
> fluency.

Please prove that you think in dits and dahs, Dick, completely divorced
from the English language.
--
http://www.mindspring.com/~w6rca

1019. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 06:41:35 UTC
From: richardharrison@webtv.net
Message-ID: <8014-3A5D559F-87@storefull-111.iap.bryant.webtv.net>
Source record: 172393

Dick Carroll wrote:
"---written or spoken words have meanings. So do the sounds of Morse code when learned to fluency."

A wheel is a car part, not a car.

An alphabet is a set of letters. Letters usually represent word parts, not words. A word has uncertainties of meaning without some context. The context comes from a sentence constructed by the rules of the language.

All Morse code does is substitute an unusual set of symbols for those normally used to transmit and record a language. English is a language. Morse code character "di-dah" and alphabet character "a" are symbols for an element of the alphabet used with the language.

An alphabet is not a language and neither are the symbols which express the alphabet used with the language for transmission or recording.

Best regards, Richard Harrison, KB5WZI

1020. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 06:55:31 UTC
From: calabella@webtv.net
Message-ID: <19910-3A5D58E3-24@storefull-297.iap.bryant.webtv.net>
Source record: 172392

Mario I have noticed the RG-11 has triple shielding.
>
http://www.satellite-shop.com/CAB-Dynapacific-RG11/index.shtml
>
~~~Surfdog___

http://community.webtv.net/calabella/WELCOMETOCHUCKSWEBTV
~~~

1021. Build 3 band 3 element beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 07:14:31 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A5D5D57.615E29B5@eskom.co.za>
Source record: 172394

Hi
I would like to build a 3 element 3 band (28, 21, 14) beam antenna. I would appreciate some ideas on making the antenna especially with the traps. (Should I use traps ?) Please keep in mind that my QTH is in ZS land and doni¿½t have access to many first world products.
Thanks
Stan
ZS6HAL

1022. Re: W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 08:00:28 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <Kpv76.1457$_y3.7281@newsfeed.slurp.net>
Source record: 172293

Yes. I would recommend you get a copy of the July 1970 issue of QST. That article also refers to an article in January 1938 QST. Both articles are written by John Kraus. His book "Antennas" mentions the W8JK array also, and you really ought to have that book in your library if you want to learn a lot about antennas anyway.

cjg wrote in message ...
>Can anyone point me to articles or books covering the W8JK antenna? I've
>done Google, deja searches and haven't come up with anything. I'd like to
>understand the design and eventually build one. Thanks for any leads! 73,
>Chris KA8WFC
>
>

1023. Re: W8JK article?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 12:23:38 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a5da5cf_1@news.cybertours.com>
Source record: 172395

"ray gaschk" <rgaschk@tpi.net> wrote in message
news:3A5CCAFC.19430B2C@tpi.net...
> chris,
> I have a copy of John Kraus' book second edition "ANTENNAS" on pages 453
> through 458 he writes about six different W8JK close spaced antennas and
gives
> lots of info, showing effects of spacing and phasing. He talks about the
> article that gave him the idea for his antennas and how the designs
evolved.
>
> I'm sure there are articles in QST regarding this antenna type and there
must
> be references in some issues of the ARRL antenna handbook.
>
> You should be able to find one of his books in your local library, but if
not
> there in a local university library. You should be able to put in a
request to
> borrow a copy through your local library.
>
> Let me know if you encounter any difficulty, I'll do a bit more searching.
>
> Best wishes from ray, w6fya for Elk Antennas
> cjg wrote:
>
> > Can anyone point me to articles or books covering the W8JK antenna?
I've
> > done Google, deja searches and haven't come up with anything. I'd like
to
> > understand the design and eventually build one. Thanks for any leads!
73,
> > Chris KA8WFC
>

There are a few sights on the net that offer info too :
http://www.hard-core-dx.com/nordicdx/antenna/wire/w8jk.html
http://www.cebik.com/lh.html

You should beable to follow the links on these pages to others with more
info.. the second one is about the Lazy H which is a cousin to the 8JK
Good luck,
73 Dave

1024. Re: Need help in Building FM receiver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 13:50:38 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <r7ldOmcfSk9oSSwo1=LAvWXVFKSy@4ax.com>
Source record: 172396

nitecapt*nospam*@optonline.net (Ray) wrote:

>I have just moved into a condo about 40 miles from NY City. We are not
>allowed to put an antenna on the roof and theres no way to run a wire
>from the attic to where the stereo is. The indoor dipole is pretty
>much useless. The condo has an outside balcony with a railing and I
>had an idea that I might be able to build something inconspicuous to
>put on the underside of the railing or between the railing posts and
>the edge of the balcony. Interestingly, the balcony faces New York
>City. My thoughts were that I might build a multi element antenna,
>using thin copper elements and spacing them very close together. My
>question is, is there a minimum distance required between the elements
>or can they be real close together? What effect does the diameter of
>each element have on its ability to receive? What lengths should the
>elements be? How do I link the elements to each other and then to the
>lead? Is there a better alternative? Any other suggestions?
>Look forward to learning from your expertise.
>Thanks
>Ray

Measure how much space you have on your balcony, and then go to Radio
Shack and see what they have in stock :-)

FM beams like these aren't very expensive, and building them would
probably be a real hassle, unless you just like to fiddle...

Bob
k5qwg

1025. Re: Need help in Building FM receiver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 14:04:20 UTC
From: richardharrison@webtv.net
Message-ID: <26863-3A5DBD64-17@storefull-113.iap.bryant.webtv.net>
Source record: 172398

Ray wrote:
"The indoor dipole is pretty much useless."

Would an outdoor dipole be useless too?

Put your dipole or FM portable radio in possible antenna installation positions to test for signal strengths.

When you`ve found a usable signal, you will be able to determine your antenna needs.

Window frames and other pieces of structure can sometimes be used as "slot antennas". You may get out the clip-leads and experiment.

How are you receiving TV? Can you use the same antenna or cable for FM too?

Best regards, Richard Harrison, KB5WZI

1026. Anyone use an M2 6meter HO Loop for base?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 14:06:29 UTC
From: KG6ENA <kg6ena@home.com>
Message-ID: <3A5DBDE3.4FC8F95B@home.com>
Source record: 172397

Hello all:

I am interested to know if anyone has experience with an M2 Ho Loop for
6 meters in a base station installation. I would appreciate comments.

thanks

steve
kg6ena

1027. FS: Crankup towers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 15:12:09 UTC
From: Bruce Brackin <bbrackin@bellsouth.net>
Message-ID: <3A5DCD49.8B99E54C@bellsouth.net>
Source record: 172400
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

(May be repeat - first ones didn't show after 24 hrs.)

Have three 40', two 60' and one 80' crankups for sale. Light duty,
custom made for wireless cable. Used for site survey. Galvanized. 40'

are 2 section, 60' has 3 and 80' has 4 sections. (about 2-1/2' overlap
per section) Have driven rod type base for most. Will throw in guy
wire and set of 4' earth anchor screws. All neck down to 6" face on
top section. Top section has brackets at top for mounting 1-12" mast.
Would be good for verticals or small/medium VHF/UHF beams.

Asking $125 for the 40' ones, $175 for the 60's and $250 for the 80'

LOCAL PICKUP (I've moved them all once!) Central Mississippi area.

Email direct for details. I am in and out so don't fret if reply takes
a
day or two. - Thnaks. Bruce, KD5IUG

1028. Re: Build 3 band 3 element beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 15:15:39 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5DCE1B.56DB6046@dvol.com>
Source record: 172401

>
stan.holmes@eskom.co.za wrote:
>
Hi

> I would like to build a 3 element 3 band (28, 21, 14) beam antenna. I
> would appreciate some ideas on making the antenna especially with the
> traps. (Should I use traps ?) Please keep in mind that my QTH is in ZS
> land and doni¿½t have access to many first world products.
> Thanks

>
Building a three element three-band trapped Yagi is a major undertaking I would not attempt and I've built some large, complex beams. Plus, as you point out, the materials specified in a construction article written in one country probably won't be available in another country except perhaps in western Europe. I don't know of any "how-to-build" articles on 3el/3 band Yagis, my ARRL Antenna Book doesn't have any. Even if there was such an article here the elements and other components would be specified in inch sizes which are not available in countries which use metric sizes and that can make a big difference.
>
If I were in your circumstances I would seriously consider a 2 element 3 band Cubical Quad antenna instead of a Yagi. 2 element quad performance is very much in the same league as small trapped Yagis. The big advanatges of a quad in your situation are that the construction is simpler, constuction accuracy requirements are much less demanding, tuning is much easier, materials are more or less common everywhere and inch/metric conversions are simple and don't affect the design parameters.
>
Quads are awkward things to handle and install. But they have smaller "footprints", are light and do not require heavy-duty rotators and it's been said that they perform better than Yagis when installed at lower heights vs. a Yagi.
>
The following will lead you to a lot of quad design & construction resources. Note the availability of several books on the subject.
>
http://www.cebik.com/radio.html
>
http://www.ac6v.com/antprojects.htm
>
The biggest problem you might face is obtaining the fiberglass spreaders.
>
http://www.cubex.com/

>
http://www.escape.ca/~gemquad/
>
>

> Stan
> ZS6HAL

>
w3rv

1029. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 15:31:58 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93kjmnqib1@iac5.navix.net>
Source record: 172402

So when one is copying 5 letter groups, that can be decrypted at a latter time, in a language the operator may not even know where is the language? What is the language?

You noted "body language", if one accepts the definition that the conveyance of meaning or communication is a language then the need for weeks of picking fly deification out of the pepper becomes moot.

Most of the people on here appear to accept that definition, with the exception of a few curmudgeons that enjoy tweaking others for their own amusement.

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:8014-3A5D559F-87@storefull-111.iap.bryant.webtv.net...
>
> An alphabet is a set of letters. Letters usually represent word parts,
> not words. A word has uncertainties of meaning without some context. The
> context comes from a sentence constructed by the rules of the language.
>
> All Morse code does is substitute an unusual set of symbols for those
> normally used to transmit and record a language. English is a language.
> Morse code character "di-dah" and alphabet character "a" are symbols for
> an element of the alphabet used with the language.
>
> An alphabet is not a language and neither are the symbols which express
> the alphabet used with the language for transmission or recording.
>
> Best regards, Richard Harrison, KB5WZI
>

1030. Re: Calibrated Dipole for FS measurements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 15:38:01 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93kk22qqp1@iac5.navix.net>
Source record: 172403

Simply build two identical dipoles. Use one to transmit the reference signal and one to receive. Adjust your transmit power, and at various output levels plot the FS values. This antenna becomes your dBdr or reference dipole. You may then compare the antenna under test with the previous calibrations.

"CDT" <xctx@onr.com> wrote in message
news:QCk76.6$%T2.2429363236@news.onr.com...
> Does anyone have good references on how
> to build a calibrated dipole for field strength
> measurements? I.E. how to build a dipole
> with a known "antenna factor" as the EMC
> experts call it.
>
> thanks in advance,
> W5CDT
>
>
> -->Remove the x's from my email address before using <--
>
>

1031. Calibrated Dipole for FS measurements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 15:50:08 UTC
From: CDT <xctx@onr.com>
Message-ID: <QCk76.6$%T2.2429363236@news.onr.com>
Source record: 172399

Does anyone have good references on how
to build a calibrated dipole for field strength
measurements? I.E. how to build a dipole
with a known "antenna factor" as the EMC
experts call it.

thanks in advance,
W5CDT

-->Remove the x's from my email address before using <--

1032. Re: Build 3 band 3 element beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 17:02:58 UTC
From: Bill <bill@g4zrb.demom.co.uk>
Message-ID: <979232513.6788.0.nnrp-12.c2de39c9@news.demon.co.uk>
Source record: 172404

I agree with Stan. Another idea to look at is the Moxon Rectangle for 3 bands which has no traps and is relatively low tech. Recent articles in QST [June 2000, pp38-42] and RadCom [October 2000 pp61-62].
Bill

stan.holmes@eskom.co.za wrote in message <3A5D5D57.615E29B5@eskom.co.za>...
>Hi
> I would like to build a 3 element 3 band (28, 21, 14) beam antenna. I
>would appreciate some ideas on making the antenna especially with the
>traps. (Should I use traps ?) Please keep in mind that my QTH is in ZS
>land and don't have access to many first world products.
>Thanks
> Stan
>ZS6HAL
>
>

1033. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 17:17:25 UTC
From: richardharrison@webtv.net
Message-ID: <5571-3A5DEAA5-16@storefull-118.iap.bryant.webtv.net>
Source record: 172407

Fred, W4JLE wrote:
"What is the language?"

Strict definition:
Language is distinctive human voice communication using selected symbols
in conventional ways with conventional meanings.

Other communications called language are ersatz or similies.

Best regards, A. Curmudgeon, KB5WZI

1034. A4S 10 Meter traps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 17:22:21 UTC
From: ki8fb@my-deja.com
Message-ID: <93kq40csh1@nnrp1.deja.com>
Source record: 172405

Does anyone have a good set of the 10 meter traps. Let me know what you have and the price
73
Kevin KI8FB

Sent via Deja.com
http://www.deja.com/

1035. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 17:52:46 UTC
From: M1nn0w <1c3d0g@att.net>
Message-ID: <Opm76.715$9c.41665@bgtnsc07-news.ops.worldnet.att.net>
Source record: 172409

So let's see..... Unless you knew the Italian language (I don't) If I were to walk up to you and say Io non parlo Anglais. You would have no idea as to what I said. You might even ask "What language is that?" And if I walked up to you and said Dah Dah Dit Dit Ah Dah Dah Dah Dah Dah Dit Dah Dit Dah Dit Dah Dit Dit Dit Dit Dit Dah Dit Dit Dit Dah Dit Dit Dah Dah Dit Dit You would again have no idea what I said. If you knew the italian language you would have known that I do not speak english. And if you knew morse you would know that I said "Good Afternoon Old Man. How Are You?" To me language is just an abstract. It means things to you because that's what you were taught. It's just a means for people who were taught the same thing to communicate. If you speak to someone in French and they don't know french they won't understand you. If you speak to someone in morse and they don't know morse they won't understand you either. it won't matter that you both know english or cobalt or unix. you chose the wrong language to communicate with. Language is a communications tool and so is morse. Having said that and stating that I work better than 98% CW (because I truly love the sound of it and because I am impressed with myself for taking the time to learn and understand it) I will say that I don't believe there should be a code requirement any longer. I do believe that Technical testing should be kept up even improved because that's where the future of this hobby should be going. There should also always be a part of the hobby for those of us (Dare I call myself an old timer) who enjoy using CW. Who have worked for our right to operate and who don't want to mix it up with the sidebanders or the packeteers. There. I've said my piece. Now I can go back to just following this endless thread.

John

1036. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 17:53:40 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3A5DF324.782A1F18@datacomm.com>
Source record: 172408

I have never used a Boston Attorney.

Anyone know for a fact if they will tune up on 10m or 40m? :-]

The ones here on the west coast are usually too wet, or salt corroded,
and aren't suitable at all! :-]

Louis

Required wrote:
>
> Michael A. Kaufman
>
> 16 Harcourt Street, #3C
>
> Boston MA 02116
>
> Admitted to the bar on 6/20/1995
> Current status is Active
>
> --
> Posted from host4.websitesource.com [209.239.38.252]
> via Mailgate.ORG Server - http://www.Mailgate.ORG

1037. Re: Build 3 band 3 element beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 17:54:11 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A5DF343.41C67EA6@rupert.tds-az.lmco.com>
Source record: 172410

stan.holmes@eskom.co.za wrote:
>
> Hi
> I would like to build a 3 element 3 band (28, 21, 14) beam antenna. I
> would appreciate some ideas on making the antenna especially with the
> traps. (Should I use traps ?) Please keep in mind that my QTH is in ZS
> land and doni¿½t have access to many first world products.
> Thanks
> Stan
> ZS6HAL

I agree with Brian Kelly's posting. I also would not attempt
a tri-band yagi. Some time ago I thought I might like to build
one, just like you. I searched everywhere for construction
articles and was suprised to not find any. I checked many issues
of the ARRL Handbood, various Antenna books, back issues of
QST, and all over the internet. There were lots of single
band and some dual band, but not tri-band.

It seems that when you start making the elements do double
and triple duty, by using traps, the spacing becomes very
critical and matching can be very hard to deal with. I finally
just bought a used tri-band yagi at a ham fest.

Brian's suggestion to try a quad is also good. When I
couldn't find tri-band yagi construction articles, I started
to look for quad articles. There are lots of construction
articles for 2, 3, and 5 band quads. Great antennas and
construction materials shouldn't be to hard to find or
substitute. It's just a bunch of wire and sticks.

Good Luck
Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

1038. WTB: Base Stn Ant Mounting Clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 18:38:51 UTC
From: Frank Sweeney <fsweeney@mail.com>
Message-ID: <fan76.18162$3M.381817@nntp0.chicago.il.ameritech.net>
Source record: 172320
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Gents, I am looking for 3 Heavy Duty mounting clamps for mounting my 8 Bay UHF Dipole Antenna to a mast. Similar to Antenna Specialist ASPR616 (I think they changed the model number to 8676). Hvy Duty Galvanized etc...

Please state price and condition.

73,
Frank - K9IC

1039. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 18:44:08 UTC
From: richardharrison@webtv.net
Message-ID: <11756-3A5DFEF8-1@storefull-115.iap.bryant.webtv.net>
Source record: 172412

M1nn0w wrote:
"To me language is just an abstract---."

I might be put off by a a merger in Morse for the character "U" and the "question mark". But, that`s nit-picking.

I used to write programs in COBOL, which is, if I recall, an acronym for "COmmon Business Oriented Language". As Ann Richards used to say, "You can put lipstick on a sow and call her Monique, but she is still a pig." Cobalt might be more fun, if it didn`t leave you cobalt blue.

That Unix is called a language, even the ones and zeros are called "machine language", comes from ersatz (substitution) and similie (a resemblance). Like Ann Richards` pig, it doesnt make them the real thing.

Best regards, Richard Harrison, KB5WZI

1040. Re: Need help in Building FM receiver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 18:54:08 UTC
From: jda@rupert.tds-az.lmco.com
Message-ID: <93kvgg$h8i4@cui1.lmms.lmco.com>
Source record: 172411

In rec.radio.amateur.antenna, Ray wrote:
>I have just moved into a condo about 40 miles from NY City. We are not
>allowed to put an antenna on the roof and theres no way to run a wire
>from the attic to where the stereo is. The indoor dipole is pretty
>much useless. The condo has an outside balcony with a railing and I
>had an idea that I might be able to build something inconspicuous to
>put on the underside of the railing or between the railing posts and
>the edge of the balcony. Interestingly, the balcony faces New York
>City. My thoughts were that I might build a multi element antenna,
>using thin copper elements and spacing them very close together. My
>question is, is there a minimum distance required between the elements
>or can they be real close together? What effect does the diameter of
>each element have on its ability to receive? What lengths should the
>elements be? How do I link the elements to each other and then to the
>lead? Is there a better alternative? Any other suggestions?
>Look forward to learning from your expertise.
>Thanks
>Ray

Well, I don't live in an apartment, or NY for that matter, but
I still use an indoor antenna for my FM reception.

Since you have a balcony, it usually means that you have some
kind of arcadia door for access and possibly a curtain that
covers the arcadia door, from the inside. My arcadia door
is about 10 feet wide and I use the curtain rod as an antenna.

It does a great job. I just run some coax from the receiver
to the curtain rod and connect the center conductor to the
curtain rod. I did, however, make sure that all of the sliding
connections, on the rod, were secured with screws, so as to
make a good connection.

You loose nothing by trying it and gain everything if it works.

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

1041. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 19:16:47 UTC
From: tom_bruhns@agilent.com
Message-ID: <93l0ql$ji8$1@nnrp1.deja.com>
Source record: 172413

Hi Richard,

Well, my first question, at least, was an honest attempt to get at the root of the problem you saw. Do you know for sure that it's the fault of single-shielded coax, and not, for example, a poorly-shielded TV front end, or a common-mode to differential-mode conversion problem? I know the problem of which you write, having seen it myself, but I would not jump to the conclusion that it was the fault of the coax, necessarily. Based on what others here have posted in the past, and also on some measurements I've made myself, I'd be very careful to check out what other ways the signal might be getting in.

In any event, for a home TV antenna distribution system, as opposed to a system that distributes a cable signal (offset in time and possibly carrier frequency from the broadcast signal), shielding, however you define it, probably isn't as important. Signal transmission integrity (reasonably flat frequency response, reasonably low attenuation, reasonably low reflections) is, I believe, the key issue. I would normally expect that there just won't be significant "bad" signals trying to get in, and leakage from the coax to the outside world similarly won't be an issue. If the coax runs by a strong noise source, one should look carefully at common-mode issues...and probably try to avoid running too close to such a noise source in any event.

Cheers,
Tom

In article <3ab5cc5c.1561515971@news.seanet.com>,
rclark@epicedge.com (Richard Clark) wrote:
> On Wed, 10 Jan 2001 19:12:14 GMT, tom_bruhns@agilent.com wrote:
>
> >In light of the posts that W8JI-Tom has made here on the subject, do
you
> >really think it's leakage from single shielded coax, or some other
> >cause? In any event, for a home antenna distribution system...will
it
> >make any practical difference if there is -40dB vs -200dB of leakage
> >from the line?
> >
> >Cheers,
> >Tom
> >
>
> Hi Tom,
>

> Perhaps I am guilty of not having followed the thread of discussion,
> but I was responding to the topic. Insofar as TV coax goes, I
> presumed this was on the subscriber's side rather than the service
> side. I say this because, to my problems described, I already
> expected that my radio shack coax was sub-grade compared to the
> service coming to me. In that regard leakage is obvious and
> differentiable - of this there can be no doubt. I do not think it is
> a problem of leakage into the service cable, but rather the
> subscriber's cable. My home is completely wired with cable (I did it
> myself, and have only myself to blame), and I did observe proper
> termination conditions so no cable is floating.
> As for the difference between -40 and -200 I can only say that this is
> relative if it in fact is applicable to my discussion at all.
>
> Sorry if my inclusion into this thread was confusing the issue.
>
> 73's
> Richard Clark, KB7QHC
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

1042. Re: Lightning protection in auto tuners??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 19:41:06 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a5e0caf$0$35018$44a10c7e@news.net-link.net>
Source record: 172414

Schedule it on your insurance policy. Works good!
Dick Carroll wrote in message <93695bfnr0@208.206.142.79>...
>
> Your effort is laudable but of limited effectiveness. Any lightning
>stroke that can travel miles through the air to get to your
>tower/antenna isn't likely to be seriously deterred by the need to jump
>the airgap on a switch or relay.
> If you have the antenna switched directly to a good ground system you
>will divert a major portion of the strike directly into ground, but your
>tuner and other gear will be exposed to whatever portion of the strike
>is attracted by its path to ground.
> Bottom line: nothing works as well as unhooking and grounding the
>antenna directly. That's what I do with my EDX2 that I use portable with
>my camper when the rig is not in use.
> I also move the antenna end away from the camper to protect it. If
>lightning got into my motorhome it could easily cause damage that would
>make a scortched tuner seem trivial.
>
>Dick
>
>
>
>Floyd Sense wrote:
>>
>> Can't speak to those two in particular, but have experience with the
SGC-230
>> family. My advice is to either:
>>
>> 1. Install a knife switch(s) and manually ground the antenna and
disconnect
>> it from the tuner when not in use in lightning season
>>
>> 2. Install a relay to do the same, powering the relay from the 12V line
to
>> the tuner so that when the tuner is powered down, the antenna is
>> disconnected and grounded.
>>
>> K8AC
>>
>> "John P. Franklin" <jpfrankl@teleport.com> wrote in message
>> news:0GS46.12160$pA5.835063@nntp1.onemain.com...
>> > Does ANYONE know if there is some kind of lightning protection scheme
>> for
>> > auto-tuners like the ICOM AH-4 or the Alinco EDX-2? Are we expected to

>> run
>> > out and take it off the wall or tower everytime a nasty looking cell
blows
>> > through the area?
>> >
>> > Pat
>> >
>> >
>> >

1043. Re: Van Gorden Shorty Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 19:49:05 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a5e0e8d$0$35010$44a10c7e@news.net-link.net>
Source record: 172415

Mine came with instructions. Bought it last spring and assembled it in
basement exactly as instructions said. Worked good on FD with my MFJ-986
tuner on 80 meters, but poor on other bands. I did not short feed line and
work on 160. Don't know why unless I was cranking the inductor too fast
trying to find the other match points. Van Gordon said to test the traps.
They appeared good. I need to put it up and hook my MFJ-259 analyzer to it
and see if I can tune it. I have not put it up since--use a full size 160
with ladder line inverted V with apex at 95 feet and W9INN balun box at
home. Works great. I will make a note of your request and look for the
instructions. email me your fax number direct and I will fax the info I
have to you.
Lonnie wrote in message ...
>I just bought one of these dipoles from HRO in Atlanta. Due to space limits
>at my qth I need the smaller length of this Dipole ant. However it came
with
>no Instructions for the placement of the traps. I called HRO and they just
>sadi that all of the others had no instructions as well. I also tried to
>reach the Manufacter but with no luck. They don't seem to have a listed
>phone and no answer to three letters.
>Any Help would be helpfull.
>
>TNX N1XMO@EARTHLINK.NET Lonnie Fannie
>
>

1044. Re: mounting small yagis in trees????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 19:57:55 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <93l37t$m6t$1@nnrp1.deja.com>
Source record: 172416

This may SOUND complicated, but I think it is better than trying to mount a rotor and antenna in a tree together:

1) Tie a string to the very center of the antenna and one at the front of the antenna.

2) Hoist the antenna with coax up the tree over one of its limbs.

3) Drive a 5' antenna mast into the ground about half way directly under the center of the antenna.

4) Mount your rotor on the mast.

5) Use 1" PVC tubing to make an "L" shaped extension. The short end will mount into the rotor and the long end will point NORTH when you set-up your rotor.

6) Tie the string from the front of your antenna to the front of the PVC extension.

When you turn your rotor, it will turn the antenna and you don't have to damage the tree by "hard" mounting the antenna.

In article <3a51dfe3_1@nntp.I-IS.COM>,
"News" <webqaz@i-is.com> wrote:
> Does anyone know any good web sites that show how to install small yagis in
> trees??
> The reason I'm asking is because I'm thinking of getting on the air but I
> live in an area with a lot of tall trees, and why spend the money for a 50
> ft mast when you already have one (that you dont have to go to radio shack
> to buy) in your backyard!
>
> Thanks
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

1045. Re: Need help in Building FM receiver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 20:37:37 UTC
From: richardharrison@webtv.net
Message-ID: <14003-3A5E1991-9@storefull-111.iap.bryant.webtv.net>
Source record: 172417

Ray wrote:
"We are not allowed to put an antenna on the roof---."

A slot 59 inches long will be resoonant about 100 MHz. Twinlead can be attached to take away the signal at the middle of the slot, one wire to each side of the slot in a conducting sheet, with a slot an inch or so wide.

A vertical slot is horizontally polarized, but today most FM stations transmit with about equal strengths at vertical and horizontal polarizations. So it makes little difference if horizontal or vertical polarization is used for the receiving antenna.

The slot can also be made in a metal cylinder (pipe) if a conducting sheet is not handy. Length and diameter of the pipe are not critical, but bigger is somewhat better.

The slot has the same gain as a 1/2-wave dipole.

Best regards, Richard Harrison, KB5WZI

1046. Re: Calibrated Dipole for FS measurements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 21:48:36 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A5E2A34.53AA742D@dialpoint.net>
Source record: 172418

For what frequency ? If for anything around 6 meters or much lower the height above ground will be difficult to compensate for. The arrl handbook used to have a dipole for about 432 that had a very repeatable gain. It was really a dipole over a screen reflector or something like that and had around 5.5 db gain in refferance to a dipole.

CDT wrote:
>
> Does anyone have good references on how
> to build a calibrated dipole for field strength
> measurements? I.E. how to build a dipole
> with a known "antenna factor" as the EMC
> experts call it.
>
> thanks in advance,
> W5CDT
>

1047. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 22:02:59 UTC
From: n2ey@aol.com
Message-ID: <93laibtkh2@nnrp1.deja.com>
Source record: 172269

In article <3A5C71C9.8B939C6C@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> Re-routed to r.r.a.policy where it belongs.

Nope.
>
> N2EY wrote:
> > Maybe, Ed. But that's not the point at all. The claim was that
Morse was used
> > for jamming, which has not been proven at all.
>
> Who made that claim?

I'm not sure. Maybe it was you, Cecil.

> It certainly wasn't I.

So what's the problem, then?

> I claimed that code-tested hams
> use Morse code equipment to jam using continuous waves or a string
of 'dits'
> or 'dahs'.

You wrote "Morse code KEYS" (emphasis added) were used. Yet you provide
no references to NALs to back up your claim.
>
> > Could be. How do you even know a keyer was used unless you are at
the jamming
> > site?
>
> Are you incapable of recognizing an electronic keyer?

Not at all. I've seen many of them. Used a few, too. I prefer a
Vibroplex bug for sending Morse.

I can't tell from listening when a station sending Morse is using an
electronic keyer unless the station says so or there is some other
method of knowing. And neither can you, Cecil.
>
> > "Don't GENERALLY do so?" Nonsense. They are so rare that NO NALs
have been
> > issued by the FCC for such use of Morse. None. Not any at all.
>
> That's like saying no one has ever dunked a basketball while wearing
> a straight jacket.

No, it isn't. Not at all.

For one thing, dunking a basketball while wearing a strait jacket is quite difficult if the jacket is worn as it was designed to be worn. Almost impossible, I'd say.

Obscenity and profanity in Morse are quite easy if one is so inclined. And the FCC has been issuing NALs all over the place - but NOT for such use of Morse. Just not a problem.

> Morse code is not required for jamming.

Yup. PACTOR 2 is more effective, I would imagine.

> But Morse
> code equipment is often used by code-tested hams.

For sending Morse, yes. For jamming and other violations? That has not been proven at all. You're blowing smoke, Cecil.

Nice try substituting "equipment" for "keys". Doesn't work, though.
>
> > And what mode are they interfering with? Who are they jamming?
>
> They are usually jamming nets, e.g. the Liberty Net.

How do you know the ja,,ers are even hams?
>
> > Where are the NALs?
>
> There are no jamming NALs?????

None for the use of Morse in jamming that I know of. Put up or shut up, Cecil. Stop badmouthing and wordweaseling and put up some real information. If you can.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1048. Re: Code Quick System

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 22:22:40 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <xoq76.722$e5.1817892@news.ntplx.net>
Source record: 172270

Pete <pete@etep.com> wrote in message
news:kQ056.60827$36.2259909@news1.rdc1.il.home.com...

> I've seen where this system has been mentioned a few times in this NG.
> Where can I get some information on it? Thanks

From the database at http://www.arrl.org/tis/tisfind.html:

http://www.arrl.org/cgi-bin/tisfind?patt=CodeQuick

Company
Wheeler Applied Research
38-221 Desert Greens Dr W
Palm Desert, CA 92260-1005
USA
Tel: 800-782-4869 (orders only) 10A-7P EST, 7A-4P PST
619-773-9426
Fax: 619-773-2674
Email: cq@cq2k.com
http://www.codequick.com/
Products and Services
MORSE CODE>CODE PRACTICE OSCILLATOR; PUBLICATION>STUDY GUIDE;

73,
Ed Hare, W1RFI

1049. Re: Antenna: design for HDTV

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 22:35:19 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <t5sdbrbjjqo1f5@corp.supernews.com>
Source record: 172271

It isn`t a fancy antenna you will need, but a Television set that supports HDTV.....

"Charles LaBella" <calabella@webtv.net> wrote in message news:22880-3A5CD9E7-48@storefull-291.iap.bryant.webtv.net...
> Has any body the formula for element length= frequency? As I was
> thinking of building and aiming for the Boston HDTV UHF channels?
> 4=30@566-572mhz
> 5=20@506-512mhz
> 7=42@638-644mhz
> >
> ~~~Surfdog___
>
> http://community.webtv.net/calabella/WELCOMETOCHUCKSWEBTV
>

1050. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 22:37:59 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <t5sdgrq0l16l47@corp.supernews.com>
Source record: 172272

Well, the bandwidth is not that great On the boston attorney. Rather pricey, too. You might want to investigate if a Homeless would do the same job, or maybe even a Hispanic.....

"Louis Bybee" <louisb@datacomm.com> wrote in message news:3A5DF324.782A1F18@datacomm.com...
> I have never used a Boston Attorney.
>
> Anyone know for a fact if they will tune up on 10m or 40m? :-]
>
> The ones here on the west coast are usually too wet, or salt corroded,
> and aren't suitable at all! :-]
>
> Louis
>
> Required wrote:
> >
> > Michael A. Kaufman
> >
> > 16 Harcourt Street, #3C
> >
> > Boston MA 02116
> >
> > Admitted to the bar on 6/20/1995
> > Current status is Active
> >
> > --
> > Posted from host4.websitesource.com [209.239.38.252]
> > via Mailgate.ORG Server - http://www.Mailgate.ORG

1051. Re: Calibrated Dipole for FS measurements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-11 22:38:59 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <docs5tkmnvq04dp68br3ja310nvku9abba@4ax.com>
Source record: 172273

->CDT wrote:
->>
->> Does anyone have good references on how
->> to build a calibrated dipole for field strength
->> measurements? I.E. how to build a dipole
->> with a known "antenna factor" as the EMC
->> experts call it.

If you are talking about doing stuff for FCC TA&C, then I'd strongly advise you get a copy of Willmar Robert's Book "A Guide To FCC Equipment Authorizations". He goes into "antenna factor", but antenna factor is a pretty trivial calculation with a dipole. More important is how you feed it (balun) and Roberts goes into a long song and dance about that sort of stuff.

It appears to be typed (on a real honest to God typewriter!!) and self published. Last known phone number was 904.427.3612 and the location of the publisher was New Smyrna Beach FL.

If you *really* want the antenna factor for a standard dipole, it is

K = 20*log f (in MHz.) - G (in dB) - 29.78 dB and since G for a standard dipole is 2.15 dB, the whole mess reduces to

K = 20*log f - 31.93 (plus balun loss, plus cable loss).

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1052. Pro & Con hy-gain "AV-640"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 00:08:33 UTC
From: Siddhartha <jrm7287@frontiernet.net>
Message-ID: <93lhv9$1cd8$1@node17.cwnet.frontiernet.net>
Source record: 172274

If you are using or have used the AV-640, I would be interested in what you have to say. Thanks. 73's W2JRM

1053. Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 00:26:47 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <bbs76.1152$GX3.30911@newsread1.prod.itd.earthlink.net>
Source record: 172275

A non-ham friend of mine has a 36 foot sailboat and is looking into SSB gear for it. He's decided to get his ham license as well, so he can operate the HF bands while at sea. Given the requirement to be able to hit the marine frequencies (I'm totally ignorant of what frequencies they are) as well as, say, 20 meters, I wonder what experienced sailor/hams are using for an antenna?

K8AC
Floyd Sense - Angier, NC

1054. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 00:34:27 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A5E5113.5F9F@bellsouth.net>
Source record: 172276

Hmmm,

I never tried to load a Boston attorney. I once "loaded up" a hippie
that tried to break my HF antenna. LOL!

Jerry

Louis Bybee wrote:
>
> I have never used a Boston Attorney.
>
> Anyone know for a fact if they will tune up on 10m or 40m? :-]
>
> The ones here on the west coast are usually too wet, or salt corroded,
> and aren't suitable at all! :-]
>
> Louis
>
> Required wrote:
> >
> > Michael A. Kaufman
> >
> > 16 Harcourt Street, #3C
> >
> > Boston MA 02116
> >
> > Admitted to the bar on 6/20/1995
> > Current status is Active
> >
> > --
> > Posted from host4.websitesource.com [209.239.38.252]
> > via Mailgate.ORG Server - http://www.Mailgate.ORG

1055. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 00:36:59 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A5E51AB.2753@bellsouth.net>
Source record: 172277
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap

Where are you trying to transmit?

Jerry

Kevin wrote:
>
> Hi,I have a modified FT-50 and it seems to have a problem on 440 out of
> band,Particularly FRS use.It may be over modulating,How do you turn the
> modulation to half modulation for only temporary use? Also does anyone
> know what kind of power this radio put out on 144 and 440 out of band
> transmissions,Because It seems to not have much power on 440 out of
> band! Please help. Kevin- h175a@multipro.com
>
> Sent via Deja.com
> http://www.deja.com/

1056. Re: tv coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 00:55:31 UTC
From: rclark@epicedge.com
Message-ID: <3a5e42c7.80036426@news.seanet.com>
Source record: 172278

On Thu, 11 Jan 2001 19:16:47 GMT, tom_bruhns@agilent.com wrote:

>Hi Richard,
>
>Well, my first question, at least, was an honest attempt to get at the
>root of the problem you saw. Do you know for sure that it's the fault
>of single-shielded coax, and not, for example, a poorly-shielded TV
>front end, or a common-mode to differential-mode conversion problem? I
>know the problem of which you write, having seen it myself, but I would
>not jump to the conclusion that it was the fault of the coax,
>necessarily. Based on what others here have posted in the past, and
>also on some measurements I've made myself, I'd be very careful to check
>out what other ways the signal might be getting in.
>
>In any event, for a home TV antenna distribution system, as opposed to a
>system that distributes a cable signal (offset in time and possibly
>carrier frequency from the broadcast signal), shielding, however you
>define it, probably isn't as important. Signal transmission integrity
>(reasonably flat frequency response, reasonably low attenuation,
>reasonably low reflections) is, I believe, the key issue. I would
>normally expect that there just won't be significant "bad" signals
>trying to get in, and leakage from the coax to the outside world
>similarly won't be an issue. If the coax runs by a strong noise source,
>one should look carefully at common-mode issues...and probably try to
>avoid running too close to such a noise source in any event.
>
>Cheers,
>Tom
>

Hi Tom,

My response was not a criticism, I dropped into the thread late and thought I might be introducing some branch to the discussion.

As for this being a problem of the TV (for one reason or another) I would say that I narrowed this down through a process of elimination rather than through verification. I have no reason otherwise, but fully expect this is a cable problem.

The local signals are strong as is evident with an 18" coax draped nearby (and moved to optimize the signal) that is sufficient to watch those three channels without snow or noise. That is, the coax connected to the jack in the back had sufficient unbalanced currents to find their way into the unterminated end. Interpretations of this one clue may vary. Another clue is that there are far more over the

air signals than these three (of admittedly different signal levels), and yet they do not present the same symptoms (again, they may be too weak, but beat patterns are quite easily viewable for large S/N ratios). In fact, these other over the air signals don't even register without a real antenna.

Most of my friends say the pictures from other channels are digital clear (in fact it is still the old, but upgraded analog system... the new distribution amplifier sits 20 feet from my house). This suggests that other paths in may be possible, but the principle path in still exhibits separable characteristics (the three beating and overloading signals are those I can also receive without an antenna and the feed coax is completely disconnected). In other words, the service appears to be excellent to the characteristics you describe as desirable above.

I have an especially long run of coax from the service connector (some 50 - 60 feet). The only remaining possibility is connectors not tightened enough (a common point of leakage too).

As for external noise generators along the path - there is no issue in that regard. The house, aside from the transmitters, is relatively noise free from HF to VHF at least. I can induce noise, by turning on light dimmers, but this wholly outside of the discussion now as I can prove that noise is a function of conduction, not radiation (and the coax path is not in a conduction path).

During my time at the bench, I used triax to eliminate interference from precision calibrations (SWR measurement is impossible otherwise) in the GHz regions; and it was definitely needed because sources and detectors are never completely screened. I think you and perhaps Tom make the same point - but in the GHz regions I was much more susceptible due to proximity. Recall now, that interference leaked into a receive path is much more noticeable than strong transmit leakages out are to remote and rather more passive equipment. That is, of course, with the acknowledged fact that (as in real estate) location is all.

This may answer your question, it may even confirm your suspicions in spite of the spin I impart to the same symptoms. Such is life.

73's
Richard Clark, KB7QHC

1057. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 01:29:17 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5E5DED.FCF21DF5@dvol.com>
Source record: 172279

Floyd Sense wrote:

> A non-ham friend of mine has a 36 foot sailboat and is looking into SSB gear
> for it. He's decided to get his ham license as well, so he can operate the
> HF bands while at sea.as well as, say, 20 m

>
He'll need two radios, one being type-accepted for maritime service. He can't
legally operate on the marine freqs with a ham rig on any U.S. flag vessel.
>

> Given the requirement to be able to hit the marine
> frequencies (I'm totally ignorant of what frequencies they are)

>
Most coastal ssb comms are conducted in the 2000-2800 Khz range.
>
See http://members.aol.com/jneuhaus/fccindex/hf_maritime.html . .

> I wonder what experienced sailor/hams are using for an
> antenna?

>
They break a mast stay or two with insulators and use an underwater plate
attached to the hull for a ground and operate the mast stay as an endfed random
length wire. None of it is trivial, your friend needs to connect with an FCC
licensed GROL and marine radio guru.
>

> K8AC
> Floyd Sense - Angier, NC

>
w3rv

1058. Re: Pro & Con hy-gain "AV-640"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 01:29:46 UTC
From: Carl Sherman <csherman@flash.net>
Message-ID: <3A5E5DBF.73B6ED22@flash.net>
Source record: 172280

Siddhartha,

I have had bad luck with my Cushcraft R7000 and am planning to replace
it with an AV-640. Have not bought it yet, so would also like to see
the responses you receiver. If you have any opinions on the 640, would
like to know them.

Thanks and 73,
Carl Sherman W5SBH

Siddhartha wrote:
>
> If you are using or have used the AV-640, I would be interested in what you
> have to say. Thanks. 73's W2JRM

1059. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 02:09:33 UTC
From: bozekk@my-deja.com
Message-ID: <93lp0o$a8j$1@nnrp1.deja.com>
Source record: 172281

I am going to my local hardware store and purhasing some 12 gauge Romex. I am just not sure how to attach the wire to the V-grips. I thought of solfering it and then covering the connection, or simply using the v-grips to clam the wire andf running a piece of the wire to the antenna ground.

N3HGN

Sent via Deja.com
http://www.deja.com/

1060. Re: Help Re-building KT34XA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 02:50:18 UTC
From: Larry Louie <y4562@home.com>
Message-ID: <Khu76.157487$iy3.36355960@news1.rdc1.tn.home.com>
Source record: 172282

The paste that I remember using on my KLM was a conductive paste with fine
copper filings.
I would think it could be removed with some fine emery paper.

"Tim Taylor" <tim-taylor@home.com> wrote in message
news:Pan66.150666$65.1131898@news1.rdc1.fl.home.com...
> I'm in the process of re-building a KT34XA. My biggest problem is how to
> remove the residue/hardening material left behind from KLM's "protective
> paste". The material has hardened like a rock and although I could leave
it
> there any reassemble the antenna, I would feel much better if it was
> removed.
>
> Second question. What is the current thinking on a material to replace
the
> KLM "protective paste" ? I have more of it, but after seeing it harden, I
> don't think I want to use it again. Is NoLox (?) (the material sold at
Home
> depot for AL to CU connections) any good?
>
> Your thoughts.
>
> Thanks,
>
> Tim K8XS
>
>
>
>

1061. Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 02:52:38 UTC
From: Paul Lusardi <n0vlr@fyi.net>
Message-ID: <3A5E7175.CA96C53F@fyi.net>
Source record: 172289

Hi, I am looking for a design for an end fed wire antenna -- I am
nhoping to not use an expensicve tuner in the process.

my layout is as such:

```
-----------------------------------------------------------------------
X (shack) 370'
---------------------->>

100'
to
here
**-----------------------------------------------------------------------
```

there are some 30-40' trees along the top line(back of property) and
some 30' trees along the 100' line(front of property). the reason I am
asking about an end fed wire is because I beleive that you *should not*
bend a wire antenna at 90 degrees

restriction: I can only run wires along back of property or from the
shack to the ** marker

any ideas? home brew or product ideas are welcome

thanks

Paul N0VLR
n0vlr@arrl.net

1062. Mosley Customer Support...Nill

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 02:58:28 UTC
From: wa7aw@bentonrea.com
Message-ID: <3a5e6402.948118869@news.bentonrea.com>
Source record: 172285

http://users.bentonrea.com/~wa7aw/tower/page14.html
web page updated Jan. 11, 2001
please send replies direct
foward this page to as many
people as you know who might
be interested in one supplier
and one customers problem
email address is on web page.
John H.
wa7aw

1063. Re: 1691MHz downconverter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:19:02 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <GIu76.29301$HE2.5505064@news1.onlynews.com>
Source record: 172283
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,alt.radio.scanner.uk

> > I'm looking for a design/schematics for a downconverter for 1691MHz
(meteosat)
> > down to anything below 1300MHz, guess most IF's is ~137.5 for APT
compability
> > though for me higher = less interference.
> > But any designs are welcome..
> > Any suggestions? (yeah I'll problably end up buying one, but $100-$300
is more than
> > I want to spend if I can build one cheap :)

QEX has an article of a few issues back which was exactly what you're
looking for.

W4ZCB

1064. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:24:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <93ltfg$mu1$1@nntp9.atl.mindspring.net>
Source record: 172286
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap

Kevin,

The deviation of the FT-50 is wider than FRS uses, so it would have a tendency to be hard to understand. Also, unless you use 12.5 step rate, the FT-50 will not tune to the FRS channels. Even when the proper frequency is displayed, I would check with a counter to be sure. Last, but not least, it is not type accepted for FRS use.

FWIW,

David
KD4NUE

Kevin <h175a@multipro.com> wrote in message
news:93fl6l$2ko$1@nnrp1.deja.com...
> Hi,I have a modified FT-50 and it seems to have a problem on 440 out of
> band,Particularly FRS use.It may be over modulating,How do you turn the
> modulation to half modulation for only temporary use? Also does anyone
> know what kind of power this radio put out on 144 and 440 out of band
> transmissions,Because It seems to not have much power on 440 out of
> band! Please help. Kevin- h175a@multipro.com
>
>
> Sent via Deja.com
> http://www.deja.com/

1065. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:25:49 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a5e74be.209522413@news.azstarnet.com>
Source record: 172287

On Thu, 11 Jan 2001 09:53:40 -0800, Louis Bybee <louisb@datacomm.com> wrote:

>I have never used a Boston Attorney.
>
>Anyone know for a fact if they will tune up on 10m or 40m? :-]
>
>The ones here on the west coast are usually too wet, or salt corroded,
>and aren't suitable at all! :-]
>
>Louis

I've never personally used one but I think some of the east coast guys do. But it seems that there is some kind of severe mismatch that causes audio distortion such that all of their "R's" seem to be missing.

Apparently this is more of a problem on h-f, particularly the longer paths to the west coast where their signals are almost unintelligible. However, I understand they work quite well for local QSOs on 2m FM in the Boston area.

Wes N7WS

>Required wrote:
>>
>> Michael A. Kaufman
>>
>> 16 Harcourt Street, #3C
>>
>> Boston MA 02116
>>
>> Admitted to the bar on 6/20/1995
>> Current status is Active
>>
>> --
>> Posted from host4.websitesource.com [209.239.38.252]
>> via Mailgate.ORG Server - http://www.Mailgate.ORG

1066. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:27:13 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <IQu76.29319$HE2.5504843@news1.onlynews.com>
Source record: 172284

. SSB and CW, on the other
> hand work very well together-if conditions on SSB fade out, merely
> switch to CW and complete the contact or quickly make arrangments to QSY
> to another band.

If they're so compatible, why have separate sub-bands? If CW is so great, let it stand or fall on it's own merits, don't try to protect it with a separate allocation.

Somehow this thing has drifted so far off base it's embarrassing to contribute to it, but NO ONE I've heard of is proposing banning CW, if you like it, fine. If you can find someone else who needs CW proficiency to feel better than the next guy, go ahead and talk with your fingers to him/her.

Stop acting like CW is next to Godliness and all the rest of us are sinners and you'll have more friends.

> Happens all the time now, but won't when CW is banned. And make no
> mistake, your comments clearly indicate your mindset that since it is
> "outmoded" that it might as well disappear. For commercial and militahy
> use, it already has, save for ongoing niche applications. But for ham
> radio, nothing could be farther off base.

If God had meant for man to talk with his fingers, he'd (She'd) have put lips on them!

W4ZCB

1067. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:34:21 UTC
From: richardharrison@webtv.net
Message-ID: <14005-3A5E7B3D-12@storefull-111.iap.bryant.webtv.net>
Source record: 172288

Jim, N2EY wrote:
"None for the use of Morse in jamming that I know of. (NALs)"

Most of all, a jammer wants results. CW is not the best way to get results. If it were superior, government and political propaganda agencies would use CW in their battles to drive away listeners. They don`t often use CW for that.

I worked for years in shortwave broadcasting. Our listening posts around the target areas logged all the jammers on our programs. More than 50 jammers would appear on one frequency. Some were high-power sky-wave jammers and some would be local jammers in city neighborhoods.

How did we know about the numbers? Most jammers identify! Beyond that, we triangulated and tracked them down. We could not exterminate them, but we knew who and where they were. Policy might have changed to allow eradication, but I expect that like roaches such action would have just prompted more to appear. The jammers were our well known neighbors on all of our frequencies. We had to publish our schedules in advance for our listeners, even when some were those in charge of jamming. In spite of jamming we punched our programs through, and we never went unheard or unheeded. We were charged with causing economic collapses, military uprisings, and revolutions. We were innocent of some of the charges!

A multitude of modulations were tried by the jammers. The variety seemed to be winnowed and a few of those modulations probably thought to be effective against us seemed to be dealt out to most of the jammers after awhile. News of the jamming efforts often circulated through our organization. We all wanted to know how we were doing. I never heard of CW being used. Big investments were made to obliterate us, but we always managed to get through, but with some gaps in coverage. If CW were ever in the competition as a jamming signal, it was eliminated, and probably early in the game.

So, would an experienced operator use CW to jam or make profane remarks? Probably not. A modulated carrier makes more intentional mischief and draws a wider audience to shock with profanity.

The weak-as-water point coders seem trying to promote is that people trained in Morse are of better character and don`t violate the rules. They claim there are no violation notices for deliberate use of CW to jam or pollute the air with profanity. This is supposed to prove that CW makes operators righteous.

The proof of the coders claim would be more convincing if it it sorted violators by whether they had been code certified and their percentages

of the total in their particular group.

Whatever group a jammer comes from, if he is a real troublemaker he is likely to go beyond extemporaneous acts. He will likely treat his audience to prerecorded programming, musical passages, sound effects, insults. barbs to specific individuals,etc., and all in plain but disguised language to reach the largest possible audience. Could this be so? Yes. It`s all happened repeatedly and involved several individuals in this community. Some were ordered to pay large fines and lost their licenses. These cats may have known CW, but it would not have served their purposes at all.

Would elimination of legal voice operation on the bands have any effect on egregious violations involving weird modulation. I think not so long as the ham`s receiver was capable of demodulating a signal.

Best regards, Richard Harrison, KB5WZI

1068. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:56:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93lv8n$15r$0@208.207.71.154>
Source record: 172292

W4JLE wrote:
>
> Most of the people on here appear to accept that definition, with the
> exception of a few curmudgeons that enjoy tweaking others for their own
> amusement.
>

Yes, that is an eminently noteworthy feature of this 'discussion'. The
Code Opposers, to a man, insist on honoring only their own choice of
definitions of the word 'Language', while every dictionary I have
consulted has numerous differing definitions, a number of which clearly
qualify Morse code as in fact being a language.
That pretty well sums it up.

W0EX

1069. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:58:57 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A5E8101.550199E7@bwcc.com>
Source record: 172291

Gary Coffman wrote:
> So, can you give some examples of the unique words (nouns, verbs, adverbs
> and adjectives), grammar, and syntax of this Morse language? I can give such
> examples for actual languages such as English, German, Spanish, Russian,
> etc, but not for "Morse language".

That is not a criterion for a language.

> The texts that you send via Morse encodings *do* have those attributes
> of language, however, because the texts are in a real language, IE English,
> Spanish, French, etc. Encoding them via Morse for transmission doesn't
> translate those texts to a different language. They are still English, Spanish,
> French, German, Russian, etc language texts that just happen to be encoded
> for transmission with Morse characters instead of ASCII characters, or
> Baudot characters, or printed font characters on paper or on a computer
> screen.
And if a word has the same spelling in two languages, you can't tell from that word which language it is.

But Russian Morse code? I missed that one.
Do you Morse-like code?

> No matter how proficient a Morse operator is in decoding Morse, he still won't
> understand the message text unless he understands the language in which
> it was composed.
To the extent that the words or abbreviations are not universal, such as an S.O.S.

> If Morse were an actual language, then he would understand
> what was being sent, because it would have been translated
> to a language (Morse) with which he is fluent.
But this is not a necessary criterion.
The Morse vocabulary that the person recognizing on hearing may be much smaller that what is recognized in English.

> The ITU correctly calls it a "telegraphic alphabet". We can use that telegraphic
> alphabet to convey messages in any language which can be spelled by that
> alphabet.
I agree.

> But those messages are still in their native languages, not in a
> separate Morse language.
That does not mean that Morse is not a language.

If a child's parent always communicated with him in a series of clicks and pops based on Morse code, the child would indeed communicate in a Morse language clicking and popping back at the parents without a clue as to how normal spoken English sounds.

> Now the Q signals, and certain other abbreviations that are in common
> use by radio operators, are a sort of very limited pidgeon language. But
> these aren't part of Morse, and should not be mistaken for Morse simply
> because radio operators commonly convey them via Morse.

So there we have it. You win the argument because you delete from consideration the very things that *are* the Morse language by saying that they are not strictly the telegraphic alphabet known as "Morse".

> If Morse actually were a language, then translating the
> message into Morse would make it understandable
> by anyone fluent in Morse, whether they knew English or not.

See, you made yet another terrible generalization.
There are many Morse languages.
We were talking about the Morse language that is based on English.

> But of course that isn't true, because Morse isn't a language.
The three dots on a traffic light are a language too.

Speaking for myself, I assert that when I see the red dot, I don't translate that into English, and say, "okay, 'stop', I guess I better stop".

I understand the language of traffic lights directly without having to know the English meaning behind the red dot, amber dot, and green dot, and flashing variations thereof.

When my first two sons were very young, I didn't tell them what the lights meant.
For month or two when we were in the car on the streets, I pointed out the lights but did not explain them as traffic control devices.
Nonetheless, eventually they understood what the lights meant from how I and other drivers reacted to them (although the other drivers often confused the issue).

They didn't have to know the English meanings at all.

By the way, although computer languages are truly languages in their own right, most are based on English.

1070. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 03:59:36 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A5E8128.3541C259@bwcc.com>
Source record: 172290

Gary Coffman wrote:
> So, can you give some examples of the unique words (nouns, verbs, adverbs
> and adjectives), grammar, and syntax of this Morse language? I can give such
> examples for actual languages such as English, German, Spanish, Russian,
> etc, but not for "Morse language".

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> for transmission with Morse characters instead of ASCII characters, or
> Baudot characters, or printed font characters on paper or on a computer
> screen.
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> understand the message text unless he understands the language in which
> it was composed.
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> what was being sent, because it would have been translated
> to a language (Morse) with which he is fluent.
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> alphabet to convey messages in any language which can be spelled by that
> alphabet.
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> But those messages are still in their native languages, not in a
> separate Morse language.
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> use by radio operators, are a sort of very limited pidgeon language. But
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Nonetheless, eventually they understood what the lights meant from how I and other drivers reacted to them (although the other drivers often confused the issue).

They didn't have to know the English meanings at all.

By the way, although computer languages are truly languages in their own right, most are based on English.

1071. Antennas for apartment dwellers?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 04:11:37 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <Ztv76.50578$n%.2475878@news20.bellglobal.com>
Source record: 172294

I would like to either erect a dipole antenna or vertical in my backyard, here is my problem. I would have to space the dipole off of the wall of the apartment somehow because there are no supports anywhere in the yard to use, and I would be limited to one band, probably 40m. Will the performance be degraded by any material contained in the brick? As for the vertical, I may use a mobile whip or maybe a screwdriver. What would be the best ground system for this type of antenna? I am using a TS450 with built in tuner. I can't mount it too high or out in the open. I was lucky to get away with the satellite dish!

Thanks for the help

Max VE3TMT

1072. Help with KLM Triband antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 04:47:21 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3a5e8c5d$0$1521$6daed22a@news.infinet.com>
Source record: 172295

I have obtained a used and abused (when it was taken down by the owner several years ago, the elements were separated from the boom and the boom and elements were left in the bushes at the edge of the property). The owner (a friend) is selling the house and he offered me the antenna. I retrieved it and dug it out (It was buried by accumulated pine straw - which may have protected it). It seems to be in pretty good shape - considering. Some of the pieces of the elements are bent, but look like they may be straightenable. I haven't gone through the elements in detail yet, but so far, apart from some rusted hardware, it looks like the only broken piece is one of the element to boom clamps.

I am looking for a copy of the manual for this antenna. I'd rather not take the elements apart (they look a lot more complex than my Force 12 C4S) until I'm sure I know how they go back together. The antenna is a 20-15-10m tribander. It has 6 elements. I believe it is either a KT34A or KT34XA. Can someone tell me how to tell the difference.

I'd also welcome any suggestions on rebuilding. My planned approache is to take everything apart, clean and straighten (or replace) the individual pieces then put it together as if I were building a new one, but currently all the elements are as they were when it was taken down, other than we separated them in the middle for transport, but we then taped the two halves together so we know which goes with which.

As it looked pretty straightforward, I began my cleanup on the boom (a lot less parts). It cleaned up really well, which gives me hope for the elements.

Thanks,
Mark, N8ME

1073. Re: Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 04:48:44 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <93m2bc$8un$0@208.206.142.78>
Source record: 172296

Check here for the tuner you'll need to build...cheap and simple, for
end fed wires.

http://www.alphalink.com.au/~parkerp/lma.gif

Dick

Paul Lusardi wrote:
>
> Hi, I am looking for a design for an end fed wire antenna -- I am
> nhoping to not use an expensicve tuner in the process.
>
> my layout is as such:
>
> ---
> X (shack) 370'
> ---------------------->>
>
> 100'
> to
> here
> **---
>
> there are some 30-40' trees along the top line(back of property) and
> some 30' trees along the 100' line(front of property). the reason I am
> asking about an end fed wire is because I beleive that you *should not*
> bend a wire antenna at 90 degrees
>
> restriction: I can only run wires along back of property or from the
> shack to the ** marker
>
> any ideas? home brew or product ideas are welcome
>
> thanks
>
> Paul N0VLR
> n0vlr@arrl.net

1074. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 05:18:39 UTC
From: Aaron Jones <nomail@nomail.com>
Message-ID: <et4t5tc3ef3q4e8280uh2fsttiesqovtvf@4ax.com>
Source record: 172297

"Harold Johnson" <w4zcb@ispchannel.com> wrote:
>If God had meant for man to talk with his fingers, he'd (She'd) have put
>lips on them!

You're seem to be talking with your fingers right now... :-)

1075. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 05:33:39 UTC
From: n2ey@aol.com
Message-ID: <20010112003339.22779.00000201@nso-fa.aol.com>
Source record: 172298

In article <20010108225955.29484.00000915@ng-cs1.aol.com>, kr2v@aol.com (Kr2v) writes:

>I'm looking for design ideas to home-brew dipole center insulators. I know
>there's not much to it, just looking for some ideas (PVC parts, etc.) that
>work
>well together.

Here's what I've used for coax-fed dipoles fpr the past 17 years or so. Only works with small diameter coax, though:

Start with a piece of "2 inch" PVC pipe about 5 inches or so long. Drill 1/8" holes about 1/2" in from each end for the antenna wires. Drill pairs of 1/4" holes on the "sides", right in the middle. Two more holes about two inches apart on the top are for a halyard to support the antenna if it's put up as an inverted V. Looks like this (side view):

```
______ _________ _______
I U U I
I I
I o O O o I
I I
I_______________________I
```

o = 1/8" hole for antenna wires
O = 1/4" hole for tywraps
U = 3/8" hole for halyard

Other side drilled the same.

The coax is wrapped around the middle of the insulator and secured with black UV resistant nylon ty wraps. The end of the coax is tywrapped to itself and points down, so water stays out. The whole thing is weatherproofed with rtv or spray lacquer after connections are made. No metal in the insulator at all.

I can supply bitmap drawings if needed to make it clear.

73 de Jim, N2EY

1076. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 05:59:33 UTC
From: WP4LGN <no@spam.com>
Message-ID: <83x76.192329$IP1.7050673@news1.giganews.com>
Source record: 172299

I have one Radio Shack Deluxe antenna in my car with an RCI-2950. After trim I got very good SWR on 10 meters. From Arizona I talk almost everyday back home (Puerto Rico), Japan and Europe and they give me 5-9 reports. Better use an swr meter and forget about the lights.

Mark Keith <nm5k@wt.net> wrote in message news:3A5A1095.1BC1@wt.net...
> Oar9fi wrote:
> >
> > I think maybe the Deluxe antenna (trimmed for 10m) may be defective- the
> > difference seems to be in the base. when i put the long whip from the
deluxe on
> > the crappy cb antenna mount (and co-ax) it lit up more output lights.
(on ssb
> > voice peaks- the 100 dosen't have fm or am)What is the spiral disk (like
a
> > copper spiral) in the antenna for? does this affect tuning? it seems
like the
> > deluxe dosent recieve as well as the crappy ant. well i'm sorta
confused. maybe
> > i'll get the swr/power meter rs has just to try & figure out the problem
then
> > return it. ok thanks... justin
>
> It may well have a bad coax connection inside. That sounds like a
> different antenna than the one I was refering to. If yours has a big
> coil, it's the type I've seen lately on trucks that look like mini-10m
> bugcatchers. Seems they should do ok normally with a coil like that. You
> can't go by the output lights on the rig. You need to buy or borrow a
> SWR meter and see whats really happening. If the antenna sounds dead to
> the cheaper one, it probably is dead. Receiving is generally reciprical
> to transmitting. If one antenna receives better than another, usually it
> will also transmit better. Some exceptions, but 95% of the time this
> will prove true. Where is the antenna mounted? Thats very important. It
> really needs to be on the car metal somewhere. Trunk, roof , etc. And be
> grounded well to the body also. "A magmount doesn't require this if
> planted on an area of metal". But any other antenna does. Your meter
> probably is reading more than normal because of the high SWR when
> mismatching whips. Don't worry about what the lights do on the radio.
> They could be set to show anything. Make sure the antenna is right
> first, and then just adjust the mike by saying x-ray over and over while
> slowly increasing the mike gain. When the meter reading quits going any
> higher on the peaks, then lower the mike gain just a bit,and thats it.
> If you try to get a high meter reading, you will just end up
> overdriving, and will sound trashy, and splatter 10 kc each way your

> freq. Or maybe worse..The radio shack meter will work just fine.
> Actually, they are pretty accurate for the price. And come with a FS
> meter which can come in handy at times. MK
> --
> http://web.wt.net/~nm5k

1077. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 06:06:53 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <93m6tt$9k1$8@bashir.peak.org>
Source record: 172300

Dick Carroll <dixie@townsqr.com> wrote:

: What all you code bashers refuse to recognize is that written or spoken
: words have meanings. So do the sounds of Morse code when learned to
: fluency.

Certainly, but they are just "written English" or "spoken English", for example. They are not languages by themselves.

The same is true for Morse code, ASCII (or any of the other methods of encoding characters). They are simply that - codes.

: Your definition of the word'language' has support in most any
: dictionary.
: So does mine.

See above.

--
Bill Nelson (billn@peak.org)

1078. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 06:20:17 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <93m7n1$9k1$9@bashir.peak.org>
Source record: 172301

Floyd Sense <sentek@sprintmail.com> wrote:
: A non-ham friend of mine has a 36 foot sailboat and is looking into SSB gear
: for it. He's decided to get his ham license as well, so he can operate the
: HF bands while at sea. Given the requirement to be able to hit the marine
: frequencies (I'm totally ignorant of what frequencies they are) as well as,
: say, 20 meters, I wonder what experienced sailor/hams are using for an
: antenna?

For the HF frequencies, the backstay is the most common antenna. Of course, it requires an antenna tuner.

The usual method is to place an insulator a couple of feet from the mast head. The antenna tuner is coupled to the hardware that fastens the base of the backstay to the boat (the tuner is placed inside the hull). Most boats of that size have a lazarette or deck locker that provides access to the inside of the hull at the right place.

It is wise to put an insulating tube over the bottom 8-10 feet of the antenna - to keep people from getting accidental rf burns if they touch the backstay during transmissions.

--
Bill Nelson (billn@peak.org)

1079. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 08:00:04 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <93mdi9hum1@nntp9.atl.mindspring.net>
Source record: 172302

Floyd:

Backstays as antennas...

Safety of life at sea demands that one ensure sure that backstay antenna setups are first and foremost structurally sound and do not compromise the mechanical integrity of the backstays. Then, and only then, should one consider optimizing the electrical and electromagnetic efficiency of an antenna which is an "auxilliary" use of such basic structures.

Lots has been written in the blue water sailing literature and periodical press about HF antennas on sailboats, some basic research by your friend is in order.

If the safety of life at sea is at stake, and one is going to [perhaps] compromise their marine safety by modifiying basic boat/ship structures like stays and or masts to accomodate an HF antenna installation, they should consult not only HF antenna experts, [i.e. like gurus in this news group], but also competent marine/naval architects/engineers who are qualified to design and "sign off" on the structural integrity of masts and backstays, etc...

Just a word of caution...

-Peter K1PO

"Bill Nelson" <billn@spock.peak.org> wrote in message news:93m7n1$9k1$9@bashir.peak.org...
> Floyd Sense <sentek@sprintmail.com> wrote:
> : A non-ham friend of mine has a 36 foot sailboat and is looking into SSB gear
> : for it. He's decided to get his ham license as well, so he can operate the
> : HF bands while at sea. Given the requirement to be able to hit the marine
> : frequencies (I'm totally ignorant of what frequencies they are) as well as,
> : say, 20 meters, I wonder what experienced sailor/hams are using for an
> : antenna?
>
> For the HF frequencies, the backstay is the most common antenna. Of
> course, it requires an antenna tuner.
>
> The usual method is to place an insulator a couple of feet from the mast
> head. The antenna tuner is coupled to the hardware that fastens the base
> of the backstay to the boat (the tuner is placed inside the hull). Most

> boats of that size have a lazarette or deck locker that provides access
> to the inside of the hull at the right place.
>
> It is wise to put an insulating tube over the bottom 8-10 feet of the
> antenna - to keep people from getting accidental rf burns if they touch
> the backstay during transmissions.
>
>
> --
> Bill Nelson (billn@peak.org)
>

1080. Re: Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 08:09:28 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5EBBB8.6FA4844E@dvol.com>
Source record: 172303

Paul Lusardi wrote:

> Hi, I am looking for a design for an end fed wire antenna -- I am
> nhoping to not use an expensicve tuner in the process.

>
There isn't any way that I know of to feed an endfed wire on two harmonically-related bands without a tuner. See Dick Carroll's post for a simple tuner.
>

> there are some 30-40' trees along the top line(back of property) and
> some 30' trees along the 100' line(front of property). the reason I am
> asking about an end fed wire is because I beleive that you *should not*
> bend a wire antenna at 90 degrees

>
It's OK to bend the wire.90 degrees. All it does is provide a different pattern from a straight wire which you can't control anyway. Just don't fold a wire back on itself.
>

> restriction: I can only run wires along back of property or from the
> shack to the ** marker
>
> any ideas? home brew or product ideas are welcome

>
Endfed wires are quite simple and effective, I've used several over the years. For 160/80 I'd make the wire 250-260 feet long from the tuner to the far end. Run it any way you can as high as you can. I use a bow & arrow to install wires thru trees. #14 stranded THHN insulated "house wire" from Home Depot which costs under $20 for 500 feet works fine. #12 would be a better idea. Leave a good bit of slack in the wire between trees. I use a simple egg insulator at the end and a nylon cord tied to the last tree to keep the wire from snaking back out of the trees toward the shack.
>
But that's only half of the antenna, the other half is the ground system. Ideally, you should install a ground rod as close as possible to the tuner and ground both the radio and the tuner. I also always install a counterpoise which is made from the same wire as the antenna.100-150 feet will do, there's nothing critical about it. I run my counterpoises along fencelines, anywhere where they aren't a tripping hazard or subject to lawn mower damage or "wifely dissent", etc. If I have to run it over open lawn I bury it an inch ot two below the surface.
>

A 250 foot wire on 160 & 80 will be voltage fed on both bands which means
the feedpoint at the tuner will be "RF hot". Not a bad thing but it can
result in "RF bites" if the ground rod isn't close to the tuner. So I
always install a choke balun in the coax line between the tuner and the
radio.
>
One caution: Long wires in trees are lightning magnets. I *always*
completely disconnect the antenna from the tuner and via an alligator clip
and attach the antenna directly to the ground when I'm not on the air.
>

> thanks
>
> Paul N0VLR
> n0vlr@arrl.net

>
w3rv

1081. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 10:09:30 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5ED7DA.538B4448@dvol.com>
Source record: 172304

"Peter O. Brackett" wrote:

> . . .
> but also competent marine/naval architects/engineers who are qualified to
> design and "sign off" on the structural integrity of masts and backstays,
> etc...
>
> Just a word of caution...
>
> -Peter K1PO

>
Could not agree more. I have visions of some guy snipping a stay and installing
a plastic something or another he picked up at a ham flea market . . makes me
wonder if we should even open our mouths in these sorts of areas else his
survivors sue us into ovblivion.
>
w3rv

1082. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 12:13:44 UTC
From: n2ey@aol.com
Message-ID: <20010112071344.17176.00000216@nso-ba.aol.com>
Source record: 172305

In article <93m6tt$9k1$8@bashir.peak.org>, Bill Nelson <billn@spock.peak.org>
writes:

>Dick Carroll <dixie@townsqr.com> wrote:
>
>: What all you code bashers refuse to recognize is that written or spoken
>: words have meanings. So do the sounds of Morse code when learned to
>: fluency.
>
>Certainly, but they are just "written English" or "spoken English", for
>example. They are not languages by themselves.

Depends on which definition of "language" is used. Since we cannot agree on
which one to use, I'll avoid the use of the word "language" and come at this a
different way.

You wrote:

"but they are just "written English" or "spoken English", for example. They are
not languages by themselves."

The important thing is this: Written English and spoken English are not
identical. There can be a BIG difference between hearing words spoken and
reading those exact same words written down. Two different methods of
expression - both of them "English", but definitely not the same.
>
>The same is true for Morse code,

Not so! When used the way most hams use it, "Morse English" is a method of
expression that is different from both "written English" and "spoken English".
It's aural (not "oral") and has unique characteristics.

> ASCII (or any of the other methods of
>encoding characters). They are simply that - codes.

Not as used by hams. ASCII and other codes are used differently - the human
doesn't interact with them directly. They are simply used to convey the written
English from one place to another. "Manual" Morse is very different.
>
>: Your definition of the word'language' has support in most any
>: dictionary.
>: So does mine.
>
Thus the debate is diverted from the important facts. Morse is a different
method of expression, with several very real advantages and one or two
disadvantages - that's the important thing.

73 de Jim, N2EY

1083. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 12:13:45 UTC
From: n2ey@aol.com
Message-ID: <20010112071345.17176.00000217@nso-ba.aol.com>
Source record: 172306

In article <lQu76.29319$HE2.5504843@news1.onlynews.com>, "Harold Johnson"
<w4zcb@ispchannel.com> writes:

>. SSB and CW, on the other
>> hand work very well together-if conditions on SSB fade out, merely
>> switch to CW and complete the contact or quickly make arrangments to QSY
>> to another band.
>
>If they're so compatible, why have separate sub-bands?

Because they are NOT so compatible. There is very little use of Morse in the HF
'phone bands. The author was talking about using it as a backup when SSB fails.

> If CW is so great,
>let it stand or fall on it's own merits,

It does! There is no requirement to use the mode at all. Just pass one test one
time.

>don't try to protect it with a separate allocation.

There is no separate allocation on amateur HF/MF!!

The only "CW only" subbands in the US are 144.0 - 144.1 and 50.0 - 50.1. They
were created decades ago as a haven for weak-signal work like EME.

ALL of the so-called "CW bands" (that is, the segments where 'phone is not
permitted) authorize Morse AND RTTY/digital modes (that do not exceed a certain
bandwidth). PSK31, for example, can go anywhere in those segments. But
RTTY/digital modes are NOT allowed in the "'phone bands"! It's analog voice
modes that are "protected" by having their own separate allocation.
>
>Somehow this thing has drifted so far off base it's embarrassing to
>contribute to it, but NO ONE I've heard of is proposing banning CW, if you
>like it, fine.

I have read some discussions that urge BANNING CW. Not just the test - the mode
itself. Sure, they're a tiny minority, but they DO exist.

>If you can find someone else who needs CW proficiency to feel
>better than the next guy, go ahead and talk with your fingers to him/her.

That's not why hams get the proficiency.
>
>Stop acting like CW is next to Godliness and all the rest of us are sinners
>and you'll have more friends.

Who does that?

Is it bad to develop skills and be proud of them?
>
>> Happens all the time now, but won't when CW is banned. And make no
>> mistake, your comments clearly indicate your mindset that since it is
>> "outmoded" that it might as well disappear. For commercial and militahy
>> use, it already has, save for ongoing niche applications. But for ham
>> radio, nothing could be farther off base.
>
>If God had meant for man to talk with his fingers, he'd (She'd) have put
>lips on them!

Umm - writing is "talking with your fingers". So is typing. Are they bad?

73 de Jim, N2EY
>

1084. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 13:46:45 UTC
From: Larry Gauthier <larryg_AT_ismi.net>
Message-ID: <3a5f0b93@news.ismi.net>
Source record: 172307

Don't assume he'll need two radios - he can operate a maritime type-accepted radio on 20 meters. I have a regular sched with a ham out in the pacific on a sailboat, and he works the HF ham bands and maritime bands with one rig.

My friend's biggest antenna propagation problem was getting enough metal screening down in the bow of the sailboat to act as a "ground".

-larry
K8UT
"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A5E5DED.FCF21DF5@dvol.com...
>
> Floyd Sense wrote:
>
> > A non-ham friend of mine has a 36 foot sailboat and is looking into SSB
gear
> > for it. He's decided to get his ham license as well, so he can operate
the
> > HF bands while at sea.as well as, say, 20 m
>
> >
> He'll need two radios, one being type-accepted for maritime service. He
can't
> legally operate on the marine freqs with a ham rig on any U.S. flag
vessel.
> >
>
> > Given the requirement to be able to hit the marine
> > frequencies (I'm totally ignorant of what frequencies they are)
>
> >
> Most coastal ssb comms are conducted in the 2000-2800 Khz range.
> >
> See http://members.aol.com/jneuhaus/fccindex/hf_maritime.html . .
>
> > I wonder what experienced sailor/hams are using for an
> > antenna?
>
> >
> They break a mast stay or two with insulators and use an underwater plate
> attached to the hull for a ground and operate the mast stay as an endfed
random
> length wire. None of it is trivial, your friend needs to connect with an
FCC
> licensed GROL and marine radio guru.

> >
>
> > K8AC
> > Floyd Sense - Angier, NC
>
> >
> w3rv
>
>

1085. WTB: aluminum boom-to-mast clamp

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 14:00:29 UTC
From: Larry Gauthier <larryg_AT_ismi.net>
Message-ID: <3a5f0ecb$1@news.ismi.net>
Source record: 172308

I just put up a new tower, and in addition to the quad up there I would like to build a homebrew 30 meter rotary dipole. However, I need a boom-to-mast clamp that will attach to the 2" mast - and thought that someone on this news group probably has a collection of used clamps from previous antenna projects. Doesn't have to be heavy-duty - this will be a coil-shortened dipole for 30.

Anybody? Please send details to my e-mail address. Thanks in advance,

-larry
K8UT@arrl.net

1086. HAMCALC question.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 14:18:31 UTC
From: carkenord@juno.com
Message-ID: <93n3nfbpn1@nnrp1.deja.com>
Source record: 172310

I am interested in obtaining HAMCALC.

Are there both DOS/GWBASIC and Windows versions?

What are the latest version numbers?

If HAMCALC is available for both DOS and Windows, I would like to
download and obtain each. What is the website where I can do that?

Lee Carkenord KA0FPJ

Sent via Deja.com
http://www.deja.com/

1087. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 14:23:47 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5F1373.FA243E3B@dvol.com>
Source record: 172309

Larry Gauthier wrote:

> Don't assume he'll need two radios - he can operate a maritime type-accepted
> radio on 20 meters. I have a regular sched with a ham out in the pacific on
> a sailboat, and he works the HF ham bands and maritime bands with one rig.

>
I thought about that after I posted and it occurred to me that a marine ssb
radio can be used legally on the ham bands, but not the other way 'round.
They're out there, too. 150 watts out, continuously tunable from 1.600 thru
29.999 Mhz., etc. Not cheap though.
>

> My friend's biggest antenna propagation problem was getting enough metal
> screening down in the bow of the sailboat to act as a "ground".

>
Oldest problem in marine radio. Glass & wooden hulls make grounding a big
hassle.
>

> -larry
> K8UT

>
w3rv

1088. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 14:28:33 UTC
From: richardharrison@webtv.net
Message-ID: <15464-3A5F1491-10@storefull-113.iap.bryant.webtv.net>
Source record: 172311

Jim, N2EY wrote:
"It does! (If CW is so great, let it stand or fall on its own merits.) There is no requirement to use the mode at all. Just pass one test one time."

Mandatory testing for an optional mode is illogical.

Mandatory Morse tests repel far more amateur radio license applicants than they attract. A large group of licensees is more likely to get what it wants from the government than a small group.

The dirty little secret is that pro-code amateurs fight for a code test to ensure amateurs are mostly pro-coders.

Some commercial users have valid claims to places in the radio spectrum. They have paid the people to use those places. The places occupied by amateurs are still owned by the people, in the sense that public lands are owned by the people.

People-owned properties should be as accessible as possible to the people who own them so that there is the most benefit to the most owners. Code testing works against this.

Best regards, Richard Harrison, KB5WZI

1089. Re: Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 14:57:15 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <fXE76.118138$A06.3814957@news1.frmt1.sfba.home.com>
Source record: 172312

Just wanted to say that I did exactly what Dick shows on the URL below about
15 years ago
with a 130 foot wire end fed on 80 and 40 meters. It was between 55 foot
towers and the tuner
was at the top of one of the towers. It used a rotary solenoid and wafer
switch to select coil
taps to cover the whole 80 meter band. It was a little bit of work to build
the tuner, but it
was straightforward and worked well (or at least as well as a low dipole
ever worked on 80!).

Rick Karlquist N6RK

Dick Carroll <dixie@townsqr.com> wrote in message
news:93m2bc$8un$0@208.206.142.78...
> Check here for the tuner you'll need to build...cheap and simple, for
> end fed wires.
>
> http://www.alphalink.com.au/~parkerp/lma.gif
>
> Dick
>

1090. Re: 1691MHz downconverter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 15:04:16 UTC
From: ukmonitor@my-deja.com
Message-ID: <93n6d9$e5e$1@nnrp1.deja.com>
Source record: 172313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,alt.radio.scanner.uk

Try doing a search !

Remote Imaging Group (RIG) have a convertor design

Sent via Deja.com
http://www.deja.com/

1091. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 15:32:04 UTC
From: richardharrison@webtv.net
Message-ID: <12597-3A5F2374-27@storefull-116.iap.bryant.webtv.net>
Source record: 172315

Jim, N2EY wrote:
"Morse English is a method of expression that is different from both
"written English" and "spoken English".

From the Kennedy-Nixon debate, we know that viewers drew different conclusions from listeners who weren`t watching. A similar thing happens at times between listeners and the readers of a transcript,

On-site viewers who see and listen tend to get the most information. The TV audience seems to be the next best informed. Radio listeners get less information than the TV audience. Readers are deprived of the speech nuances, as are CW users.

If we want to communicate in place of a commute, shouldn`t we all use 2-way TV to get fastest access to the most information? Bell always thought so, but never could sell it. Maybe the technology was still lacking.

CW seems best suited to a last resort.

Best regards, Richard Harrison, KB5WZI

1092. feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 15:46:00 UTC
From: sjwoodr@my-deja.com
Message-ID: <93n8rk$go4$1@nnrp1.deja.com>
Source record: 172316

what are the pro's and cons of using twin-lead feedline instead of coax from the tuner to the antenna? coax is supposed to be high loss, but most antenna designs i've come across usually are illustrated as being fed by coax and use so-239 connectors. its it an interference issue? i know any antenna design can easily be changed to use whatever type of feedline, but why do so many people use coax? tnx...

--steve, n9xbj

Sent via Deja.com
http://www.deja.com/

1093. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 15:49:07 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A5F2773.46C35E82@wgcr.org>
Source record: 172314

Dick Carroll wrote:
> Yes, that is an eminently noteworthy feature of this 'discussion'. The
> Code Opposers, to a man, insist on honoring only their own choice of
> definitions of the word 'Language', while every dictionary I have
> consulted has numerous differing definitions, a number of which clearly
> qualify Morse code as in fact being a language.
> That pretty well sums it up.

Just what does Morse being a language have to do with the Code Tests?
Not the USE of code, but the TESTING of code proficiency?

I am opposed to the code tests. But I am not opposed to the continued
use of CW by those who enjoy it on bandwidth set aside for that
purpose. So, if opposing the tests fits your definition of 'Code
Opposer', then I am prima facie proof of your incorrect assertion that
the Code Opposers, to a man, use narrow definitions of 'language' -- as
I do not disagree with Morse being a 'language' in many of the ways
American Sign is a 'language'. To be technical and nitpicking.

Eliminating the test does not equal eliminating the mode.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

1094. MW Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 16:13:25 UTC
From: DX-390 <kal4cu@my-deja.com>
Message-ID: <93naer$i63$1@nnrp1.deja.com>
Source record: 172317

I am not an amateur radio license holder but I am new to radio which makes me an amateur (Just kidding). I have gotten interested in MW radio. My question is 1) I have a R/S DX-390 (Sangean 818) and a good Panasonic table top (transistor/6 diode)that I listen too. I am looking for a good inexpensive way to improve the signal. The 390 has an external plug but the Panasonic only has two post for an external FM antenna. Is there a way to hook up a MW antenna I can use on both of these.

Any help will be appreciated.. I am studying now for my license.

--
DX-390 Radio Hobbyist

Sent via Deja.com
http://www.deja.com/

1095. Re: feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 16:20:15 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A5F2EBF.A262B475@zylay.com>
Source record: 172318

sjwoodr@my-deja.com wrote:
>
> what are the pro's and cons of using twin-lead feedline
> instead of coax from the tuner to the antenna? coax is
> supposed to be high loss, but most antenna designs i've
> come across usually are illustrated as being fed by coax
> and use so-239 connectors. its it an interference issue?
> i know any antenna design can easily be changed to use
> whatever type of feedline, but why do so many people use
> coax? tnx...

Because coax is easy and convenient to install and maintain. You can bury it, you can run it near metal objects, you can do almost anything you want to with it. On the other hand, ladderline is lower-cost)$19.95/100 ft from HRO), lower loss, and it rolls up smaller for portable work. I use ladderline myself mainly because I can build an entire high-performance 2M base antenna and 80 ft of feedline (some of hte 100-ft roll is used in making hte antenna itself) for much less than even a small roll of cheap coax.

Check out http://www.tfn.net/~gfloyd7/antenna for a vertical collinear J-pole that is fed with ladderline as well as an inexpensive way to match 50-ohm coax to 450-ohm ladderline (1/2-wave 4:1 coax balun and a 1/4-wave 300-ohm matching section).

1096. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 16:40:57 UTC
From: n2ey@aol.com
Message-ID: <20010112114057.00445.00000389@nso-bj.aol.com>
Source record: 172319

In article <14005-3A5E7B3D-12@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"None for the use of Morse in jamming that I know of. (NALs)"
>
>Most of all, a jammer wants results.

I don't really know what a jammer wants, but let's see where your idea leads.

> CW is not the best way to get
>results. If it were superior, government and political propaganda
>agencies would use CW in their battles to drive away listeners. They
>don`t often use CW for that.

Agreed. A plain carrier is easily removed by a notch filter. A keyed carrier is
a little tougher, but can be dealt with.

So what you are saying is that CW isn't attractive for jamming purposes. That's
a good thing
>
>I worked for years in shortwave broadcasting. Our listening posts around
>the target areas logged all the jammers on our programs. More than 50
>jammers would appear on one frequency. Some were high-power sky-wave
>jammers and some would be local jammers in city neighborhoods.

I didn't know they did local jamming!

There's an ongoing jamming episode happening on 40 meters between Iran and
Iraq. They are both operating outside the SWBC bands. See

http://www.arrl.org

for more details.

>How did we know about the numbers? Most jammers identify!

Har! I would think you did some sort of RDF and transmitter signature analysis
too. But maybe better not to give away how it's done.

> Beyond that,
>we triangulated and tracked them down. We could not exterminate them,
>but we knew who and where they were. Policy might have changed to allow
>eradication, but I expect that like roaches such action would have just
>prompted more to appear. The jammers were our well known neighbors on
>all of our frequencies. We had to publish our schedules in advance for
>our listeners, even when some were those in charge of jamming. In spite
>of jamming we punched our programs through, and we never went unheard or

>unheeded. We were charged with causing economic collapses, military
>uprisings, and revolutions. We were innocent of some of the charges!

Hmm....lemmeee guess...VOA?
>
>A multitude of modulations were tried by the jammers. The variety seemed
>to be winnowed and a few of those modulations probably thought to be
>effective against us seemed to be dealt out to most of the jammers after
>awhile. News of the jamming efforts often circulated through our
>organization. We all wanted to know how we were doing. I never heard of
>CW being used. Big investments were made to obliterate us, but we always
>managed to get through, but with some gaps in coverage. If CW were ever
>in the competition as a jamming signal, it was eliminated, and probably
>early in the game.

That's a good thing.
>
>So, would an experienced operator use CW to jam or make profane remarks?
>Probably not. A modulated carrier makes more intentional mischief and
>draws a wider audience to shock with profanity.
>
>The weak-as-water point coders seem trying to promote is that people
>trained in Morse are of better character and don`t violate the rules.

Nope. That's not my point.

My point is simply that the type of violations on the ham bands being gone
after by the FCC are happening to 'phone stations, not Morse stations.
Intentional jamming, profanity and obscenity by hams actually using Morse on
the air is so rare that it's beneath the FCC's radar.

>They claim there are no violation notices for deliberate use of CW to
>jam or pollute the air with profanity.

It's not a claim. It's the truth, for at least the past 10 years.

Point me to some Morse NALs, if I'm mistaken. Lots of "enforcement log"
websites.

>This is supposed to prove that CW
>makes operators righteous.

Nope. It simply proves that hams using Morse behave themselves so well on the
air that NO NALs have been issued for such jamming/obscenity/profanity
violations for at least 10 years. Maybe longer. Such is NOT the case with hams
running 'phone. It has been reported that Riley Hollingsworth himself was
"jammed
off 20 meters" recently. Frequency was 14.275 - I don't think he was running
Morse, do you?

Maybe being skilled at Morse makes one think a little more before putting a
signal on the air. Or maybe those who choose to use Morse are the type who
behave themselves on the air regardless of mode. Maybe it's something else

entirely. But the fact of no NALs for a very long time still remains.
>
>The proof of the coders claim would be more convincing if it it sorted
>violators by whether they had been code certified and their percentages
>of the total in their particular group.

IF the claim were that Morse TESTS cause massive behavior changes, maybe. But
that's not the claim at all. It's Morse USE that seems to make the difference.

The test is a dead issue.
>
>Whatever group a jammer comes from, if he is a real troublemaker he is
>likely to go beyond extemporaneous acts. He will likely treat his
>audience to prerecorded programming, musical passages, sound effects,
>insults. barbs to specific individuals,etc., and all in plain but
>disguised language to reach the largest possible audience. Could this be
>so? Yes. It`s all happened repeatedly and involved several individuals
>in this community. Some were ordered to pay large fines and lost their
>licenses. These cats may have known CW, but it would not have served
>their purposes at all.

Exactly. Maybe they knew Morse really well, or maybe they learned it just well
enough to pass the tests and then forgot it. No real way to tell. License class
only tells you they got credit for passing a test once upon a time.

All licensed violators, regardless of class of license or violation, took
WRITTEN exams on the rules and regs. Broke 'em anyway.
>
>Would elimination of legal voice operation on the bands have any effect
>on egregious violations involving weird modulation. I think not so long
>as the ham`s receiver was capable of demodulating a signal.
>
Nobody's proposing that. But it might greatly reduce the incidence of
violations.

In a recent case (WA6CNQ), a two-time violator's license was modified as part
of a plea-bargain. The only amateur bands/mode he can work legally now is
HF/MF Morse. No RTTY/digital, no phone, no SSTV, no VHF/UHF. Maybe the FCC's
idea is to break that zero NAL record, or maybe the hope is he'll clean up his
act. I don't know whether I agree with that move or not - but it sure makes you
think.

73 de Jim, N2EY

1097. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 17:34:00 UTC
From: n2ey@aol.com
Message-ID: <20010112123400.26444.00000540@nso-fo.aol.com>
Source record: 172322

In article <15464-3A5F1491-10@storefull-113.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"It does! (If CW is so great, let it stand or fall on its own merits.)
>There is no requirement to use the mode at all. Just pass one test one
>time."
>
>Mandatory testing for an optional mode is illogical.

No, it's perfectly logical. A license test should check for skill and knowledge
in those things that are commonly done with the privileges the license grants.

Granting privileges without tests of knowledge in appropriate areas is
illogical.
>
>Mandatory Morse tests repel far more amateur radio license applicants
>than they attract.

How do you know that? Studies and facts, please.

Note that since the massive reductions in both code and written testing of
April 15, 2000, the number of US licensees has not grown appreciably faster
than before the changes.

Suppose the Morse tests are dropped entirely, and the numbers still don't jump.
Will they be put back?

> A large group of licensees is more likely to get what
>it wants from the government than a small group.

Then why didn't the cb folks just take over in the '60s? Quality counts, not
just quantity.
>
>The dirty little secret is that pro-code amateurs fight for a code test
>to ensure amateurs are mostly pro-coders.

Not at all. There are a variety of reasons to support code testing.

And one can be "pro-code" wothout being "pro-code-TEST".

Besides, the whole test issue is a dead duck. A moot point. We're down to the
bare minimum now, held on only by the treaty. Which can't change before 2003.
>
>Some commercial users have valid claims to places in the radio spectrum.
>They have paid the people to use those places. The places occupied by
>amateurs are still owned by the people, in the sense that public lands
>are owned by the people.

By ALL the people, yes. But when used by some of the people, their very nature prevents others from using them. Amateurs "pay" for their piece of the spectrum in a variety of ways.
>
>People-owned properties should be as accessible as possible to the
>people who own them so that there is the most benefit to the most
>owners.

Sheer numbers are not the only criteria. Overcrowding leads to less benefit. How many SSB QSOs can fit in 100 kHz compared to Morse or digital QSOs in the same bandwidth?

>Code testing works against this.

So does any effective testing. Why should hams have to know the limits of the 40 meter band if its use is optional? Why should they have to know the fundamentals of SSB or repeaters if their use isn't mandatory? Go down this path, and you wind up with practically no tests at all - and chaos. Not a good thing at all.

73 de Jim, N2EY

1098. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 17:35:09 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A5F404D.4C65@bellsouth.net>
Source record: 172321

Aaron Jones wrote:
>
> "Harold Johnson" <w4zcb@ispchannel.com> wrote:
> >If God had meant for man to talk with his fingers, he'd (She'd) have put
> >lips on them!
>
> You're seem to be talking with your fingers right now... :-)

Aaron,

TOUCHE!!! LMAO!!

Jerry

1099. 900MHz Yagis - solid vs. tubing as elements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 17:47:54 UTC
From: Tom Merendino <tmerendi@fore.com>
Message-ID: <3A5F434A.1FAD6C09@fore.com>
Source record: 172323

Hi,

I am planning to experiment by building a yagi for the 900Mhz band. Will be used for receiving only. It will be mounted in the attic, so mechanical/wind loading considerations are not important.

Is there any electrical performance advantage of using solid rods vs. small diameter hollow tubing as elements? Is there a large sensitivity to element diameter in this frequency range?

How about the boom - any electrical performance advantage of using conductive vs. nonconductive boom material? Is it better to attach the elements to a conductive boom vs. isolating them from a conductive boom (above or thru?)?

The electrical parameter I'm most interested in optimizing is the receive gain.

Thanks in advance for any experience you can share.

--Tom--

1100. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 17:52:00 UTC
From: richardharrison@webtv.net
Message-ID: <27917-3A5F4440-3@storefull-117.iap.bryant.webtv.net>
Source record: 172324

Jim, N2EY wrote,
"(Would elimination of legal voice operation on the bands have any
effect on egregious violations involving weird modulation?)
Nobody`s proposing that. But it might greaty reduce the incidence of
violations."

No doubt. Cut out the voice and mostly empty the bands. With empty bands there will be few violations and soon there will be few licensed amateur radio operators. Lots of space for CW die-hards, for long as amateur allocations persisted, which might be less time than some think.

Best regards, Richard Harrison, KB5WZI

1101. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 18:09:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5F484B.91A9BB0B@IEEE.org>
Source record: 172325

N2EY wrote:
> A license test should check for skill and knowledge
> in those things that are commonly done with the privileges the license grants.

But skill is tested in only ONE mode, OOK/Morse. Why is skill in OOK/Morse
as important as everything else in amateur radio combined? 5wpm skill in
Morse code is a pass/fail requirement for HF access. Everything else in
ham radio combined is a pass/fail requirement for HF access. How anyone
can consider that fair is beyond comprehension.
--
http://www.mindspring.com/~w6rca

1102. Mosley info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 18:53:53 UTC
From: fa1cil <fa1cil@wanadoo.fr>
Message-ID: <93nju4$7pg$1@wanadoo.fr>
Source record: 172326

Hi,

I want to buy to a friend a Mosley TA53M but he has missing the
installation documents.
- Is it possible to find this document on internet ? Or maybe anybody have a
file ?
- The 24 Mhz band is no longer running, is it possible to find any pieces in
France ?
- Is this antenna a good antenna ? (i think yes but i prefer advise of
everybody).

Thanks in advance,

73, Pascal

REF : 44.751
AMSAT : 672
E-mail : FA1CIL@wanadoo.fr
To visite my site : http://perso.wanadoo.fr/fa1cil/

1103. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 19:02:45 UTC
From: richardharrison@webtv.net
Message-ID: <16931-3A5F54D5-53@storefull-115.iap.bryant.webtv.net>
Source record: 172327

Jim, N2EY wrote:
"How many SSB QSOs can fit in 100 KHz compared to Morse or digital QSOs in the same bandwidth?"

This has little to do with code testing. Wider bandwidth allows faster information transfer. If you have a quantity of data you can use wideband for a short time or narrowband for a long time. In the grand scheme of things, it`s a wash. Coding and transmission schemes have various efficiencies. Morse loses the efficiency contest due to a fatal flaw. A dit is shorter than a dah. End of story.

Best regards, Richard Harrison, KB5WZI

1104. Re: MW Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 19:38:28 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5F5D34.CBD622A2@oio.net>
Source record: 172329

DX-390 wrote:
>
> I am not an amateur radio license holder but I am new to radio which
> makes me an amateur (Just kidding). I have gotten interested in MW
> radio. My question is 1) I have a R/S DX-390 (Sangean 818) and a good
> Panasonic table top (transistor/6 diode)that I listen too. I am
> looking for a good inexpensive way to improve the signal. The 390 has
> an external plug but the Panasonic only has two post for an external FM
> antenna. Is there a way to hook up a MW antenna I can use on both of
> these.
>
> Any help will be appreciated.. I am studying now for my license.
>

Probably the most simple antenna would be a random length of
wire, outdoors, as high as you can get it. Should work better
than the antenna in the radio. For recieving only, it shouldn't
make much difference ~how~ you get it outside...
'Doc

1105. Force-12 C3SS Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 19:40:17 UTC
From: Denis O' Flynn <denisf@eircom.net>
Message-ID: <h3J76.6243$s4.4233@news.indigo.ie>
Source record: 172328

More info needed if possible. Anyone on the list use or have used the C3SS antenna. Still comparing !!

many thanks
de Denis EI6HB
denisf@eircom.net

1106. Re: feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 19:46:50 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5F5F2A.139880E@oio.net>
Source record: 172330

sjwoodr,
Coax is 'ho-hum', common.
'Ladder Line' is 'radio sexy'.
(whatta concept!)
'Doc
PS - Really just depends on which set of 'rules' you
want or can go by. By 'rules' I mean like not
too close to metal, etc.

1107. Re: 1691MHz downconverter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 19:49:57 UTC
From: luggsey <luggsey@hotmail.com>
Message-ID: <3A5F5FE5.EF00B7F3@hotmail.com>
Source record: 172333
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,alt.radio.scanner.uk

Ash wrote:
>
> Buying is not cheaper than building for almost free is it? :)
>

I was meaning it would be cheaper to buy the scanner then paying up to
$300...See below (;-)

> > > Any suggestions? (yeah I'll problably end up buying one, but $100-$300 is more than
> > > I want to spend if I can build one cheap :)
> > >
> > > //Ash
> > >
>

Paul
(;-)

1108. Re: Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 20:00:37 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <93nnmqluc1@plutonium.btinternet.com>
Source record: 172331

Download in a few seconds from website below program ENDFEED,

Models and computes performance of any inverted-L antenna above a
ground electrode system. Also provides L and C component values of L
and T-match networks.
--
==========
Regards from Reg, G4FGQ
For free radio design software go to:-
http://www.btinternet.com/~g4fgq.regp
==========
Paul Lusardi <n0vlr@fyi.net> wrote in message
news:3A5E7175.CA96C53F@fyi.net...
> Hi, I am looking for a design for an end fed wire antenna -- I am
> nhoping to not use an expensicve tuner in the process.
>
> my layout is as such:
>
> --
> X (shack) 370'
> ---------------------->>
>
>
> 100'
> to
> here
>
**--
>
> there are some 30-40' trees along the top line(back of property) and
> some 30' trees along the 100' line(front of property). the reason I
am
> asking about an end fed wire is because I beleive that you *should
not*
> bend a wire antenna at 90 degrees
>
> restriction: I can only run wires along back of property or from
the
> shack to the ** marker
>
> any ideas? home brew or product ideas are welcome
>
> thanks
>

> Paul N0VLR
> n0vlr@arrl.net
>

1109. Re: (HOMES))(HOMES))((HOMES))((0-DOWN)) 4277

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 20:07:37 UTC
From: Rich Grise <richgrise@vel.net>
Message-ID: <3A5F6409.506B@vel.net>
Source record: 172332
Cross-posted to: rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx

So, can you loan me a couple grand?

Thanks!
Rich

vwljsj@sisna.com wrote:
>
> Hi,
>
> Thank you for your interest in this program. I have
> been in this industry for over 20 years and have made
> no less than $40,000 per year and no more $140,000 and
> with no residual income, that is income like rental
> income. I came across this man that just retired at 40
> years of age and with 300 rentals making an average of
> $320 per month. That's $96,000.00 per month or
> $1,152,000.00 a year. He used to buy old homes from me
> that he fixed up and rented out right away. He worked
> over 20 years to buy all of these homes and now is
> making a great income, a million plus a year. He
> shared his secrets with me and with my 20 years in the
> business of buying and selling I am now ready to share
> with you.
>
> I have put together my learned techniques on buying
> with no money down and renting to gain a profit your
> first month.
>
> EXAMPLE:
>
> BUY 2 BED HOME FOR $400 per month
> 0-Down
>
> No
> credit needed.
> RENT home for $650 +-
> Depending on
> rentals
>
> In your area
> Net Monthly income $250
> Profit
>

> This Example will work in any market, but profit will
> vary depending on your market. Now imagine 20, 30 or
> 100 of these rentals working for you in as little as 5
> years. After Homes are paid off profits will soar
> through the roof and best of all someone else makes
> all the payments.
>
> I will show you how to buy up to 20 Homes for under
> $100,000.00 0-Down and NO Credit needed creating
> $4,000.00 income per month, free and clear, to put in
> the bank. How can you buy 20 Homes for under $100,000?
> Well that is my secret to you and I will share this
> and many more with you.
>
> I have now quit my selling job and have gone into full
> time pursuit of this program. As I mentioned in my
> posting I now have 12 Homes rented in only 6 months
> and 4 new contracts on homes for next week. I should
> have almost 30 Homes by the end of a year of doing
> this. That is $7,500.00 per month in net income in
> only one year.
>
> If you choose to participate in this program you will
> be the first other than me and be able to take
> advantage to the fullest.
>
> I have spoke to an accountant about the value of this
> program and compared to other programs that are
> similar, the market value is between $260.00 and
> $300.00. I need to establish some successes stories in
> you. So for the first 100 people I will give you
> personal tutoring via the phone, Internet or in person
> if you live close enough. I will help these 20 people
> establish their first 20 rental incomes and full
> support for the first year. If you choose to be one of
> the first 20 I will offer all of this for only $130.00.
> Remember you get one year of my personal support
> because I need you to succeed.
>
> If you choose to be one of the first 20 then I will
> offer a money back guarantee if we cannot make the
> program work for you. In addition to the money back
> guarantee out of the first success stories I will
> offer you a partnership in future promotions of this
> product.
>
> So if you want to retire in 5 years with over 100
> rentals and over $25,000 per month in income please
> E-mail me back and lets put the program to work for
> you.

>
> Sincerely,
>
> Brian Tice
> 211 W.4th st
> Craig, Co 81625
> Own10homesin1year@yahoo.com
> kyknrucexohymkqsevfpssgrjjrmvslykdkwgxfcfttfounshikbhlsdflqyfwgtefxybqvtlhovrjhiutxvycth
eldczylq

1110. INFO Apartment HF antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 20:20:55 UTC
From: Joe Sanada <bsanada01@snet.net>
Message-ID: <3A5F6727.95713D27@snet.net>
Source record: 172334

Hi I will be going into a apartment soon? What type of HF antenna
should I be Looking for and ... If I do Not have an Attic what options
do I have there as well..

Thank you Very much Joe Sanada W1JAS

1111. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 20:37:26 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <aWJ76.35$DW5.2243@newsread2.prod.itd.earthlink.net>
Source record: 172335

Bill - thanks very much for your response. It would appear that you actually have some experience with the subject. The rest of the responses were typical of what one normally sees from this group - most of the "experts" assume you're an idiot, and most of the others forward on rumors they've heard.

For those obviously less informed than I, there are indeed SSB radios that are type accepted for both marine and amateur band use. The SGC-2000 is one of those. It received a very glowing review in one of the sailing magazines, in an article written by an "expert". However, in researching how this unit is performing in the fleet, we found nothing but negative comments about it's reliability and the extreme difficulty in dealing with SGC on service issues.

I've read the info in the ARRL Antenna book on sailboat antennas. A properly installed backstay vertical seemed the most reasonable to me, and I have experience with automatic tuners (SGC-230s). When my friend contacted two sailing hams he knows, they gave him quite different solutions. One guy is using an Outbacker mobile antenna (they have one model that covers the ham and marine bands - $469 or so), and the other made a 20 meter dipole using two back-to-back hamsticks. So, it appears that this odd concept that any expensive commercial antenna must be better than anything else, has followed some hams into their sailing hobby. I also wondered how many of these "land mobile" antennas have ever been thoroughly tested in a marine environment.

Thanks again.

K8AC
Floyd Sense - Angier, NC
"Bill Nelson" <billn@spock.peak.org> wrote in message
news:93m7n1$9k1$9@bashir.peak.org...
> Floyd Sense <sentek@sprintmail.com> wrote:
> : A non-ham friend of mine has a 36 foot sailboat and is looking into SSB
gear
> : for it. He's decided to get his ham license as well, so he can operate
the
> : HF bands while at sea. Given the requirement to be able to hit the
marine
> : frequencies (I'm totally ignorant of what frequencies they are) as well
as,
> : say, 20 meters, I wonder what experienced sailor/hams are using for an
> : antenna?
>
> For the HF frequencies, the backstay is the most common antenna. Of

> course, it requires an antenna tuner.
>
> The usual method is to place an insulator a couple of feet from the mast
> head. The antenna tuner is coupled to the hardware that fastens the base
> of the backstay to the boat (the tuner is placed inside the hull). Most
> boats of that size have a lazarette or deck locker that provides access
> to the inside of the hull at the right place.
>
> It is wise to put an insulating tube over the bottom 8-10 feet of the
> antenna - to keep people from getting accidental rf burns if they touch
> the backstay during transmissions.
>
>
> --
> Bill Nelson (billn@peak.org)
>
>

1112. Re: INFO Apartment HF antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 20:42:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A5F6C3C.FF996BB5@IEEE.org>
Source record: 172336

Joe Sanada wrote:
> Hi I will be going into a apartment soon? What type of HF antenna
> should I be Looking for and ... If I do Not have an Attic what options
> do I have there as well..

Hi Joe, I do it backwards to you. I decide what kind of antenna I
want and then pick out a place to live.
--
http://www.mindspring.com/~w6rca

1113. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 21:50:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A5F7C39.5C4D7BCD@eznec.com>
Source record: 172338

This advice isn't based on sailing experience but on solid theory.

You'll find that a vertically polarized antenna will give you considerably better results for long-haul propagation than a horizontally polarized antenna. A horizontally polarized antenna will work just about the same in the salt water environment as on land, but a vertical will be much better over salt water, at low angles. If you use a vertical in a typical land-based environment, low angle signals are greatly attenuated due to reflection from the lossy ground. But the reflection is nearly perfect when it takes place from salt water. In that environment, you can actually get a pattern from a vertical that's very much like the theoretical perfect-ground vertical antenna pattern -- with the maximum value right at the horizon. Land-based stations can never achieve this unless the antenna is within a very short distance of a body of salt or brackish water. So I recommend that anyone having the luxury of a salt water "ground" take advantage of it and use some sort of vertical.

Roy Lewallen, W7EL

Floyd Sense wrote:
>
> Bill - thanks very much for your response. It would appear that you
> actually have some experience with the subject. The rest of the responses
> were typical of what one normally sees from this group - most of the
> "experts" assume you're an idiot, and most of the others forward on rumors
> they've heard.

>. . .

1114. Re: feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 21:54:35 UTC
From: sjwoodr@my-deja.com
Message-ID: <93nuen$5mk$1@nnrp1.deja.com>
Source record: 172339

In article <3A5F5F2A.139880E@oio.net>,
'Doc <w5lz@oio.net> wrote:
> sjwoodr,
> Coax is 'ho-hum', common.
> 'Ladder Line' is 'radio sexy'.
> (whatta concept!)
> 'Doc
> PS - Really just depends on which set of 'rules' you
> want or can go by. By 'rules' I mean like not
> too close to metal, etc.

Thanks 'doc.... i'm using 50-ft of coax now. I would say the run is pretty much metal-free, and i would really only need about 30-35 feet of some other type of feed line. If i were to go to something like ladder line or other twin-lead feed what kind of loss would i be preventing? (50-ft 50ohm coax, versus 35-ft twinlead). Considering QRP, would there be justification to make the switch? How about with more power, say around 100 W?

--steve, n9xbj

Sent via Deja.com
http://www.deja.com/

1115. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 22:00:42 UTC
From: n2ey@aol.com
Message-ID: <93nuq5$654$1@nnrp1.deja.com>
Source record: 172340

In article <16931-3A5F54D5-53@storefull-115.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Jim, N2EY wrote:
> "How many SSB QSOs can fit in 100 KHz compared to Morse or digital
QSOs
> in the same bandwidth?"
>
> This has little to do with code testing.

That's right! The issue is one of subbands for different modes.

> Wider bandwidth allows faster
> information transfer.

If and only if the wider bandwidth is used effectively. It often isn't. An SSB signal typically takes up ten times the bandwidth of a Morse signal, but it doesn't carry information ten times as fast. AM is even less efficient.

And the discussion was about access for the most people. More people have access at a given time using "conventional" methods if narrower bandwidth modes are used. This isn't just a characteristic of Morse - other modes have it too. Opening up the bands to all modes squeezes the spectrum-efficient ones like PSK31. That's not a good thing.

> If you have a quantity of data you can use
> wideband for a short time or narrowband for a long time.

Sure - if you are transferring data. If you are having a realtime conversation, it's a different game.

Most people talk in the 100-200 wpm range, but their actual communication rate is rarely more than 80-100 wpm because of pauses, repetitions and "by gollys". A decent Morse op or typist can effectively communicate in the 50-100 wpm range using abbreviations and Q signals. But the Morse and keyboard users take up far less spectrum, allowing more QSOs in the limited space.

> In the grand
> scheme of things, it`s a wash.

No, it isn't. The times people can get on the air and the bands used are usually determined by external circummstances, resulting in busy and slack times. That's why spectrum-conserving modes deserve consideration.

>Coding and transmission schemes have
> various efficiencies.

Agreed!

>Morse loses the efficiency contest due to a fatal
> flaw. A dit is shorter than a dah. End of story.

Nope. Morse doesn't need start/stop bits or synchronization. End result
is that Morse is quite good. Want some numbers? I've got 'em.

73 de Jim, N2EY
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1116. Re: INFO Apartment HF antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 22:09:26 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a5f81bc1vtanpl$mr2ice@news.uga.edu>
Source record: 172337

Performance will be poor if the apartment is concrete. Much better luck with cinder blocks and even better with all-wood construction.

I had reasonable luck with dipoles attached at the ceiling level, as long as possible, fed by a TV line at the corner to an antenna tune with balanced output. This worked from 10m down to 40m.

Magnetic loop is a possibility although getting one to work below 20m may be hard and tuning is very picky.

Ignacy, NO9E
no9e@arrl.net

1117. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 22:16:01 UTC
From: rwclark@seanet.com
Message-ID: <3a697be1.160190301@news.seanet.com>
Source record: 172341

On Fri, 12 Jan 2001 13:02:45 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Jim, N2EY wrote:
>"How many SSB QSOs can fit in 100 KHz compared to Morse or digital QSOs
>in the same bandwidth?"
>
>This has little to do with code testing. Wider bandwidth allows faster
>information transfer. If you have a quantity of data you can use
>wideband for a short time or narrowband for a long time. In the grand
>scheme of things, it`s a wash. Coding and transmission schemes have
>various efficiencies. Morse loses the efficiency contest due to a fatal
>flaw. A dit is shorter than a dah. End of story.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Almost ANY method of modulation suffers under such a comparison. What you say is true, quite so, but is equally true across the board and as such becomes a commonplace observation rather than a special one for CW alone. All forms of communication incorporate some form of redundancy in time, frequency or space. In fact nearly any modern digital transmission is intentionally redundant. Spread Spectrum is the class example in that regard (a simple derivative example may be found in FM mode).

What you are answering with would be called a data bit/rate/bandwidth constant, but what you are also responding to would be called data throughput. The two are not the same except by a casual appearance. In the language of computer connectivity to your ISP, you may in fact have a 56 KBaud connection that is so noisy that through all the retries you in fact only move 1 KBaud of data successfully. This is a prime example of redundancy built into a mode (in this case TCP/IP which is very like Packet).

Really, you guys talk about "language" at a truly amateur level of discussion. One of the key failures is being too close to the subject. In other words there is the underlying perception that being able to use and speak a "language" must mean that you understand the process. Wrong - you don't have to be a conductor to appreciate and "understand" the language of music - but neither does a listener of music have the qualifications to conduct it in spite of the strong feelings evoked by that act of participation. But I have already posted a response in that regard that was wholly ignored - language is not the battle you guys are fighting. You are fighting because of

language. CW is a language to a linguist, perhaps not to this crew, but that is immaterial; and the argument about being language is an element tossed in for effect only and has exhibited very little substance to support or deny the logic presented in this forum.

73's
Richard Clark, KB7QHC

1118. Re: MW Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 22:25:04 UTC
From: rwclark@seanet.com
Message-ID: <3a6a8280.161885388@news.seanet.com>
Source record: 172342

On Fri, 12 Jan 2001 16:13:25 GMT, DX-390 <kal4cu@my-deja.com> wrote:

> I am not an amateur radio license holder but I am new to radio which
>makes me an amateur (Just kidding). I have gotten interested in MW
>radio. My question is 1) I have a R/S DX-390 (Sangean 818) and a good
>Panasonic table top (transistor/6 diode)that I listen too. I am
>looking for a good inexpensive way to improve the signal. The 390 has
>an external plug but the Panasonic only has two post for an external FM
>antenna. Is there a way to hook up a MW antenna I can use on both of
>these.
>
>Any help will be appreciated.. I am studying now for my license.

Hi OM,

Be prepared for the contradiction of your life. For this particular radio (I have one), a better antenna will equate to poorer performance!

The problem will be found in out-of-band (or off frequency) sources of great power that overload/desense the front end of your set. If you want improved performance, you will need an antenna tuner, or tuneable preselector.

Here in the states (and perhaps europe too), there are many local big AM band transmitters that may be so close to you (several miles) that they swamp your signal. You must reject them before they get to the antenna connector. True, you may not be tuned to them, but the front end of this set is not tuned either and will accept any signal. The conversion process will mask this problem (except in the worse of circumstances) such that it is not obvious, making this a rather tough problem to troubleshoot if you were not already aware of this design shortfall. The receiver is a good one otherwise.

73's
Richard Clark, KB7QHC

1119. Re: 900MHz Yagis - solid vs. tubing as elements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 22:29:12 UTC
From: tom_bruhns@agilent.com
Message-ID: <93o0fc$7pb$1@nnrp1.deja.com>
Source record: 172343

For a given element OD, there won't be any noticable difference
between tubing and solid elements.

Element diameter does make a difference. That will be especially true
for the parasitic elements, because Yagis work by having the elements
tuned to get specific phase shifts, and the tuning is affected by the
diameter. The same is true for any frequency, for a given design and
change in element diameter, expressed as a percent.

Boom conductivity does matter. A conductive boom will shift element
resonances to a higher frequency, relative to a non-conducting one. I
believe you'll see this effect most if the elements are bonded to the
boom, but to some extent even if they are insulated from the boom.

Suggest you do some modelling, or arrange things so you can easily
change element spacing and length. You may find it convenient to get a
stock of nesting brass or copper tubing from a hobby shop, and use slip
joints to allow quick changes. At 900MHz, you might even use screws
threaded into the ends of the elements to allow length adjustments. I
know it would be frustrating to me to have to build a large number of
antennas to test out variations.

Cheers,
Tom

In article <3A5F434A.1FAD6C09@fore.com>,
Tom Merendino <tmerendi@fore.com> wrote:
> Hi,
>
> I am planning to experiment by building a yagi for the 900Mhz band.
Will
> be used for receiving only. It will be mounted in the attic, so
> mechanical/wind loading considerations are not important.
>
> Is there any electrical performance advantage of using solid rods vs.
> small diameter hollow tubing as elements? Is there a large sensitivity
> to element diameter in this frequency range?
>
> How about the boom - any electrical performance advantage of using
> conductive vs. nonconductive boom material? Is it better to attach the
> elements to a conductive boom vs. isolating them from a conductive
boom
> (above or thru?)?
>
> The electrical parameter I'm most interested in optimizing is the
> receive gain.

>
> Thanks in advance for any experience you can share.
>
> --Tom--
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

1120. Re: INFO Apartment HF antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 23:21:08 UTC
From: Mike N4DIA <michaelj@networktel.net>
Message-ID: <t5v4b1m6ld1u7b@corp.supernews.com>
Source record: 172344

Joe,

Being Military and moving all the time, I have run from apts to rental houses. Check with the Apt owner. I lived on the top floor of a 3 story apt for 4 years and the owners let me build a "portable" dipole on the roof. It was one of the better ant's I used on a rental. If you are high enough off the ground, you can run a long wire, weighted on the end and fed on the other end with a tuner. Just roll it up when you aren't using it.

There are also commercial units that clip on a window sill and are all band. (I have never used one) You an not beat a long wire ant when it comes to all around performance.

Mike
N4DIA

"Joe Sanada" <bsanada01@snet.net> wrote in message
news:3A5F6727.95713D27@snet.net...
> Hi I will be going into a apartment soon? What type of HF antenna
> should I be Looking for and ... If I do Not have an Attic what options
> do I have there as well..
>
> Thank you Very much Joe Sanada W1JAS
>

1121. ATU design recommendations please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 23:30:35 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <6tM76.2379$Ed4.59742@news2-win.server.ntlworld.com>
Source record: 172345

Please can someone suggest a good balanced ATU which is relatively easy to build (as I've not built one before). It will be used to match a doublet fed with 600Ohm open wire. from 80 to 10M with a max pwr of 100W.
Maybe someone has a diagram of an MFJ tuner and can send me a copy.

Thanks in advance.

Jon M0BQQ

1122. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 23:31:26 UTC
From: k1bqt@aol.com
Message-ID: <20010112183126.28771.00001051@ng-fq1.aol.com>
Source record: 172346

Hi Wes--

I've never "had" a fake or real Boston attorney (like Laura Flynn Boyle or Martha Moakley for example), but I used to date one in NH. Sadly, the prenup scared me off.

I've had lunch at Boston Chicken, though, and loved it--even though they are going out of business (a scenario familiar to many Boston Ham companies, as well).
But, enough about me. Here's the riddle:
Why did the Boston Attorney cross the road? Too drunk to say in his own lane, of course!

Opps, a bad Kennedy joke and time for pizza!

73

Rick K1BQT

1123. Re: MW Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-12 23:51:48 UTC
From: DX-390 <kal4cu@my-deja.com>
Message-ID: <93o5ahbuo1@nnrp1.deja.com>
Source record: 172347

Thanks for your reply. I am well pleased with the radio. I also have a
T/O Royal 7000-1 that I listen to.

In article <3a6a8280.161885388@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Fri, 12 Jan 2001 16:13:25 GMT, DX-390 <kal4cu@my-deja.com> wrote:
>
> > I am not an amateur radio license holder but I am new to radio which
> >makes me an amateur (Just kidding). I have gotten interested in MW
> >radio. My question is 1) I have a R/S DX-390 (Sangean 818) and a good
> >Panasonic table top (transistor/6 diode)that I listen too. I am
> >looking for a good inexpensive way to improve the signal. The 390 has
> >an external plug but the Panasonic only has two post for an external
FM
> >antenna. Is there a way to hook up a MW antenna I can use on both of
> >these.
> >
> >Any help will be appreciated.. I am studying now for my license.
>
> Hi OM,
>
> Be prepared for the contradiction of your life. For this particular
> radio (I have one), a better antenna will equate to poorer
> performance!
>
> The problem will be found in out-of-band (or off frequency) sources of
> great power that overload/desense the front end of your set. If you
> want improved performance, you will need an antenna tuner, or tuneable
> preselector.
>
> Here in the states (and perhaps europe too), there are many local big
> AM band transmitters that may be so close to you (several miles) that
> they swamp your signal. You must reject them before they get to the
> antenna connector. True, you may not be tuned to them, but the front
> end of this set is not tuned either and will accept any signal. The
> conversion process will mask this problem (except in the worse of
> circumstances) such that it is not obvious, making this a rather tough
> problem to troubleshoot if you were not already aware of this design
> shortfall. The receiver is a good one otherwise.
>
> 73's
> Richard Clark, KB7QHC
>

--
DX-390 Radio Hobbyist

Sent via Deja.com
http://www.deja.com/

1124. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 00:27:29 UTC
From: keith green <kbgreen@worldnet.att.net>
Message-ID: <RhN76.1441$pc7.79378@bgtnsc07-news.ops.worldnet.att.net>
Source record: 172348

In my ssb installation I laminated copper screen on the interior of my hull. Total area of the screen is 100 sq ft. The screen is broken up into several pieces all connected wit 3 inch wide copper foil and then connected to an exterior bronze plate under the hull immersed in water. For the antenna I use a 23 foot whip,and of course a tuner. Works like dream on all bands.

N4RNT Keith Green

1125. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 00:44:37 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3A5FA4F5.4E83F434@datacomm.com>
Source record: 172349

"J. MacKenzie" wrote:
>
> In article <3a5e74be.209522413@news.azstarnet.com>,
> nospam_n7ws@arrl.net (Wes Stewart) wrote:
> > On Thu, 11 Jan 2001 09:53:40 -0800, Louis Bybee <louisb@datacomm.com>
> >
> > >I have never used a Boston Attorney.
> > >
> > >Anyone know for a fact if they will tune up on 10m or 40m? :-]
> > >
> > >The ones here on the west coast are usually too wet, or salt
> > >and aren't suitable at all! :-]
> > >
> > >Louis
> >
> > it seems that there is some kind of severe mismatch that causes audio
> > such that all of their "R's" seem to be missing.
> >
> > Apparently this is more of a problem on h-f, particularly the longer
> > the west coast where their signals are almost unintelligible.
> > understand they work quite well for local QSOs on 2m FM in the Boston
> >
> > Wes N7WS
> >
> > >Required wrote:
> > >>
> > >> Michael A. Kaufman
> > >>
> > >> 16 Harcourt Street, #3C
> > >>
> > >> Boston MA 02116
> > >>
> > >> Admitted to the bar on 6/20/1995
> > >> Current status is Active
> > >>
> > >> --
> > >> Posted from host4.websitesource.com [209.239.38.252]
> > >> via Mailgate.ORG Server - http://www.Mailgate.ORG
> > >
> > >
>
> This Boston Attorney will take your case if you are protecting
> your Intellectual Property from Pirates.

Hmmmm......

I feel somewhat slighted!

No Pirate has ever indicated interest in my "Intellectual Property"

I guess I have managed to successfully disguise it's worth. :-]

Louis

>
> Sent via Deja.com
> http://www.deja.com/

1126. Re: feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 00:51:17 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <93o8p2$6pb$1@uranium.btinternet.com>
Source record: 172350

Steve, your and similar questions about twin-line and coax antenna feeders occur very frequently. I'll try to summarise the facts.

(1) For the same wire gauge the attenuation (matched loss) of a transmission line is inversely proportional to its impedance Zo. Coaxial lines always have a lower Zo than balanced twin lines so for the same conductor gauge attenuation per 100 feet is greater for coax. But not very much greater when line lengths encountered by amateurs are considered.

(2) For example, the attenuation per 100 feet of 600-ohm open wire line is 50/600 = 1/12th of the attenuation of 50-ohm coax line for the same SWR. On the other hand the SWR on the 600-ohm line is likely to be higher than on the 50-ohm line.

(3) Most coax has impedances in the range 50 to 80 ohms. Balanced twin lines have impedances in the rangs 130 to 600 ohms. However, twin lines need a matching transformer or tuner of some sort at one or both ends to convert to the 50 ohms which transmitter prefers to see.

(4) But for short to medium lengths of line, from transmitter to antenna, the attenuation of both types is very small. SO PROVIDED THE SWR IS SMALL IT DOESN'T MATTER WHICH TYPE OF LINE YOU USE. Its a matter of cost and convenience of installation.

(5) Only when multi-band operation is required will a high SWR be encountered. For single-band operation it can nearly always be engineered to have a low SWR on the feedline.

(6) SWR increases the loss of BOTH types of line in the same proportion. But because the attenuation of twin or open wire line is very much less to start with the loss with open-wire or ladder line for a given length and wire gauge is always less.

(7) Again, for short or moderate line lengths at the lower frequencies, say below 8 MHz, it doesn't matter very much what type of line is used. We don't care very much if the loss on the line is 5 times (in dB) greater because of high SWR if the attenuation is only 0.2 dB when the SWR is 1-to-1.

(8) On the other hand it is very often more convenient to install a coax line all the way from antenna to transmitter than an open-wire line.

(9) It is not true to say the loss on coax is greater than on twin line. To keep matters in proportion it is important to remember the attenuation and losses on coax can be less than on open wire line if

the coaxial inner conductor has a diameter several times greater than the open wire conductor diameters even with moderate SWR.

(10) So the choice of type of line to achieve a particular level of radiating efficiency.is always a matter of convenience. and economics. How much are you prepared to pay for an increase in signal strength of 1dB or 1/6th of an S-unit ? 1dB is a change in signal level which is undetectable at the receiving end.

Download in a few seconds program VARNEY to experiment with different dipole feedline impendances and conductor diameters. You will find the choice is not at all critical. Not zipped up, one small file only. Run immediately.

==========
Regards from Reg, G4FGQ
For free radio design software go to:-
http://www.btinternet.com/~g4fgq.regp
==========
<sjwoodr@my-deja.com> wrote in message
news:93n8rk$go4$1@nnrp1.deja.com...
> what are the pro's and cons of using twin-lead feedline
> instead of coax from the tuner to the antenna? coax is
> supposed to be high loss, but most antenna designs i've
> come across usually are illustrated as being fed by coax
> and use so-239 connectors. its it an interference issue?
> i know any antenna design can easily be changed to use
> whatever type of feedline, but why do so many people use
> coax? tnx...
>
> --steve, n9xbj
>
>
> Sent via Deja.com
> http://www.deja.com/

1127. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 02:15:38 UTC
From: n2ey@aol.com
Message-ID: <20010112211538.24296.00000689@nso-fp.aol.com>
Source record: 172352

In article <12597-3A5F2374-27@storefull-116.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"Morse English is a method of expression that is different from both
>"written English" and "spoken English".
>
>From the Kennedy-Nixon debate, we know that viewers drew different
>conclusions from listeners who weren`t watching. A similar thing happens
>at times between listeners and the readers of a transcript,

I agree 100%. Listeners thought Nixon won. Viewers thought Kennedy won.
>
>On-site viewers who see and listen tend to get the most information.

Yes - in part because their attention cannot be directed.

> The TV audience seems to be the next best informed.

I disagree. They get different information, that's all. They only see and hear what the TV director allows to be in the telecast. For example, if the camera is on Kennedy, the TV viewers can't see Nixon's reaction. The on-site viewers can decide for themselves who to look at - but if they watch Kennedy they miss Nixon and vice versa.

> Radio listeners get less
>information than the TV audience.

Not necessarily. Their focus is different. They are not distracted by the visual. Listeners get different information - they get info that the TV audience misses because TV viewers are distracted by the visual. Kennedy wooed the viewers in part because he looked better.

We like to think we are rational beings making objective judgements based on facts, but in many cases people are swayed by things like appearance and the sound of a voice.

Ever listen to "Prarie Home Companion"? They put together a true radio show. Seing videotapes of a performance causes one to miss the fine points of the performance.

"PHC" is a good example of the differences of various communcation modes. One cannot sit back and listen to it passively. Unlike TV, one has to be actively listening and visualizing the story in one's mind.

>Readers are deprived of the speech
>nuances, as are CW users.

True to a point - but readers have punctuation. And a reader sets the pace, and can go back and reread. "Live" communication happens and is gone (unless you rewind the tape). Different information entirely. Reading also forces the reader to mentally visualize what is being described, similar to listening.

Morse users have a piece of all of this, plus some distinct features. As used by hams, Morse is usually "live" and "aural" - so it's like listening and talking. Yet the sound and appearance of the people communicating are not a factor - only their skill in using the mode matters. So Morse becomes a great equalizer, eliminating prejudices based on accent, gender and age.

>
>If we want to communicate in place of a commute, shouldn`t we all use
>2-way TV to get fastest access to the most information? Bell always
>thought so, but never could sell it. Maybe the technology was still
>lacking.

The "Picturephone" was basically a form of low resolution SSTV. It couldn't capture motion very well. Plus it was so expensive that few people went for it. In other words, most of the info needed could be sent without the picture. Note how fast fax machines caught on, once they became inexpensive, as a way of sending visual information.

>CW seems best suited to a last resort.

I disagree. It's another tool in the toolbox, that's all. Like ASL (American Sign Language) which has unique features of its own.

The real trick is to choose the right tool for the job at hand.

73 de Jim, N2EY

1128. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 02:15:39 UTC
From: n2ey@aol.com
Message-ID: <20010112211539.24296.00000690@nso-fp.aol.com>
Source record: 172351

In article <27917-3A5F4440-3@storefull-117.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote,

(actually Rich wrote this part):

>"(Would elimination of legal voice operation on the bands have any
>effect on egregious violations involving weird modulation?)

I wrote:

>Nobody`s proposing that. But it might greaty reduce the incidence of
>violations."
>
>No doubt.

Please note that nobody, 'specially me, is proposing such a
baby-with-the-bathwater thing. Even if it were possible, it would be a terrible
idea.

>Cut out the voice and mostly empty the bands.

Rich, have you ever listened to the non-phone parts of the HF ham bands? They
aren't empty at all. Lots of Morse and RTTY/digital ham signals. In fact, 30
meters has no voice segment, and it's not "mostly empty".

>With empty bands
>there will be few violations and soon there will be few licensed amateur
>radio operators.

True - but only if the bands were empty.

>Lots of space for CW die-hards, for long as amateur
>allocations persisted, which might be less time than some think.

The problem of "use it or lose it" is greatest above 50 MHz, not below. How do
we get more activity up there?
>
73 de Jim, N2EY

1129. Re: ATU design recommendations please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 02:22:36 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5FBBEC.53C03171@oio.net>
Source record: 172353

Jon M0BQQ wrote:
>
> Please can someone suggest a good balanced ATU which is relatively easy to
> build (as I've not built one before). It will be used to match a doublet fed
> with 600Ohm open wire. from 80 to 10M with a max pwr of 100W.
> Maybe someone has a diagram of an MFJ tuner and can send me a copy.
>
> Thanks in advance.
>
> Jon M0BQQ

Jon,
Take a look at the tuner on Rick Measures page (don't remember
the URL). He has a balanced tuner that's fairly simple.
'Doc

1130. Re: MW Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 02:27:33 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <93oepalt1@slb1.atl.mindspring.net>
Source record: 172354

I see this question asked here from time to time and the usual answer is to string up a wire antenna. That was a very good choice some years ago when there weren't MW stations jammed everywhere. Your best bet is a tunable, directional loop. I have one put out by Radio Shack and it works quite well with my DX 390 and just about every other MW receiver. It just sits next to your radio and inductively couples to the internal loopstick. It works quite well and is not expensive. About $30.00.
--
CW
KC7NOD
"DX-390" <kal4cu@my-deja.com> wrote in message
news:93naer$i63$1@nnrp1.deja.com...
> I am not an amateur radio license holder but I am new to radio which
> makes me an amateur (Just kidding). I have gotten interested in MW
> radio. My question is 1) I have a R/S DX-390 (Sangean 818) and a good
> Panasonic table top (transistor/6 diode)that I listen too. I am
> looking for a good inexpensive way to improve the signal. The 390 has
> an external plug but the Panasonic only has two post for an external FM
> antenna. Is there a way to hook up a MW antenna I can use on both of
> these.
>
> Any help will be appreciated.. I am studying now for my license.
>
> --
> DX-390 Radio Hobbyist
>
>
> Sent via Deja.com
> http://www.deja.com/

1131. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:00:39 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A5FC4D7.34E0@wt.net>
Source record: 172355

J. MacKenzie wrote:

> > >>
> > >> Michael A. Kaufman
> > >>
> > >> 16 Harcourt Street, #3C
> > >>
> > >> Boston MA 02116
> > >>
> > >> Admitted to the bar on 6/20/1995
> > >> Current status is Active
> > >>
> > >> --
> > >> Posted from host4.websitesource.com [209.239.38.252]
> > >> via Mailgate.ORG Server - http://www.Mailgate.ORG
> > >
> > >
> >
> This Boston Attorney will take your case if you are protecting
> your Intellectual Property from Pirates.

Dunno, I think I would find someone with a little more experience to handle all my important intellectual property. I would want no less than Perry Mason. But I do have a job I would be willing to trust him with. I wonder if he could find the lousy bastard that stole my brand new floor jack the other night? I'll sure make it worth his while. Have him quote me a fee if interested. I'm good in the book. MK
--
http://web.wt.net/~nm5k

1132. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:03:33 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5FC585.D343A7F9@dvol.com>
Source record: 172357

Floyd Sense wrote:

> For those obviously less informed than I, there are indeed SSB radios that
> are type accepted for both marine and amateur band use. The SGC-2000 is one
> of those. It received a very glowing review in one of the sailing
> magazines, in an article written by an "expert". However, in researching
> how this unit is performing in the fleet, we found nothing but negative
> comments about it's reliability and the extreme difficulty in dealing with
> SGC on service issues.

>
http://www.heatherk.com/gear/History_of_sgc_2000_radio_proble.htm
>
http://www.teamtoucan.com/sgc/sgc2.html
>
>
Based on my half century afloat in pleasurecraft plus some significant
experience with the Right Coast commercial fishing fleet (ignoring my six years
with the Naval Establishment, many days of that gig spent in CV/CVA radio rooms
during shakedown cruises) it doesn't take long to learn that if top quality
radios count anywhere they count most aboard small craft like 36 foot ragboats
in offshore blue water. A typical example of the kinds of radios the pros use
when their butts are on the line:
>
http://www.jrc.co.jp/product/marine/marine-e.html
>
http://www.nordicship.com/nmmi9.htm
>
Also http://marine-electronics.net/products/ssb.htm
>

I've read the info in the ARRL Antenna book on sailboat antennas. A

> properly installed backstay vertical seemed the most reasonable to me, and I
> have experience with automatic tuners (SGC-230s). When my friend contacted
> two sailing hams he knows, they gave him quite different solutions.

>
They were smart enough not to mess with the boat's basic structure.
>
When you get gored by a 55 gallon oil drum piece of half-submerged flotsam and
it's going down fast bow first 'way offshore you better have a reliable ssb
radio and a backstay antenna that booms the USCG per Roy's comments and to hell
with whether or not you can work 20 with it.
>

> One guy
> is using an Outbacker mobile antenna (they have one model that covers the
> ham and marine bands - $469 or so), and the other made a 20 meter dipole
> using two back-to-back hamsticks. So, it appears that this odd concept that
> any expensive commercial antenna must be better than anything else, has
> followed some hams into their sailing hobby. I also wondered how many of
> these "land mobile" antennas have ever been thoroughly tested in a marine
> environment.
>
> Thanks again.
>
> K8AC
>

1133. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:08:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A5FC69E.8852C309@eznec.com>
Source record: 172356

Louis Bybee wrote:
>
> Hmmmm......
>
> I feel somewhat slighted!
>
> No Pirate has ever indicated interest in my "Intellectual Property"
>
> I guess I have managed to successfully disguise it's worth. :-]
>
> Louis

No, you just haven't taken the right steps. Here's how to get up some interest.

1. Bend up some wire and call it an antenna.
2. Publish a picture of it in several magazines, and put a picture of it on your web site.
3. Make up a "figure of merit" from various characteristics which favor your antenna. Announce on this newsgroup that you'll give $1000 to the person submitting the design which beats your antenna's "figure of merit" by the greatest amount, claiming that no other antenna can. Declare that the "figure of merit" will be determined by antenna modeling, but refuse to publicly release a model of your antenna for others to use for comparison.
4. When someone accepts your challenge and makes his own model by looking at the pictures you've published (and also produces other models exceeding your antenna's "figure of merit" by a large amount), don't honor your public offer. Instead, deflect attention from the fact that the other antennas are superior and that you won't be paying the money after all by loudly declaring the other person's model to be your "intellectual property" and accusing him of stealing it from you. Increase attention by accusing and threatening anyone who helps others actually get this model. After all, it's in your interest to prevent others from seeing for themselves that the other antennas are better.

So you see, the wider range of things you claim to be your "intellectual property" and the more noise you make about them, the more interest you can get. Unfortunately, the interest won't really be in your actual intellectual property, but rather in the spectacle you make of yourself. But if it's attention you crave, and you can't get it by really coming up with something revolutionary, this is a tested and proven formula. Go for it.

Roy Lewallen, W7EL

-- Accused thief, pirate, and alleged and threatened, but
unconsummated, lawsuit defendent

Anyone who wants to look at Steve's MI2 model and his superior designs can download them from ftp://eznec.com/pub/MI2. (You can view them with the demo version of EZNEC, available from http://eznec.com, or run your own calculations using the standard version of EZNEC.) If you want to compare Steve's MI2 model and file with Chip's, first you've got to get a copy of Chip's file. Good luck.

1134. uhf/vhf/fm antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:20:47 UTC
From: whozix <whozix@hotmail.com>
Message-ID: <93ohif$b19jo$1@ID-44649.news.dfncis.de>
Source record: 172358
Cross-posted to: rec.radio.amateur.antenna,rec.audio.tech

Please forgive the dumb question but I've never done this before. I have an attic-mounted TV antenna with a coax downlink to a splitter, currently feeding two TV's. I would like to use this antenna for FM reception as well. I have purchased a three-for-one splitter and I have run a coax to the FM tuner. My question is, do I need any kind of special filter or can I simply connect to the FM antenna terminals on the receiver. If so, should I use a 300 to 75 ohm adapter or simply direct-connect the coax to the receiver terminals? The adapter has no discernible polarity markings but the receiver terminals are clearly marked for polarity - one terminal for antenna, the other for ground. I am within 10 miles of most transmitters and receive a strong signal that produces a good quality TV picture.
Thanks in advance for any advice and for you cynics, yes, I did a Deja search and read many posts, looking for this answer.

1135. Re: uhf/vhf/fm antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:38:19 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a5fcde9_4@news3.prserv.net>
Source record: 172359
Cross-posted to: rec.radio.amateur.antenna,rec.audio.tech

It won't hurt anything to try. If the receiver is marked antenna and ground, it is likely 75 ohm, and matches the rest of your installation. You may have to put an FM filter or attenuator in the line if the signals overload your receiver (stations show up at more than one place, two signals at one place where neither belong [intermod], etc.). This latter depends on the front end in the FM receiver, and is difficult to predict.

The other approach is to get a band splitter which splits the FM from the TV, run the FM output to the radio, and the TV to a two way splitter for the TVs. This may be difficult to find, as I don't think Ratshack sells one exactly like this. MATV sources have them. Still may have overload problems.
--
Crazy George

whozix <whozix@hotmail.com> wrote in message
news:93ohif$b19jo$1@ID-44649.news.dfncis.de...
> Please forgive the dumb question but I've never done this before. I
have
> an attic-mounted TV antenna with a coax downlink to a splitter, currently
> feeding two TV's. I would like to use this antenna for FM reception as
well.
> I have purchased a three-for-one splitter and I have run a coax to the FM
> tuner. My question is, do I need any kind of special filter or can I
simply
> connect to the FM antenna terminals on the receiver. If so, should I use a
> 300 to 75 ohm adapter or simply direct-connect the coax to the receiver
> terminals? The adapter has no discernible polarity markings but the
receiver
> terminals are clearly marked for polarity - one terminal for antenna, the
> other for ground. I am within 10 miles of most transmitters and receive a
> strong signal that produces a good quality TV picture.
> Thanks in advance for any advice and for you cynics, yes, I did a Deja
> search and read many posts, looking for this answer.
>
>
>

1136. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:49:49 UTC
From: richardharrison@webtv.net
Message-ID: <16931-3A5FD05D-95@storefull-115.iap.bryant.webtv.net>
Source record: 172361

Richard Clark critiqued this discussion to some extent on style and substance. He is professionally qualified to do so. But, these are transient exchanges. They aren`t planned and edited for posterity. That`s my excuse, and I`m sticking to it.

No ham is likely to say we have plenty of bandwidth. We will always need more spectrum and narrower signals. It`s traditional. We will always need enough space to accommodate the peak traffic load. We live in a world that never sleeps, so our demand is 24 hours, 7 days, and 365 days a year, at least. We also need enough space to accommodate redundant transmissions so that data can be compared bit-by-bit to be sure there is no error.

Richard Clark also wrote:
"-you don`t have to be a conductor to appreciate and "understand" the language of music-"

Here, I beg to differ a little. Apprecation does not require an ability to conduct. To appreciate and understand the language of music as a good musical conductor does, likely requires the ability to read music, to know the challenges, and to imagine great possibilities for the music`s performance.

The argument that Morse is a language was in suppport of new uses for a mode which is fading from the scene in its traditional applications. It was just grasping at straws.

Best regards, Richard Harrison, KB5WZI

1137. Re: 900MHz Yagis - solid vs. tubing as elements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 03:57:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5FD227.5D1292AB@dvol.com>
Source record: 172360

Tom Merendino wrote:

> Is there any electrical performance advantage of using solid rods vs.
> small diameter hollow tubing as elements? Is there a large sensitivity
> to element diameter in this frequency range?

>
RF flows only on the skin of any conductor, the depth of the skin being a
fuction of the frequency. At 900Mhz you could probably use aluminum foil
tubing without suffering any losses.
>

> How about the boom - any electrical performance advantage of using
> conductive vs. nonconductive boom material? Is it better to attach the
> elements to a conductive boom vs. isolating them from a conductive boom
> (above or thru?)?

>
There is no "best", all those scenarios would work fine but the boom
characteristics will have definite effects on element lengths.
>

> The electrical parameter I'm most interested in optimizing is the
> receive gain.

>
Gain is gain, receive or transmit. If you really wnat to do it right and
save yourself a lot of backyard experimentation you should consider modeling
the antenna with programs like EZNEC.
>

>
>
> Thanks in advance for any experience you can share.
>
> --Tom--

>
w3rv

1138. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 04:17:11 UTC
From: richardharrison@webtv.net
Message-ID: <16931-3A5FD6C7-99@storefull-115.iap.bryant.webtv.net>
Source record: 172364

Jim, N2EY wrote:
"They only see and hear what the TV director allows to be telecast."

Very true. Editing has always been able to shape the form and content of a presentation. I assumed an unbiased presentation, which is as unreal as a "lossless" transmission line.

Jim also wrote:
"Seeing videotapes of a performance causes one to miss the fine points of a performance."

Again, agreed. Beyond distraction, nothing can compare with the rich performance in the theater of the mind if you turn it on and let it loose.

Best regards, Richard Harrison, KB5WZI

1139. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 04:25:13 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A5FD8A9.F9F6AFC2@dvol.com>
Source record: 172362

N2EY wrote:

> In article <20010108225955.29484.00000915@ng-cs1.aol.com>, kr2v@aol.com (Kr2v)
> writes:
>
> >I'm looking for design ideas to home-brew dipole center insulators. I know
> >there's not much to it, just looking for some ideas (PVC parts, etc.) that
> >work
> >well together.
>
> Here's what I've used for coax-fed dipoles fpr the past 17 years or so. Only
> works with small diameter coax, though:
>
> Start with a piece of "2 inch" PVC pipe about 5 inches or so long. Drill 1/8"
> holes about 1/2" in from each end for the antenna wires. Drill pairs of 1/4"
> holes on the "sides", right in the middle. Two more holes about two inches
> apart on the top are for a halyard to support the antenna if it's put up as an
> inverted V. Looks like this (side view):
> ______ _________ _______
> I U U I
> I I
> I o O O o I
> I I
> I_____________________I
>
> o = 1/8" hole for antenna wires
> O = 1/4" hole for tywraps
> U = 3/8" hole for halyard
>
> Other side drilled the same.
>
> The coax is wrapped around the middle of the insulator and secured with black
> UV resistant nylon ty wraps. The end of the coax is tywrapped to itself and
> points down, so water stays out. The whole thing is weatherproofed with rtv or
> spray lacquer after connections are made. No metal in the insulator at all.
>
> I can supply bitmap drawings if needed to make it clear.
>
> 73 de Jim, N2EY

>
I use foam 8X coax which is pretty flexible. The body of the center insulator is a
standard 75 cent filled nylon "dogbone" strain insulator with three molded-in
"disks & valleys". I wrap the coax tightly all the way around the middle "valley"
of the insulator with a four inch "tail" pointed down. I double-tywrap the coax

and tail together right under the insulator. Then I strip three or so inches of insulation off both the braid and the center conductor. The braid gets soldered to the end of one dipole element which is attached to one end of the dogbone and the center conductor gets soldered to the end of the other dipole element. Goop the exposed end of the coax to keep water out. Light, low profile, build nothing, two for a buck fifty.
>
w3rv

1140. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 04:36:20 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <UNlfOjX4xEJK=fXVKE3q1i6=hbLc@4ax.com>
Source record: 172363

On Fri, 12 Jan 2001 21:49:49 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Richard Clark also wrote:
>"-you don`t have to be a conductor to appreciate and "understand" the
>language of music-"
>
>Here, I beg to differ a little. Apprecation does not require an ability
>to conduct.

Richard, I can't see a whit of difference for which you beg to differ.

> To appreciate and understand the language of music as a good
>musical conductor does, likely requires the ability to read music, to
>know the challenges, and to imagine great possibilities for the music`s
>performance.
>
>The argument that Morse is a language was in suppport of new uses for a
>mode which is fading from the scene in its traditional applications. It
>was just grasping at straws.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Straws?! And so much huffin' and puffin' for all of that.

The meaning of "Language" indeed :-)

73's
Richard Clark, KB7QHC

1141. Re: HAMCALC question.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 04:57:42 UTC
From: "Robert S. Stein" <w6nbi@earthlink.net>
Message-ID: <3A5FBDA5.39601819@earthlink.net>
Source record: 172365

carkenord@juno.com wrote:
>
> I am interested in obtaining HAMCALC.
>
> Are there both DOS/GWBASIC and Windows versions?
>
> What are the latest version numbers?
>
> If HAMCALC is available for both DOS and Windows, I would like to
> download and obtain each. What is the website where I can do that?
>
> Lee Carkenord KA0FPJ
>
> Sent via Deja.com
> http://www.deja.com/

The current version is 48, and is on a CD. It is a DOS/GWBasic program, but will run in Windows' DOS window. It is not available on the web, although older versions may be. You can buy it from VE3ERP for US$7.00, including postage. Murph (VE3ERP) donates all proceeds to a Canadian association for the blind, so your money is going for a good cause. You can contact him at ve3erp@encode.com.

Bob, W6NBI

1142. Re: feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 05:16:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A5FE4C8.8F1D649A@oio.net>
Source record: 172367

Steve,
All kidding aside, I doubt if changing to ladder line
would be any benifit to you. There just isn't that much
loss in 50 feet of coax (unless it's really terrible
quality coax). Even at QRP levels the loss shouldn't make
a lot of difference, if all else is as it should be.
'Doc

1143. Re: 10M ground plane question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 05:20:24 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A5FE41D.D3490375@home.com>
Source record: 172366

Check out the January 2001 QST, there is a great ground coupled portable antenna that you can make yourself.

paul wrote:

> Hello,
>
> I want to make a homebrewed 10 meter ground plane antenna. I've got
> most everything together but have a question on the radials.
>
> Is it possible to physically shorten the lengths of the radials by
> adding a loading coil to each one? I think that the radials (on a
> homebrewed antenna) would really be the only unattractive part as they
> would take up most of the roof. Any idea of what size to make the coil
> /whip combination? Any idea if this would improve, degrade, or be the
> same in terms of performance?
>
> Thanks
>
> Paul
> KD4GNU

1144. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 05:28:15 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <93op1f$5be$5@bashir.peak.org>
Source record: 172219

Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
: Backstays as antennas...

: Safety of life at sea demands that one ensure sure that backstay antenna
: setups are first and foremost structurally sound and do not compromise the
: mechanical integrity of the backstays. Then, and only then, should one
: consider optimizing the electrical and electromagnetic efficiency of an
: antenna which is an "auxilliary" use of such basic structures.

Certainly. But a properly set up backstay for an antenna does not compromise
the structural safety of the backstay. Such antennas are, of necessity, a
compromise as far as radiation efficiency go.

: Lots has been written in the blue water sailing literature and periodical
: press about HF antennas on sailboats, some basic research by your friend is
: in order.

Such antennas have long been used for boats - and are well accepted.

: If the safety of life at sea is at stake, and one is going to [perhaps]
: compromise their marine safety by modifiying basic boat/ship structures like
: stays and or masts to accomodate an HF antenna installation, they should
: consult not only HF antenna experts, [i.e. like gurus in this news group],
: but also competent marine/naval architects/engineers who are qualified to
: design and "sign off" on the structural integrity of masts and backstays,
: etc...

I would not suggest that a person wing it on their own. While they can do
that on the grounding/counterpoise - as there are plenty of good articles
available, any modification to the rigging support must be designed by a
knowledgeable marine engineer/architect.

: Just a word of caution...

Thank you for the elaboration. I should have included the warning in my
original response.

--
Bill Nelson (billn@peak.org)

1145. Re: ARRL Technical Publications Cost (was Re: Cellphones and cancer not

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 05:34:57 UTC
From: n2ey@aol.com
Message-ID: <20010113003457.14870.00000617@nso-fr.aol.com>
Source record: 172368

In article <20010103075807.10762.00001231@ng-cr1.aol.com>, fractenna@aol.com (Fractenna) writes:

>>In article <20010101214036.27079.00000331@ng-cr1.aol.com>, fractenna@aol.com
>>(Fractenna) writes:
>>
>>>>Back about 1954, my uncle bought a nice 3 bedroom twin home in the town
>>>where
>>>>B&W used to be for $12,000. He went into hock up to his ears to buy it,
>too
>>>-
>>>>took every cent for a while, because it exceeded the "2 years gross
>salary"
>>>>rule of the time. 20 year mortgage at 4%, which was considered almost
>usury
>>>>then.
>>>>
>>>>In 1979 I bought a very similar house four doors down for $47,000. I, too,
>>>>went
>>>>into hock up to my ears to buy it. 30 year mortgage at 10.5%, which was
>>>>considered pretty good at the time.
>>>>
>>>>Several years ago we both moved away. He went first and got about 8.5
>times
>>>>his
>>>>purchase price. I got about twice my purchase price. His house was nicer
>>;-)
>>>>
>>>>Compared to decent real estate, ham radio gear is dirt cheap.
>>>>
>>>>73 de Jim, N2EY
>>>
>>>This is all very far away from the original thread.
>>
>>Not at all. The discussion is about relative values over time. The Handbook
>>that cost $3 in the fifties costs over ten times that now. The house that
>>cost
>>$12,000 back then costs eight times that now (in raw price). Add in the
>>higher
>>costs of taxes and insurance, and the Handbook hasn't inflated nearly so
>>much.
>>>
>>>The point(s) is/ (are):
>>>

>>>1) the ARRL HANDBOOK's price does not represent the very cheapest it could
>>be
>>>and still turn a profit.
>>
>>How do you know? Have you ever been involved in its production?
>>
>>> I would guesstimate that price-point is of order
>>>$24
>>>or so;
>>
>>Based on what?
>>
>>>2) The ARRL HANDBOOK is designed to MAKE money to cover the extensive
>losses
>>>incurred in operations at the League;
>>
>>What "losses"?
>>
>>The main reason the ARRL publishes is to be of service to amateurs. They
>have
>>bills to pay, so the publications cost some money. Compared to similar sized
>>engineering texts, they are dirt cheap.
>>
>>>3) If the League didn't have the HANDBOOK then there would be a very severe
>>>cut
>>>in many of the operations we have come to expect;
>>
>>Maybe. You ever read their financial report?
>>
>>>I would speculate that
>>>things
>>>which do not generate revenue and have low readership--such as contest
>>>results,
>>>DXCC; and so on would suffer.
>>
>>Not really. Those things do not consume much in the way of resources. They
>>could be funded other ways.
>>
>>> And say goodbye to the percs such as the web
>>>site; letters; bulletins; and so on.
>>
>>Maybe.
>>>
>>>What's the point(s)?
>>>
>>>1) The League is a well run ship with no fat;
>>
>>Agreed.
>>
>>>2) The League does have a cashcow--the HANDBOOK--that makes a lot of the

>>>other
>>>things possible;
>>
>>I don't know about that at all.
>>
>>>3) Prices of items seldom reflect their costs. If you believe they do, then
>>>ask
>>>yourself how much money McDonald's makes on hamburgers (actually very
>>little;
>>>of order a dime for a quarter pounder) compared to a coke (about 60-100+
>>>cents
>>>per drink) and fries (about 20-30 cents per order).
>>
>>Sure - marketing and sales. Pretty smart folks in Newington. That's why I've
>>been a member for 33 years.
>>>
>>>So not everything scales as a KWM-2 ;-)
>>
>>Sure. The costs of producing a book like the Handbook skyrocketed.
>>Particularly
>>during the '70s and early '80s. The costs of producing electronic equipment
>>have dropped.
>>
>>We shouldn't even be discussing the Handbook, anyway. It's copyrighted
>>material.
>>
>>73 de Jim, N2EY
>>
>
>
>I will be pithy.

Better to be the pither than the pithee.
>
>Have I been ivolved in book publication--and thus understand the costs and
>pricing structure?--yes.
>
I'm not disputing that. The question was about the costs of publishing the ARRL
Handbook.
>
>Is the ARRL making some money from the HANDBOOK to over other losses in
>operations? Absolutely.

Not in dispute, either.
>
>Do I have anything else to add, other than this accurate and factual
>perspective? Nope.

OK
>
>Do you understand what a copyright is and its application? Apparently not.

You are simply mistaken, Chip old boy. Admit it - you never saw that punchline coming.
>
>Have a good new year.

You too.

73 de Jim, N2EY

1146. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 05:59:48 UTC
From: richardharrison@webtv.net
Message-ID: <27916-3A5FEED4-34@storefull-117.iap.bryant.webtv.net>
Source record: 172222

Richard Clark wrote:
"Straws?!"

Well, the Morse defenders seem disturbed by the fading applications for their favorite mode. Some of the justifications proposed for amateur radio Morse tests seem flimsy to me. I am all for aleviating the plight of the handicapped, but don`t see that as cause for maintaining amateur radio Morse testing in license exams.

There is an old saying that a drowning man will grasp at straws. I imagined a parallel with the Morse code situation today.

Best regards, Richard Harrison, KB5WZI

1147. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 06:12:32 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5FF131.DFABFF20@bellatlantic.net>
Source record: 172220

Richard Harrison wrote:

> ehsjr wrote:
> "He told me that he had to read what he typed to know what he heard."
>
> Then he hadn`t understood what he typed.

Correct - he wasn't even aware of what he had typed, per se,
only that he had typed what he heard.

> His keystrokes were
> "conditioned responses" to the unique sounds of Morse characters.

The exact same way a spoken sentence is "processed" from sound
to thought. Sound is, after all, vibration, not thought or ideas. Spoken
words are sounds. Audible Morse code is sounds. In both cases,
an idea is conveyed. One fluent in Morse - or English, Chinese, whatever,
can converse with another fluent in the same language with no translation.
You cannot think about an idea without using words. As you read this
you are not "translating" the individual characters, one at a time, into
English words. You are recognizing an image as a word - no translation.
But when you first learned to read, you had to translate. You saw
the image CAT on paper and had to work to bring to mind the furry
fourlegged creature that that image represented. In time, the image CAT
became part of your written language.

The same thing happens when you meet people for the first time. It
takes some time and effort to recognize that a man with a a particular
appearance is Paul Smith. Later on, there is no effort - you just see
the person and Know he is Paul Smith. No translation - the image
automatically evokes the recognition. That same thing happens
with Morse - you go through the learning process where translation
occurs. But if you develop fluency - the vibration that is sound
automatically evokes the idea that sound represents, just as the vibration
of light evoked the understanding that the person you are seeing is
Paul Smith.

Now, whether it is seeing a person that you understand is Paul Smith
thathear or hearing a tune that you understand is the 1812 overture,
or hearing morse that you understand as an idea, words are always
involved. Conscious thought requires words, but language does NOT
require words to meet definition number 2 in the American Heritage
dictionary: "2. A non-verbal method of communicating ideas, as by a
system of signs, symbols or gestures". Thus the system of audible
symbols which you hear as dah di di di di di at 5 words per
minute, and then translate, if you are still struggling to learn, is

heard as part of an overall idea at 50 wpm by one fluent in morse:
"The quick brown fox jumped over the lazy dogs back". The 5 wpm
translation process for the one starting to learn morse is something
like this: let's see, 1 dash by itself is the letter T. 4 dots together
is the letter H. One dot by itself is the letter e. THE

The 50 wpm man hears a blur of sound that carries a particular
meaning - he is not translating individual dots and dashes and spaces
into characters, then into words. The fact that he can hear
1000 ONO 15 with one ear while conversing with me in Spanish and
English, type 1000 ONO 15 on his machine and transmit with his other
hand all simultaneously proves he is using a language with no
translation needed for the idea to get across. See definition 2. The idea
communicated is that wind at 1000 feet is at 15 knots in a west north west
direction. The idea arrived in morse symbols and ended up on paper
in written symbols. I looked at the paper and did not understand what
it meant - he had to translate it for me. One column always contained
altitude, another wind direction, another wind velocity. The idea was
communicated, no words were used.

> It`s
> the same as monkeys do when they are trained to push certain buttons
> when they see certain lamps flash on.
>
> Morse code is a set of symbols used to represent letters and numerals.
> It is only a language if poetic license is taken with the word,
> "language". In the sense that there is the languages of love and that
> there is body language, these interest me, Morse is called a language,
> too. With such a broad definition, anything of significance is a
> language. Ideas can`t be exchanged with clarity if fuzzy definitions are
> used for their words of expression. Fuzzy definitions are fine for
> poetry, comedy and other entertainment, but not for serious
> communications.
>
> Best regards, Richard Harrison, KB5WZI

1148. Re: INFO Apartment HF antennas!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 06:15:24 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <0oS76.35773$ge4.14466473@news2.rdc2.tx.home.com>
Source record: 172221

Hi Joe, if you have a balcony you might try these ideas I sent to another Ham,
I would look at this page
http://www.sgcworld.com/publications/stealth.htm
A "smart tuner" or weather proofed manual tuner, with 3/4" copper tubing built into a loop around your balcony might be your best solution. Another is a magnetic loop as in MFJ's 1786 (10m - 30m) or 1788 (15m - 40m). But your desire to work 40M, 10M, 6M, 2M, and .70M might rule them out. One thought is Yaesu's ATAS-100 small screwdriver, with the proper counterpoise (maybe a ground screen on the floor of your balcony, or radials cut for each band) this one antenna will cover all the bands you mentioned. Unless you have the Ft-100 or the FT-847 you would have to use one of the controller boxes available (ad in back of QST). Another idea is folded dipoles run along you balcony for the bands you want.
I personally would go with the loop-tuner combo with separate verticals or vertical dipoles built on to the inside of balcony for UHF & VHF. Also the best chances to reduce RFI to your neighbors would be to get the RF outside.
For more ideas check out my site at http://www.geocities.com/n0hc/.
Also a bunch of info found here..
http://www.dxzone.com/catalog/Technical_Reference/Antennas/

Some of us understand that life will sometimes take us to places that is not "ultimate" for Ham radio, but the dedicated make the best of it and even have fun with the challenge...
73 & Good Luck Cliff N0HC

"Joe Sanada" <bsanada01@snet.net> wrote in message
news:3A5F6727.95713D27@snet.net...
> Hi I will be going into a apartment soon? What type of HF antenna
> should I be Looking for and ... If I do Not have an Attic what options
> do I have there as well..
>
> Thank you Very much Joe Sanada W1JAS
>

1149. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 06:56:16 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5FFB65.2E08EA09@bellatlantic.net>
Source record: 172223

Cecil wrote:

> ehsjr@bellatlantic.net wrote:
> >
> > Gary Coffman wrote:
> >
> > > So, can you give some examples of the unique words (nouns, verbs, adverbs
> > > and adjectives), grammar, and syntax of this Morse language?
> >
> > Yes. Any combination of Morse sounds that strike your eardrum and
> > directly create an idea without the need for translation. A good morse
> > op does not hear characters, he hears ideas.
>
> Actually, in text based Morse he hears either characters of the alphabet
> or words of a particular language. Morse code is an Input/Output function.
> It is NOT a central processor function. Language exists at the central
> processor function level, i.e. in the brain. How many ways are there to
> input the word "tree"?
>
> You can hear "tree" spoken. You can hear "tree" sent
> in Morse code. You can read the word "tree" in text. You can read the
> word "tree" in braille. You can read the word "tree" sent as letters
> in American sign "language". All those are Input functions. The point
> where you start dealing with the word-concept "tree" in your brain
> is common to all the above methods of input. "Tree" is an English word.
> If you were dealing with a different language, it wouldn't be the word
> "tree" with which you are dealing. The Morse code word "tree" is a word
> from the English language, it is not some separate Morse code language
> word. Human beings usually think in their native language and that's
> never Morse code. When you hear - .-. . . you are converting a
> coded English word into an English language concept which represents
> an object in reality. You could learn to do the same thing in ASCII
> at a slow baud rate.

Cecil, you are confusing the fact that conscious thought uses words
with language. Language is used to express thoughts and ideas and
emotions. When I see an actual tree, I use the word "tree" to express
what I am seeing. The actual communication (ie the process whereby
I became aware that the tree is there) of the idea into my thoughts did
not involve the word. The tree didn't say " TREE!" A combination of
vibrations of light evoked the thought. The same thing occurs in speech -
a set of audible vibrations evokes specific thoughts. We didn't see
"TREE!" but the result is the same. Now, when we develop a
system of sounds - spoken words - to convey ideas between ourselves,
we call that a language. Morse is a system of sounds we have developed

to convey ideas between ourselves. We have to train ourselves to
demodulate morse, so to do that we start slow, and break that language
down to REALLY small pieces. We then translate those pieces into
some intermediary form through a relatively slow process until we
recognize the individual letters T R E E and then translate that to the
word tree, which, once done, simultaneousley causes us to think "tree".
If we had to do the same thing with speech, it would take us a number
of years to become fluent. And we would have to do a LOT of listening,
before we could recognize a particular set of sounds as "tree".
But, the meaningless sounds a baby hears become language, over time.
And morse is the same. If one spends enough time, one develops
fluency in that language.

>
> --
> http://www.mindspring.com/~w6rca

1150. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 07:11:16 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A5FFEE5.FD3B49ED@bellatlantic.net>
Source record: 172224

Gary Coffman wrote:

> No matter how proficient a Morse operator is in decoding Morse, he still won't
> understand the message text unless he understands the language in which
> it was composed. If Morse were an actual language, then he would understand
> what was being sent, because it would have been translated to a language
> (Morse) with which he is fluent.

By that logic, French is not a language, because I don't understand it.
"If French were an actual language, then I would understand what
was being said, because it would have been translated to a language
(French) with which I am fluent". The key is fluency. When I get
fluent enough in French, I will no longer need to translate it to
English. The sound of the French word will evoke the idea, with
no translation needed. Fluent morse evokes the idea in our thought
without translation. The fact that conscious thought uses words
does not mean that specific sound cannot directly cause specific
thought. Thats how speech works. Thats how morse works, too,
when you are fluent in it.

> But it doesn't work that way because Morse
> isn't a language. It is merely an alphabetic encoding, no different in principle
> from ASCII or Baudot. The messages are still in their native languages.
>
> This can easily be confusing to a monolingual person. He is so used to
> thinking in only one language that he may not even realize what language
> is. To someone fluent in several languages, however, the distinction between
> language and the means used to convey it is quite clear.
>
> Language doesn't have to be aural, of course. It can be written or signed
> or represented in some other way. Nor does it have to be a natural human
> language. For example, computer languages are languages because they
> have their own words, their own grammar, and their own syntax. Mathematics
> can be a language too. It has its own symbolic equivalents of words (variables
> and constants), its own rules of grammar (2+2=4), its own syntactic forms
> (equations), etc. Like conventional natural languages, these artificial constructs
> are also languages which convey meaning to those who understand them.
> But the ASCII often used to *spell* the words of these languages to a computer
> is not a language. Neither is Morse.
>
> The ITU correctly calls it a "telegraphic alphabet". We can use that telegraphic
> alphabet to convey messages in any language which can be spelled by that
> alphabet. But those messages are still in their native languages, not in a
> separate Morse language.
>

> Now the Q signals, and certain other abbreviations that are in common
> use by radio operators, are a sort of very limited pidgeon language. But
> these aren't part of Morse, and should not be mistaken for Morse simply
> because radio operators commonly convey them via Morse. They convey
> the same meaning if transmitted via ASCII, Baudot, etc. They are independent
> of the encoding system used to convey them.
>
> That's true of any real language. An example is that this entire message has
> been conveyed to you via ASCII encoding, but it isn't an ASCII language message.
> It is still English, regardless of the transmission coding used to deliver it to you.
> If I'd laborously keyed it in Morse, it would still be English language text, not
> Morse language text. Someone not fluent in the English language still wouldn't
> know what it says, *no matter how good a Morse operator he might be*.
>
> But if I'd translated it into *another language*, for example German, then anyone
> fluent in German would understand the message. If Morse actually were a
> language, then translating the message into Morse would make it understandable
> by anyone fluent in Morse, whether they knew English or not. But of course that
> isn't true, because Morse isn't a language.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

1151. Re: MW Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 09:10:04 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A601B6C.293D@wt.net>
Source record: 172229

DX-390 wrote:
>
> Thanks for your reply. I am well pleased with the radio. I also have a
> T/O Royal 7000-1 that I listen to.

I'd like to echo Richard a bit. I see no point in using larger antennas for AM BC reception if the antenna in the radio is decent. Normally, there is no need for any more voltage to the radio. If you add a big monster antenna for AM, all you really end up doing is pumping up the S meter. The signal to noise ratio should be about the same. Maybe even worse if the big antenna picks up more noise. I think a small loop probably the best way to go really. The only additional thing you need in an antenna for AM is directivity. The loop will give you this. They aren't planted on the old transoceanics by accident. They work. I think about as well as anything for real low freq BC. Even the ferrite rod antennas work pretty well. The small size is deceiving. It seems as some think because they are standard in the cheaper radios, they can't be any good. They usually do fine unless you are in a metal building or something. There are better antennas for the hard core, but much more work involved. I think an old transoceanic and the loop on top, hard to beat for listening to AM BC. BTW, the early 50's T/O had a better loop than the later 50's models. It was wider and a larger oval. The later 50's had the narrow racetrack looking loops. I don't think it works quite as well as the older one I had. "I had an early 50's model a few years ago, but now have a 1958 model with the narrower loop". I liked the older one better. MK

--
http://web.wt.net/~nm5k

1152. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 09:50:17 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6024D9.676C@wt.net>
Source record: 172230

N2EY wrote:

> >
> >: Your definition of the word'language' has support in most any
> >: dictionary.
> >: So does mine.
> >
> Thus the debate is diverted from the important facts. Morse is a different
> method of expression, with several very real advantages and one or two
> disadvantages - that's the important thing.
>
> 73 de Jim, N2EY

Dunno, I don't really think it's a language. The reason being is we are already sending a language. "english".
But then on the other hand you see "sign language" which is doing the same thing, sending english in a different form than writing or speech. Dunno, if "sign language" qualifies as a language, then I would have to say yes, morse is a language, but in my opinion , neither are true languages. But on the other hand, I do think high speed code operators DO utitilze morse in much the same way as a person would use a different language.
Mainly in the manner in which no real conscious thought is needed to listen to it. If someone says to you, pick up the telephone, you don't have to sit there for a second to think what all that means. It's automatic. To a fast code operator it's much the same. And there is nothing magic at all about it. It's just practice. Anyone can do it if they want to. Or I think anyway. It's no different than learning to type or anything else really.
I can go fairly fast because I've known the code since I was in the 8th grade. or 30 years. If I haven't got it down by now, I might as well hang it up...:/ Everyone else I know that has used code that long is fast also. Almost without exception. "The ones that actually use it , that is.." You gotta lose the pencil to really boogy woogy. I only write important stuff down. The rest I just listen to. Transfering it to paper is what will kill you if you really want to go fast. It's silly anyway. You don't write down "pick up the phone" , when they told you that...g There is no need for it for code either unless you just feel compelled. The main exception being a contest or traffic something where you have to be real accurate for records. I tend to pay a bit more attention in a case like that, but normal qso's I write only the name and callsign down. And the only reason I do that is because I'll forget em 3 min later if I don't...I also sometimes use a form of shorthand gibberish to keep track of what was said which of course is totally useless to anyone but me.. -o-0-o- MK

--
http://web.wt.net/~nm5k

1153. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 10:30:30 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <whtgOuJ+obtvF7vsINjaDx8F3t4b@4ax.com>
Source record: 172225

On Fri, 12 Jan 2001 23:59:48 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"Straws?!"
>
>Well, the Morse defenders seem disturbed by the fading applications for
>their favorite mode. Some of the justifications proposed for amateur
>radio Morse tests seem flimsy to me. I am all for aleviating the plight
>of the handicapped, but don`t see that as cause for maintaining amateur
>radio Morse testing in license exams.
>
>There is an old saying that a drowning man will grasp at straws. I
>imagined a parallel with the Morse code situation today.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Morse will persist for as long as it is fun. Future contesting might find more points awarded for lower SNR (1:1.1?) or, say, working under a BBC broadcast might be the next challenge. If, is as offered, CW is the service that gets through when the going gets rough - well then CW should be the last service running after the lights go out.... if you have faith in the original argument ;-) It seems some of the logic appeals to the apocalypse to fulfil a prophetic CW legacy ("Ham Radio operators thwart sophisticated alien invasion with lowly morse code").

However, I am a sucker for tradition. Sport has its season, game, and distinctions in class of weapon. Regulation of the commons goes back centuries, millennia. Archery used to be compulsory practice, but now it is a sport with its own season.

The argument shouldn't be about how to preserve/take the CW Bands, it should be how to grow ALL the Bands. Open up HF to all comers. Make it easier than getting into CB.

73's
Richard Clark, KB7QHC

1154. Delta Electronics RAS-10A antenna-comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 10:54:19 UTC
From: tf.electronics@virgin.net
Message-ID: <3a603072.808907@news.virgin.net>
Source record: 172226
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave

Hi,

Recently, I have been reviewing my home antenna system and I have
decided it is time for a change.

A friend mentioned to me that Delta Electronics make a wide band
antenna called the model RAS-10A which covers 1-30MHz, in a span of
only 40 feet. I believe it could be used for transmitting as well.

This antenna seems to have no traps and it isn't a fan type of dipole,
there are no loading coils or linear type of loading either. Instead,
there is a prominent "balun" in the center of the antenna, connected
to the feedline and the two legs of the antenna.

The question is how does it work? How CAN it work? I seem to remember
a few years back an antenna which claimed similar performance in small
size yet when it was checked out by QST it was really a short dipole
with a mysterious circuit board and a large resistor! It certainly was
50 Ohms at all frequencies but didn't radiate too well. I'm certainly
NOT suggesting the Delta Electronics antenna is like this though!

So does anyone have any experience of the Delta Electronics RAS-10A?
I'd be interested in your comments before I pursue the matter further.

Please reply to: tf.electronics@virgin.net

Regards,
Al
MD T.F. Electronics

1155. how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 11:03:50 UTC
From: Mike <w4mjr@home.com>
Message-ID: <3A60361A.1C6A218@home.com>
Source record: 172227

What is the best way to bury ground radials ?
Lets say the ground is kinda soft from a light rain.I was thinking maybe
a spade.
The tv cable company has something that will push the line in the ground
kinda like a spade but about as wide as a snow shovel.Does anyone know
how its made and maybe rig up something like this or whatever your idea
might be ?

1156. weatherproof gamma capacitor... ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 11:37:00 UTC
From: Kari Back <kba@nic.fi>
Message-ID: <3A603DDC.C5AAA068@nic.fi>
Source record: 172228

Hi all

A plan is to construct coaxial capasitor using copper and aluminum tubing with 0.5 mm teflon sheet insulation between them

Have anyone used equal capasitor and what are expected weather and aging effects ?

73s Kari

1157. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 12:07:58 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A60451E.7C55B690@oio.net>
Source record: 172231

1. Chainsaw (preferably your neighbor's)
2. Single disc cultivator
3. Yard tractor & home made 'ripper' blade
4. Lay it on top of the ground, let the grass grow up
around it.
5. Change mind and put up a dipole.
'Doc

1158. HF Vertical all band antenna MFJ-1798

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 12:28:55 UTC
From: "W.T.M.Wessling" <wtm.wessling@freeler.nl>
Message-ID: <979390213.193766@news.l3.wish.net>
Source record: 172232
Cross-posted to:
alt.nl.radio.zendamateur.gelicentieerd,alt.radio.amateur,nl.radio.amateur,rec.ham-radio,rec.radio.amateur.antenna

Hello,
does anyone has experiences with the All Band vertical antenna MFJ-1798 (10 bands, 80 Meter thru 2 Meter, vertical antenna)
Is it worth the price? (about $300 or NFL. 995,=).

I don't want to be disappointed about de SWR.

Thanks for answering me,
pa8wim@amsat.org

73,
Wim

1159. Re: Boston Attorney

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 12:49:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <93pisbftb1@nntp9.atl.mindspring.net>
Source record: 172233

Roy:

All I can say about your summary is, "Amen".

Very insightful.

Thanks for sharing with us such a concise and insightful description of how to place your intellectual property in jeopardy.

I wonder how you were able to work out that particular "recipe for defeat" in such detail?

Surely no one on earth could actually come up with such a precise and effective methodology and process for "messin up", could they?

-Peter K1PO, Cary NC

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3A5FC69E.8852C309@eznec.com...
> Louis Bybee wrote:
> >
> > Hmmmm......
> >
> > I feel somewhat slighted!
> >
> > No Pirate has ever indicated interest in my "Intellectual Property"
> >
> > I guess I have managed to successfully disguise it's worth. :-]
> >
> > Louis
>
> No, you just haven't taken the right steps. Here's how to get up some
> interest.
>
> 1. Bend up some wire and call it an antenna.
> 2. Publish a picture of it in several magazines, and put a picture of it
> on your web site.
> 3. Make up a "figure of merit" from various characteristics which favor
> your antenna. Announce on this newsgroup that you'll give $1000 to the
> person submitting the design which beats your antenna's "figure of
> merit" by the greatest amount, claiming that no other antenna can.
> Declare that the "figure of merit" will be determined by antenna
> modeling, but refuse to publicly release a model of your antenna for
> others to use for comparison.
> 4. When someone accepts your challenge and makes his own model by
> looking at the pictures you've published (and also produces other models

> exceeding your antenna's "figure of merit" by a large amount), don't
> honor your public offer. Instead, deflect attention from the fact that
> the other antennas are superior and that you won't be paying the money
> after all by loudly declaring the other person's model to be your
> "intellectual property" and accusing him of stealing it from you.
> Increase attention by accusing and threatening anyone who helps others
> actually get this model. After all, it's in your interest to prevent
> others from seeing for themselves that the other antennas are better.
>
> So you see, the wider range of things you claim to be your "intellectual
> property" and the more noise you make about them, the more interest you
> can get. Unfortunately, the interest won't really be in your actual
> intellectual property, but rather in the spectacle you make of yourself.
> But if it's attention you crave, and you can't get it by really coming
> up with something revolutionary, this is a tested and proven formula. Go
> for it.
>
> Roy Lewallen, W7EL
>
> -- Accused thief, pirate, and alleged and threatened, but
> unconsummated, lawsuit defendent
>
> Anyone who wants to look at Steve's MI2 model and his superior designs
> can download them from ftp://eznec.com/pub/MI2. (You can view them with
> the demo version of EZNEC, available from http://eznec.com, or run your
> own calculations using the standard version of EZNEC.) If you want to
> compare Steve's MI2 model and file with Chip's, first you've got to get
> a copy of Chip's file. Good luck.

1160. Re: weatherproof gamma capacitor... ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 12:49:51 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A604EEF.E0A7E6FA@dvol.com>
Source record: 172234

Kari Back wrote:

> Hi all
>
> A plan is to construct coaxial capasitor using copper and aluminum
> tubing with 0.5 mm teflon sheet insulation between them
>
> Have anyone used equal capasitor and what are expected weather and
> aging effects ?

>
Given those materials and sealing it after it's tuned with something like RTV it should hold up for a very long time, decades probably. The only problem I can visualize might be getting the RTV to adhere to the Teflon.
>

>
> 73s Kari

>
w3rv

1161. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 12:58:46 UTC
From: "D. S. Platt" <jeepp@erols.com>
Message-ID: <3A605106.59349F9@erols.com>
Source record: 172235
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

jamesrhampton@my-deja.com wrote:

> Neat. Someone actually thought of not charging. Of course, my first
> licenses cost nothing - it was just the 60 mile (one way) drive to
> Buffalo that cost a bit of time and money (gas, thruway tolls, parking,
> etc.). The cost is actually minimal anywhere. I think I paid $5.90
> when I decided to get back into amateur radio and tested out in 1993
> (after letting my tickets expire over 10 years earlier). Whats the
> cost today?
>
> 73 from Rochester, NY
> Jim (AA2QA)
>
> In article <93airr$1js$1@nnrp1.deja.com>,
> BamBam <kl0an@my-deja.com> wrote:
> > Now why would I go and PAY for a license when I got my license, AND
> > upgrades for free.. Oh, sorry, I did have to earn them with a little
> > studying and such.. My club offers testing free.. No money exchanges
> > hands.. And I can now talk world-wide on the Extra bands..
> >
> > Just quit tryin to cheat the system, sit down with the manuals and get
> > studying.. And if you want to take a test for free.. First Saturday of
> > the month, Geo-Physics Institute, UAF, Fairbanks, Alaska.
> >
> > 73
> > Paul Jordan
> > kl0an
> >
> > In article <no.skill@arrl.crappy.org>,
> > Buyone@arrl.crap (peddler) wrote:
> > > Thanks to the organization called the ARRL, you don't have to earn a
> > license
> > > anymore. You can go to your local VE group and buy one for $10.
> > > Get one today and join in the Fun!
> > >
> > > AOHF ~ assholes on H.F.
> > >
> > >
> >
> > --
> > Don't Sweat the Petty Things.
> > Don't Pet the Sweaty Things.
> >

> > Sent via Deja.com
> > http://www.deja.com/
> >
>
> Sent via Deja.com
> http://www.deja.com/

The Laurel (MD) VEC (MD) has had a fee!

1162. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 13:39:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A605A88.69DC5EEF@IEEE.org>
Source record: 172236

Mike wrote:
> What is the best way to bury ground radials ?
> Lets say the ground is kinda soft from a light rain.I was thinking maybe
> a spade.
> The tv cable company has something that will push the line in the ground
> kinda like a spade but about as wide as a snow shovel.Does anyone know
> how its made and maybe rig up something like this or whatever your idea
> might be ?

There's an edging tool that looks like a straightened-out hoe.
It works well for me in sandy clay.
--
http://www.mindspring.com/~w6rca

1163. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 13:50:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A605D31.21C7BDDF@IEEE.org>
Source record: 172237

ehsjr@bellatlantic.net wrote:
> Cecil, you are confusing the fact that conscious thought uses words
> with language.

Nope, I'm not. I think in English. Objects aside, how does one represent an abstract idea like 'truth' without resorting to one's language? I cannot do it without the associated English word, 'truth'. - .-. ..- - .... is just a Morse coded representation of the English word, 'truth'. In fact, I do not think the English word 'truth' can be mentally avoided when one receives - .-. ..- - .... in Morse code, assuming one's native language is English.
--
http://www.mindspring.com/~w6rca

1164. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 14:15:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6062FF.D4AA971E@IEEE.org>
Source record: 172238

ehsjr@bellatlantic.net wrote:
> Fluent morse evokes the idea in our thought without translation.

But there is a one-to-one correspondence of Morse characters to
English characters. You cannot convince anyone that the Morse
word - .-. ..- - .... does not evoke the English word for
'truth' in your thought processes. Only someone blind and deaf
from birth would be capable of attempting to think in Morse code.

For virtually 100% of the human race, one's native language is
firmly fixed in one's thought processes before Morse code is
learned. I think in English. When I hear -. .- -- . in
Morse code, I hear the English word-concept 'name' with which
I think. -. .- -- . is just another way of writing an
English word. 'dah-dit dit-dah dah-dah dit' is just another
way of sounding an English word.
--
http://www.mindspring.com/~w6rca

1165. Looking 4 U.S. TOWER MA series owners

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 14:38:13 UTC
From: Zappy <bob.marzari@ezonline.com>
Message-ID: <QGZ76.205$H3.490552@nntp2.onemain.com>
Source record: 172239

Hi,

I would be interested in hearing from MA-550MDP and MA-770MDP owners as I am contemplating buying a 770.....

Please contact me via bob.marzari@ezonline.com

Thanks, Bob, KC3BN

1166. Re: Soup-can antenna - have questions, plans needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:00:41 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A607BA9.1E898B44@erols.com>
Source record: 172241

Liz,

So you are building a modern version of the "Beer Can Vertical", an interesting project from the late 50's. It was written up as a project in CQ Magazine, if I remember correctly. You supposedly drank beer so why not recycle the cans! I was lucky, my father drank a lot of beer (over time) so I started collecting the cans and eventually tried my hand at building the vertical!

I used a 250 or 500 watt soldering iron, not a wimpy little pencil iron. I used rosin core solder. I could never get the thing over about 8 feet without having it break apart! I soldered around the cans completely at every joint. I can't remember taking off the ends. I can't imagine any problems with leaving them intact. The biggest problem I can see is that modern cans are made from Aluminum, not steel. You want steel cans if you are going to do the soldering!

Use some guy ropes or wires when you put it up. The Anne will be very heavy. It will be most prone to breaking while you are raising it!

73

1167. Re: anyone tried the MFJ Magnetic loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:05:29 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A607CC9.C0F77836@erols.com>
Source record: 172242
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Bob,

With receiving you are not worried as much about having a perfect match to the antenna. Most receivers have more than sufficient gain to compensate for a mismatch. However, when transmitting a close to perfect match is very important!

I had a 30 - 10 meter version of that antenna. Yes it was sharp, but I ahd their autotuner and it quickly found a match. Your operational success will depend on where and how you mount the antenna. If your mounting place is close to your station you will undoubtedly run in to problems with near field radiation causing all sorts of problems, like receiver blocking and transmitter hangs ups. If you mount it far enough away I think you'll be happy!

73

1168. Re: Need HyGain 12AVQ Help ! !!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:10:23 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A607DEF.C73023CD@erols.com>
Source record: 172243

Dennis,

It sounds like you don't have it assembled correctly! The manual should tell you the correct dimensions and the correct trap placement. You used to be able to download the instruction manuals from the MFJ website, they bought out HyGain's antenna business.

73

1169. Re: Apartment Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:13:46 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A607EBA.C0518936@erols.com>
Source record: 172244

Curtis,

Your mount will depend on what kind of an antenna you want to put on it! For example, you wouldn't need much of a mount for a VHF whip, but you would need a much better mount for a HF Beam! There used to be a number of roof top mounts sold for hams and also for TV's. Check out the ham magazines like QST.

73

1170. Re: Hamstick at Apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:17:20 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A607F90.3ECC7B9@erols.com>
Source record: 172245

What you want is first to provide a decent ground for the antenna! You are using a vertical. As you have it now the antenna is unbalanced. A tuner will not balance a vertical antenna. Connect a piece of wire that is 1/4 wave long to the Vise Grip. There will be a screw on there especially for making a ground connection. Then add the tuner if the system is not tuned to the PSK20 frequency (high SWR).

73

1171. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:21:08 UTC
From: richardharrison@webtv.net
Message-ID: <3818-3A608074-27@storefull-115.iap.bryant.webtv.net>
Source record: 172250

Richard Clark, KB7QHC wrote:
"Open up HF to all comers. Make it easier than getting into CB."

I agree, and as Richard said: "Morse will persist for as long as it is fun." Morse need not be used in commerce or the military to be useful to hams. Amateur radio is non-commercial by law. CB may be unruly but it has no ARRL organization nor tradition of self-regulation. A large influx of new hams need not cause chaos.

Another concern expressed in this thread was band crowding. I wouldn`t expect all of the new hams to crowd into the 30m band with its tiny size and other limitations.

Most new hams are likely to be appliance operators. Heathkit is gone and the days of saving money by doing your own point-to-point wiring are just about gone too. It is hard to compete with offshore labor and automatic assembly.

Store-bought radios aren`t difficult to operate legally. When they aren`t operated legally, the operator can be notified and if the illegal operation persists, fines can be imposed regardless of the origin of the radio.

VHF occupancy could be improved by an influx of new hams. Plenty of cheap consumer electronics could be adapted to VHF ham bands.

Ham radio needs resuscitation and it can only be achieved by an influx of new hams. Morse has always inhibited growth of ham radio. It couldn`t be helped when Morse was the only game in town. Now, Morse is just a marginal player in the larger communications field. It`s long past the time to put it away as an entrance requirement to ham radio.

Best regards, Richard Harrison, KB5WZI

1172. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:22:05 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A6080AD.34C67A56@erols.com>
Source record: 172246

Justin,

An antenna can be resonant at only one frequency at a time. No antenna can exhibit resonance over the range from 11 meters to 10 meters! If your antenna cannot be tuned to 10 meters I would recommend taking it back! Radio Shack sells many good products, but also sells many compromise products.

Make up a decent antenna, a 10 meter dipole does not take up much space and is fairly cheap to build! It solves most of the problems you will encounter. A vertical has much more problems with installation. You will have to have a good ground plane at the antenna!

73

1173. Re: Counterpoise for multiband

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:26:39 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A6081BF.9C74BDB1@erols.com>
Source record: 172247

Bob,

The short answers to your questions are:
>
> 1) Can I hook up all the counterpoises at the same time, or if I can
> only have the one for the correct band hooked up at any one time?
>
Yes
>
> 2) I plan to run them all tie-wrapped together, is that OK, or do they
> need to be spaced?
>
They should be spaced apart. Running them together makes them look like
one big wire!
>
> 3) the counterpoises for the 10-20 meters bands will drop vertically to
> the ground, however, the lower bands will have to run to ground level
> then run along the ground. Will that work?
>
Yes they will work.

I should say that using an Outbacker as a fixed vertical is OK, but a
lot of the performance will depend on your skill!

73

1174. Re: Need help in Building FM receiver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:31:58 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A6082FE.9F471B6D@erols.com>
Source record: 172248

Ray

Building a dipole in close proximity to the balcony railing is an exercise fraught with problems! You can't achieve enough separation of the antenna from the grounded railing to make it work! A better idea would be to mount a short FM vertical on your railing.

Bruce

1175. Re: Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:36:53 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A608425.2428FB0B@erols.com>
Source record: 172249

Paul,

Why not use the traditional end fed random wire solution? Run as much wire out as you can, and connect it to the rig through a tuner? Almost any random wire tuner will work. I have used this for 20 years now and can say it works. I have used tuners from a cheap little MFJ unit up to a Drake MN2700 with good results.

Oh, don't forget a ground radial at the transmitter! I use a short piece of wire running along the baseboard in the room and tune it through an MFJ Artificial Ground!

73

1176. Re: Looking 4 U.S. TOWER MA series owners

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 16:47:58 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A6086BE.5908231@qth.com>
Source record: 172240
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

HI, I have Ma 40..love it, wish it was taller...Im watching for used 550 or 70....THey work well and seem plenty sturdy...I beleive with a taller unit, I would want a motor for the vertical part, tilt over is fine with a crank!! 73 Murray K5MDM

Zappy wrote:

> Hi,
>
> I would be interested in hearing from MA-550MDP and MA-770MDP owners as I am
> contemplating buying a 770.....
>
> Please contact me via bob.marzari@ezonline.com
>
> Thanks, Bob, KC3BN

[One or more binary attachments are retained only in the source text.]

1177. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 17:01:54 UTC
From: richardharrison@webtv.net
Message-ID: <13471-3A608A02-34@storefull-117.iap.bryant.webtv.net>
Source record: 172251

Cecil, W6RCA wrote:
"For virtually 100% of the human race, one`s native language is firmly fixed in one`s thought processes before Morse code is learned."

I think Cecil is exactly right. If you`re totally immersed in a foreign environment for some years, it`s likely you`ll switch off to the foreign language for your thoughts from time to time. You often may only be able to come up with the foreign noun or verb you seek to recall. At least that`s my experience. I doubt this happens often with Morse code. You want the word? Just decode the Morse.

Best regards, Richard Harrison, KB5WZI

1178. Simpleton Speaks

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 17:38:27 UTC
From: michaelalan.brown@virgin.netXXX
Message-ID: <3a60336f.5928804@news.virgin.net>
Source record: 172253

Let's get one thing straight ... I can find my way around a computer, I can read the instructions for a radio - but after that it's all downhill. Technicalities in words of more than two sylabuls will cause problems.
So - I am thinking of upgrading my Alinco DJ-X10 Scanner to a Yaesu VR5000 Wideband receiver.
What in simple terms would be an easy to erect aerial, the main frequencies in use will Aero HF, Aero VHF, and Marine HF, Marine VHF - so we are looking at 2mHz to 170mHz.
I get the impression that a 'longwire' is probably the easiest. Is that what is is? Just a great big length of wire as long and as high as possible and just stuck into the receiver?

Open to offers and advice.

Mike Brown
Please remove the XXX from the Email address

1179. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 17:38:31 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <89416tsoqc1dmp6qadbquhev6m9iuv671p@4ax.com>
Source record: 172252

"Floyd Sense" <sentek@sprintmail.com>
shared these priceless pearls of wisdom:

Floyd --

I'm sorry, I didn't see your first post, so I don't know if you are talking about a 12' Sunfish or a round-the-world class vessel.

I had a Cat-22 for a whole lot of years, and while I took her bluewater a few times, most of my sailing was freshwater. However, I *did* enjoy the TS-130 rig while moored out overnight, and my solution was to load the aluminum mast (with all the attendant rigging electrically connected to it). and use the swing-keel as the ground. There was enough water leakage into the metal keel and draw cable that I got a fairly consistent performace from this lashup.

There are (memory fails me now) about a dozen through-bolts into the cabin area that hold the mast to the rest of the superstructure. I just made damned sure that the one I chose to attach to was making good electrical contact with the rest of the aluminum mast.

Hope this helps.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1180. Re: weatherproof gamma capacitor... ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 17:49:38 UTC
From: N5NUG <n5nug@ix.netcom.com>
Message-ID: <3A609532.4EFCBA5@ix.netcom.com>
Source record: 172254

Try commercial hot glue for weather proofing your capacitor. I use hot glue all the time for my outdoor weather proofing requirements. A heated blow gun will undo your seal job very nicely if you ever need to open it back up again. I have one application that has been sealed for over 7 years now without any evidence of leaking. 73, Ed - N5NUG

1181. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 18:11:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A609A6B.5B51D7D6@IEEE.org>
Source record: 172257

Bruce Muscolino wrote:
> An antenna can be resonant at only one frequency at a time.

Actually, a physical dipole is resonant at 1/2WL, 3/2WL, 5/2WL, etc.
A standard G5RV antenna system is resonant on 80m, 40m, 20m, and 12m.
My 120ft dipole fed with 88ft of ladder-line is resonant on 3.993
and 7.216 at the same time.
--
http://www.mindspring.com/~w6rca

1182. Re: HF Vertical all band antenna MFJ-1798

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 18:16:24 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <YX086.2402$ag.88541@newsread2.prod.itd.earthlink.net>
Source record: 172255
Cross-posted to:
alt.nl.radio.zendamateur.gelicentieerd,alt.radio.amateur,nl.radio.amateur,rec.ham-radio,rec.radio.amateur.antenna

This may be of some help.

http://www.eham.net/reviews/detail/853

Dennis - KF2XL

1183. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 18:21:07 UTC
From: TheRock <therock@nospam.irc-chat.net>
Message-ID: <o0186.22$5a6.24426@news.pacbell.net>
Source record: 172256
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"D. S. Platt" <jeepp@erols.com> wrote in message
news:3A605106.59349F9@erols.com...
> jamesrhampton@my-deja.com wrote:
>
> > Neat. Someone actually thought of not charging. Of course, my first
> > licenses cost nothing - it was just the 60 mile (one way) drive to
> > Buffalo that cost a bit of time and money (gas, thruway tolls, parking,
> > etc.). The cost is actually minimal anywhere. I think I paid $5.90
> > when I decided to get back into amateur radio and tested out in 1993
> > (after letting my tickets expire over 10 years earlier). Whats the
> > cost today?
> >
> > 73 from Rochester, NY
> > Jim (AA2QA)
> >
> > In article <93airr$1js$1@nnrp1.deja.com>,
> > BamBam <kl0an@my-deja.com> wrote:
> > > Now why would I go and PAY for a license when I got my license, AND
> > > upgrades for free.. Oh, sorry, I did have to earn them with a little
> > > studying and such.. My club offers testing free.. No money exchanges
> > > hands.. And I can now talk world-wide on the Extra bands..
> > >
> > > Just quit tryin to cheat the system, sit down with the manuals and get
> > > studying.. And if you want to take a test for free.. First Saturday of
> > > the month, Geo-Physics Institute, UAF, Fairbanks, Alaska.
> > >
> > > 73
> > > Paul Jordan
> > > kl0an
> > >
> > > In article <no.skill@arrl.crappy.org>,
> > > Buyone@arrl.crap (peddler) wrote:
> > > > Thanks to the organization called the ARRL, you don't have to earn a
> > > license
> > > > anymore. You can go to your local VE group and buy one for $10.
> > > > Get one today and join in the Fun!
> > > >
> > > > AOHF ~ assholes on H.F.
> > > >
> > > >
> > >
> > > --
> > > Don't Sweat the Petty Things.

> > > Don't Pet the Sweaty Things.
> > >
> > > Sent via Deja.com
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> > >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
> The Laurel (MD) VEC (MD) has had a fee!
>
>
>

The charge today can be up to $10 per fcc regulations.
The limit is $10 though. It was $6 when I got mine 7 years ago roughly,
course that VEC didn't charge the full rate, I think the max they could
charge was $7 or something.

TheRock
KD6NIG
irc.acestar.org

1184. Re: Need design for endfed 80/160M wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 18:27:26 UTC
From: rware@voyager.net
Message-ID: <3a609cc9$0$35021$44a10c7e@news.net-link.net>
Source record: 172258

Has any one tried the Spiro endfed slopers? The vs-53 does 10-80 meters at 42' long, and the vs-64 does 10-160 at 73'. How is the bandwidth.

http://spiromfg.com/

73
Ray
kc8iwt

1185. Re: Help with KLM Triband antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 19:03:57 UTC
From: DocClark <kd6un@mindspring.com>
Message-ID: <pe916tovrr28fhtm8mq3jmru0c36k3lslv@4ax.com>
Source record: 172259

6-Element would make it a KLM, KT-34XA.

Doc

PS

I have a spec. sheet somewhere here if you're in need, and a Brand New
34XA in the box, never used.

On Thu, 11 Jan 2001 23:47:21 -0500, "Mark Erbaugh"
<mark@nospam.microenh.com> wrote:

>I have obtained a used and abused (when it was taken down by the owner
>several years ago, the elements were separated from the boom and the boom
>and elements were left in the bushes at the edge of the property). The owner
>(a friend) is selling the house and he offered me the antenna. I retrieved
>it and dug it out (It was buried by accumulated pine straw - which may have
>protected it). It seems to be in pretty good shape - considering. Some of
>the pieces of the elements are bent, but look like they may be
>straightenable. I haven't gone through the elements in detail yet, but so
>far, apart from some rusted hardware, it looks like the only broken piece is
>one of the element to boom clamps.
>
>I am looking for a copy of the manual for this antenna. I'd rather not take
>the elements apart (they look a lot more complex than my Force 12 C4S) until
>I'm sure I know how they go back together. The antenna is a 20-15-10m
>tribander. It has 6 elements. I believe it is either a KT34A or KT34XA. Can
>someone tell me how to tell the difference.
>
>I'd also welcome any suggestions on rebuilding. My planned approache is to
>take everything apart, clean and straighten (or replace) the individual
>pieces then put it together as if I were building a new one, but currently
>all the elements are as they were when it was taken down, other than we
>separated them in the middle for transport, but we then taped the two halves
>together so we know which goes with which.
>
>As it looked pretty straightforward, I began my cleanup on the boom (a lot
>less parts). It cleaned up really well, which gives me hope for the
>elements.
>
>Thanks,
>Mark, N8ME
>

1186. Re: Simpleton Speaks

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 19:44:46 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A60B02E.A4647C94@dvol.com>
Source record: 172260

Mike Brown wrote:

> Let's get one thing straight ... I can find my way around a computer,
> I can read the instructions for a radio - but after that it's all
> downhill. Technicalities in words of more than two sylabuls will cause
> problems.
> So - I am thinking of upgrading my Alinco DJ-X10 Scanner to a Yaesu
> VR5000 Wideband receiver.
> What in simple terms would be an easy to erect aerial, the main
> frequencies in use will Aero HF, Aero VHF, and Marine HF, Marine VHF -
> so we are looking at 2mHz to 170mHz.
> I get the impression that a 'longwire' is probably the easiest. Is
> that what is is? Just a great big length of wire as long and as high
> as possible and just stuck into the receiver?

>
Get one thing straight: Yeah.
>

> Open to offers and advice.
>
> Mike Brown
> Please remove the XXX from the Email address

>
w3rv

1187. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 19:49:01 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A60B12D.971FA95B@dvol.com>
Source record: 172261

Jim Weir wrote:

> I'm sorry, I didn't see your first post, so I don't know if you are talking
> about a 12' Sunfish or a round-the-world class vessel.

>
36 footer. Big enough for blue water, small enough to get into trouble fast.
>
w3rv

1188. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:31:01 UTC
From: jflanders2@home.com
Message-ID: <3a60b997.147640799@news>
Source record: 172262

Bingo. But also: Use a couple of SS "hose clamps" from the hardware store in addition to that "double-tywrap" to strengthen the coax connection to the dogbone.

To avoid soldering in the field, just use 1/8 inch wire rope clamps (tiny "U-bolts") to secure the coax leads to the dipole wires. Works for me.

Jerry W4UK

On Fri, 12 Jan 2001 23:25:13 -0500, Brian Kelly <kelly@dvol.com> wrote:

>SNIP
>>
>I use foam 8X coax which is pretty flexible. The body of the center insulator is a
>standard 75 cent filled nylon "dogbone" strain insulator with three molded-in
>"disks & valleys". I wrap the coax tightly all the way around the middle "valley"
>of the insulator with a four inch "tail" pointed down. I double-tywrap the coax
>and tail together right under the insulator. Then I strip three or so inches of
>insulation off both the braid and the center conductor. The braid gets soldered to
>the end of one dipole element which is attached to one end of the dogbone and the
>center conductor gets soldered to the end of the other dipole element. Goop the
>exposed end of the coax to keep water out. Light, low profile, build nothing, two
>for a buck fifty.
>>
>w3rv
>
>

1189. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:31:16 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <cke16tkumikvckup8jqr8tp6bcp4ddetj6@4ax.com>
Source record: 172263

On Sat, 13 Jan 2001 11:22:05 -0500, Bruce Muscolino
<w6toy@erols.com> wrote:

>An antenna can be resonant at only one frequency at a time.

Not so. The antenna will also be resonant on odd multiples of the
frequency. Hams often use 7 MHz antennas on 21 MHz.

73, Bill W7TI

1190. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:36:54 UTC
From: jflanders2@home.com
Message-ID: <3a60bbd0.148210288@news>
Source record: 172264

Cut a tiny "ditch" with an edging trimmer - one of the gas-powered
gadgets that has a short blade rotating in the vertical plane - it is
used by ordinary citizens to edge-trim grass near walkways, etc.

Send the kids inside and use good goggles - it throws sand and
pebbles.

Jerry W4UK

On Sat, 13 Jan 2001 11:03:50 GMT, Mike <w4mjr@home.com> wrote:

>What is the best way to bury ground radials ?
>Lets say the ground is kinda soft from a light rain.I was thinking maybe
>a spade.
>The tv cable company has something that will push the line in the ground
>kinda like a spade but about as wide as a snow shovel.Does anyone know
>how its made and maybe rig up something like this or whatever your idea
>might be ?
>

1191. Re: WTB: aluminum boom-to-mast clamp

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:39:09 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A60BCC2.6319F9BB@earthlink.net>
Source record: 172265

hey larry
i dont know how handy you are but all you need is a4 inch square piece of plate stock either steel or aluminum about 1/4 in thick and just drill your Ubolt holes where needed sure beats paying $20-50 for one
there use to be a place online called harbach or something like that but i just tried to go to hisd site to give you the URL and its down
good luck

Larry Gauthier wrote:

> I just put up a new tower, and in addition to the quad up there I would like
> to build a homebrew 30 meter rotary dipole. However, I need a boom-to-mast
> clamp that will attach to the 2" mast - and thought that someone on this
> news group probably has a collection of used clamps from previous antenna
> projects. Doesn't have to be heavy-duty - this will be a coil-shortened
> dipole for 30.
>
> Anybody? Please send details to my e-mail address. Thanks in advance,
>
> -larry
> K8UT@arrl.net

1192. Re: Mosley info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:41:47 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3A60BD62.9D9F2398@earthlink.net>
Source record: 172266

hello
mosley has a website but they only sell there manuals they dont offer them online below is there URL you can get there phone number from it and call and order the book

http://www.mosley-electronics.com

fa1cil wrote:

> Hi,
>
> I want to buy to a friend a Mosley TA53M but he has missing the
> installation documents.
> - Is it possible to find this document on internet ? Or maybe anybody have a
> file ?
> - The 24 Mhz band is no longer running, is it possible to find any pieces in
> France ?
> - Is this antenna a good antenna ? (i think yes but i prefer advise of
> everybody).
>
> Thanks in advance,
>
> 73, Pascal
>
> REF : 44.751
> AMSAT : 672
> E-mail : FA1CIL@wanadoo.fr
> To visite my site : http://perso.wanadoo.fr/fa1cil/

1193. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:41:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A60BD8F.9B01975F@IEEE.org>
Source record: 172267

Reg Edwards wrote:

Hey Reg, this is off the subject but why are Land Rovers in England
so heavy? I'm watching a TV program of cop chases. They said the
English cops were chasing a 15,000 pound Land Rover.
--
http://www.mindspring.com/~w6rca

1194. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:52:12 UTC
From: jflanders2@home.com
Message-ID: <3a60bcf2.148500442@news>
Source record: 172268

I built one of Cecil's 130 foot ladder-line fed antennas, and I get THREE band operation with about 95 ft of "450" ohm LL. Operation on 21.1, 7.1, and 3.9 MHz, all SWRs down below 2:1 with no tuner.

VF of LL can vary, so I cut the LL to tune the antenna with a MFJ259B at the end of the LL

Principles are discussed on Cecil's page at:
http://people.delphi.com/cecilmoore/mystery.htm

Mine is about 50 feet high. I will build the relay box someday to switch in the additional LL to match other bands as well. Great antenna.

Jerry W4UK

On Sat, 13 Jan 2001 12:11:55 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

>Bruce Muscolino wrote:
>> An antenna can be resonant at only one frequency at a time.
>
>Actually, a physical dipole is resonant at 1/2WL, 3/2WL, 5/2WL, etc.
>A standard G5RV antenna system is resonant on 80m, 40m, 20m, and 12m.
>My 120ft dipole fed with 88ft of ladder-line is resonant on 3.993
>and 7.216 at the same time.
>--
>http://www.mindspring.com/~w6rca

1195. Re: 10m mobile ant. advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 20:53:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A60C04F.45311605@IEEE.org>
Source record: 172169

Jerry Flanders wrote:
> I built one of Cecil's 130 foot ladder-line fed antennas, and I get
> THREE band operation with about 95 ft of "450" ohm LL. Operation on
> 21.1, 7.1, and 3.9 MHz, all SWRs down below 2:1 with no tuner.

That's the beauty of this antenna system. Add 8ft and get 30m, 17m,
and 10m operation. I fear that I have failed to convey the advantages
and simplicity of this system. In particular, hams with built-in auto-
tuners can bring this antenna into their auto-tuning range quite
easily. In particular, hams with fixed tuned 50 ohm amplifiers can
get by without a QRO tuner which was my incentive. If one has to
have a feedline, why not let it do all the work?
--
http://www.mindspring.com/~w6rca

1196. ICOM AT-120 Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 21:18:25 UTC
From: Virgil Stamps <stamps@brokersys.com>
Message-ID: <93qgmn$23gh$1@news.hal-pc.org>
Source record: 172175

I am looking for a manual or copy or schematic for the ICOM AT-120.
Thanks,
Virgil AD5BH

1197. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 21:53:24 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93qiqplhc1@iac5.navix.net>
Source record: 172170

Prodding the old fecal matter yet again?

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A60BD8F.9B01975F@IEEE.org...
> Reg Edwards wrote:
>
> Hey Reg, this is off the subject but why are Land Rovers in England
> so heavy? I'm watching a TV program of cop chases. They said the
> English cops were chasing a 15,000 pound Land Rover.
> --
> http://www.mindspring.com/~w6rca

1198. FA::: TIC RING ROTOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 21:59:11 UTC
From: Randy <rbkb8iii@erinet.com>
Message-ID: <3a60cfaf$0$1503$53a6afc1@news.erinet.com>
Source record: 172172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

ONLY 4 HOURS LEFT

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1206710241

1199. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 21:59:31 UTC
From: wcovexip@husky.ptialaska.net
Message-ID: <490.1232731710.130607@corp.supernews.com>
Source record: 172171

Having spent 35 years in the Marine electronics business and a portion of that time with the FCC as a field agent mostly doing SOLAS Inspections, I feel qualified to make the following comments.

Sailboats with Plastic (Fiberglass) or Wood hulls make the worst transmitting platforms afloat. The problem is rarely the antenna design or implementation, but the attention the installer paid to the ground system, that supports the antenna. Salt Water is one of the best RF Gounds that God designed on this Earth. The problem comes in trying to couple the radio system to the water, without electrolysis causing every bit of metal to disappear before your eyes. If you folks would just put on your "RF Filtered Glasses" and take a look at what the vessel looks like at RF, it would be plan as the nose that holds up those "Glasses" that what is required is a good coupling into the water. Plastic and Wood make great insulators, and therefore you can't see them thru you "Special Glasses", so now that we are really trying to see what available, lets take a look. You see, the engine, the shaft, the prop, the keel if it is metal, the chainplates, the mast if it is metal, the rigging, if it is metal, the rudder and rudder post, and the tanks if they are metal. Now just how is RF coupling going to be induced into the water, well by capacitive coupling of course. Of course in a metal hulled vessel this is no problem as the hull makes one plate of the cap, and the water makes the other plate, and the paint is the dielectric between them. On a plastic or wood vessel, The hull is the dielectric, and the water oif course makes one plate. The second plate you build, as your grounding system. Lower Impedance is better, than higher impedance, so how do we build a bigger or better coupling plate for our side of the cap?????? Well there are two things that increase capacitance, more surface area and closer coupling. Getting more surface area is done by tying every scrap of metal together with low impeadance connections, or as some have said, glassing in copper screen to the inside of the hull, with lots of SquareFeet. Closer coupling is getting all the metal that is closer to the water bonded. It does no good to put your screen in the overhead of the cabin, or some such places, as it is to far from the other plate of the cap to be a low impedance at RF.

End of lecture: RF Gound Systems for MF and HF Maritime Radio System 101.

It is the GROUND System folks, not the antenna. A wet noodle will work quite well as an Antenna, if you got a GOOD Rf Ground. This isn't Rocket Science, it is plan and simple General Class Level Impedance Theory.
--

Bruce (semiretired powderman & exFCC Field Inspector for Southeastern Alaska)

Bruce Gordon * Debora Gordon R.N. Bruce's Trading Post
P.O. Box EXI Excursion Inlet South
Juneau, Alaska 99850 Excursion Inlet, Alaska 99850
www.btpost.net bruce@btpost.net
University of Alaska Remote Weather Data Collection Site
fnbeg@aurora.alaska.edu KWO-70 * WDT-59 * KNEG-586
wcovexip@ptialaska.net Wards Cove Packing Co.
btpost@eagle.ptialaska.net AL7AQ@KL7HFI * KL7WJ@KL7HFI

1200. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 22:01:07 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <De486.260714$U46.8336507@news1.sttls1.wa.home.com>
Source record: 172173

Jerry,

You don't have a corrosion problem later on using the clamps? I have visions of green copper and poor continuity at the connection or do you seal the connection?

Thanks

Glenn KB7PKC

"Jerry Flanders" <jflanders2@home.com> wrote in message news:3a60b997.147640799@news...
> Bingo. But also: Use a couple of SS "hose clamps" from the hardware
> store in addition to that "double-tywrap" to strengthen the coax
> connection to the dogbone.
>
> To avoid soldering in the field, just use 1/8 inch wire rope clamps
> (tiny "U-bolts") to secure the coax leads to the dipole wires. Works
> for me.
>
> Jerry W4UK
>
> On Fri, 12 Jan 2001 23:25:13 -0500, Brian Kelly <kelly@dvol.com>
> wrote:
>
> >SNIP
> >>
> >I use foam 8X coax which is pretty flexible. The body of the center insulator is a
> >standard 75 cent filled nylon "dogbone" strain insulator with three molded-in
> >"disks & valleys". I wrap the coax tightly all the way around the middle "valley"
> >of the insulator with a four inch "tail" pointed down. I double-tywrap the coax
> >and tail together right under the insulator. Then I strip three or so inches of
> >insulation off both the braid and the center conductor. The braid gets soldered to
> >the end of one dipole element which is attached to one end of the dogbone and the
> >center conductor gets soldered to the end of the other dipole element. Goop the
> >exposed end of the coax to keep water out. Light, low profile, build nothing, two

> >for a buck fifty.
> >>
> >w3rv
> >
> >
>

1201. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 22:12:18 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A60D2C2.E7A7D736@dvol.com>
Source record: 172174

Cecil wrote:

> Reg Edwards wrote:
>
> Hey Reg, this is off the subject but why are Land Rovers in England
> so heavy? I'm watching a TV program of cop chases. They said the
> English cops were chasing a 15,000 pound Land Rover.

>
12,000 pounds of it was decent Cognac.
>

>
> --
> http://www.mindspring.com/~w6rca

1202. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 22:46:21 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <uam16tc41tdksgbbok4kaq1r5kifrdmmnc@4ax.com>
Source record: 172176

On Sat, 13 Jan 2001 21:59:31 -0000, wcovexip@husky.ptialaska.net
(btpost) wrote:

>It is the GROUND System folks, not the antenna. A wet noodle will work
>quite well as an Antenna, if you got a GOOD Rf Ground. This isn't
>Rocket Science, it is plan and simple General Class Level Impedance
>Theory.

A good post, Bruce, but there is a better way than trying to
establish a "ground" inside a fiberglass boat. Instead of using
the backstay as a 1/4 wave vertical worked against ground, install
a conventional dipole vertically from the masthead. For 20
meters, it will be about 33 feet long, fed in the middle, and most
sailboats of the type mentioned in the original post will have a
mast longer than that. The presence of the mast will detune it
somewhat, but a competent ham or professional installer can
compensate that without too much trouble, and then you will have
an antenna with no ground coupling problems and no electrolysis.
If you're clever, you can probably make either of the port or
starboard stays the antenna.

73, Bill W7TI

1203. Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 22:56:05 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <92586.62773$n%.2740214@news20.bellglobal.com>
Source record: 172177

With or without balun? 75 or 52 ohm coax? Will be fed thru tuner.

Thanks,

Max
VE3TMT

1204. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 23:09:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A60E00C.C8C564A6@eznec.com>
Source record: 172178

If you're putting them into a lawn or other grassy area, you can just stretch them out on top of the ground, working them down into the grass. I use a bent wire "staple" here and there to keep the wires down where the ground is lumpy. Within a year, the grass shoots cover the wires. In the meantime, you can mow over them. (My soil is clay, so the wire "staples" -- made from galvanized fence wire -- work well. In sandy soil, you might want to think of something else. I wouldn't want a staple to work loose and get thrown by a mower.)

Roy Lewallen, W7EL

Mike wrote:
>
> What is the best way to bury ground radials ?
> Lets say the ground is kinda soft from a light rain.I was thinking maybe
> a spade.
> The tv cable company has something that will push the line in the ground
> kinda like a spade but about as wide as a snow shovel.Does anyone know
> how its made and maybe rig up something like this or whatever your idea
> might be ?

1205. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 23:18:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A60E228.C162C28D@eznec.com>
Source record: 172179

Resonant (half wavelength) or nonresonant? Single or multiband?

Roy Lewallen, W7EL

VE3TMT wrote:
>
> With or without balun? 75 or 52 ohm coax? Will be fed thru tuner.
>
> Thanks,
>
> Max
> VE3TMT

1206. HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-13 23:46:22 UTC
From: alex_whizkid@my-deja.com
Message-ID: <93qpcd$9js$1@nnrp1.deja.com>
Source record: 172180

Hi

I'm after some advice.

I wish to use 20/15/10 metres. My garden (yard) is 40ft long and 15ft wide. Can anybody suggest an effective antenna(s) which isn't too expensive?

Thanks

AlexP

Bristol, UK

Sent via Deja.com
http://www.deja.com/

1207. Re: HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 00:09:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A60EE56.9C992199@IEEE.org>
Source record: 172183

alex_whizkid@my-deja.com wrote:
> I wish to use 20/15/10 metres. My garden (yard) is 40ft long and 15ft
> wide. Can anybody suggest an effective antenna(s) which isn't too
> expensive?

I have a 32ft rotatable dipole fed with 300 ohm ladder-line that works
well on 20m, 17m, 15m, 12m, and 10m. If made fixed and out of wire instead
of aluminum tubing, the cost is about $20.
--
http://www.mindspring.com/~w6rca

1208. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 00:10:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A60EE92.4AEEDEEC@IEEE.org>
Source record: 172184

W4JLE wrote:
> Prodding the old fecal matter yet again?

All in good fun, Fred.
--
http://www.mindspring.com/~w6rca

1209. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 00:19:02 UTC
From: n2ey@aol.com
Message-ID: <20010113191902.14870.00000636@nso-fr.aol.com>
Source record: 172182

In article <3A5D351D.BBE3F5B9@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>n2ey@aol.com wrote:
>>
>> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>> > I didn't disagree because it doesn't matter.
>>
>> Sure it matters. You haven't responded to my challenge because you
>> can't.
>
>There's no argument about the mode so why should I respond to any
>challenge about the mode?

OK, fine. You agree that jamming with Morse is virtually unknown in ham radio.
Works for me.

> It would be a waste of time.

That has never stopped you before, Cecil.
>
>> > Morse code tested hams
>> > use their Morse code keys to jam other hams.

Nope. You don't know what they used unless you were there at the jammers'
locations.
>>
>> That doesn't mean they were using Morse. You just want to badmouth the
>> mode.
>
>I've already said they didn't use Morse code.

I must have missed that part.

> I am certainly not badmouthing
>the mode.

Not right now, no.

>I am badmouthing code-tested hams using Morse code equipment
>to jam ham frequencies.

First it was "keys", now it's "equipment". Changing the boundary conditions is
not allowed. "Keys" are a small subset of "equipment".

What about others? How do you even know they are hams, let alone Morse-tested?
If they ARE hams, they're also theory- and regs-tested.

It's interesting that you say you are badmouthing Morse-tested hams who jam.
What about others who jam but are not Morse tested - guess that's OK with you?

> What is it about a string of 'dits' or a
>string of 'dahs' that you do not understand?

What I don't understand is how you know what sort of device was used to
generate the pulsed signals you claim were jamming.
>
>> >I have heard it.
>>
>> But have you SEEN it? If not, how do you KNOW they were using "Morse
>> code keys"? A simple 555 circuit will generate a pulse train for such
>> purposes. Computer software can do the same. A tape recording played
>> into a mike will do as well.
>
>Of course, a ham is going to whip up a 555 circuit to send a pulse
>train when he has an electronic keyer sitting there on the desk - or
>program a computer or play a tape recording.

Probabaly not. But how do you KNOW he has an electronic keyer on the desk?
Those things can be quite expensive - a 555 circuit is dirt cheap. Unless you
know who the jammers are and were present at their stations, you don't KNOW
what was used. You just ASSUME. And we all know what happens when one ASSUMEs.

>Give us an ever-loving break, Jim.

My unrelenting and irrefutable logic must be quite wearing upon you, Cecil.
Slow down. Take it easy. Relax. Put your feet up and run some antenna
simulations. Read some Ayn Rand. A is A, you know.

>You are just blowing smoke.

Nope. I leave that to the masters of smoke-blowing.

>> Point us to the NALs. Otherwise you're just blowing smoke and
>> badmouthing.
>
>Look at the NALs issued to code-tested hams for jamming.

Yup - lots of 'em. Awful. Guys oughta be ashamed. But they didn't use Morse to
do the jamming.

>I've have personally heard them using electronic keyers to do their jamming.

You have personally heard jamming - that part I'll believe. The use of keyers
is an assumption on your part unless you were there at the jamming station.
Maybe you WERE there, maybe not - I don't know. But don't expect me to accept
your assumptions as fact.

>I'm sure you have also and refuse to admit it.

Nope. I don't spend much time listening to the 'phone bands. Morse is my mode -
I'm on 40 meters mostly, with 80 and 20 as options. Lots of fun. What jamming
I have heard in the 'phone segements was done other ways. One common method was

to transmit some sort of weird wideband signal on top of the station being jammed. Sounded like some sort of noise generator - but I don't really know. Another method sounded like a dead carrier being wobbulated up and down a few kHz - I don't know how that was generated either. Playing music (a violation in itself) was yet another method.

Way back in the '70s there was a "jammer" that became known as the "woodpecker". Sounded like a string of dits with a terribly light weight ratio (on-time was about 10%) and a very bad case of key clicks - dern thing took up dozens of kHz or more. Some nut with a bug? Nope - a Soviet over-the-horizon radar system. Violated all sorts of international regs, but they did it anyway.

1210. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 00:19:03 UTC
From: n2ey@aol.com
Message-ID: <20010113191903.14870.00000637@nso-fr.aol.com>
Source record: 172181

In article <16931-3A5FD6C7-99@storefull-115.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"They only see and hear what the TV director allows to be telecast."
>
>Very true. Editing has always been able to shape the form and content of
>a presentation. I assumed an unbiased presentation, which is as unreal
>as a "lossless" transmission line.

Exactly! In fact, editing can be used as a subtle form of bias.
>
>Jim also wrote:
>"Seeing videotapes of a performance causes one to miss the fine points
>of a performance."
>
>Again, agreed. Beyond distraction, nothing can compare with the rich
>performance in the theater of the mind if you turn it on and let it
>loose.
>
"Theater of the mind" - excellent! Exactly what I'm referring to. But the
theater of the mind requires the active participation of the audience.

The basic point was this: One form of communication isn't necessarily "better"
than another just because more raw information is delivered. A book can do
things a movie or TV cannot. A recorded/edited presentation can do things which
are impossible in real time. Morse can do some things that other modes cannot.

All of them are different tools in the toolbox.

73 de Jim, N2EY

1211. re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 00:43:02 UTC
From: k3bu@aol.com
Message-ID: <20010113194302.18264.00000211@ng-fe1.aol.com>
Source record: 172185

>When over salt water NO radials are necessary. All that's needed is a small
>ground plate immersed just under the surface.
>----
>Reg
>
>

Do you have any figures, measurements or studies to support that, or show the difference between various configurations?

Yuri, K3BU

1212. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 00:50:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A60F7DB.5445B65@IEEE.org>
Source record: 172186

N2EY wrote:
> But how do you KNOW he has an electronic keyer on the desk?
> Those things can be quite expensive - a 555 circuit is dirt cheap.

A lot of transceivers have electronic keyers built in including inexpensive
ones like my IC-706 - no 555 required - just a key.

> >Look at the NALs issued to code-tested hams for jamming.
>
> Yup - lots of 'em. Awful. Guys oughta be ashamed. But they didn't use Morse to
> do the jamming.

Well, we are making progress. It's been like pulling a tooth, but you have
finally criticized code-tested jammers.
--
http://www.mindspring.com/~w6rca

1213. Re: A question for American HAMs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 02:00:15 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A61082B.B5A6C77@rchrd.com>
Source record: 172187

```
You can find the complete US band plans at:

http://www.arrl.org/FandES/field/regulations/bandplan.html

TruckDrivingMan wrote:
>
> Hi OMs
> I've heard that FM mode is forbidden in the USA.Allowed is only AM and
> SSB.Is that true ?
>
> 73 & 55 de
> 13 TW 071

--
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
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1214. Any MFJ Vertical Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 02:10:42 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A610A9E.22822BC5@rchrd.com>
Source record: 172188

```
Anyone care to comment on the vertical multiband antennas from MFJ?
In particular, the 1798 (10 bands, 80m-2m, 20') or the 1796 (6 bands,
40m-2m, 12'). Am looking at one of them for my roof.

Also, anyone care to review the MFJ Portable Ant Tuner (971) vs any of their
other tuners, like the 941E or 949E?

BTW, my rig is an IC-706MKIIG
--
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
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```

1215. Pi-L PA Output Network Design

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 02:25:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <93r3g8egq1@plutonium.btinternet.com>
Source record: 172190

NOW AVAILABLE:

NEW Program "Pi_L_NET.exe"

Pi & Pi-L OUTPUT NETWORKS FOR RF POWER AMPLIFIERS.

The program is in two parts. For given RF power output, RF plate/anode/collector volts and external load resistance, the first part computes either the L and C component values of a Pi-L network or of a simple Pi network.

The second part allows the L and C values to be varied in fine increments while observing how the input impedance of the network varies. The network input impedance is the load presented to the amplifying device: triode, tetrode, bipolar transistor, FET, etc.

In particular the input impedance can be observed as the tune and load capacitors are varied as in an actual amplifier. Or as frequency is varied off-resonance up to harmonics of the carrier frequency.

The program can also be used to compute L and C component values of Pi or Pi-L impedance matching networks between any two resistances. The phase delay through the network can be specified if needed for particular applications.

File size = 50 Kbytes. Download from website below in a few seconds. Not zipped up. Run immediately. Absolute bargain.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

1216. Antenna Pattern Plotting Software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 02:32:14 UTC
From: DOUGLAS STINSON <douglas-stinson@home.com>
Message-ID: <3A611047.1D412B5C@home.com>
Source record: 172189

Can anyone tell me where I can obtain a program what will plot measured antenna gain data in the standard log-polar format?

Thanks.

1217. Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 02:56:16 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <kz886.171329$I5.4068930@news1.rdc1.sdca.home.com>
Source record: 172191

I am contemplating my first tower purchase. I would appreciate any pointers.

I am in Southern California, so wind is really quite mild and no ice, and I also have a lot big enough to give me 100 feet from the next door properties both sides. If I go up to about 85 feet or so, I have a clear shot to the Pacific Ocean, so I would like to get up fairly high, assuming that going to the height needed for an Ocean view is doable. I am in an area (San Diego County is the local authority) without tower height restrictions (as far as I know).

How large will the area on the ground be for a self-supporting tower 85 feet or higher? I want to put up a big interlaced yagi or quad (at least 4 elements on 20M), in addition to using the tower for slopers as well (if possible).

Also I need to be able to work on and replace the antenna frequently, as most antenna work I do is "experimental" and my antennas are usually homebrewed.

I have about $5K maximum to spend on this outrageous extravagance which I have promised myself since I was a fourteen year old novice.

Is 85' reasonable? Should I, can I? go higher in a self-supporting crank up?

How big is the "footprint" on the lot? Should I locate it away from the house (and nearby large trees) or keep it close to the shack to shorten cable runs?

All advice welcome.

wombat

1218. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 03:02:57 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <BF886.171330$I5.4069925@news1.rdc1.sdca.home.com>
Source record: 172192

I should also mention the following:

I am primarily interested in the short path to VK/ZL on HF. Hence the westward ocean view is important to me.

I would welcome recommendations on specific towers and brands, as no matter how much I read, I can't seem to understand how to calculate wind loading or find the cost of everything from tower to rotator (my budget includes for an allowance of $750 - 1000 for a really good rotator, so tips there would be appreciated also).

thanks

wombat wrote in message ...
>I am contemplating my first tower purchase. I would appreciate any pointers.
>
>I am in Southern California, so wind is really quite mild and no ice, and I
>also have a lot big enough to give me 100 feet from the next door properties
>both sides. If I go up to about 85 feet or so, I have a clear shot to the
>Pacific Ocean, so I would like to get up fairly high, assuming that going to
>the height needed for an Ocean view is doable. I am in an area (San Diego
>County is the local authority) without tower height restrictions (as far as I
>know).
>
>How large will the area on the ground be for a self-supporting tower 85 feet
or
>higher? I want to put up a big interlaced yagi or quad (at least 4 elements
on
>20M), in addition to using the tower for slopers as well (if possible).
>
>Also I need to be able to work on and replace the antenna frequently, as most
>antenna work I do is "experimental" and my antennas are usually homebrewed.
>
>I have about $5K maximum to spend on this outrageous extravagance which I have
>promised myself since I was a fourteen year old novice.
>
>Is 85' reasonable? Should I, can I? go higher in a self-supporting crank up?
>
>How big is the "footprint" on the lot? Should I locate it away from the house
>(and nearby large trees) or keep it close to the shack to shorten cable runs?
>
>All advice welcome.
>
>wombat
>

>
>

1219. Anybody make a NMO to SO-239 (female PL-259) adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 03:06:12 UTC
From: Mark Russo <mrrusso@optonline.net>
Message-ID: <3A6117A7.B9996702@optonline.net>
Source record: 172193

it would solve a problem.

THANKS, Mark N2FLF

1220. Re: 144/440mhz mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 03:15:17 UTC
From: Mark Russo <mrrusso@optonline.net>
Message-ID: <3A6119C9.5C3B9CB1@optonline.net>
Source record: 172194

Hi, I have been a Ham for about 20 years. I have found the Larson dual band (NMO) antennas
very reliable and long lasting. I have them on 4 cars. Also, they won't kill your wallet like
some of the prettier, shinny counterparts. The black versions are almost not seen from across
the street, they blend into the background. If they can't see them, they won't steal them!

Just my .02 cents!

Good Luck, 73, Mark N2FLF

David wrote:

> I need a 144/440 dualband mobile antenna. Assuming the glass on my 98
> Honda Accord coupe isn't the UV metalized kind, how close to the embedded
> heater wires in the rear can I get with a thru-glass Larsen? Will it hurt
> if the edge of the mount is right next to one of these wires as long as it
> isn't underneath it?
>
> Or....if I don't go with the thru-glass Larsen and opt of an NMO mount with
> a 3/4" hole in the roof, which one would you recommend? Mind you, I don't
> want anything too long (I'm already sporting an HS-1500 screwdriver),
> preferably under 36" would be nice.
>
> Any ideas?
>
> Thanks,
> David, K4ZZR

1221. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 03:50:03 UTC
From: Jesse Johnson <jazzemt@hotmail.com>
Message-ID: <t628ghmi730t3a@corp.supernews.com>
Source record: 172195

Well use a crank up. EASIER to change antenna.
"wombat" <chingada_madre@hotmail.com> wrote in message
news:BF886.171330$I5.4069925@news1.rdc1.sdca.home.com...
> I should also mention the following:
>
> I am primarily interested in the short path to VK/ZL on HF. Hence the
westward
> ocean view is important to me.
>
> I would welcome recommendations on specific towers and brands, as no
matter how
> much I read, I can't seem to understand how to calculate wind loading or
find
> the cost of everything from tower to rotator (my budget includes for an
> allowance of $750 - 1000 for a really good rotator, so tips there would be
> appreciated also).
>
> thanks
>
>
>
> wombat wrote in message ...
> >I am contemplating my first tower purchase. I would appreciate any
pointers.
> >
> >I am in Southern California, so wind is really quite mild and no ice, and
I
> >also have a lot big enough to give me 100 feet from the next door
properties
> >both sides. If I go up to about 85 feet or so, I have a clear shot to
the
> >Pacific Ocean, so I would like to get up fairly high, assuming that going
to
> >the height needed for an Ocean view is doable. I am in an area (San
Diego
> >County is the local authority) without tower height restrictions (as far
as I
> >know).
> >
> >How large will the area on the ground be for a self-supporting tower 85
feet
> or
> >higher? I want to put up a big interlaced yagi or quad (at least 4
elements

> on
> >20M), in addition to using the tower for slopers as well (if possible).
> >
> >Also I need to be able to work on and replace the antenna frequently, as
most
> >antenna work I do is "experimental" and my antennas are usually
homebrewed.
> >
> >I have about $5K maximum to spend on this outrageous extravagance which I
have
> >promised myself since I was a fourteen year old novice.
> >
> >Is 85' reasonable? Should I, can I? go higher in a self-supporting crank
up?
> >
> >How big is the "footprint" on the lot? Should I locate it away from the
house
> >(and nearby large trees) or keep it close to the shack to shorten cable
runs?
> >
> >All advice welcome.
> >
> >wombat
> >
> >
> >
>
>

1222. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 04:09:25 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <VD986.61131$JT5.1847684@news20.bellglobal.com>
Source record: 172196

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A60E228.C162C28D@eznec.com...
> Resonant (half wavelength) or nonresonant? Single or multiband?

Personally I would love to have a multi-band but space will not permit so I have to say single band. Resonant for say 3750 or 7100. I can make as many as I need but am a little confused as far as feeding them.

1223. FS::Heights Alum. Tilt Over Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 04:19:44 UTC
From: Randy <rbkb8iii@erinet.com>
Message-ID: <3a6128e1$0$1498$53a6afc1@news.erinet.com>
Source record: 172197
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

I have For Sale a Heights Aluminum motor screw driven Tilt Over Tower 48' tall. I'm asking $600.00 plus shipping prefer pick-up near Dayton,Ohio. For more details or any question you can call me at 937-372-2492 or E-mail me at rbkb8iii@erinet.com

1224. Re: Antenna Pattern Plotting Software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 04:23:52 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6129D8.ABFD2D0A@dvol.com>
Source record: 172198

DOUGLAS STINSON wrote:

> Can anyone tell me where I can obtain a program what will plot measured
> antenna gain data in the standard log-polar format?

>
http://www.eznec.com/index.shtml
>
http://www.nittany-scientific.com/
>

> Thanks.

>
w3rv

1225. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 04:32:37 UTC
From: jflanders2@home.com
Message-ID: <3a6128dd.176131563@news>
Source record: 172199

Took some dipoles down a week ago after about 12 years in the air. Some rusting on the un-galvanized thread parts, but no disabling corrosion anywhere on the 1/8 inch cable clamps (I used cheap galvanized ones - you can also get SS ones at 5x the price). Some of them still had the black PVC tape I had put on them 12 years ago for UV sunlight protection, some did not. I put these clamps back in the air with new dipoles, feedlines, and supports.

My dipoles stay up a long time because I use farmer's steel fence wire 12.5 gauge to support the solid copperweld antenna wires in the trees. Some of the steel supporting wires have grown into the tree branches and can't be lowered anymore. Rope would have deteriorated long ago/

By the way, I had used some of the white plastic dogbone insulators on some of these and the insulators are still usable after 12 years, though flakey on the surface.

Jerry W4UK

On Sat, 13 Jan 2001 22:01:07 GMT, "Glenn" <glenn.hansen@usa.net> wrote:

>Jerry,
>
>You don't have a corrosion problem later on using the clamps? I have visions
>of green copper and poor continuity at the connection or do you seal the
>connection?
>
>Thanks
>
>Glenn KB7PKC
>
>
>
>"Jerry Flanders" <jflanders2@home.com> wrote in message
>news:3a60b997.147640799@news...
>> Bingo. But also: Use a couple of SS "hose clamps" from the hardware
>> store in addition to that "double-tywrap" to strengthen the coax
>> connection to the dogbone.
>>
>> To avoid soldering in the field, just use 1/8 inch wire rope clamps
>> (tiny "U-bolts") to secure the coax leads to the dipole wires. Works
>> for me.
>>
>> Jerry W4UK
>>

>> On Fri, 12 Jan 2001 23:25:13 -0500, Brian Kelly <kelly@dvol.com>
>> wrote:
>>
>> >SNIP
>> >>
>> >I use foam 8X coax which is pretty flexible. The body of the center
>insulator is a
>> >standard 75 cent filled nylon "dogbone" strain insulator with three
>molded-in
>> >"disks & valleys". I wrap the coax tightly all the way around the middle
>"valley"
>> >of the insulator with a four inch "tail" pointed down. I double-tywrap
>the coax
>> >and tail together right under the insulator. Then I strip three or so
>inches of
>> >insulation off both the braid and the center conductor. The braid gets
>soldered to
>> >the end of one dipole element which is attached to one end of the dogbone
>and the
>> >center conductor gets soldered to the end of the other dipole element.
>Goop the
>> >exposed end of the coax to keep water out. Light, low profile, build
>nothing, two
>> >for a buck fifty.
>> >>
>> >w3rv
>> >
>> >
>>
>
>

1226. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 05:26:21 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A6138EA.74ECDDCC@bellatlantic.net>
Source record: 172200

Cecil wrote:

> ehsjr@bellatlantic.net wrote:
> > Cecil, you are confusing the fact that conscious thought uses words
> > with language.
>
> Nope, I'm not. I think in English.

No Cecil, you don't. You "think in English" but you
do not think in English. According to scientists, you
think in vibation - some frequency of electrical energy -
and chemical activity in the brain. Now, lest there be
some debate about that, consider the following, which
demonstrates that thinking occurs when no language
is present. Thus it does not depend on what scientists
say.

That process - thinking - happens long before you
learn a language. If it was not possible to think without
language, then a baby could not learn.

You express - to your self, or to others - your thoughts
using language. But the actual thinking does not require
language. In communication, some external stimulus causes
us to think about the stimulus. It could be sound, touch,
scent, taste or sight which stimulates the thinking in communication
as well as othjer things. And that thought can start without
any English - or other - word. When alone in a room, The thought
that "it's too cold in here, I'd better turn on the heater" does not
start
with words. In the example I have in mind, it starts with your senses -
you feel cold. A person deaf from birth can think without a language.
For example, show them a light switch and demonstrate its operation.
They learn that the switch turns on the light.

> Objects aside, how does one
> represent an abstract idea like 'truth' without resorting to
> one's language? I cannot do it without the associated English
> word, 'truth'. - .-. ..- - .... is just a Morse coded
> representation of the English word, 'truth'. In fact, I do not
> think the English word 'truth' can be mentally avoided when one
> receives - .-. ..- - .... in Morse code, assuming one's
> native language is English.

A baby, with no language, recognizes love. It knows who its
mother is, without language. This proves thought, without

language.

>
> --
> http://www.mindspring.com/~w6rca

1227. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 05:33:23 UTC
From: n2ey@aol.com
Message-ID: <20010114003323.10105.00000301@nso-bh.aol.com>
Source record: 172202

In article <3818-3A608074-27@storefull-115.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Richard Clark, KB7QHC wrote:
>"Open=A0up HF to all comers. Make it easier than getting into CB."

>I agree,

uh-oh.

>and as Richard said: "Morse will persist for as long as it is
>fun."

That I agree with.

>Morse need not be used in commerce or the military to be useful to
>hams. Amateur radio is non-commercial by law.

Agree again!

>CB may be unruly but it
>has no ARRL organization nor tradition of self-regulation. A large
>influx of new hams need not cause chaos.

A large influx of newcomers who don't follow the tradition of self-regulation
WILL cause chaos.

>Another concern expressed in this thread was band crowding. I wouldn`t
>expect all of the new hams to crowd into the 30m band with its tiny size
>and other limitations.

Of course not. Yet during much of the sunspot cycle, many of the amateur HF
bands are useless for skywave propagation during much of the day. Those which
are useful get crowded. And the long distance nature of an open HF band means
that one's signal may be heard over millions of square miles. End result is
that crowding is a real concern.
>
>Most new hams are likely to be appliance operators.

Sure - because they don't know any better.

>Heathkit is gone and
>the days of saving money by doing your own point-to-point wiring are
>just about gone too. It is hard to compete with offshore labor and
>automatic assembly.

Yet it can be done, and is being done. See

http://www.elecraft.com

for an example of an under-$1000 rig that performs like it costs several times as much. And not only can it be home built, but with a minimum of test gear it can be aligned and repaired. And modified.

>Store-bought radios aren`t difficult to operate legally.

Neither are homebrew ones. Or kits.

>When they
>aren`t operated legally, the operator can be notified and if the illegal
>operation persists, fines can be imposed regardless of the origin of the
>radio.

Sure - but the violation shouldn't happen in the first place. We hams have a lot of freedom in our operating privileges. With that freedom comes responsibility.

>VHF occupancy could be improved by an influx of new hams. Plenty of
>cheap consumer electronics could be adapted to VHF ham bands.

That's what we were told in 1990. Didn't happen. The growth in ham radio in the ten years following 1991 is almost indistinguishable from the growth in the ten years preceding.
>
>Ham radio needs resuscitation and it can only be achieved by an influx
>of new hams.

What needs "resuscitation"? What type?

>Morse has always inhibited growth of ham radio.

Morse? The mode? How?

Do you possibly mean the TEST? If so, please say so.

The Morse tests were reduced to 5 wpm back in April - yet the number of US hams has grown by only 4,000 since then. That's about 1/2 of one percent.

>It couldn`t
>be helped when Morse was the only game in town. Now, Morse is just a
>marginal player in the larger communications field.

It's certainly NOT a "marginal player" in HF/MF ham radio, though.

>It`s long past the time to put it away as an entrance requirement to ham
radio.

It's just about gone now. The FCC has said they can't reduce it any more until the treaty changes. The whole debate is over a moot point.

The real causes of slow growth in ham radio have nothing to do with Morse or any tests. But those problems are a lot tougher to solve.

73 de Jim, N2EY
>

1228. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 05:33:24 UTC
From: n2ey@aol.com
Message-ID: <20010114003324.10105.00000302@nso-bh.aol.com>
Source record: 172201

In article <3A5FD8A9.F9F6AFC2@dvol.com>, Brian Kelly <kelly@dvol.com> writes:

(snip of longwinded N2EY explanation)

>I use foam 8X coax which is pretty flexible. The body of the center insulator
>is a
>standard 75 cent filled nylon "dogbone" strain insulator with three molded-in
>"disks & valleys". I wrap the coax tightly all the way around the middle
>"valley"
>of the insulator with a four inch "tail" pointed down. I double-tywrap the
>coax
>and tail together right under the insulator. Then I strip three or so inches
>of
>insulation off both the braid and the center conductor. The braid gets
>soldered to
>the end of one dipole element which is attached to one end of the dogbone and
>the
>center conductor gets soldered to the end of the other dipole element. Goop
>the
>exposed end of the coax to keep water out. Light, low profile, build
>nothing, two
>for a buck fifty.

As usual, W3RV clearly explains more in a paragraph than I do with four-five paragraphs and a crude drawing.
>>
My PVC pipe design was derived from the "coax around a dogbone insulator" idea. Both have their advantages - I went to the pipe because it was on hand after making coax traps. It has the advantage of being easy to use in an inverted V situation.

One thing to watch with both designs is how sharp a bend you put in the coax. All coax types have a "minimum bend radius" spec - if you bend 'em too sharp, the center conductor tends to migrate off center over time. Problem is worst in hot climates with foam coax.

I first saw the idea in an old QST article (about 1957) by Lew McCoy, W1ICP (SK). He used a ceramic insulator!

Tywraps and lots of goop are the way to go. Hose clamps may squeeze the coax too much. Be sure to use black UV resistant tywraps - I've had the plain white nylon ones fail after several years in the sun. I just solder the connections - Brundys (split bolt electrical connectors) cost too much.

Enough PVC pipe for a pair of traps and a center insulator cost me about forty cents.

73 de Jim, N2EY

1229. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 05:40:07 UTC
From: Aaron Jones <nomail@nomail.com>
Message-ID: <9se26tcsqcfuvaiirjr9anhli8m5elbsre@4ax.com>
Source record: 172203

Mark Keith <nm5k@wt.net> wrote:
>...you see "sign language" which is doing the
>same thing, sending english in a different form than writing or speech.
>Dunno, if "sign language" qualifies as a language, then I would have to
>say yes, morse is a language, but in my opinion , neither are true
>languages.

Here is what the dictionary thinks:

sign language n. 1. A language that uses manual movements to convey
grammatical structure and meaning. 2. A method of communication, as
between speakers of different languages, that uses hand movements and
other gestures.

1230. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 06:01:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6140D1.673F7C2D@IEEE.org>
Source record: 172204

ehsjr@bellatlantic.net wrote:
>
> Cecil wrote:
> > I think in English.
>
> No Cecil, you don't.

Please don't try to tell me how I think. I often think in images
but for abstract concepts, I think in English. It is impossible
for me to mentally consider 'truth' without the English word
for 'truth' popping into my mind.

> But the actual thinking does not require language.

Hellen Keller didn't do a lot of abstract conceptual thinking
until she discovered language.

> A baby, with no language, recognizes love. It knows who its
> mother is, without language. This proves thought, without
> language.

I'm talking about adult abstract conceptual thought, not about
perceptions or feelings. My dog has thoughts but I am not talking
about that kind of thoughts.
--
http://www.mindspring.com/~w6rca

1231. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 06:23:35 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A614650.7E504591@bellatlantic.net>
Source record: 172205

You are still not separating the idea of what thinking is from
the use of language. Your observations are correct that you
learn your native language before morse, and that you can
become fluent in something other than your native tongue
where you "think in" that language.

I've experienced morse fluency, and you don't believe it.
If you haven't experienced morse fluency, perhaps you
can't understand examples oriented towards it. Lets try
a different area, not dealing with communication, but
dealing with thought.

Experienced runners can relate to this. I used to run 70
miles per week. I discovered that I could tell you my
pace within 10 seconds per mile, without looking at a
watch and without having consciously thought about it.
And I found that many other runners could do the same.
The really interesting thing was that this held true, even
if I was going at a MUCH faster pace than ever. From
time to time on training runs, I'd run cross country to
a high school 1/4 mile track and run with someone who
I'd never met. I would guesstimate my pace and then ask
the other guy what pace we were running. The most
impressive to me was when I ran with a guy and thought,
"Wow, we're doing a 6:10 or 6:15". My normal training
runs were, at the time, 7:30's. I asked, and he said "about
6:15". Now, how did I know the pace? I had not experienced
that pace before. True - we both could have been wrong.
But too many times I would run a street route I had never run
before, get back to the house, and know exactly what time
it was to the minute. That worked when i was running 8's,
9's, 8:30's etc. And when I later on drove the route to clock
it on the odometer, it always turned out that my pace, the
distance, and the time consumed all agreed with one another
mathematically. There is thought there which somehow ran
"the clock in my head" with no English used. The use of English
occurred only when I consciously thought of the time.

If the running example doesn't work for you, how about
music? A musician learns to play the piano at first by
consciously thinking about where to place his fingers,
and consciously translating the symbols on the sheet
music to letters - like b flat - and then pushing the
corresponding key. But an accomplished pianist
"thinks in music" and plays the instrument to make the

music come out. In jazz, the musicians communicate
a theme and follow each other. No words, just
sound. They don't even need sheet music.

Or how about catching a ball on the run? No English,
but some kind of thought where you adjust your speed
and direction to put you at the place/time coordinates
that enable you to catch the ball. Or observing a
person running to catch the ball - we arrive at the
opinion that he will or will not arrive at the proper
space/time coordinates to make the catch. We
"figure it out", without "thinking in English". We
express the result of that "figuring" in English, to
ourselves or others. But the figuring took no
English.

Richard Harrison wrote:

> Cecil, W6RCA wrote:
> "For virtually 100% of the human race, one`s native language is firmly
> fixed in one`s thought processes before Morse code is learned."
>
> I think Cecil is exactly right. If you`re totally immersed in a foreign
> environment for some years, it`s likely you`ll switch off to the foreign
> language for your thoughts from time to time. You often may only be able
> to come up with the foreign noun or verb you seek to recall. At least
> that`s my experience. I doubt this happens often with Morse code. You
> want the word? Just decode the Morse.
>
> Best regards, Richard Harrison, KB5WZI

1232. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 06:41:13 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <dSb86.262395$U46.8392308@news1.sttls1.wa.home.com>
Source record: 172206

I'm confused. My multi-band fan dipole covering 80/40/20 takes the same space as a 80 meter single band. I have to be missing something here!

Glenn - KB7PKC

"VE3TMT" <mdonoghue1@sympatico.ca> wrote in message news:VD986.61131$JT5.1847684@news20.bellglobal.com...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3A60E228.C162C28D@eznec.com...
> > Resonant (half wavelength) or nonresonant? Single or multiband?
>
>
> Personally I would love to have a multi-band but space will not permit so I
> have to say single band. Resonant for say 3750 or 7100. I can make as many
> as I need but am a little confused as far as feeding them.
>
>

1233. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 06:42:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A614A39.E39B66C9@IEEE.org>
Source record: 172207

ehsjr@bellatlantic.net wrote:
> I've experienced morse fluency, and you don't believe it.
> If you haven't experienced morse fluency, perhaps you
> can't understand examples oriented towards it. Lets try
> a different area, not dealing with communication, but
> dealing with thought.

Your examples are trivial. Of course, some thought can be
accomplished without a language. My dog can do that. But try
abstract conceptual thought without words. How do you think
about 'truth' without resorting to the English word for 'truth'.
Don't know about you, but I find it impossible to think about
'truth' without referencing the English word 'truth'.
--
http://www.mindspring.com/~w6rca

1234. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:11:00 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <3A615104.23916943@inreach.com>
Source record: 172208

you are missing the help for the gentleman's request.
Lots of ways to make a dipole, full length, or trap shortened, even a
coil in the center.
Typically a dipole is fed with coax and a balun, matching the impedances
either with the coax or the balun being a transformer as well such as
4:1, 9:1 etc. also, parallel line is used, typically 300 ohm, or 450
ohm, and matched with a transformer etc. Some dont match, and use a
tuner at the shack to compensate.
A good suggestion is to get a copy nof tha ARRL antenna book and study
up.

Glenn wrote:
>
> I'm confused. My multi-band fan dipole covering 80/40/20 takes the same
> space as a 80 meter single band. I have to be missing something here!
>
> Glenn - KB7PKC
>
> "VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
> news:VD986.61131$JT5.1847684@news20.bellglobal.com...
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:3A60E228.C162C28D@eznec.com...
> > > Resonant (half wavelength) or nonresonant? Single or multiband?
> >
> >
> > Personally I would love to have a multi-band but space will not permit so
> I
> > have to say single band. Resonant for say 3750 or 7100. I can make as
> many
> > as I need but am a little confused as far as feeding them.
> >
> >

1235. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:14:40 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6151E0.C5BD44A7@dvol.com>
Source record: 172209

wombat wrote:

> I am contemplating my first tower purchase. I would appreciate any pointers.
>
> I am in Southern California, so wind is really quite mild and no ice,

>
You won't have to worry about ice but there isn't anywhere in this country which hasn't experienced very high winds at some time or another, assume 100mph. It only takes once. Your building code might have some requirements along these lines. An informal chat with your County Engineer would not hurt.
>

> . . . a big interlaced yagi or quad (at least 4 elements on
> 20M), in addition to using the tower for slopers as well (if possible).

>
Big antennas = big tower.
>

> Also I need to be able to work on and replace the antenna frequently, as most
> antenna work I do is "experimental" and my antennas are usually homebrewed.

>
A self-supporting tower is obviously preferable, crankup or fixed.
>

> I have about $5K maximum to spend on this outrageous extravagance which I have
> promised myself since I was a fourteen year old novice.

>
I think you'll find yourself a tad short of funds for a self supporting carnk-up which will handle big HF beams at 85 feet, but $5k should be more than enough for a guyed tower and perhaps a non-crankup.
>
Tune http://www.texastowers.com/, check out the Rohn, Trylon, Universal and US Tower pages for a first pass at catalog tower info and pricing.
>
Is 85' reasonable? Should I, can I? go higher in a self-supporting crank up?
>
With certain exeptions higher is better. Can you or should you are not a technical or operational matters, it's a personal judgement/budget call only you can make.
>

> How big is the "footprint" on the lot?

>
Big variable dependent on the specific tower and the tower manufacturer's required minimum base size for that tower. I used one cubic yard of concrete for my 70 ft guyed Rohn 45 tiltover. A buddy of mine had 70 cubic yards anchoring his 100 ft. Lingo pole. Whatever else you do don't decide you can get away with a base which is smaller than the manufacturer recommends.
>

> Should I locate it away from the house
> (and nearby large trees) or keep it close to the shack to shorten cable runs?

>
Locate the tower where it won't hit anybody's home if it flops over including yours. Run a single length of virtually lossless hardline to and up the tower and use a remotely switched Top Ten relay box at the top of the tower to select specific antnenas.
>

> I am primarily interested in the short path to VK/ZL on HF. Hence the westward
> ocean view is important to me.
>
>
You don't need to actually see the Pacific Ocean from the top of the tower to reliably work VKs and ZLs. A reasonably clear shot toward the ocean at any angle, say around five degrees up will work just as well as being able to see the horizon on the ocean from the top of your tower.
>

> I can't seem to understand how to calculate wind loading

>
Best illustrated by an example: Assume you have a ten foot long length of 2.00 inch diameter aluminum tubing as an element or boom. Ten feet is 120 inches. Multiply 2.00 x 120 and you get 240 square inches. Divide that by 144 square inches per square foot and you get 1.67 square feet of projected wind loading surface for that particular element. To determine the worst-case total wind load on the complete installation you add up all the projected square feet of all the elements, booms and the mast. In the case of continuously tapered quad spreaders determine the average diameter and multiply that value times the length of the spreader.
>

>
> wombat

>
w3rv

1236. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:31:48 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6155E4.1ED3@wt.net>
Source record: 172210

Aaron Jones wrote:
>
> Mark Keith <nm5k@wt.net> wrote:
> >...you see "sign language" which is doing the
> >same thing, sending english in a different form than writing or speech.
> >Dunno, if "sign language" qualifies as a language, then I would have to
> >say yes, morse is a language, but in my opinion , neither are true
> >languages.
>
> Here is what the dictionary thinks:
>
> sign language n. 1. A language that uses manual movements to convey
> grammatical structure and meaning. 2. A method of communication, as
> between speakers of different languages, that uses hand movements and
> other gestures.

I think #2 more accurate. A method of communication that uses the
english language. Or in the US anyway.. MK

--
http://web.wt.net/~nm5k

1237. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:35:52 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6156D8.E433EB98@dvol.com>
Source record: 172211

Glenn wrote:

> Jerry,
>
> You don't have a corrosion problem later on using the clamps? I have visions
> of green copper and poor continuity at the connection or do you seal the
> connection?

>
There are lotsa really weenie more or less chemically inert stainless steel
u-bolts available. Not that I bother with them mind you, I have seven 110vac
soddering arns ranging from 15 watts to 750 watts plus three torches . . .
EVERYTHING gets soddered and nothing turns green.
>

>
> Thanks
>
> Glenn KB7PKC

>
w3rv

1238. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:43:01 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A615885.A7ED77F7@oio.net>
Source record: 172212

wombat,
What I would recomend is for you to contact several of
the tower manufacturers. Tell them what your interested
in, and listen to their advice very closely. What your
thinking of is ~not~ a week-end progect! Good luck with
it, but I think that $5k is going to be just a bit 'short'.
'Doc

1239. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:48:50 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6159E2.ED661282@dvol.com>
Source record: 172213

"Bill Turner, W7TI" wrote:

>
> . . . For 20
> meters, it will be about 33 feet long, fed in the middle, and most
> sailboats of the type mentioned in the original post will have a
> mast longer than that. . . .

>
But how well do you suppose it would work when bawling for a bailout on
2182?
>

> 73, Bill W7TI

1240. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 07:49:06 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6159F2.7D9009E7@oio.net>
Source record: 172214

VE3TMT wrote:
>
> With or without balun? 75 or 52 ohm coax? Will be fed thru tuner.
>
> Thanks,
>
> Max
> VE3TMT

Max,
The feedpoint impedance of the average dipole is some
where between those two values, depending onhow it is
erected. For a single band dipole, I wouldn't bother
with a balun, they just aren't needed. For the lower
HF bands baluns are more of a problem than they are
worth.
'Doc

1241. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 09:10:06 UTC
From: Ash <abuse@uu.net>
Message-ID: <3A616CEC.D1DC36FC@uu.net>
Source record: 172215

Mark Keith wrote:

> Aaron Jones wrote:
> >
> > Mark Keith <nm5k@wt.net> wrote:
> > >...you see "sign language" which is doing the
> > >same thing, sending english in a different form than writing or speech.
> > >Dunno, if "sign language" qualifies as a language, then I would have to
> > >say yes, morse is a language, but in my opinion , neither are true
> > >languages.
> >
> > Here is what the dictionary thinks:
> >
> > sign language n. 1. A language that uses manual movements to convey
> > grammatical structure and meaning. 2. A method of communication, as
> > between speakers of different languages, that uses hand movements and
> > other gestures.
>
> I think #2 more accurate. A method of communication that uses the
> english language. Or in the US anyway.. MK
>
> --
> http://web.wt.net/~nm5k

--
< This is my actual email adress, hopefully the spam programs filter out abuse@*!* adresses
>

1242. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 09:17:20 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <A8e86.262717$U46.8405506@news1.sttls1.wa.home.com>
Source record: 172216

William,

The gentleman said "I would love to have a multi-band but space will not
permit so I have to say single band. Resonant for say 3750 or 7100".
Regardless of your explanation of dipole construction, transformers and such
I don't see how any of these impact having room for a 80 meter antenna but
not having room for the exact same length 80/40 meter antenna. How will
getting "a copy nof tha ARRL antenna book and" studying up resolve why you
can have room for an eighty meter single band antenna but not for an eighty
and 40 meter multiband antenna that is the exact same length? Is it mirrors?
Reflections off the snow? Can you lower yourself to my level and try and
help me out William or do I need to read a book instead?

HUH?

Glenn - KB7PKC

"William F. Hagen" <whagen@inreach.com> wrote in message
news:3A615104.23916943@inreach.com...
> you are missing the help for the gentleman's request.
> Lots of ways to make a dipole, full length, or trap shortened, even a
> coil in the center.
> Typically a dipole is fed with coax and a balun, matching the impedances
> either with the coax or the balun being a transformer as well such as
> 4:1, 9:1 etc. also, parallel line is used, typically 300 ohm, or 450
> ohm, and matched with a transformer etc. Some dont match, and use a
> tuner at the shack to compensate.
> A good suggestion is to get a copy nof tha ARRL antenna book and study
> up.
>
>
> Glenn wrote:
> >
> > I'm confused. My multi-band fan dipole covering 80/40/20 takes the same
> > space as a 80 meter single band. I have to be missing something here!
> >
> > Glenn - KB7PKC
> >
> > "VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
> > news:VD986.61131$JT5.1847684@news20.bellglobal.com...
> > >
> > > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > > news:3A60E228.C162C28D@eznec.com...
> > > > Resonant (half wavelength) or nonresonant? Single or multiband?
> > >

> > >
> > > Personally I would love to have a multi-band but space will not permit
so
> > I
> > > have to say single band. Resonant for say 3750 or 7100. I can make
as
> > many
> > > as I need but am a little confused as far as feeding them.
> > >
> > >

1243. Re: PVC Dipole Center Designs

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 09:21:13 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <dce86.262719$U46.8405959@news1.sttls1.wa.home.com>
Source record: 172217

I seal with molten solder too. I was just curious, always having felt wires twisted, clamped or what ever are going to have the surface get ugly without sealing it somehow from air and moisture. Solder seems to be a good wire sealant. :-) Obviously the clamps work, so to each his own.

Glenn KB7PKC

"Brian Kelly" <kelly@dvol.com> wrote in message news:3A6156D8.E433EB98@dvol.com...
>
> Glenn wrote:
>
> > Jerry,
> >
> > You don't have a corrosion problem later on using the clamps? I have visions
> > of green copper and poor continuity at the connection or do you seal the
> > connection?
>
> >
> There are lotsa really weenie more or less chemically inert stainless steel
> u-bolts available. Not that I bother with them mind you, I have seven 110vac
> soddering arns ranging from 15 watts to 750 watts plus three torches . . .
> EVERYTHING gets soddered and nothing turns green.
> >
>
> >
> > Thanks
> >
> > Glenn KB7PKC
>
> >
> w3rv
>
>

1244. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-14 10:40:40 UTC
From: pywacker@fuse.net
Message-ID: <t630hfm9m57pa9@corp.supernews.com>
Source record: 172218

If you cut it for one band 75 meters use coax direct to feedpoint, RG8 or 213. By the way it should work on 10 meters with low swr somewhere in that band. If you want the single wire dipole that you can use for more than one band use 450 ohm ladder line and an outboard antenna tuner. We can go into cores, baluns, chokes, feeds and reason etc. but it's not necessary. I would assume if cut for 75 meters it will not be above 60 feet in height (best) most hams only to mount 35 to 40 ft.

Good luck.

73 de KE4WY Jim

"VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
news:VD986.61131$JT5.1847684@news20.bellglobal.com...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3A60E228.C162C28D@eznec.com...
> > Resonant (half wavelength) or nonresonant? Single or multiband?
>
>
> Personally I would love to have a multi-band but space will not permit so
I
> have to say single band. Resonant for say 3750 or 7100. I can make as
many
> as I need but am a little confused as far as feeding them.
>
>

1245. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-15 21:51:27 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <93vrg6kb1@iac5.navix.net>
Source record: 172119

That being the case, I should get in for free. It is not fair making me take a pitching test if I never plan to pitch. Besides, it sounds like the pitchers like Smoltz and Glavine want to feel superior to me because they can do it and I can't. I demand they change all the rules to make ME happy.

That's not fair, I exist therefore I deserve...(stolen from an other post, but I love the idea)

"Lamar Owen" <lamar.owen@wgcr.org> wrote in message news:3A6367D4.2A069EA9@wgcr.org...
> W4JLE wrote:
> >
> > Using your same logic, the Atlanta Braves should let me in all the games
> > next season for free.
>
> > They are taking away my potential enjoyment of the game because I have to
> > pay to get in.
>
> No the logic that would accurately track the pro-code-test position
> would be the Braves requiring you to pass a pitching test in the bullpen
> before you could watch the game.
> --
> Lamar Owen
> WGCR Internet Radio
> 1 Peter 4:11

1246. Insulator Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-15 23:11:18 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <3A638396.D099EF4D@qnet.com>
Source record: 172138

Hello All:

Looking for a reference book or web site that explains what is required for a insulator in a antenna at HF to VHF Frequencies to properly design a insulator (materials, spacing, and break down or arc voltage distances) to withstand high RF voltages, weather, ect.

My searches show a few clubs that collect old telephone pole insulators.

Thank you.

Jay in the Mojave

1247. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-15 23:28:22 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <In9jOnoWsd5L4SwUnztUrNBRdH2h@4ax.com>
Source record: 172120

On Mon, 15 Jan 2001 00:18:23 -0000, Jim Glover <psykey@okcforum.org>
wrote:

>Richard Clark <rwclark@rwclark.seanet.com> wrote:
>
>: There should be two classes of Amateur radio license: Operator and
>: Technician. Even in this forum there are very few who would qualify
>: as Technician (or who would want to). Open the flood gates for more
>: Operators, tighten the requirements for Technicians. There should be
>: reserved frequencies for Technicians (for any reason), and there
>: should be reserved frequencies for Operators' various pursuits of the
>: different modes (status quo). A Technician should be an FCC
>: recognized individual who is authorized to operate, repair or change
>: any citizen radio equipment, and test for type acceptance (these
>: activities would be forbidden to Operators).
>
>This proposal is one I would vehemently oppose. Amateur radio is,
>and should be, a service in which the privilege of operation on the
>ham bands encourages and supports technical growth and development.
>Your dichotomy would encourage operators to think of themselves as
>being *nothing more than* appliance operators, and would reserve
>the technical privileges of amateur radio for those who had acquired
>the necessary skills elsewhere (or at least by some means other than
>through learning by doing). No...let's keep amateur radio a place
>where those who have demonstrated a basic familiarity with the
>underlying principles (hopefully, enough to help them be responsible)
>may explore and grow in whatever areas (operational or technical)
>their passions and inspirations may lead them from day to day.
>
>--Jim WB5UDE

Hi Jim,

Being "for or against" is one thing, observing it is the reality of
the current situation is another.

Yes two classes would promote the sense of an equipment operator.
That is the point - there are MANY equipment operators out there who
are total devoid of what Rick calls "RF-Curious" (insofar as the
physics goes) and yet they manage to enjoy themselves nonetheless. I
very much doubt that any of them would take umbrage at occupying a
lower caste position (and I am sure they would probably infer quite
the opposite). As the current caste system exhibits many levels, I
cannot see the objection to fewer layers and a truer sense of
demarcation that is technically based (rather than a aggregate of

meager answers to a few lame technical questions, a few ace-buster rules, and a CW degree).

And you better believe I would reserve the technical privileges to those who have the necessary skills (from anywhere), or who wish to obtain those skills from others than the equipment operators (many of whom have "opinions" on the subject - we find many of their postings here). That was the whole point to amateur radio in the first place, but life has moved on, and there are FAR MORE who would prefer to just get on the air and talk - I support them heartily and I don't want them dinking with the equipment. I also see a need to recognize Technical authority, and for it to be assigned to those who are technically competent. The current regime of testing and classification has been turned into an ego reward for time on the air. Any similarity between the honorific of Advanced or Extra and technical competence is just that, a similarity - and a hollow one at that.

If, as you aver, that service is key, then having aknowledged Technical experts rather than the current system of multiple choice injuneers would be a true service to the Operators indeed (and to the greater community as well). The perpetuation of a broken and impotent classification system just won't do.

Opposition is the American way, but status quo is the way of the dinosaurs. All may oppose my suggestion, but if no alternative is offered to BOTH my suggestions AND the status quo; then the objections are transparent and have no basis to build a future.

Simply voting no is the signature to a suicide note.

73's
Richard Clark, KB7QHC

1248. Force 12 ZR-3

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-15 23:37:22 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A63885C.8D64E2D8@home.com>
Source record: 172121

I was wondering if anyone has used this antenna. Looks like something that could work well in my deed restricted neighborhood.

1249. Re: ICOM AT-120 Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-15 23:53:21 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A638D71.53BC63E4@IEEE.org>
Source record: 172122

Virgil Stamps wrote:
>
> Anyone with experience using this tuner ?
> It was designed for marine use with a long wire from 2-24Mhz.
> Can it be used with a G5RV antenna?

I can't say for sure but if it works with a long wire then it
should work with a G5RV. But don't expect very good performance
out of the G5RV except on 80m, 40m, 20m, and 12m.
--
http://www.mindspring.com/~w6rca

1250. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:05:03 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A63902F.BEE5C4A3@IEEE.org>
Source record: 172124

Jim Glover wrote:
> It is impossible for you to think about certain subjects without
> the English words which correspond popping into your mind. The
> parts of the brain involved with higher reasoning (sophisticated
> conceptual analysis) are more efficiently linked with the also
> sophisticated language center of the brain than with the more
> primitive responses in the core of our brain, but they are still
> separate.

I cannot conceive of an abstraction without a word and/or definition
for the abstraction. How the heck can one conceptualize the abstract
notion of 'truth' without a definition for the abstraction? 'Truth'
is not like a rock. You cannot hold a truth in your hand to show
someone what you are talking about. Please rise above the solid
object stage of human thought shared by higher mammals and take a
look at the nebulous abstract stage that defines Homo Sapiens.
--
http://www.mindspring.com/~w6rca

1251. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:11:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6391B8.F07D2DAE@IEEE.org>
Source record: 172127

Jim Glover wrote:
> We
> do generate words to accompany our thoughts, and we can use
> those words to communicate with others so that we share each
> other's sophistication, but none of that proves that the words
> are the essence of the thoughts.

How the heck can you have a thought about an abstraction before
you have a definition of the abstraction? Truth doesn't satisfy
the identity of truth without a definition. For instance, try
thinking about the difference between 'truths' and 'facts' without
a definition of the two concepts. It is impossible. When a person
reaches a certain level of thought, it is impossible to think
without words, at least for me.
--
http://www.mindspring.com/~w6rca

1252. Re: Force 12 ZR-3

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:13:25 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <FmM86.35260$U4.1079994@newsread1.prod.itd.earthlink.net>
Source record: 172123

Try the eham link below for a start

73

Dennis - KF2XL

1253. Re: Apartment antenna follow on question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:19:24 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A63938C.5B4AEDBA@oio.net>
Source record: 172126

Keith,
There really isn't any 'cut-n-dried' way of doing
this. Usually, a ground or counterpoise isn't to 'picky'
as to it's shape, or how it's run. You just run it how
ever you have to. If it doesn't work as well as you
think it should, try a different way of running it. You
shouldn't need a wire as heavy as you have, but it will
certainly work. Good luck...
'Doc

1254. Re: Force 12 ZR-3

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:19:34 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <qsM86.35283$U4.1081453@newsread1.prod.itd.earthlink.net>
Source record: 172125

Wouldn't hurt to include the link I guess....

http://www.eham.net/reviews/detail/286

Sorry about that....

Dennis - KF2XL

1255. Re: Mast section for two meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:21:49 UTC
From: K7SAM <k7sam@arrl.net>
Message-ID: <ZtM86.11733$pq.266258@e3500-chi1.usenetserver.com>
Source record: 172128

Have to agree with Ralph. I have used the wooden closet rod inside a piece of Schedule 40 PVC for many years on various antennas with no problems. Had a 7 element 2M and 14 element 440 mounted on piece and it withstood many a Montana winter and winds in excess of 60 miles per hour. Not sure how long you can make it before it becomes a problem but have had many in the 5 to 6 foot range with no problems what so ever.

Sam
K7SAM

1256. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:28:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6395B9.6A4FF289@IEEE.org>
Source record: 172130

W4JLE wrote:
> Using your same logic, the Atlanta Braves should let me in all the games
> next season for free.

The Atlanta Braves are at least supposed to be a profit-making organization.
That is totally unrelated to equal access to public property granted by
the government and The Constitution.
--
http://www.mindspring.com/~w6rca

1257. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:32:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A639686.7405724E@IEEE.org>
Source record: 172131

W4JLE wrote:
> That's not fair, I exist therefore I deserve...(stolen from an other post,
> but I love the idea)

Or quoting Desiderata (sp?): "You are a child of the universe. You have
a right to be here."
--
http://www.mindspring.com/~w6rca

1258. All in one meter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:36:56 UTC
From: DBTech <dbraggs@hcis.net>
Message-ID: <3a639549_3@corp.newsfeeds.com>
Source record: 172129

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=542588776

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1259. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 00:39:31 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A639843.C5771496@IEEE.org>
Source record: 172132

n2ey@aol.com wrote:
> I condemn all jammers on the ham bands.

I won't be satisfied until I hear you say that you condemn all
jammers on the ham bands including code-tested jammers who use
their Morse code equipment for their jamming.
--
http://www.mindspring.com/~w6rca

1260. REQ: skeleton slot information

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 01:03:18 UTC
From: Glenn <g_newell@dingoblue.net.au>
Message-ID: <3a639dd8$0$15492$7f31c96c@news01.syd.optusnet.com.au>
Source record: 172133

Can someone point me towards info regarding manufacturing the skeleton slot.

Thanks Glenn....vk7ab

1261. Re: Even more fun than a fractal

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 01:43:45 UTC
From: n2ey@aol.com
Message-ID: <20010115204345.14870.00000721@nso-fr.aol.com>
Source record: 172134

In article <93tkj2$hd8$1@iac5.navix.net>, "W4JLE" <Fred@w4jle.com> writes:

>http://www.stargun.cc/
>
>Will give you a real chuckle on antenna claims, particular give a look at
>their testing facilities under data.

Thanks Fred - that was a good one! The price list was even more amusing.

73 de Jim, N2EY

1262. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 01:43:46 UTC
From: n2ey@aol.com
Message-ID: <20010115204346.14870.00000722@nso-fr.aol.com>
Source record: 172135

In article <3A63175A.B392924C@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Dean Craft wrote:
>> And then there is the evil that some do in attempting to tear down that
>> which others enjoy. Carrying on a continuos crusade against those who have
>> an appreciation for CW and the fact that it is the single common bond of
>> true hams, clearly places the crusader outside of the ham community.
>
>There is no crusade against the mode.

Yes, there is, Cecil. There are folks who want the Morse mode itself to die out, either by eliminating the available spectrum for it or by an outright ban. They are a small minority, but a vocal one. These anti-Morse people must not be confused with those who are simply anti-test, like yourself. They actually make the goal of the anti-test folks harder to reach.

> There is only a crusade against the outmoded requirement.

Would that it were so. But I have read enough anti-Morse (not just anti-test) diatribes over the past several years to know the difference.

73 de Jim, N2EY

1263. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:02:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <940a35$1jk$3@208.206.142.85>
Source record: 172136
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

```
Cecil wrote:
>
> Dick Carroll wrote:
> >
> > Cecil wrote:
> > >
> > > Dick Carroll wrote:
> > > > To attempt to work code without any training and practical
> > > > experience is akin to attempting to fly an airplane without any prior
> > > > flight training.
> > >
> > > Please explain how working CW is a life and death proposition akin
> > > to flying an airplane.
> >
> > There you go again, making phantom linkages. No such assertation was
> > made. The comparison stands.
>
> You are the one who made the phantom linkage. Working CW is NOT
> akin to flying an airplane.
>

It certainly is. Neither activity can be accomplished without
sufficient training and practice such that one can properly perform the
necessary functions to successfully complete the task. Some things
cannot be accomplished by "winging" it.
```

1264. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:03:49 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A63ACCA.E24079A4@bellatlantic.net>
Source record: 172137

Richard Harrison wrote:

> ehsjr wrote:
> "You are unfamiliar with the language of music and abstract mathematics
> which do not use words.
>
> True, but not in the way you intended.
>
> Sheet music includes plenty of Italian words about how the music is to
> be presented. The sheets are covered with symbols defining the actual
> tune. These musical symbols are parts of a code set and are used to
> instruct pitch and duration of the "note" to be sounded. Gaps are
> important too and included in the code set.

I mentioned "thinking in" music, and specifically mentioned jazz.
The "language of music" I had in mind was not intended to be
related to "sheet music language" to the exclusion of actually "thinking
in" music with no sheets, no visual image, just music inside the musicians
head, so to speak. A good jazz combo uses no words, no speech,
nothing but the sound. Jazz musicians create a theme and others
pick up on it and follow along. They are "thinking in music". No words,
no translation, just communication via the music.

As to loose definition - I gave the url and the definition I referred
to from Websters. You choose to dismiss Webster's, definition
as "loose". What do you offer to back up that contention? Perhaps
Webster's dictionary states that any definition other that definition
number 1 is a "loose definition" and can be dismissed as "loose".
If you can show that, that would effectively back up your point.

Both you and Cecil elect to dismiss anything that does not fit
into your preconceived ideas. The whole concept of abstract
thinking which Cecil brought up, while fascinating, has nothing
to do with the language of Morse. The concept can be
communicated via morse from one operator to another, without
the second operator thinking of it at all. He can be unaware that
the word was communicated, until he reads the printed copy
of what he typed. No English was involved, and no abstract
or conceptual thinking - until the operator read what he himself
typed in response to the sounds hitting his ear.

The point of that goes right to the original incorrect
assumption - that all Morse communications require a
translation - that Morse was only encoding English (or some
other spoken language). When fluent in Morse, and paying attention,
the sound directly evokes the concept in ones brain - there is no

translation. When not paying attention, the sound evokes, as an
end result, typewritten characters on paper. Again, no translation.
That is exactly how spoken English works. The sound evokes
the concept in ones brain, with no interim translation.
Neither you nor Cecil has been able to refute that. There is NO
difference, at Cecil's "30,000 foot level" - the sound strikes the
eardrum and evokes thought. And it doesn't matter whether
it is the word truth alone, or the word truth along with the concept.
One can read or listen to English, and repeat the words, without
pondering the abstract concept. For example, you can relate
what someone said to you as follows: He said "that's the truth".
Or you can ask someone the question "how would you define
the word truth - what does it mean to you?" In the first case,
there is no thought of the abstract concept of "truth" - you are
merely relating what was said. The second case is intended
to bring the abstract concept into focus.

Finally - a question: Are you engaged in this solely to
try to argue against a differing view, or are you considering
the other point of view, deciding it is incorrect, and then
arguing against it? For my part, I have tried to consider
what you and Cecil have said to try to understand your
point of view. I concluded a couple of posts back that it
might be that you and Cecil could not understand that Morse
is a language at high speed, due to not being fluent in it.
Thus the departure in other areas, including the scientists
view of thinking. Cecil's dismissal of all evidence, and
the quoting out of context, make me believe he is only
arguing. Sadly, I am beginning to believe that may be your
intention too.

>
>
> Under a loose definition of language, any code is a language.
>
> Under a strict definition of language, musical symbols don`t qualify,
> but the Italian does.
>
> A disqualification of the musical code set is in its paucity. The
> English language has over 600,000 words that are in use. The size of the
> set of symbols should be a consideration in whether it qualifies as a
> language.
>
> A real language can communicate a fairly complicated idea using a few
> symbols because the set of symbols is rich enough to be succinct.
>
> Mathematics is in the same league with music when it comes to its code
> set.
>
> Try to teach or learn music or mathematics without the use of a language
> such as Italian or English. It`s possible by the process of "monkey see.

> monkey do", but I wouldn`t want to.
>
> There used to be a cartoon in "Popular Mechanics" or some such magazine
> and it was called "The Wordless Workshop". This was better entertainment
> than instruction. This thread has been in the same vein as the cartoon.
>
> Best regards, Richard Harrison, KB5WZI

1265. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:04:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A63AC34.6FAC1CA4@IEEE.org>
Source record: 172139

N2EY wrote:
>
> <Cecil.A.Moore@IEEE.org> writes:
> >There is no crusade against the mode.
>
> Yes, there is, Cecil. There are folks who want the Morse mode itself to die
> out, either by eliminating the available spectrum for it or by an outright ban.
> They are a small minority, but a vocal one.

There always exist a handfull of nuts. Please estimate the number of people
who seriously want CW to be outlawed. Please name a few of the individuals.
--
http://www.mindspring.com/~w6rca

1266. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:08:45 UTC
From: richardharrison@webtv.net
Message-ID: <10962-3A63AD2D-85@storefull-117.iap.bryant.webtv.net>
Source record: 172140

Richard Clark wrote:
"There should be two classes of Amateur radio license: Operator and Technician."

I gather the Operator would not be allowed to tinker with his radio. Only a Technician could do that.

That would be a curious prohibition because I believe that today`s regulations don`t prohibit unlicensed types from tinkering with commercial radios.

Seems about 20 years ago the FCC proposed dropping the licensed commercial operator requirement for non-broadcast operations. Telecommunications managers in all industries almost unanimously predicted chaos and worse as a result. It was a non-event, right up there with Y-2K, and in subsequent times nothing of consequence has happened. Transmitter users don`t want the hassles that non-compliance would bring, so they make sure that their radios are operated lawfully without the blessings of an endorsement from a licensed commercial operator. The FCC was right and almost everybody else was wrong.

I got my 1st phone ticket 51 years ago. Several years ago, the FCC mailed me a general ticket to replace the original. They said it would be good forever, or at least as long as I lived. I haven`t figured what it`s now good for.

Best regards, Richard Harrison, KB5WZI

1267. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:15:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A63AEBA.C4DC46A4@IEEE.org>
Source record: 172141
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick Carroll wrote:
> It certainly is. Neither activity can be accomplished without
> sufficient training and practice such that one can properly perform the
> necessary functions to successfully complete the task. Some things
> cannot be accomplished by "winging" it.

Of course, learning CW can be accomplished by "winging" it since there is no punishment for doing so. The reason that one cannot "wing" learning to fly an airplane is because one winds up dead. The only thing that happens to a poor CW operator is that the other operator pulls out or the QSO cannot be finished. It's no big deal if a QSO cannot be completed. It happens all the time because of fading MUFs.

The only CW-only bands in the entire amateur radio spectrum don't require Morse code for the license. That proves that the FCC thinks CW can be learned and accomplished by "winging" it. Why should HF have any different requirement from the CW-only bands?????

If one applied your desired rules to speech, babies would never be allowed to try to speak until they were fluent. Is that really what you want?
--
http://www.mindspring.com/~w6rca

1268. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:26:23 UTC
From: richardharrison@webtv.net
Message-ID: <10962-3A63B14F-92@storefull-117.iap.bryant.webtv.net>
Source record: 172144

Jim, N2EY wrote:
"There are folks who want the Morse mode itself to die out, either by eliminating the available spectrum for it or by an outright ban."

Hard to persuade someone who is determined "they" (those folks) are out to get him. Remember, "they" banned spark transmitters. "they" may be returning to victimize us again!

Best regards, Richard Harrison, KB5WZI

1269. Re: ATU design recommendations please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:38:34 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A63B4E6.F04556BE@bellatlantic.net>
Source record: 172142

Doc,

This may be the url for the tuner you have in mind:
http://www.vcnet.com/measures/bbat.html

'Doc wrote:

> Jon M0BQQ wrote:
> >
> > Please can someone suggest a good balanced ATU which is relatively easy to
> > build (as I've not built one before). It will be used to match a doublet fed
> > with 600Ohm open wire. from 80 to 10M with a max pwr of 100W.
> > Maybe someone has a diagram of an MFJ tuner and can send me a copy.
> >
> > Thanks in advance.
> >
> > Jon M0BQQ
>
> Jon,
> Take a look at the tuner on Rick Measures page (don't remember
> the URL). He has a balanced tuner that's fairly simple.
> 'Doc

1270. Re: weatherproof gamma capacitor... ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:43:11 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A63B5FB.B6DC25A8@bellatlantic.net>
Source record: 172143

Heat shrink tubing works well.

Kari Back wrote:

> Hi all
>
> A plan is to construct coaxial capasitor using copper and aluminum
> tubing with 0.5 mm teflon sheet insulation between them
>
> Have anyone used equal capasitor and what are expected weather and
> aging effects ?
>
> 73s Kari

1271. Re: Any MFJ Vertical Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:46:14 UTC
From: Rick Ruhl <ricker@cssincorp.com>
Message-ID: <lDO86.3157$Q06.62754@e420r-atl2.usenetserver.com>
Source record: 172145

```
Richard,

I have the 1798 at my home and the 1796 at the office (CSS ). Both work
great , in fact, have worked alot of DX on them (FO0AAA, VK0IR, etc)

Rick - W4PC
http://www.cssincorp.com

"Richard Friedman" <rchrd@rchrd.com> wrote in message
news:3A610A9E.22822BC5@rchrd.com...
> Anyone care to comment on the vertical multiband antennas from MFJ?
> In particular, the 1798 (10 bands, 80m-2m, 20') or the 1796 (6 bands,
> 40m-2m, 12'). Am looking at one of them for my roof.
>
> Also, anyone care to review the MFJ Portable Ant Tuner (971) vs any of
their
> other tuners, like the 941E or 949E?
>
> BTW, my rig is an IC-706MKIIG
> --
> -=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-=-=-=
> | Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA
http://www.rchrd.com |
> | . Information Architect, Technical Communications, Sun
Microsystems |
> | . Instructor, Univ California Berkeley Extension
|
> -=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
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>
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1272. Cushcraft R5 mathching network inop need help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 02:55:18 UTC
From: rharrisdeja@my-deja.com
Message-ID: <940d6llme1@nnrp1.deja.com>
Source record: 172146

I just purchased an older R5 vert. and now find that the SWR is very high on all bands. I have tried a different coax and signal source and still the same result.

I assume that the matching network is bad. I have tried to get a diagram from Cushcraft...no help.

Does anyone have a diagram of the unit?

Does anyone know what the range of the matching unit is? Can I replace it with a 4:1 balun etc.

If I could find out the impedance of the trap vertical I might be able to build a new matching network.

Or....does anyone know of a replacement Cushcraft R5 matching network that I could buy for a reasonable price.

Tnx.

KY6N
ron@rainbow.to

Sent via Deja.com
http://www.deja.com/

1273. Re: Apartment antenna follow on question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 03:49:58 UTC
From: bozekk@my-deja.com
Message-ID: <940gd4ofp1@nnrp1.deja.com>
Source record: 172147

Could I use a ligher wire and could it be insulated. If I could should
I use more than one counterpoise?

Keith
N3HGN

Sent via Deja.com
http://www.deja.com/

1274. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:17:22 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <mXP86.178867$I5.4169447@news1.rdc1.sdca.home.com>
Source record: 172148

Many thanks for this advice, especially the wind loading explanation

73

Brian Kelly wrote in message <3A6151E0.C5BD44A7@dvol.com>...
>
>wombat wrote:
>
>> I am contemplating my first tower purchase. I would appreciate any
pointers.
>>
>> I am in Southern California, so wind is really quite mild and no ice,
>
>>
>You won't have to worry about ice but there isn't anywhere in this country
which
>hasn't experienced very high winds at some time or another, assume 100mph. It
only
>takes once. Your building code might have some requirements along these lines.
An
>informal chat with your County Engineer would not hurt.
>>
>
>> . . . a big interlaced yagi or quad (at least 4 elements on
>> 20M), in addition to using the tower for slopers as well (if possible).
>
>>
>Big antennas = big tower.
>>
>
>> Also I need to be able to work on and replace the antenna frequently, as
most
>> antenna work I do is "experimental" and my antennas are usually homebrewed.
>
>>
>A self-supporting tower is obviously preferable, crankup or fixed.
>>
>
>> I have about $5K maximum to spend on this outrageous extravagance which I
have
>> promised myself since I was a fourteen year old novice.
>
>>
>I think you'll find yourself a tad short of funds for a self supporting
carnk-up

>which will handle big HF beams at 85 feet, but $5k should be more than enough
for a
>guyed tower and perhaps a non-crankup.
>>
>Tune http://www.texastowers.com/, check out the Rohn, Trylon, Universal and US
>Tower pages for a first pass at catalog tower info and pricing.
>>
>Is 85' reasonable? Should I, can I? go higher in a self-supporting crank up?
>>
>With certain exeptions higher is better. Can you or should you are not a
technical
>or operational matters, it's a personal judgement/budget call only you can
make.
>>
>
>> How big is the "footprint" on the lot?
>
>>
>Big variable dependent on the specific tower and the tower manufacturer's
required
>minimum base size for that tower. I used one cubic yard of concrete for my 70
ft
>guyed Rohn 45 tiltover. A buddy of mine had 70 cubic yards anchoring his 100
ft.
>Lingo pole. Whatever else you do don't decide you can get away with a base
which is
>smaller than the manufacturer recommends.
>>
>
>> Should I locate it away from the house
>> (and nearby large trees) or keep it close to the shack to shorten cable
runs?
>
>>
>Locate the tower where it won't hit anybody's home if it flops over including
>yours. Run a single length of virtually lossless hardline to and up the tower
and
>use a remotely switched Top Ten relay box at the top of the tower to select
>specific antnenas.
>>
>
>> I am primarily interested in the short path to VK/ZL on HF. Hence the
westward
>> ocean view is important to me.
>>
>>
>You don't need to actually see the Pacific Ocean from the top of the tower to
>reliably work VKs and ZLs. A reasonably clear shot toward the ocean at any
angle,
>say around five degrees up will work just as well as being able to see the

horizon
>on the ocean from the top of your tower.
>>
>
>> I can't seem to understand how to calculate wind loading
>
>>
>Best illustrated by an example: Assume you have a ten foot long length of 2.00
inch
>diameter aluminum tubing as an element or boom. Ten feet is 120 inches.
Multiply
>2.00 x 120 and you get 240 square inches. Divide that by 144 square inches per
>square foot and you get 1.67 square feet of projected wind loading surface for
that
>particular element. To determine the worst-case total wind load on the
complete
>installation you add up all the projected square feet of all the elements,
booms
>and the mast. In the case of continuously tapered quad spreaders determine the
>average diameter and multiply that value times the length of the spreader.
>>
>
>>
>> wombat
>
>>
>w3rv
>

1275. Looking for specs/drwgs/formula for .....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:19:02 UTC
From: kk7ho@aol.communicate
Message-ID: <20010115231902.08314.00000680@ng-cn1.aol.com>
Source record: 172149

Looking for specs/drwgs/formula for 80 meter double bazooka. IAC is sure proud
of theirs. Thought I'd go ahead and build one.
Thanks Tim...KK7HO KK7HO@aol.com

1276. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:19:34 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <qZP86.178878$I5.4169383@news1.rdc1.sdca.home.com>
Source record: 172150

Bill Turner, W7TI wrote in message ...
>Do you really want/need a crankup? I just installed an 80 foot
>Trylon self-supporting tower and am very pleased with it. They
>make them taller if you prefer. Email me if you want more info.
>

I want to be able to pull the tower down in case of storms and also to work on the antennas fairly frequently. If I don't use a crank up (or motorised winch), how else is this workable?

thanks

1277. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:21:38 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <m%P86.178888$I5.4169388@news1.rdc1.sdca.home.com>
Source record: 172151

Thanks for the advice. I am considering this quite seriously and I assure you
that it will not be a weekend project. I just have no idea where to start. I
will be contacting the local authority and also have requested some catalogs.
One point though, if a second hand tower was inspected by a competent engineer,
do you not think this would be an opportunity to save some big dollars?

thanks es 73

Joe S. wrote in message <93sv4f$r5q$1@nnrp1.deja.com>...
>In article <kz886.171329$I5.4068930@news1.rdc1.sdca.home.com>,
> "wombat" <chingada_madre@hotmail.com> wrote:
>> I am contemplating my first tower purchase. I would appreciate any
>pointers.
>>
>>
>
>
>1. Do not scrimp on the tower. That is, buy the best. In amateur
>radio, there are a few things that will kill you or that will cause
>great and expensive damage. Do not take chances with any of these:
>-- getting into the high voltage on your linear
>-- falling from a tree/tower/rooftop
>-- tower falling on the house
>-- tower or antenna contacting HV electrical lines while you are
>holding it
>
>2. Do not buy a used tower, not even from Jesus Christ.
>
>3. Get 'aholt of the addresses of the tower manufacturers, write them,
>tell them what you want. Ask for a catalog and any free design
>literature they have. You may need to spend $10 - $20 each for
>catalogs. Read whatever they send you -- it's good stuff.
>
>4. Drive around and find someone with a tower and antenna that looks
>like what you want and talk to him/her.
>
>5. This is not a week-end project. Plan to take most of the rest of
>this year.
>
>6. Investigate, plan, investigate, plan, then investigate and plan
>some more. No one plans to fail but lots of folks fail to plan -- same
>thing.
>
>7. Read number 2 again.
>

>Let us know how it works out.
>
>--
>Regards,
>Joe Schlatter
>
>
>Sent via Deja.com
>http://www.deja.com/

1278. Re: Feeding dipoles (cont.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:22:02 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <K%P86.270863$U46.8660116@news1.sttls1.wa.home.com>
Source record: 172152

You might want to take a peek at http://www.iascom.com/products2.html Just happened to find it surfing.

If it worked it would be your solution but.....never heard of this. Is it a wire wound hula hoop?

Glenn - KB7PKC

"VE3TMT" <mdonoghue1@sympatico.ca> wrote in message news:QOk86.98697$f36.4410987@news20.bellglobal.com...
> Perhaps I had better explain the scenario here first. I live on the ground
> floor of a large v-shaped apartment complex. My backyard is about 28' in
> length. Antennas on the roof are out of the question. I wanted to rig up
> something in the yard for the low bands (75 & 40) but as you can see I
> really don't think I have the space. I am using a 20' vertical longwire fed
> with 52 ohm cable at the present time. The tuner in my 450S will match it
> on everyband except 20m. Not an effecient antenna but at least the rig is
> protected. My main problems are:
>
> 1. Lack of space to erect a full size dipole for any band other than 10m.
>
> 2. Nothing to support the center of the antenna (for dipole or inverted v).
>
> 3. Certainly have the possibility of RFI to contend with.
>
> If I chose to use a vertical, homemade or other, it is not something I can
> just stick up in the center of the yard. So if I ground mount it close to
> the wall, is the brick not going to wreak havoc on the antenna's
> performance? Perhaps it would enhance my signal to the west!!
>
> Just looking for suggestions, and free advice!!
>
> 73, Max
>
>

1279. Re: Antenna Pattern Plotting Software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:31:12 UTC
From: DOUGLAS STINSON <douglas-stinson@home.com>
Message-ID: <3A63CF2E.C9558BCF@home.com>
Source record: 172153

Thanks for the suggestion anyway. Several other responders have come up
with good suggestions.

Brian Kelly wrote:
>
> DOUGLAS STINSON wrote:
>
> > Just to be clear: I'm looking for a program to plot experimental data. I
> > am not looking for an antenna modeling program. Can these programs do
> > that?
>
> >
> I mis-read your question. Apologies.
> >
> w3rv

1280. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:50:00 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A63D2F8.6E2061A8@bwcc.com>
Source record: 172155

Brian Kelly wrote:
> A buddy of mine had 70 cubic yards anchoring his 100 ft. Lingo pole.

That's enough concrete to make a large house foundation.
In a monolith, that would be 21' X 15' X 6'.
Perhaps he meant 7 cubic yards.

> To determine the worst-case total wind load on the complete
> installation you add up all the projected square feet of
> all the elements, booms and the mast.

That is fine if southern California is truly always and forever free of snow and ice.

To determine a worst case where ice is possible, it is better to take the largest vertical cross-section in square feet.
When a tower is coated with ice, snow, leaves, etc., it will catch a lot more wind.

1281. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 04:55:41 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <940k8dcpg5@bashir.peak.org>
Source record: 172156

Richard Harrison <richardharrison@webtv.net> wrote:

: Cecil said a lot in very few words. CW used to be a life-line for safety
: of life at sea. That`s not now true. It`s said all hams had to learn
: code so they could understand an order to clear out for emergency
: traffic. That`s passe`.

: The reason for mandatory code is gone. The persistent mandate does no
: good but has the evil of keeping out prospective hams for no good
: reason.

And, by the same reasoning:

Most new hams these days are appliance operators - with little or no grasp of electronics. So, let's get rid of the theory tests as well, as the reason for such testing is gone. The persistent mandate for theory testing does no good but has the evil of keeping out prospective hams for no good reason.

--
Bill Nelson (billn@peak.org)

1282. Re: Feeding dipoles (cont.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 05:05:11 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <940kq7cpg6@bashir.peak.org>
Source record: 172157

Dick Carroll <dixie@townsqr.com> wrote:
: Something else you might want to try is a "hamstick dipole", using the
: dual antenna fitting which you can hang any way you can and feed direct
: with coax.It won't do much on 75/80 meters but will do OK on 40 and up.
: I picked up another set of Pro-Am Valor brand of "hamsticks" yesterday
: at the hamfest with that idea in mind. The ham vendor who sold them to
: me said that some guys were using the 75 meter stick as the common
: "cold" side of the dipole on all bands 40mtrs and up, and just changing
: the other side to change bands. It's worth a try. You only need one set
: of hamsticks to do it that way.

Uh, on a dipole, you don't have a "cold" side. It is a balanced antenna,
which means the currents are identical in both halves.

If you change only one side, then you have an off-center fed antenna,
which will probably require an antenna tuner.

--
Bill Nelson (billn@peak.org)

1283. Theoretical Basis of dipole calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 05:29:16 UTC
From: CDT <xctx@onr.com>
Message-ID: <M_Q86.22$cp2.763979816@news.onr.com>
Source record: 172154

Does anyone have any references to Schelkunoff's
algorithm which describes the theoretical basis of dipole calibration?

I want to make a "real" field strength meter calibrated
in volts/meter.

thanks in advance,

W5CDT

--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

1284. Re: Radials over salt water?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 05:48:52 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A63E0C4.80@wt.net>
Source record: 172158

Yuri Blanarovich wrote:
Maybe there is insignificant difference, but until
> I see the figures, I will not buy speculations. And that is what inquiring
> minds want to know. Anyone out there have the asnwers and figures?
>
> Yuri, K3BU, VE3BMV, VE1BY
> Tesla RC N2EE, NT1E

Not me. I've only worked mobile at the beach so far. So have done no tests at all. But if it were me and I wanted a way to estimate if adding radials helped or not once I got there, I would would use the bandwidth as an indicator. I can think of no simpler way to test other than just doing F/S measurements. If the bandwidth shrinks any, they are helping. It it doesn't, probably not. I'm sure this won't help for pre-planning, but might be useful if you go ahead and try it. Maybe drag a F/S meter along. That would give you a second indicator. MK
--
http://web.wt.net/~nm5k

1285. Re: Cushcraft R5 mathching network inop need help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 06:00:24 UTC
From: tom <tsokol@adelphia.net>
Message-ID: <YrR86.2177$mo2.158280@news1.news.adelphia.net>
Source record: 172159

Try opening the matchbox and checking things out. Look for any obvious
stuff. Clean out any spiders, re-solder contacts, and tighten all
connections. Look for cracked toroids.

Unless struck by lightning, that's about all that can go wrong. The above
steps solve this problem about 80% of the time.

Tom
N2LDE

<rharrisdeja@my-deja.com> wrote in message
news:940d6llme1@nnrp1.deja.com...
> I just purchased an older R5 vert. and now find that the SWR is very
> high on all bands. I have tried a different coax and signal source and
> still the same result.
>
> I assume that the matching network is bad. I have tried to get a
> diagram from Cushcraft...no help.
>
> Does anyone have a diagram of the unit?
>
> Does anyone know what the range of the matching unit is? Can I replace
> it with a 4:1 balun etc.
>
> If I could find out the impedance of the trap vertical I might be able
> to build a new matching network.
>
> Or....does anyone know of a replacement Cushcraft R5 matching network
> that I could buy for a reasonable price.
>
> Tnx.
>
> KY6N
> ron@rainbow.to
>
>
> Sent via Deja.com
> http://www.deja.com/

1286. Re: Looking for specs/drwgs/formula for .....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 06:06:51 UTC
From: k6mhe@arrl.net
Message-ID: <3a63e4e0.17821230@news.mcn.org>
Source record: 172162

Before you do check this out.

http://www.iag.net/~w2du/Reflections%202,%20Chapter%2018,%20Double%20Bazooka.pdf

Danny, K6MHE

On 16 Jan 2001 04:19:02 GMT, kk7ho@aol.communicate (KK7HO) wrote:

>Looking for specs/drwgs/formula for 80 meter double bazooka. IAC is sure proud
>of theirs. Thought I'd go ahead and build one.
>Thanks Tim...KK7HO KK7HO@aol.com

1287. Re: Theoretical Basis of dipole calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 06:20:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A63E830.C03C3999@eznec.com>
Source record: 172160

The formulas are given in "Theory of Antennas of Arbitrary Size and Shape", Proc. of the I.R.E., September 1941, pp. 493-520. I think he also describes it in his book _Advanced Antenna Theory_ (Wiley, 1952). I believe I recall an analysis or comparison with measured values which shows decreasing accuracy as the antenna gets several half wavelengths long, but can't lay a hand on the reference just now. Schelkunoff's method was really super before we had so much computing power, but antenna input impedance calculations are almost always done with the method of moments or other numerical method these days. The method of moments will give very good accuracy for nearly any combination of antenna length, diameter, and shape, while Schelkunoff's method is limited in these respects. It was great work, though.

Roy Lewallen, W7EL

CDT wrote:
>
> Does anyone have any references to Schelkunoff's
> algorithm which describes the theoretical basis of dipole calibration?
>
> I want to make a "real" field strength meter calibrated
> in volts/meter.
>
> thanks in advance,
>
> W5CDT
>
> --
> >>>Remove the X's from my email address before using<<<
>
> XctX@onr.com

1288. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 06:47:51 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A63EE97.30B3@wt.net>
Source record: 172161

ehsjr@bellatlantic.net wrote:
>
> Richard Harrison wrote:
>
> > ehsjr wrote:
> > "You are unfamiliar with the language of music and abstract mathematics
> > which do not use words.
> >
> > True, but not in the way you intended.
> >
> > Sheet music includes plenty of Italian words about how the music is to
> > be presented. The sheets are covered with symbols defining the actual
> > tune. These musical symbols are parts of a code set and are used to
> > instruct pitch and duration of the "note" to be sounded. Gaps are
> > important too and included in the code set.
>
> I mentioned "thinking in" music, and specifically mentioned jazz.
> The "language of music" I had in mind was not intended to be
> related to "sheet music language" to the exclusion of actually "thinking
> in" music with no sheets, no visual image, just music inside the musicians
> head, so to speak. A good jazz combo uses no words, no speech,
> nothing but the sound. Jazz musicians create a theme and others
> pick up on it and follow along. They are "thinking in music". No words,
> no translation, just communication via the music.

I find a lot of the people that do code well are musicians, and visa versa. There may be some aspect to music that is similar to code. Code is kinda rhythmic when it's sent cleanly and properly spaced. I can play music in my head just like a juke box. And never a wrong note ever. I can play symphonies, rock, jazz, blues, even Hank Williams, and what I "hear/play" in my head sounds the same as the record. I can play Al Dimeola, Eric Johnson, Chet Atkins, etc you name it "hard stuff to play", note for note perfect in my brain. I just wish I could always get my fingers to cooperate....They tend to balk at times. I've played music since 4th grade in school, and have played both by sheet music "drums" and by ear "geetar", but even if I didn't play anything, I still think I would have a good jukebox in my head. It's an ultra powerful instrument, "yep, I consider it an instrument to me" and far superior to anything I can play manually. But no one else can hear it...But, it's real handy as it tells me if a note is sour when I'm playing something new. So, once I work something out, there is never a sour note. I can hear a clunker a mile away no matter what scale or key. And the weird part about it is, I can think of all these scales in my head, arpeggios' whatever, and hear them in my head and eventually play them , but if you were to ask me

what scale I was playing, you'd just draw a blank. duhhhhh...I have no idea..And could care less. As far as thinking in music as far as playing geetar, you do get to the point where you can think of a note, and know what fret to hit automatically to play that note. But I think it's more from sheer practice and repetition than anything. Much like code. Also once you know all the scales etc and start playing lots of runs, it gets to the point where you can mix and match scales and runs and have them work out right pretty much on the fly. But comes after playing said runs over and over about 49322 times. There is no real shortcut to this. Once you get to this point, you can pretty much go on autopilot. Most of the good jazz and blues players play this way. They can go off on a tangent and end up on their feet 95% of the time. Stevie Ray Vaughn was real good at that playing blues. He'd play a solo slightly different each time usually. Mainly because he was on autopilot just winging it. Most the jazz players do the same. About the same way as a fast coder goes on autopilot when sending. MK

--
http://web.wt.net/~nm5k

1289. shunt matching for 5/8

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 11:40:59 UTC
From: warren hobdell <warreng@powerup.com.au>
Message-ID: <3a64348b@grissom>
Source record: 172163

I would like to build a 5/8 vertical for 6m and place
it above my 3 ele 10m beam . could any tell
my if there is a standard formula for calculating
a shunt matching coil for a 5/8 vert or is it
trial and error ?

thanks .
warren vk4yiz
warreng@powerup.com.au

1290. WTB: Complete 6 meter repeater

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 13:04:38 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <BGX86.2978$ad2.143035@news.direcpc.com>
Source record: 172164
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

I am looking to purchase complete 6 meter repeater system including the cans. Please email description and price.

Thanks and 73

Paul

1291. F/S YAGIS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 13:06:10 UTC
From: n2ion@aol.com
Message-ID: <20010116080610.29620.00002906@ng-cs1.aol.com>
Source record: 172165

FOR SALE
4-55 ELEMENT 1.2 GHz TONNA YAGIS
$75 EACH
2-45 ELEMENT 1.2 GHz KLM YAGIS
$75 EACH

ALL PRICES DO NOT INCLUDE SHIPPING

1292. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 13:44:15 UTC
From: Mike Mayer <mwmayer@tds.net>
Message-ID: <87r923fwa5.fsf@auberon.circuitfarm.com>
Source record: 172166

>>>>> "Bill" == Bill Nelson <billn@spock.peak.org> writes:

> Most new hams these days are appliance operators - with little or
> no grasp of electronics. So, let's get rid of the theory tests as
> well, as the reason for such testing is gone. The persistent
> mandate for theory testing does no good but has the evil of
> keeping out prospective hams for no good reason.

> -- Bill Nelson (billn@peak.org)

No, lets's beef it up -- require a four year degree in Electrical
Engineering. I would be all for it. It raises the bar, since getting a
four year engineering degree requires much more time and effort than
learning Morse code. Maybe there should be a four year transition period
where current license holders can continue to operate while they go back
to college. Or maybe not -- let's not baby them.

--
==========
Mike Mayer

1293. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 13:53:28 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A645258.879C6790@IEEE.org>
Source record: 172168

Bill Nelson wrote:
> Most new hams these days are appliance operators - with little or no grasp
> of electronics. So, let's get rid of the theory tests as well, as the
> reason for such testing is gone.

Electronics is not outdated.
--
http://www.mindspring.com/~w6rca

1294. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 13:54:12 UTC
From: "D. S. Platt" <jeepp@erols.com>
Message-ID: <3A645284.B34C8E3C@erols.com>
Source record: 172167
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"D. S. Platt" wrote:

> jamesrhampton@my-deja.com wrote:
>
> > Neat. Someone actually thought of not charging. Of course, my first
> > licenses cost nothing - it was just the 60 mile (one way) drive to
> > Buffalo that cost a bit of time and money (gas, thruway tolls, parking,
> > etc.). The cost is actually minimal anywhere. I think I paid $5.90
> > when I decided to get back into amateur radio and tested out in 1993
> > (after letting my tickets expire over 10 years earlier). Whats the
> > cost today?
> >
> > 73 from Rochester, NY
> > Jim (AA2QA)
> >
> > In article <93airr$1js$1@nnrp1.deja.com>,
> > BamBam <kl0an@my-deja.com> wrote:
> > > Now why would I go and PAY for a license when I got my license, AND
> > > upgrades for free.. Oh, sorry, I did have to earn them with a little
> > > studying and such.. My club offers testing free.. No money exchanges
> > > hands.. And I can now talk world-wide on the Extra bands..
> > >
> > > Just quit tryin to cheat the system, sit down with the manuals and get
> > > studying.. And if you want to take a test for free.. First Saturday of
> > > the month, Geo-Physics Institute, UAF, Fairbanks, Alaska.
> > >
> > > 73
> > > Paul Jordan
> > > kl0an
> > >
> > > In article <no.skill@arrl.crappy.org>,
> > > Buyone@arrl.crap (peddler) wrote:
> > > > Thanks to the organization called the ARRL, you don't have to earn a
> > > license
> > > > anymore. You can go to your local VE group and buy one for $10.
> > > > Get one today and join in the Fun!
> > > >
> > > > AOHF ~ assholes on H.F.
> > > >
> > > >
> > > >
> > > --
> > > Don't Sweat the Petty Things.

> > > Don't Pet the Sweaty Things.
> > >
> > > Sent via Deja.com
> > > http://www.deja.com/
> > >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
> The Laurel (MD) VEC (MD) has had a fee!

Sorry about that... left a word out... should have read: Laurel (MD) VEC has NEVER had a fee. Nice folks... fast and competent, too!!

1295. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 14:19:18 UTC
From: Ilan Rabinovitch <ilan@fonz.net>
Message-ID: <t6aeb6gt672mc3@corp.supernews.com>
Source record: 172030
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

I paid $6 when I took my Technician test in Decmeber.

Ilan
KG6ERM

In article <93bh3v$p32$1@nnrp1.deja.com>, jamesrhampton@my-deja.com wrote:

> The cost is actually minimal anywhere. I think I paid $5.90
> when I decided to get back into amateur radio and tested out in 1993
> (after letting my tickets expire over 10 years earlier). Whats the
> cost today?
>
> 73 from Rochester, NY
> Jim (AA2QA)

1296. Re: End fed Zepp question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 14:20:10 UTC
From: w4hij@my-deja.com
Message-ID: <941lai$l06$1@nnrp1.deja.com>
Source record: 172069

In article <3a635085.609648@news.mcn.org>,
k6mhe@arrl.net (Dan Richardson) wrote:
> On Mon, 15 Jan 2001 17:47:55 GMT, w4hij@my-deja.com wrote:
>
> >I am considering putting up a multiband antenna for use on 80 meters
> >and up. I know most of the design criteria ie. 135 feet in length,
fed
> >with twin lead (it's what I have on hand). I will use my AEA AT-300
> >tuner to match it. The research I have done leads me to believe that
a
> >center fed configuration would be best but this may not be possible
in
> >my situation, so I am considering the "End fed Zepp". My question is
> >where does the unused conductor of the twin lead go? Most diagrams I
> >see show it being soldered, but to what? It appears to be soldered
to a
> >very short length of wire on the other side of the end insulator. Is
> >this correct? I also would assume that the lead attached to the
antenna
> >itself would go to my tuner post labeled "end fed wire", correct? Tnx
> >for any help I can get with these questions.
> >73,
> >Michael
> >
> >
> >Sent via Deja.com
> >http://www.deja.com/
>
> Michael,
>
> To answer your question It connects to nothing.
>
> A Zep antenna is a λ-wave element connected to one side of a λ-wave
> section parallel transmission line. This arrangement can give matching
> problems when used on higher frequencies.
>
> If the center feed dipole approach is not convent you might want to
> look at an off-center-fed dipole - still using the ladder line. For
> multi-band operations it will tune easier than an end fed Zep.
>
> Danny, K6MHE
>
> Thanks for the replies guys. After doing some more "site work", I

think I am going to be able to go with a center fed version after all.
I was always a bit leary of the end fed design. BTW when my Dad passed on he left me with a 1949 ARRL antenna book. Interesting reading there, some designs we don't even see published anymore. An interesting tip too, for those of us using twin lead....coat it with silicon grease to keep rain from geetting on it and changing the impedance. Don't know if it works though.
73,
Michael

Sent via Deja.com
http://www.deja.com/

1297. Re: REQ: skeleton slot information

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 14:24:26 UTC
From: richardharrison@webtv.net
Message-ID: <23850-3A64599A-18@storefull-115.iap.bryant.webtv.net>
Source record: 172070

Glenn, VK7AB wrote:
"Can someone point me towards info regarding manufacturing the skeleton slot?'

I have not seen any skeletal slot antennas. I think you need some meat on the bones to make them work.

A skeleton slot would be two quarterwave stubs short-circuited at their far ends, placed in the same plane, with their open-circuited ends facing each other and connected together. This then amounts to a narrow halfwave loop (one wavelength of wire).

The junction of the quarterwave stubs is the feedpoint.

The voltage vector is across the feedpoint as is the polarization of the radiation. A vertical slot has horizontal radiation.

Problem is, the quarterwave stubs are nearly open circuits opposite their shorted ends. The wires must be fattened (or widened) to bring down the impedance, accept power, and radiate the power.

Fattening the conductors permits phase and magnitude differences so that the fields don`t add to zero in all directions. A slot antenna has radiation characteristics similar to a dipole.

A slot antenna is made by carving a 1/2-wave long slot in a sheet or tube. It doesn`t need to be wide, an inch or two will do. Attachment of the feedlne is across the slot at its middle, so that it is 1/4-wavelength to either end of the slot. The drivepoint impedance, if the metal is extensive, is usually a pretty good match to twinlead.

Best regards, Richard Harrson, KB5WZI

1298. Re: End fed Zepp question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 14:36:05 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A645C55.A53734DF@IEEE.org>
Source record: 172071

w4hij@my-deja.com wrote:
>
> I am considering putting up a multiband antenna for use on 80 meters
> and up. I know most of the design criteria ie. 135 feet in length, fed
> with twin lead (it's what I have on hand). I will use my AEA AT-300
> tuner to match it. The research I have done leads me to believe that a
> center fed configuration would be best but this may not be possible in
> my situation, so I am considering the "End fed Zepp". My question is
> where does the unused conductor of the twin lead go? Most diagrams I
> see show it being soldered, but to what? It appears to be soldered to a
> very short length of wire on the other side of the end insulator.

When an end-fed antenna is fed with one of the transmission line wires
and the other is essentially left open-circuited, one can expect
considerable feedline radiation, unbalanced currents, and possible
RF in the shack.
--
http://www.mindspring.com/~w6rca

1299. Re: Delta Electronics RAS-10A antenna-comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 14:59:39 UTC
From: "Harvey W. Harbicht" <mrdoolie@execpc.com>
Message-ID: <3a6462a2$0$7170$272ea4a1@news.execpc.com>
Source record: 172072
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave

In article <3a603072.808907@news.virgin.net>, tf.electronics@virgin.net says...
> there are no loading coils or linear type of loading either. Instead,
> there is a prominent "balun" in the center of the antenna, connected
> to the feedline and the two legs of the antenna.

What will you bet there's a big fat 50 Ohm resistor inside there?
>
> The question is how does it work?

Very very poorly. You waste about 95% of your power into the resistor.

> How CAN it work?

Simple. It's a very leaky dummy-load. The radio sees 50 Ohms on 99% of the freqs and some power leaks out the wire(s).
I made one long ago and the only time I ever used it was for working QRP since my rig had no power output control.When using the leaky-dummy people use to ask me if my antenna had blown down since I was an S2 or 3 on that stupid thing when usually I was well over 9.

1300. Re: REQ: skeleton slot information

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 15:25:48 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <2Xy7MTB8fGZ6EAus@ifwtech.plus.net>
Source record: 172077

Richard Harrison wrote:
>Glenn, VK7AB wrote:
>"Can someone point me towards info regarding manufacturing the skeleton
>slot?'
>
>I have not seen any skeletal slot antennas. I think you need some meat
>on the bones to make them work.
>
>A skeleton slot would be two quarterwave stubs short-circuited at their
>far ends, placed in the same plane, with their open-circuited ends
>facing each other and connected together. This then amounts to a narrow
>halfwave loop (one wavelength of wire).
>

That's pretty much it. The "skeleton slot" was invented by G2HCG sometime in the 1950s and used by his TV antenna company as a way of feeding and stacking yagis at about 5/8 wavelengths.

It's a narrow rectangular loop as Richard surmises, and the shorter top and bottom sides act as the driven elements of the two stacked yagis. The feedpoint is from center to center of the vertical sections, and is fairly high impedance. It can be fed either in the middle of a straight crossbar with a step-down balun, or with a delta match to coax.

That style of VHF antenna has fallen out of favor, but the skeleton slot has made a comeback as a multi-band 14-50MHz antenna. It behaves as three stacked dipoles (top of loop, bottom of loop, and the crossbar used to feed it) fed in phase. The system is fed by tuned open-wire to the center of the crossbar.

By not making the loop too wide, you get a simple horizontally polarized bi-directional pattern across a very broad frequency range, without the pattern breaking up at the highest frequency. The disadvantage is the height of mast required (although the mast can be metal).

There was an article by G3JYP in RadCom a few years ago, and the most recent write-up is in G3LDO's 'Backyard Antennas' book (RSGB, may be available from WIA and ARRL).

G3LDO's version is 10ft wide, 30ft high, on a 45ft rotating mast. It has three cross-booms made of tubing at 15ft intervals, and the vertical conductors are wires strung between the tubing ends. He describes it as a "14-28MHz" antenna but it will undoubtedly work on 50MHz (G3JYP used his successfully on 70MHz with the same open-wire feed).

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1301. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 15:55:36 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A646EF8.276AF108@dvol.com>
Source record: 172073

Denver Braughler wrote:

> That's enough concrete to make a large house foundation.
> In a monolith, that would be 21' X 15' X 6'.
> Perhaps he meant 7 cubic yards.

>
Nope. 70 cubic yards, 120+ tons of the stuff. The "pad" was more like 12' x 12' x 13' deep.
Joe Hertzberg, k3jh, VP of RCA
from Bryn Mawr PA, now an SK. A 100 ft or so tall self-supporting rotating steel pole which had Long John yagis on all
bands 40-10, in some cases stacked pairs, plus a full-size 80m quad plus some VHF antennas. In a pricey residential
neighborhood with 60 x 100 foot lots. Give or take. Joe never did anything halfway.
>

> > To determine the worst-case total wind load on the complete
> > installation you add up all the projected square feet of
> > all the elements, booms and the mast.
>
> That is fine if southern California is truly always and forever free of snow and ice.

>
San Diego sure is.
>

> To determine a worst case where ice is possible, it is better to take the largest vertical cross-section in square feet.
> When a tower is coated with ice, snow, leaves, etc., it will catch a lot more wind.

>
Joe assumed 2 inches of radial ice on everything at 150mph times a safety factor. Again give or take. The whole "square
feet" calculation is bogus the way most hams use it because what really matters is a calculation of the bending moment on
the tower, not just the antenna "square feet".
>
w3rv

1302. Re: feedline: coax or twin-lead?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 16:02:00 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A647078.59AEF81B@zylay.com>
Source record: 172074

sjwoodr@my-deja.com wrote:
>
> In article <3A5F5F2A.139880E@oio.net>,
> 'Doc <w5lz@oio.net> wrote:
> > sjwoodr,
> > Coax is 'ho-hum', common.
> > 'Ladder Line' is 'radio sexy'.
> > (whatta concept!)
> > 'Doc
> > PS - Really just depends on which set of 'rules' you
> > want or can go by. By 'rules' I mean like not
> > too close to metal, etc.
>
> Thanks 'doc.... i'm using 50-ft of coax now. I would say the
> run is pretty much metal-free, and i would really only need
> about 30-35 feet of some other type of feed line. If i were
> to go to something like ladder line or other twin-lead feed
> what kind of loss would i be preventing? (50-ft 50ohm coax,
> versus 35-ft twinlead). Considering QRP, would there be
> justification to make the switch? How about with more power,
> say around 100 W?

I'd say that you'd be preventing the loss of about $100.00. I haven't priced coax in a long time, but I'm sure that the good stuff is much more than the $19.95/100-ft of twin-lead. I don't think the physical losses themselves are that much different at HF, but on a QRp station, I'd say make every 1/10th of a watt count. Even on 100 watts, your antenna is still the best place to put extra effort in.

1303. Re: shunt matching for 5/8

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 16:24:39 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6475C7.7A25@wt.net>
Source record: 172075

warren hobdell wrote:
>
> I would like to build a 5/8 vertical for 6m and place
> it above my 3 ele 10m beam . could any tell
> my if there is a standard formula for calculating
> a shunt matching coil for a 5/8 vert or is it
> trial and error ?
>
> thanks .
> warren vk4yiz
> warreng@powerup.com.au

With the coil having an insulated base "non grounded" the formula is
165/freq in mhz x 6.26 For a grounded coil use 305/freq in mhz x 6.26
Just guessing, I'd start with about 8-10 turns on a 1 inch form. Trim
for best match. You are tuning the antenna for a 3/4 wl resonance. MK
--
http://web.wt.net/~nm5k

1304. Classic 33

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 17:39:50 UTC
From: John Anderson <ac5tx@foxinternet.net>
Message-ID: <3a64889f_1@news.foxinternet.com>
Source record: 172076

I have a Mosley Classic 33 Antenna that I would like to trade or sell to someone in the Dallas/Ft Worth area. It is down and in good shape. Let me know what you wish. Thanks
John

--

1305. Re: Insulator Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 19:29:02 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A64A0FE.3844F51C@oio.net>
Source record: 172078

Jay,
Here's one way you might do it. To find the voltage on a feedline
use;
V = SQR(SWR x watts x Z of coax)
If you use 1.0:1 SWR your looking at the 'best case' voltage. If
you do the same for, say, 10:1 SWR, your looking at the 'worst case'
voltage. Crank in a 'fudge factor' of 2 x V, for instance, and you
should be safe.
A safe arching distance? Who knows, how about 1/4" per 1000 volts?
Probably something like that?
'Doc

1306. Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 19:34:57 UTC
From: lemwnash@aol.com
Message-ID: <20010116143457.21563.00001819@ng-mg1.aol.com>
Source record: 172079

whatever happened to Raibeam??

1307. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 19:57:17 UTC
From: pywacker@fuse.net
Message-ID: <t699uv1m2vfr0a@corp.supernews.com>
Source record: 172080

Should be here.....73 de KE4WY Jim

http://www.raibeam.com/

"Lemwnash" <lemwnash@aol.com> wrote in message
news:20010116143457.21563.00001819@ng-mg1.aol.com...
> whatever happened to Raibeam??

1308. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 20:06:28 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <wQ196.533$7F4.124927@news.uswest.net>
Source record: 172081

Lemwnash <lemwnash@aol.com> wrote in message
news:20010116143457.21563.00001819@ng-mg1.aol.com...
> whatever happened to Raibeam??

Check out http://www.raibeam.com Lem. Oh, BTW don't miss the Raibeam review in the upcoming Feb. 2001 issue of CQ Magazine :-)

1309. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 21:12:34 UTC
From: k3ph@dxis.monroe.pa.us
Message-ID: <G79wH2.31y@dxis.monroe.pa.us>
Source record: 172082

In article <20010116143457.21563.00001819@ng-mg1.aol.com>,
Lemwnash <lemwnash@aol.com> wrote:
>whatever happened to Raibeam??

They can still be found at:

http://www.raibeam.com

It is still claimed that their antennas give you whiter whites,
brighter brights, and build strong bodies 12 ways. 8^)

73,
Bob

--
+------------------- \-\-\-\ ----------------------------+
| Bob Schreibmaier K3PH | E-mail: k3ph@dxis.monroe.pa.us |
| Kresgeville, PA 18333 | http://www.qsl.net/k3ph |
+---+

1310. Re: Tower advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 21:44:25 UTC
From: n2ey@aol.com
Message-ID: <942fbm$e2i$1@nnrp1.deja.com>
Source record: 172084

In article <3A646EF8.276AF108@dvol.com>,
Brian Kelly <kelly@dvol.com> wrote:
>
> Denver Braughler wrote:
>
> > That's enough concrete to make a large house foundation.
> > In a monolith, that would be 21' X 15' X 6'.
> > Perhaps he meant 7 cubic yards.
> >
> Nope. 70 cubic yards, 120+ tons of the stuff. The "pad" was more like
12' x 12' x 13' deep. Joe Hertzberg, k3jh, VP of RCA
> from Bryn Mawr PA, now an SK. A 100 ft or so tall self-supporting
rotating steel pole which had Long John yagis on all
> bands 40-10, in some cases stacked pairs, plus a full-size 80m quad
plus some VHF antennas. In a pricey residential
> neighborhood with 60 x 100 foot lots. Give or take. Joe never did
anything halfway.

That's putting it mildly.

The installation was partially described in QST for May, 1970. The
pictures are OK, but no picture can properly describe the impression
the 107 foot tall monster made when seen for the first time. Because of
surrounding trees it was not too obvious until you were almost there.
Then it was quite obvious.

K3JH had a corner lot and a typical split-level house. The smallest
Yagi was a 3 element 40 meter job, the quad was 2 full size elements on
80 in diamond configuration. It's all gone now - the estate couldn't
find another ham to buy the place, and the big tower was cut up for
scrap.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1311. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 21:45:13 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <5h396.870$7F4.170358@news.uswest.net>
Source record: 172083

Bob Schreibmaier <k3ph@dxis.monroe.pa.us> wrote in message
news:G79wH2.31y@dxis.monroe.pa.us...
> In article <20010116143457.21563.00001819@ng-mg1.aol.com>,
> Lemwnash <lemwnash@aol.com> wrote:
> >whatever happened to Raibeam??
>
> They can still be found at:
>
> http://www.raibeam.com
>
> It is still claimed that their antennas give you whiter whites,
> brighter brights, and build strong bodies 12 ways. 8^)
>
> 73,
> Bob

Hi Bob...

Their only claim is supergain performance, which - to date - no one has been
able to refute empirically. Some theorists claim otherwise, of course, but
didn't they make the same claims about the Wright's flyer and Bell's microphone?
<g>

73,
Anonymous

1312. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 21:48:33 UTC
From: n2ey@aol.com
Message-ID: <942fjeeds1@nnrp1.deja.com>
Source record: 172086

In article <3A52C641.D9512EA3@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> Please
> list some cases where CW was used by hams on the HF CW ham bands to
save lives
> that would otherwise have been lost.

http://www.callingcq.org/desoto/chap7.html

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1313. Re: Antenna Pattern Plotting Software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 22:00:07 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <3A64C467.D0C4A3A3@berkshire.net>
Source record: 172085

microsoft excel does that... they call it a 'radar' plot. just format the
radial axis to be logrithmic and away you go.

DOUGLAS STINSON wrote:
>
> Just to be clear: I'm looking for a program to plot experimental data. I
> am not looking for an antenna modeling program. Can these programs do
> that?
>
> Brian Kelly wrote:
> >
> > DOUGLAS STINSON wrote:
> >
> > > Can anyone tell me where I can obtain a program what will plot measured
> > > antenna gain data in the standard log-polar format?
> >
> > >
> > > http://www.eznec.com/index.shtml
> > >
> > > http://www.nittany-scientific.com/
> > >
> >
> > > Thanks.
> >
> > >
> > > w3rv

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

1314. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 22:08:06 UTC
From: rwclark@seanet.com
Message-ID: <3a64c54e.17041444@news.seanet.com>
Source record: 172087

On Tue, 16 Jan 2001 21:48:33 GMT, n2ey@aol.com wrote:

>In article <3A52C641.D9512EA3@IEEE.org>,
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
>> Please
>> list some cases where CW was used by hams on the HF CW ham bands to
>save lives
>> that would otherwise have been lost.
>
>http://www.callingcq.org/desoto/chap7.html
>
>73 de Jim, N2EY

Hi Jim,

An interesting story (the first of the three). Moreso, because I've
lived thru those winters in that part of the country.

73's
Richard Clark, KB7QHC

1315. Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 22:17:39 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <7M396.73598$JT5.2393669@news20.bellglobal.com>
Source record: 172088

My HF rig (in the basement) picks up birdies and interference any time my TV in the living room is on. I set the rig on 14.160 and turned the volume up, then came upstairs and watched the TV. Sure enough every time the scene on the TV changed or text appeared the noise on the HF rig would change. Turn off the TV and the noise goes away. On top of all my other problems, this is not one I need. Any way to shield the rig from the noise or any filters for the TV to eliminate it? TV is only 3 years old.

1316. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 22:25:57 UTC
From: rwclark@seanet.com
Message-ID: <3a65c6b5.17400791@news.seanet.com>
Source record: 172089

On Tue, 16 Jan 2001 14:45:13 -0700, "Anonymous" <alias@microsoft.com>
wrote:

>Bob Schreibmaier <k3ph@dxis.monroe.pa.us> wrote in message
>news:G79wH2.31y@dxis.monroe.pa.us...
>> In article <20010116143457.21563.00001819@ng-mg1.aol.com>,
>> Lemwnash <lemwnash@aol.com> wrote:
>> >whatever happened to Raibeam??
>>
>> They can still be found at:
>>
>> http://www.raibeam.com
>>
>> It is still claimed that their antennas give you whiter whites,
>> brighter brights, and build strong bodies 12 ways. 8^)
>>
>> 73,
>> Bob
>
>Hi Bob...
>
>Their only claim is supergain performance, which - to date - no one has been
>able to refute empirically. Some theorists claim otherwise, of course, but
>didn't they make the same claims about the Wright's flyer and Bell's microphone?
><g>
>
>73,
>Anonymous
>

Hi OM,

Hmmm, they claim supergain performance - a theoretical construct.
Theorists warn it can't happen. So, the inventors say the theorists
are wrong - for which claim? :-)

Just love these prove-a-negative issues. Let's see, speculation:
the Raibeam actually, for real, works on the infinite improbability
gain principal - anyone able to refute this empirically? :-O

73's
Richard Clark, KB7QHC

1317. Re: Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 22:51:04 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <8k496.907$e5.2257081@news.ntplx.net>
Source record: 172090

It is probably radiated harmonics from the set's horizontal driver
circuitry. The giveaway is that these birdies will appear every 15.75 kHz.

If the TV is connected to a cable system or to a satellite receiver, first
try a common-mode choke on the incoming cable. Use an F-240-43 ferrite core
(Palomar) and wrap about 10 turns of the cable onto it.

If connected to an antenna, you may also need a high-pass filter on the TV
feed line.

In some cases, and additional common-mode filter may be needed on the AC
line. A differential-mode AC line filter (Industrial Communications
Engineers or Radio Shack catalog #15-1111) may also be needed.

Very rarely, it is the set's internal wiring that is radiating. If the
above cures don't work, buy a new TV.

Resources, from the ARRL category searchable database
http://www.arrl.org/tis/tisfind.html :

Palomar Engineers
PO Box 462222
Escondido, CA 92046
USA
Tel: 760-747-3343
Fax: 760-747-3346
Email: palomar@compuserve.com
http://www.palomar-engineers.com/

Industrial Communications Engineers (ICE)
PO Box 18495
Indianapolis, IN 46218-0495
USA
Tel: 317-545-5412
800-423-2666
Fax: 317-545-9645
http://www.inducomm.net/

73,
Ed Hare, W1RFI

VE3TMT <mdonoghue1@sympatico.ca> wrote in message
news:7M396.73598$JT5.2393669@news20.bellglobal.com...
> My HF rig (in the basement) picks up birdies and interference any time my
TV
> in the living room is on. I set the rig on 14.160 and turned the volume
up,

> then came upstairs and watched the TV. Sure enough every time the scene
on
> the TV changed or text appeared the noise on the HF rig would change. Turn
> off the TV and the noise goes away. On top of all my other problems, this
> is not one I need. Any way to shield the rig from the noise or any
filters
> for the TV to eliminate it? TV is only 3 years old.
>
>
>
>

1318. Re: Any MFJ Vertical Experiences?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 23:15:56 UTC
From: G0LRK <g0lrk@NOSPAMHEREqsl.net>
Message-ID: <cJ496.1233$jr.9083@news2-hme0>
Source record: 172091

I've got a MFJ1798 at my qth on the NW coast of UK and nothing but problems with the weather getting in and messing everything about. Also bends quite easy in the wind so would not like to mount it very high, mine only about 12 feet above ground here. Other than that when it is working it is very good indeed for a vertical multiband antenna.
Hope this helps you.
Kev Wall G0LRK.....

1319. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 23:25:16 UTC
From: "Bob M." <kcxxxxxx@snet.net>
Message-ID: <mL496.22743$OD.8423643@typhoon.snet.net>
Source record: 172092

Since I happen to have a 3000psi pressure washer, I was planning on
installing its zero-degree nozzle, and tracing the existing wires, letting
the water cut a slot in the ground. I also plan on wearing plastic all over
myself as the water will push up mud that will try to land on me !

I also had considered the same setup but attaching a small wheel to the end
of the pressure washer's wand. This wheel would have a groove in it that
would follow the wire and keep the nozzle the same distance above the ground
at all times.

Naturally this won't be tested until the spring.......

==========

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A605A88.69DC5EEF@IEEE.org...
> Mike wrote:
> > What is the best way to bury ground radials ?
> > Lets say the ground is kinda soft from a light rain.I was thinking maybe
> > a spade.
> > The tv cable company has something that will push the line in the ground
> > kinda like a spade but about as wide as a snow shovel.Does anyone know
> > how its made and maybe rig up something like this or whatever your idea
> > might be ?
>
> There's an edging tool that looks like a straightened-out hoe.
> It works well for me in sandy clay.
> --
> http://www.mindspring.com/~w6rca

1320. CCRadio vs GE SuperRadio III

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 23:49:37 UTC
From: Tom Marin <marint@concentric.net>
Message-ID: <3A64DCFD.3AEF6741@concentric.net>
Source record: 172093

I currently own the GE SuperRadio III and am thinking about buying the CCRadio from Crane & Co.

Does anybody have an opinion on how much better (for listening to long distance AM Radio) the CCRadio is than the GE SuperRadio III?

I also currently use the Select-A-Tenna with the GE SuperRadio III.

Thanks in advance.

-Tom

1321. Re: Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-16 23:55:56 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <gc596.3490$tq1.196779@newsread1.prod.itd.earthlink.net>
Source record: 172094

Buying a new TV without checking it for RFI may present you with new surprises. I recently bought a new RCA 36" TV and it took me a couple of months to realize that the white noise level I was seeing on 20 and 17 meters (S-7) was coming from the TV. Specifically, from the switching power supply, which has power to it all the time when the TV is plugged in. It might have taken me longer to find the problem had I not seen a letter in a recent QST where another ham reported the same problem with an RCA TV.

In my case, I was able to reduce the noise substantially on 17 meters by wrapping the AC line cord many times around one of the Radio Shack split rectangular cores. In fact, six cores were required to do the job. The big problem however, is that the power supply is completely unshielded and there appears to be no RFI suppression measures of any kind used. The final solution involved installing a remotely controlled on/off switch in the TVs AC line. An MFJ-1026 Noise cancellation unit is used to kill the noise when the XYL wants to watch the TV while I'm on the air.

Anyone looking for a new TV really needs to perform an RFI test on the store floor before buying. I took my little Sangean SW portable receiver to the store, tuned it to 17 meters, and checked out various TVs by placing the receiver up against the case near the rear of the set. The RCA's were the absolute worst at producing the white noise. The Toshiba 36 inch TV was substantially quieter, but still produced a very strong white noise signal.

Note that conducting this test requires a VERY cooperative store staff, since you want to power off all but the TV being tested. If you don't do that, you'll hear nothing but white noise and birdies everywhere in the store.

K8AC
Floyd Sense - Angier, NC

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:8k496.907$e5.2257081@news.ntplx.net...
> It is probably radiated harmonics from the set's horizontal driver
> circuitry. The giveaway is that these birdies will appear every 15.75 kHz.
>
> If the TV is connected to a cable system or to a satellite receiver, first
> try a common-mode choke on the incoming cable. Use an F-240-43 ferrite
core
> (Palomar) and wrap about 10 turns of the cable onto it.
>
> If connected to an antenna, you may also need a high-pass filter on the TV
> feed line.
>
> In some cases, and additional common-mode filter may be needed on the AC

> line. A differential-mode AC line filter (Industrial Communications
> Engineers or Radio Shack catalog #15-1111) may also be needed.
>
> Very rarely, it is the set's internal wiring that is radiating. If the
> above cures don't work, buy a new TV.
>
> Resources, from the ARRL category searchable database
> http://www.arrl.org/tis/tisfind.html :
>
> Palomar Engineers
> PO Box 462222
> Escondido, CA 92046
> USA
> Tel: 760-747-3343
> Fax: 760-747-3346
> Email: palomar@compuserve.com
> http://www.palomar-engineers.com/
>
> Industrial Communications Engineers (ICE)
> PO Box 18495
> Indianapolis, IN 46218-0495
> USA
> Tel: 317-545-5412
> 800-423-2666
> Fax: 317-545-9645
> http://www.inducomm.net/
>
> 73,
> Ed Hare, W1RFI
>
> VE3TMT <mdonoghue1@sympatico.ca> wrote in message
> news:7M396.73598$JT5.2393669@news20.bellglobal.com...
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> > in the living room is on. I set the rig on 14.160 and turned the volume
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> > then came upstairs and watched the TV. Sure enough every time the scene
> on
> > the TV changed or text appeared the noise on the HF rig would change.
Turn
> > off the TV and the noise goes away. On top of all my other problems,
this
> > is not one I need. Any way to shield the rig from the noise or any
> filters
> > for the TV to eliminate it? TV is only 3 years old.
> >
> >
> >
> >

>
>

1322. Re: Looking for specs/drwgs/formula for .....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 00:08:53 UTC
From: kk7ho@aol.communicate
Message-ID: <20010116190853.24687.00001588@ng-cj1.aol.com>
Source record: 172095

Danny thanks a bunch. Very informative article. Not realizing how the "broadbandedness" is actually achieved, I almost put one up. Thanks again. Ps. There were references to a "Witt" article (ref: 122, 123, 124) regarding a true broadband 80 meter dipole. Any ideas where I might find this article? Tim.....KK7HO

>Before you do check this out.
>
>
>http://www.iag.net/~w2du/Reflections%202,%20Chapter%2018,%20Double%20Bazooka.pdf
>
>Danny, K6MHE
>

1323. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 00:12:18 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <Iq596.1221$GB1.322990@news.uswest.net>
Source record: 172096

Richard Clark <rwclark@seanet.com> wrote in message
news:3a65c6b5.17400791@news.seanet.com...
> On Tue, 16 Jan 2001 14:45:13 -0700, "Anonymous" <alias@microsoft.com>
> wrote:
>
> >Bob Schreibmaier <k3ph@dxis.monroe.pa.us> wrote in message
> >news:G79wH2.31y@dxis.monroe.pa.us...
> >> In article <20010116143457.21563.00001819@ng-mg1.aol.com>,
> >> Lemwnash <lemwnash@aol.com> wrote:
> >> >whatever happened to Raibeam??
> >>
> >> They can still be found at:
> >>
> >> http://www.raibeam.com
> >>
> >> It is still claimed that their antennas give you whiter whites,
> >> brighter brights, and build strong bodies 12 ways. 8^)
> >>
> >> 73,
> >> Bob
> >
> >Hi Bob...
> >
> >Their only claim is supergain performance, which - to date - no one has been
> >able to refute empirically. Some theorists claim otherwise, of course, but
> >didn't they make the same claims about the Wright's flyer and Bell's
microphone?
> ><g>
> >
> >73,
> >Anonymous
> >
>
> Hi OM,
>
> Hmmm, they claim supergain performance - a theoretical construct.
> Theorists warn it can't happen. So, the inventors say the theorists
> are wrong - for which claim? :-)
>
> Just love these prove-a-negative issues. Let's see, speculation:
> the Raibeam actually, for real, works on the infinite improbability
> gain principal - anyone able to refute this empirically? :-O
>
> 73's

> Richard Clark, KB7QHC

Hi Richard,

Apples and oranges... If proper empirical measurements were made, the *negative* could be either proven or dispelled. In this case, the problem as I see it is a belief in the infallibility of mathematical solutions... the empirical world be dammed!

When one holds science in the same light as religion, little progress can be made - as it is more a matter of knowing, not believing. For example, you can study to learn Ohms Law and believe that you *know* all about it, but only after you *prove* it empirically with a power source and a handful of resistors will you truly have the knowledge. JMHO :-)

73,
Anonymous

1324. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 00:34:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A64E87E.853DEC8D@eznec.com>
Source record: 172097

Hi, Chuck (posting again as "Anonymous"). On about Dec. 2, you posted:

> There is a shoot-out being conducted by RAC (Radio Amateur Canada) using a
> popular tribander and a tribander with critically coupled elements from the
> antenna vendor of whom you speak. Each tribander is on a separate 55' tower - I
> don't recall the exact separation between towers. The popular tribander has a
> 20ft boom the critically coupled tribander has a 12 ft boom. The popular
> tribander is being outperformed in every case, and on all bands, by a minimum of
> 2 to 3 S-units by the critically coupled tribander that you say has "unsupported
> claims of impossibly good performance". Up to this point, the evidence in
> support of critical coupling robustness is quite compelling, and the results of
> these tests will be published.

Have the results been published yet? I think all of us would be
interested in taking a look at your "emperical" evidence. And how big
did the "S units" end up being in dB?

Why not sign your real name to your postings?

Roy Lewallen, W7EL

Anonymous wrote:
>
> Richard Clark <rwclark@seanet.com> wrote in message
> news:3a65c6b5.17400791@news.seanet.com...
> > On Tue, 16 Jan 2001 14:45:13 -0700, "Anonymous" <alias@microsoft.com>
> > wrote:
> >
> > >Bob Schreibmaier <k3ph@dxis.monroe.pa.us> wrote in message
> > >news:G79wH2.31y@dxis.monroe.pa.us...
> > >> In article <20010116143457.21563.00001819@ng-mg1.aol.com>,
> > >> Lemwnash <lemwnash@aol.com> wrote:
> > >> >whatever happened to Raibeam??
> > >>
> > >> They can still be found at:
> > >>
> > >> http://www.raibeam.com
> > >>
> > >> It is still claimed that their antennas give you whiter whites,
> > >> brighter brights, and build strong bodies 12 ways. 8^)
> > >>
> > >> 73,
> > >> Bob
> > >
> > >Hi Bob...
> > >

> > >Their only claim is supergain performance, which - to date - no one has been
> > >able to refute empirically. Some theorists claim otherwise, of course, but
> > >didn't they make the same claims about the Wright's flyer and Bell's
> microphone?
> > ><g>
> > >
> > >73,
> > >Anonymous
> > >
> >
> > Hi OM,
> >
> > Hmmm, they claim supergain performance - a theoretical construct.
> > Theorists warn it can't happen. So, the inventors say the theorists
> > are wrong - for which claim? :-)
> >
> > Just love these prove-a-negative issues. Let's see, speculation:
> > the Raibeam actually, for real, works on the infinite improbability
> > gain principal - anyone able to refute this empirically? :-O
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Hi Richard,
>
> Apples and oranges... If proper empirical measurements were made, the *negative*
> could be either proven or dispelled. In this case, the problem as I see it is a
> belief in the infallibility of mathematical solutions... the empirical world be
> dammed!
>
> When one holds science in the same light as religion, little progress can be
> made - as it is more a matter of knowing, not believing. For example, you can
> study to learn Ohms Law and believe that you *know* all about it, but only after
> you *prove* it empirically with a power source and a handful of resistors will
> you truly have the knowledge. JMHO :-)
>
> 73,
> Anonymous

1325. Re: HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 00:50:29 UTC
From: g0xay@aol.com
Message-ID: <20010116195029.27040.00000483@ng-bk1.aol.com>
Source record: 172098

Alex.
Build yourself a vertical - see numerous antenna books - or I'm in the call book!
Numerous wire antennas will fit too. Depends a bit where in BS you are which will go 'best'.

Dick G0XAY

1326. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 01:00:22 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A64EEA6.5ECAD096@wgcr.org>
Source record: 172099

W4JLE wrote:
> That being the case, I should get in for free. It is not fair making me take
> a pitching test if I never plan to pitch. Besides, it sounds like the
> pitchers like Smoltz and Glavine want to feel superior to me because they
> can do it and I can't. I demand they change all the rules to make ME happy.

> That's not fair, I exist therefore I deserve...(stolen from an other post,
> but I love the idea)

Nope. Not even close. Passing a code test is much easier than passing
the technical tests anyway. So, even without a code test, TANSTAAFL.
Or game, as the case may be. Of course, if it's so easy, why oppose
it? The tea tax on the American Colonists was a pittance, why did they
oppose it?

Maybe I should have said:
It's like requiring paid ticket holders to the game to take a pitching
test before they can get inside the stadium, but allowing them to get
close enough to listen with just a paid ticket.

The technical test is the real pay for the ticket anyway, not the
archaic code test.

All men are created equal; they work to become unequal.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

1327. Re: Feeding dipoles (cont.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 01:18:23 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <942rsvdpu0@208.207.71.134>
Source record: 172100

Bill Nelson wrote:
>
> Dick Carroll <dixie@townsqr.com> wrote:
> : Something else you might want to try is a "hamstick dipole", using the
> : dual antenna fitting which you can hang any way you can and feed direct
> : with coax.It won't do much on 75/80 meters but will do OK on 40 and up.
> : I picked up another set of Pro-Am Valor brand of "hamsticks" yesterday
> : at the hamfest with that idea in mind. The ham vendor who sold them to
> : me said that some guys were using the 75 meter stick as the common
> : "cold" side of the dipole on all bands 40mtrs and up, and just changing
> : the other side to change bands. It's worth a try. You only need one set
> : of hamsticks to do it that way.
>
> Uh, on a dipole, you don't have a "cold" side. It is a balanced antenna,
> which means the currents are identical in both halves.
>
> If you change only one side, then you have an off-center fed antenna,
> which will probably require an antenna tuner.

Right you are, Bill. The ham-vendor passed that along as a suggestion,
and it seemed worth passing on since he states he has some customers who
report that it is working for them. Without time for a lot of discussion
of it, I came away with the idea that he was referring to it as though
using a 1/4 wave element and an unspecific ground plane, in the vertical
plane rather than as a horizontal dipole. I haven't tried any of this
yet but probably will. I always used a tuner of some kind on a loaded
antenna for access to more of the band anyway since they're naturlly
narrowbanded.
He was referring to the coax shield side as the "cold" side, Not that
it matters. As a dipole it is still supposed to be a balanced antenna.

1328. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 01:28:34 UTC
From: rwclark@seanet.com
Message-ID: <3a64e948.26251577@news.seanet.com>
Source record: 172101

On Tue, 16 Jan 2001 17:12:18 -0700, "Anonymous" <alias@microsoft.com>
wrote:

>Hi Richard,
>
>Apples and oranges... If proper empirical measurements were made, the *negative*
>could be either proven or dispelled. In this case, the problem as I see it is a
>belief in the infallibility of mathematical solutions... the empirical world be
>dammed!
>
>When one holds science in the same light as religion, little progress can be
>made - as it is more a matter of knowing, not believing. For example, you can
>study to learn Ohms Law and believe that you *know* all about it, but only after
>you *prove* it empirically with a power source and a handful of resistors will
>you truly have the knowledge. JMHO :-)
>
>73,
>Anonymous
>

Hi OM,

What you are responding to is the
>belief in the infallibility of
fill-in-the-blank which also includes empirical measurement. (I
beleive you may have already said that above.)

Having sat at the standards bench making empirical measurements for a
number of years, I have been able to confirm many theoretical
subjects. That's Apples. I have also observed others claim they
could perform empirical measurements to disprove the same theoretical
subjects - Oranges. Having been trained in the science of
measurement, Metrology, I think that I have at least the humility to
know that I only got close, and never as completely right as the
critics believe themselves to be.

Those folks have the heart of the righteous, the belief of the
converted and yet are no closer to truth than before they went on
their quest. What is worse, their convictions cloud their objectivity
with proclamations of Theory - bah humbuggery! My response to your
posting reveals that such acolytes use authority to deny and refute
the same authority.

Empirical measurement is the heart and soul of engineering, and the
basis of scientific progress. It often preceeds any law pronounced
from on high. Georg Simon Ohm noted resistance far in advance of his

Law, and yet the scientific proof of his law is a circular argument because the Ohm is defined by an Empirical measurement of a Physical (not Theoretical) Standard.

I am sure there are many here who can measure an Ohm, or is it 1.1 Ohm, or is it 1.01 Ohm, or is it 1.001 Ohm or is it... ? I have done this empirically to 7 places, absolutely accurate to 6. But what does it prove? Only that the resistor I measured conforms by empirical measure to a standard that is an empirical measure. The theory accounts for many variables in the empirical measurement and brings that measurement to higher accuracy. To dismiss the theoretical and accept any measurement is a contradiction on the face of it.

This, of course, is my not so mumbled opinion.

73's
Richard Clark, KB7QHC

1329. 1,6 Mhz Duplex for 433 Mhz

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 01:32:10 UTC
From: Radio3 <jk@yahoo.com>
Message-ID: <uC696.2853$Yv.350499@juliett.dax.net>
Source record: 172102

We need a Duplex (1,6 Khz) for 70 cm repeater`s.

need help.....

Txn

Mr.klonk

1330. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 02:15:14 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <942v7imqn0@208.207.71.134>
Source record: 172103

Richard Clark wrote:
>
> On 14 Jan 2001 17:21:10 GMT, Dick Carroll <dixie@townsqr.com> wrote:
>
> >
> >Richard Clark wrote:
> >>
> >> Really, you guys talk about "language" at a truly amateur level of
> >> discussion.
> >>
> >>
> > Rich, far as I'm aware there has been no one with professional
> >expertise in linguistics signed on here...Evenif they did they would
> >require familiarity with Morse code operations to speak fully to the
> >subject. We long ago had someone quoting a friend who was alleged to be
> >so situated who clearly was not. Typical usenet exercise.
> >
>
> Hi Dick,
>
> You are too close to the problem too.

Rich, Thanks for your very meaningful insight. It is certainly weighty.

>Snip much good info<

> There should be two classes of Amateur radio license: Operator and
> Technician. Even in this forum there are very few who would qualify
> as Technician (or who would want to). Open the flood gates for more
> Operators, tighten the requirements for Technicians. There should be
> reserved frequencies for Technicians (for any reason), and there
> should be reserved frequencies for Operators' various pursuits of the
> different modes (status quo). A Technician should be an FCC
> recognized individual who is authorized to operate, repair or change
> any citizen radio equipment, and test for type acceptance (these
> activities would be forbidden to Operators). Frankly, there are those
> who hold the Extra Class and Advanced Class of license that I wouldn't
> trust to change a transistor or even connector a coax. They maybe
> proficient beyond 20 WPM or hold DXCC and so on, but this in my mind
> is not the mark of technical achievement, it is more one of the
> achievement of a technique. They qualify as superb Operators, but
> there is no evidence that they could help anyone fix a rig or site an
> antenna.
>

And when I assert, based on 8 years as a practicing VE, that the current version of amateur radio license testing tests for nothing but the determination of the examinee to get the license, and that no learning whatever is required,
I am slammed by several learned persons who basically despise my attitude toward Morse code. They insist that hams should have NO particular technical qualifications, rather they will all be certain to learn whatever they need after the license arrives! I assert that many ham applicants come away from the testing process with Extra class licenses yet can't work an Ohms law problem nor figure the demensions of a halfwave dipole, and I am castigated for even mentioning any such thing.
Methinks there exists an Agenda with perhaps twin purposes. Get rid of Morse code in ham radio and get rid of technical content in the tests. What will become of the ARS following all that is problematic. For sure it won'tbe recognizable.

1331. Re: End fed Zepp question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 02:25:40 UTC
From: who? <glennt@ibm.net>
Message-ID: <3a6504c0_3@news1.prserv.net>
Source record: 172104

Cecil wrote in message <3A645C55.A53734DF@IEEE.org>...
>w4hij@my-deja.com wrote:
>>
>> I am considering putting up a multiband antenna for use on 80 meters
>> and up. I know most of the design criteria ie. 135 feet in length, fed
>> with twin lead (it's what I have on hand). I will use my AEA AT-300
>> tuner to match it. The research I have done leads me to believe that a
>> center fed configuration would be best but this may not be possible in
>> my situation, so I am considering the "End fed Zepp". My question is
>> where does the unused conductor of the twin lead go? Most diagrams I
>> see show it being soldered, but to what? It appears to be soldered to a
>> very short length of wire on the other side of the end insulator.
>
>When an end-fed antenna is fed with one of the transmission line wires
>and the other is essentially left open-circuited, one can expect
>considerable feedline radiation, unbalanced currents, and possible
>RF in the shack.
>--
>http://www.mindspring.com/~w6rca

Dunno - the end-fed zepp is a big brother of the "J-pole" antenna popular on VHF. I've not seen that produce RF in the shack etc. on VHF. Of course, the J requires specific dimensions and configuration. If you just use any old length of wire and any old length of transmission line, you do tend to get the unpleasant effects that Cecil describes...

73 de Glenn wb6w

1332. FS: Ameritron RCS-4 Remote Coax Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 02:30:41 UTC
From: wd4mda <wd4mda@mediaone.net>
Message-ID: <lt796.161$mH.7902@typhoon.jacksonville.mediaone.net>
Source record: 172107
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

The above unit is a remote controlled coaxial rf switch that may be tower or mast mounted. It only requires one feedline to operate up to four(4) feedlines. This is for HF freq only, not 2 meter.
The Ham I bought this from used it for two weeks. It did not cover the 2 meter band. He bought the RCS-8 which does.I have never used the unit. It is still in the original box, instructions. etc
$60.00 shipped conus/funds to be in a money order.

--
Harold (Hal) Stang, Jr.
73,
WD4MDA
4802 Palmer Av.
Jacksonville, Florida 32210-3226
1-904-388-2450

1333. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 02:32:27 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A650412.96E0C71D@GTE.net>
Source record: 172106

Lemwnash wrote:

> whatever happened to Raibeam??

BIG ads in QST each month

1334. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 02:37:00 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <9430gk$s9e$1@iac5.navix.net>
Source record: 172105

So Richard er Ya fer it or agin it?

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a64e948.26251577@news.seanet.com...
>
> Empirical measurement is the heart and soul of engineering, and the
> basis of scientific progress. It often preceeds any law pronounced
> from on high. Georg Simon Ohm noted resistance far in advance of his
> Law, and yet the scientific proof of his law is a circular argument
> because the Ohm is defined by an Empirical measurement of a Physical
> (not Theoretical) Standard.
>
> I am sure there are many here who can measure an Ohm, or is it 1.1
> Ohm, or is it 1.01 Ohm, or is it 1.001 Ohm or is it... ? I have done
> this empirically to 7 places, absolutely accurate to 6. But what does
> it prove? Only that the resistor I measured conforms by empirical
> measure to a standard that is an empirical measure. The theory
> accounts for many variables in the empirical measurement and brings
> that measurement to higher accuracy. To dismiss the theoretical and
> accept any measurement is a contradiction on the face of it.
>
> This, of course, is my not so mumbled opinion.
>
> 73's
> Richard Clark, KB7QHC

1335. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 02:51:57 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <jM796.1839$GB1.447538@news.uswest.net>
Source record: 172108

Roy Lewallen <w7el@eznec.com> wrote in message
news:3A64E87E.853DEC8D@eznec.com...
<snip>
>
> Have the results been published yet? I think all of us would be
> interested in taking a look at your "emperical" evidence. And how big
> did the "S units" end up being in dB?
>
Hi Roy,

FYI; Originally I was under the impression that the tests being conducted in Canada was being done by the RAC. This has since been clarified and these tests are being conducted by RAC member VA3KA independently of the RAC. Nevertheless, the results of these tests will be included in an article, but I have no further knowledge regarding the particulars. In the VA3KA tests, the Raibeam RB-36x continues to outperform the Cushcraft A4s by a respectable margin on all bands... FWIW.

I suggest however, that you don't miss the review of the Raibeam RB-24w by Paul Carr, N4PC in the upcoming February issue of CQ Magazine. Perhaps you can then focus on deriding other people's findings and get off of my back :-(

Chuck, WA7RAI

1336. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 03:05:44 UTC
From: richardharrison@webtv.net
Message-ID: <25739-3A650C08-104@storefull-114.iap.bryant.webtv.net>
Source record: 172110

Dick Carroll wrote:
"Get rid of Morse Code in ham radio and get rid of technical content in the tests."

Close, but no cigar. The only test needed is for knowledge of how to operate and obey the rules and regulations.

Fine the violators.

No need to get rid of Morse, RTTY, ATV, or any other compatible mode. No need to test for proficiency in any mode. Nobody gets seriously hurt by unskilled operations on the ham bands.

No need to test for understanding how radio works anymore than testing applicants for drivers licenses on how cars work mechanically. All applicants for either license should be tested on is how to operate and how to obey the law.

The distinguishing characteristics of amateur radio are, it is non-commercial, and it has no prescribed channel assignments.

Best regards, Rchard Harrison, KB5WZI

1337. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 03:11:58 UTC
From: Steve Woodruff <sjwoodr.nospam@nospam.email.com>
Message-ID: <9432hsdln1@flood.xnet.com>
Source record: 172109
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"D. S. Platt" <jeepp@erols.com> wrote in message
news:3A645284.B34C8E3C@erols.com...
> Sorry about that... left a word out... should have read: Laurel (MD) VEC
has
> NEVER had a fee. Nice folks... fast and competent, too!!

I have no problem paying a fee.... but i was suprised tonight to learn that
i had to
pay the $10 fee for EACH exam i took. I upgraded to general, and had
intentions
of attempting the extra class exam.... but when i found out it would cost me
an
additional $10 i figured i'd wait until next month when i could be
reasonably sure
that i'd pass with ease.

--steve

1338. Re: All in one meter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 03:18:36 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a650ec4_1@news3.prserv.net>
Source record: 172111

Ooooh! And, it's in *ment* condition!

--
Crazy George
DBTech <dbraggs@hcis.net> wrote in message
news:3a639549_3@corp.newsfeeds.com...
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=542588776
>
>
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1339. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 03:39:01 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94344l$8ag$0@208.207.71.134>
Source record: 172112

ehsjr@bellatlantic.net wrote:
>
> Finally - a question: Are you engaged in this solely to
> try to argue against a differing view, or are you considering
> the other point of view, deciding it is incorrect, and then
> arguing against it? For my part, I have tried to consider
> what you and Cecil have said to try to understand your
> point of view. I concluded a couple of posts back that it
> might be that you and Cecil could not understand that Morse
> is a language at high speed, due to not being fluent in it.
> Thus the departure in other areas, including the scientists
> view of thinking. Cecil's dismissal of all evidence, and
> the quoting out of context, make me believe he is only
> arguing. Sadly, I am beginning to believe that may be your
> intention too.
>

It's well established that those who want code testing to end globally
will give no quarter in their quest. They will allow no attractive or
useful attribute to accrue to the mode for any reason whatever,however
accurate, true or how well justified.
I think you've reached the obvious and only logical conclusion.

1340. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 03:46:55 UTC
From: Glenn Miller <glennmiller@worldnet.att.net>
Message-ID: <PA896.7050$Ep3.442734@bgtnsc04-news.ops.worldnet.att.net>
Source record: 172113
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

The VEC fee is a session fee which means you can take as many exams as you like at a single examination session for one $10 fee. If a VE is charging the $10 fee per element at the same exam session, he needs to re-read his VE manual.
73
Glenn AA5PK

"Steve Woodruff" <sjwoodr.nospam@nospam.email.com> wrote in message news:9432hsdln1@flood.xnet.com...
> I have no problem paying a fee.... but i was suprised tonight to learn that
> i had to
> pay the $10 fee for EACH exam i took. I upgraded to general, and had
> intentions
> of attempting the extra class exam.... but when i found out it would cost me
> an
> additional $10 i figured i'd wait until next month when i could be
> reasonably sure
> that i'd pass with ease.
>
> --steve
>
>
>

1341. Re: Ameritron RCS-4 Remote Coax Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 04:15:27 UTC
From: David Hunter <dhunter@multipro.com>
Message-ID: <t6a73b2na8t37d@corp.supernews.com>
Source record: 172114
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Hal,
I'll take it.....If it isn't already spoken for...73
--
David Hunter (K4DAV)
4367 Cumby Rd.
Cookeville, Tn. 38501
Putnam Co. EM-76

wd4mda <wd4mda@mediaone.net> wrote in message
news:lt796.161$mH.7902@typhoon.jacksonville.mediaone.net...
> The above unit is a remote controlled coaxial rf switch that may be tower
or
> mast mounted. It only requires one feedline to operate up to four(4)
> feedlines. This is for HF freq only, not 2 meter.
> The Ham I bought this from used it for two weeks. It did not cover the 2
> meter band. He bought the RCS-8 which does.I have never used the unit. It
> is still in the original box, instructions. etc
> $60.00 shipped conus/funds to be in a money order.
>
> --
> Harold (Hal) Stang, Jr.
> 73,
> WD4MDA
> 4802 Palmer Av.
> Jacksonville, Florida 32210-3226
> 1-904-388-2450
>
>
>
>

1342. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 04:25:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A651EBF.886D25BB@IEEE.org>
Source record: 172115

Dick Carroll wrote:
> It's well established that those who want code testing to end globally
> will give no quarter in their quest. They will allow no attractive or
> useful attribute to accrue to the mode for any reason whatever,however
> accurate, true or how well justified.

Dick, the fact that no dictionary or encyclopedia lists Morse code
as a language does not detract one iota from its usefulness as a
coding method for English or any other language associated with
RF communications. CW is attractive to some hams and possesses
some useful attributes like S/N superiority over SSB, near minimum
hardware, etc.
--
http://www.mindspring.com/~w6rca

1343. Re: Insulator Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 04:28:49 UTC
From: richardharrison@webtv.net
Message-ID: <20922-3A651F81-137@storefull-113.iap.bryant.webtv.net>
Source record: 172118

Jay wrote:
"Looking for a reference book or web site that explains what is required for an insulator---."

OK, The American Institute of Electrical Engineers, a predecessor of the IEEE published a list of spark-gap voltages eons ago. These break-down voltages depend on temperature, pressure, the electrode shapes, etc, to some extent. A summary of the AIEE information appears in the CRC "Handbook of Chemistry and Physics".

Between needle points the spark will jump about three times as far as it will between good sized balls.

When considering a-c voltages, the peak voltage is available during the cycle to initiate a spark. Once initiated, the cloud of ionozation is persistent and the arc can persist through the a-c alternations. The value of the peak voltage is 1.414 times the rms (effective value) of the applied voltage. RF is a-c of high frequency.

On transmission lines, SWR is a ratio of maximum and minimum voltages or currents found on a line. Fortunately this is not a multiplier of the rms applied to the line. The maximum voltage will be a maximumm of 2 times the peak voltage found on a line with no reflections. That is because the doubling is the sum of the peaks of the forward and reflected waves. The reflection can`t exceed the vigor of the forward wave which produced the reflection. Only when the peaks of the forward and reflected waves are equal and in-phase will the double-voltage peak occur. A complete open or a complete short of the line is needed to produce a complete reflection.

Here are a few values from the AIEE values of peak kilovolts between needle points and the gap a spark can jump under standard atmospheric conditions.

5kv:0.42cm, 10kv:0.85cm, 15kv:1.30cm, 20kv:1.75cm, 25kv:2.20cm, 30kv:2.69cm

Well, the table goes on and on, but we are already past a gap of one inch, and you can look up the rest in the CRC handbook.

Best regards, Richard Harrison, KB5WZI

1344. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 04:36:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9437gbgcg0@208.207.71.134>
Source record: 172116

Cecil wrote:
>
> n2ey@aol.com wrote:
> > I condemn all jammers on the ham bands.
>
> I won't be satisfied until I hear you say that you condemn all
> jammers on the ham bands including code-tested jammers who use
> their Morse code equipment for their jamming.

You won't be satisfied under any circumstances. Who cares?

1345. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 04:37:48 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9437isgcg1@208.207.71.134>
Source record: 172117

ccom2@socket.net wrote:
>
> Time to end this stupid thread which doe not belong here in the first
> place. Take it somewhere else.
>

Actually it never should have started.

1346. Interference in my shack *** update ***

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:02:28 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <EH996.81602$n%.3260915@news20.bellglobal.com>
Source record: 172020

I decided to unplug everything in the upstairs area of the house. This meant the computer and associated junk, the tv's the satellite rcvr, vcr's, playstation..everything. Went downstairs and turned the HF set on and voila the interference was gone. So just to test, I dialed up 1.910 (previously S9 + 20 noise level) and it was quiet as can be. I turned up the audio and came back upstairs and turned the computer on. The noise was back. I could actually hear the hard drives spinning up in the 450! After the computer finished rebooting I turned it back off and went downstairs. Tuning up from 160m the noise was nowhere to be found. Remember at this point the offending TV is still unplugged. Now there was a constant buzz around 9.5 Mhz up through 20m. I came back upstairs and began unplugging the computer parts again until it went away. I was caused by one of those Playstation devices called DexDrive that allows you to load games off the net. I unplugged it and checked the bands...all quiet again. I have always left my computer on 24/7 so never thought it to be a problem. So what I have determined is I have two main sources of RFI getting into the rig. The living room TV and the computer which is on the other side of the living room 1 floor above the rig. I guess my first step would be to wind all offending cords with chokes, or perhaps AC line filters, as has been suggested.

There is still a bit of power line noise on 40m, but nothing to worry about, that is being investigated by the power company. For the first time I actually have no noise level showing on 160! Sorry for the long explanation, but I figure if I explain it as best as I can, I'm not leaving any information out. And besides, it helps with my typing speed!

I appreciate all your help.

73,
Max

1347. Re: Mast section for two meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:14:05 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9439mt$o1i$0@208.207.71.134>
Source record: 172021

"Ian White, G3SEK" wrote:
>
> Dick Carroll wrote:
> >
> >
> >Donald Campbell wrote:
> >>
> >> I am installing a 14 element two meter beam above a tri-bander and the
> >> mast section is approximately 1 1/2 inch inside diameter. The two meter
> >> beam is vertically polarized so I know I do not want an electrically
> >> conducting mast for the two meter mast section. I guess that my options
> >> are wood dowel, fiberglass, schedule 40 PVC pipe. I would appreciate
> >> suggestions on what would work best and possibly where to obtain it.
> >>
> >> Thanks, Don W6QEY
> >
> >
> >Go ahead and use steel masting. It will make NO difference. I've a 11
> >element 2 meter beam up with a steel mast for over 20years.Works fine.
> >The mast is non resonant and has no discernable effect on the beam.
>
> If "no discernable effect" means you're still quieting all the FM
> stations you want to work on vertical beam, then that's fine. But in
> fact the mast - and the coax, which is also a metal conductor - DO
> affect the pattern and reduce the gain.
>

I don't doubt for a moment that there is a measurable effect, that's
why I used the words "no discernable effect". For I have carefully
checked factors like beamwidth and front to back, side,sidelobes and
rear rejection of the beam while using a steel mast, and if there's any
effect on the performance of my 11 element Cushcraft I can't tell it in
operation. I can assure you and everyone else, I'll never give up the
benefits of using a steel mast to gain whatever small amount of
advantage a nonconductive type mast might offer.
I suppose it may be another case of successfully "doing it" for years
and years before learning that it won't work.

73, Dick W0EX

1348. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:34:19 UTC
From: n2ey@aol.com
Message-ID: <20010117003419.22631.00000719@nso-fz.aol.com>
Source record: 172022

In article <3A645258.879C6790@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>Bill Nelson wrote:
>> Most new hams these days are appliance operators - with little or no grasp
>> of electronics. So, let's get rid of the theory tests as well, as the
>> reason for such testing is gone.
>
>Electronics is not outdated.
>--
Morse isn't outdated, either.

But neither knowledge of Morse nor electronics is absolutely necessary to operate some ham stations. Otherwise qualified people are being kept off the ham bands by the written tests.

73 de Jim, N2EY

1349. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:34:19 UTC
From: n2ey@aol.com
Message-ID: <20010117003419.22631.00000718@nso-fz.aol.com>
Source record: 172023

In article <10962-3A63B14F-92@storefull-117.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"There are folks who want the Morse mode itself to die out, either by
>eliminating the available spectrum for it or by an outright ban."
>
>Hard to persuade someone who is determined "they" (those folks) are out
>to get him.

Can you prove to me that NOBODY wants the USE of Morse on the ham bands to end?
I have read many diatribes against the mode, not the test.

>Remember, "they" banned spark transmitters.

Do you know when? And why?

>"they" may be
>returning to victimize us again!
>
Nope. Different people.

73 de Jim, N2EY

1350. Take the NO CODE argument elsewhere..this is antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:35:08 UTC
From: CDT <xctx@onr.com>
Message-ID: <gaa96.23$ng4.2328835085@news.onr.com>
Source record: 172019

Take the NO CODE argument elsewhere..this is antennas...thanks

1351. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:38:37 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943b4tslj0@208.207.71.134>
Source record: 172024

Cecil wrote:
>
> N2EY wrote:
> >
> > <Cecil.A.Moore@IEEE.org> writes:
> > >There is no crusade against the mode.
> >
> > Yes, there is, Cecil. There are folks who want the Morse mode itself to die
> > out, either by eliminating the available spectrum for it or by an outright ban.
> > They are a small minority, but a vocal one.
>
> There always exist a handfull of nuts. Please estimate the number of people
> who seriously want CW to be outlawed. Please name a few of the individuals.
>

You might consider that when you and others insist that there is
nothing more than "novelty" benefit to the mode that is the functional
equivalent of saying that is it useless and therefore not worth
preserving. When the clamor by those who would expand the voice segments
to the maximum limit consider your statements, how then will you react?
And what good could it possibly do?

And you clearly overlook the fact that some posters here clearly state
that Morse code is long past usefulness and the implication is clear
that as far as they are concerned, it may as well pass from the scene.
In fact, your rantings frequently convey that impression.

1352. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:41:02 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943b9eslj1@208.207.71.134>
Source record: 172025

Richard Harrison wrote:
>
> Jim, N2EY wrote:
> "There are folks who want the Morse mode itself to die out, either by
> eliminating the available spectrum for it or by an outright ban."
>
> Hard to persuade someone who is determined "they" (those folks) are out
> to get him. Remember, "they" banned spark transmitters. "they" may be
> returning to victimize us again!

See what I mean Cecil?

1353. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:42:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943bbfslj2@208.207.71.134>
Source record: 172026

Richard Harrison wrote:
>
> Jim, N2EY wrote:
> "There are folks who want the Morse mode itself to die out, either by
> eliminating the available spectrum for it or by an outright ban."
>
> Hard to persuade someone who is determined "they" (those folks) are out
> to get him. Remember, "they" banned spark transmitters. "they" may be
> returning to victimize us again!
>

It is extremely revealing that you see NO difference between a spark transmitter and radiotelegraphy using continuous waves.

1354. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 05:46:32 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943bjoslj3@208.207.71.134>
Source record: 172027

Bill Nelson wrote:
>
> Richard Harrison <richardharrison@webtv.net> wrote:
>
> : Cecil said a lot in very few words. CW used to be a life-line for safety
> : of life at sea. That`s not now true. It`s said all hams had to learn
> : code so they could understand an order to clear out for emergency
> : traffic. That`s passe`.
>
> : The reason for mandatory code is gone. The persistent mandate does no
> : good but has the evil of keeping out prospective hams for no good
> : reason.
>
> And, by the same reasoning:
>
> Most new hams these days are appliance operators - with little or no grasp
> of electronics. So, let's get rid of the theory tests as well, as the
> reason for such testing is gone. The persistent mandate for theory testing
> does no good but has the evil of keeping out prospective hams for no good
> reason.

Which is exactly what is on the Agenda.

1355. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 06:05:59 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943co7slj4@208.207.71.134>
Source record: 172028

W4JLE wrote:
>
> So Richard er Ya fer it or agin it?

Whichever, he sure described it!

> "Richard Clark" <rwclark@seanet.com> wrote in message
> news:3a64e948.26251577@news.seanet.com...
> >
> > Empirical measurement is the heart and soul of engineering, and the
> > basis of scientific progress. It often preceeds any law pronounced
> > from on high. Georg Simon Ohm noted resistance far in advance of his
> > Law, and yet the scientific proof of his law is a circular argument
> > because the Ohm is defined by an Empirical measurement of a Physical
> > (not Theoretical) Standard.
> >
> > I am sure there are many here who can measure an Ohm, or is it 1.1
> > Ohm, or is it 1.01 Ohm, or is it 1.001 Ohm or is it... ? I have done
> > this empirically to 7 places, absolutely accurate to 6. But what does
> > it prove? Only that the resistor I measured conforms by empirical
> > measure to a standard that is an empirical measure. The theory
> > accounts for many variables in the empirical measurement and brings
> > that measurement to higher accuracy. To dismiss the theoretical and
> > accept any measurement is a contradiction on the face of it.
> >
> > This, of course, is my not so mumbled opinion.
> >
> > 73's
> > Richard Clark, KB7QHC

1356. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 06:11:51 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943d37$5ch$0@208.207.71.134>
Source record: 172029
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Steve Woodruff wrote:
>

but i was suprised tonight to learn that
> i had to
> pay the $10 fee for EACH exam i took. I upgraded to general, and had
> intentions
> of attempting the extra class exam.... but when i found out it would cost me
> an
> additional $10 i figured i'd wait until next month when i could be
> reasonably sure
> that i'd pass with ease.

If that is permissable evidently they have changed the rules. When I
ran a VE team ('85 thru '93) the rules said one fee for all tests taken
at that session. Later it was deemed permissable to charge an additional
fee for a retest of a failed element at the same session, but we never
did.

1357. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 06:21:45 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943dlp$6nf$0@208.207.71.134>
Source record: 172031

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "Get rid of Morse Code in ham radio and get rid of technical content in
> the tests."
>
> Close, but no cigar. The only test needed is for knowledge of how to
> operate and obey the rules and regulations.
>
> Fine the violators.
>
> No need to get rid of Morse, RTTY, ATV, or any other compatible mode. No
> need to test for proficiency in any mode. Nobody gets seriously hurt by
> unskilled operations on the ham bands.

Beg to differ. As a Public Safety communicator I have experienced
interference from hams that could easily have caused serious problems.

>
> No need to test for understanding how radio works anymore than testing
> applicants for drivers licenses on how cars work mechanically.

While doing that same job- Public Safety communicator- a part of my
duty was to receive preliminary accident reports including a statement
of facts. I saw all sorts of evidence that much more training on "how
cars work mechanically" would have been beneficial, especially WRT how
the laws of physics control them in braking, skidding, centrifugal
forces, etc.

All
> applicants for either license should be tested on is how to operate and
> how to obey the law.

You have a right to your opinion, erroneous as it is. I suppose that
you would recommend a consulting engineer to do their ALL technical
work, instead of just a part of it. After all, why should any "hobbyist"
need to know how to construct a simple dipole or anything else so
mundane?

> The distinguishing characteristics of amateur radio are, it is
> non-commercial, and it has no prescribed channel assignments.
>

You've just managed to describe CB and the Family Radio Service. To say
nothing about the Freebanders - I saw nothing in your post that said
"ham radio license".

1358. Re: Take the NO CODE argument elsewhere..this is antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 06:25:16 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <943dsc$6nf$1@208.207.71.134>
Source record: 172032

CDT wrote:
>
> Take the NO CODE argument elsewhere..this is antennas...thanks

Your protest is pointless, you might as well just toggle past whatever
you don't want to read.

1359. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 07:23:25 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <943h9b$9s4$1@nnrp1.deja.com>
Source record: 172033
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <PA896.7050$Ep3.442734@bgtnsc04-news.ops.worldnet.att.net>,
"Glenn Miller" <aa5pk@hotmail.com> wrote:
> The VEC fee is a session fee which means you can take as many exams as
you
> like at a single examination session for one $10 fee. If a VE is
charging
> the $10 fee per element at the same exam session, he needs to re-read
his VE
> manual.

Unless the ARRL has changed, it's not quite a session fee. It is insofar
as you can take one of every element for one fee. Retakes of failed
elements are subject to another fee.

LRod

Sent via Deja.com
http://www.deja.com/

1360. Re: Mast section for two meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 07:34:57 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <ZVFQ8iAhsUZ6EAq6@ifwtech.plus.net>
Source record: 172035

Dick Carroll wrote:
>
>
>"Ian White, G3SEK" wrote:
>>
>> Dick Carroll wrote:
>> >
>> >
>> >Donald Campbell wrote:
>> >>
>> >> I am installing a 14 element two meter beam above a tri-bander and the
>> >> mast section is approximately 1 1/2 inch inside diameter. The two meter
>> >> beam is vertically polarized so I know I do not want an electrically
>> >> conducting mast for the two meter mast section. I guess that my options
>> >> are wood dowel, fiberglass, schedule 40 PVC pipe. I would appreciate
>> >> suggestions on what would work best and possibly where to obtain it.
>> >>
>> >> Thanks, Don W6QEY
>> >
>> >
>> >Go ahead and use steel masting. It will make NO difference. I've a 11
>> >element 2 meter beam up with a steel mast for over 20years.Works fine.
>> >The mast is non resonant and has no discernable effect on the beam.
>>
>> If "no discernable effect" means you're still quieting all the FM
>> stations you want to work on vertical beam, then that's fine. But in
>> fact the mast - and the coax, which is also a metal conductor - DO
>> affect the pattern and reduce the gain.
>>
>
>
> I don't doubt for a moment that there is a measurable effect, that's
>why I used the words "no discernable effect". For I have carefully
>checked factors like beamwidth and front to back, side,sidelobes and
>rear rejection of the beam while using a steel mast, and if there's any
>effect on the performance of my 11 element Cushcraft I can't tell it in
>operation. I can assure you and everyone else, I'll never give up the
>benefits of using a steel mast to gain whatever small amount of
>advantage a nonconductive type mast might offer.

Neither would I, for any use of vertical polarization other than
moonbounce.

> I suppose it may be another case of successfully "doing it" for years
>and years before learning that it won't work.

>
Don't misquote me! I never said it won't work.

Can't we all open our minds a bit wider than "will work" versus "won't work"?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1361. Re: Take the NO CODE argument elsewhere..this is antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 07:39:45 UTC
From: wombat <chingada_madre@hotmail.com>
Message-ID: <5%b96.184872$l5.4234353@news1.rdc1.sdca.home.com>
Source record: 172034

Dick Carroll wrote
>Your protest is pointless, you might as well just toggle past whatever
>you don't want to read.

The scary thing about this post is its accuracy. I just hope the same argument
is never offered when PSK31 is being transmitted on 14.015

It's just a thought.

wombat
-.-

1362. Yaesu rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 11:48:35 UTC
From: pm@NO_SPAM_HERE_inorbit.com
Message-ID: <3a658354.96164146@news.online.no>
Source record: 172036

Hello,

I recently came by an Yaesu G-1000SDX rotator at an very affordable
price, I was however warned the the rotator's control cable plug was
missing. Upon checking with our national Yaesu distributor I was told
that this was an propritary plug and they would like to charge about
80 USD for it. This is the round 6 ping plug which goes into the
rotator, not the rectangular entering the control unit.
Does anyone know if there exist an replacement for this plug?

--- per
LC3WAT

1363. Interference update..getting closer...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 12:42:08 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <Aqg96.114692$f36.4838218@news20.bellglobal.com>
Source record: 172037

I decided to unplug everything in the upstairs area of the house. This meant the computer and associated junk, the tv's the satellite rcvr, vcr's, playstation..everything. Went downstairs and turned the HF set on and voila the interference was gone. So just to test, I dialed up 1.910 (previously S9 + 20 noise level) and it was quiet as can be. I turned up the audio and came back upstairs and turned the computer on. The noise was back. I could actually hear the hard drives spinning up in the 450! After the computer finished rebooting I turned it back off and went downstairs. Tuning up from 160m the noise was nowhere to be found. Remember at this point the offending TV is still unplugged. Now there was a constant buzz around 9.5 Mhz up through 20m. I came back upstairs and began unplugging the computer parts again until it went away. I was caused by one of those Playstation devices called DexDrive that allows you to load games off the net. I unplugged it and checked the bands...all quiet again. I have always left my computer on 24/7 so never thought it to be a problem. So what I have determined is I have two main sources of RFI getting into the rig. The living room TV and the computer which is on the other side of the living room 1 floor above the rig. I guess my first step would be to wind all offending cords with chokes, or perhaps AC line filters, as has been suggested.

There is still a bit of power line noise on 40m, but nothing to worry about, that is being investigated by the power company. For the first time I actually have no noise level showing on 160! Sorry for the long explanation, but I figure if I explain it as best as I can, I'm not leaving any information out. And besides, it helps with my typing speed!

I appreciate all your help.

73,
Max

1364. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 13:33:35 UTC
From: n2ey@aol.com
Message-ID: <20010117083335.15567.00000320@nso-de.aol.com>
Source record: 172038

In article <3A639843.C5771496@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>n2ey@aol.com wrote:
>> I condemn all jammers on the ham bands.
>
>I won't be satisfied until I hear you say that you condemn all
>jammers on the ham bands including code-tested jammers who use
>their Morse code equipment for their jamming.

The latter is a subset of the former. Your satisfaction is not my concern.

You won't "hear" me "say" anything on Usenet. It's a text-based mode.

73 de Jim, N2EY

1365. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 13:33:35 UTC
From: n2ey@aol.com
Message-ID: <20010117083335.15567.00000319@nso-de.aol.com>
Source record: 172039

In article <3A63AC34.6FAC1CA4@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>N2EY wrote:
>>
>> <Cecil.A.Moore@IEEE.org> writes:
>> >There is no crusade against the mode.
>>
>> Yes, there is, Cecil. There are folks who want the Morse mode itself to die
>> out, either by eliminating the available spectrum for it or by an outright
>ban.
>> They are a small minority, but a vocal one.
>
>There always exist a handfull of nuts.

Then you agree that your earlier statements about nobody wanting to eliminate
Morse were incorrect. "Nobody" means "not one person". Thanks for admitting
your mistake, Cecil.

The existence of counterexamples disproves a statement like "There is no
crusade against the mode."

> Please estimate the number of people who seriously want CW to be outlawed.

I'm not sure. There are/were several of them regularly posting to another
newsgroup that I don't bother with anymore.

> Please name a few of the individuals.

If it walks like a duck, talks like a duck.....

Here's a hint: The organization isn't called "No Code TEST International".

73 de Jim, N2EY

1366. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 13:33:36 UTC
From: n2ey@aol.com
Message-ID: <20010117083336.15567.00000321@nso-de.aol.com>
Source record: 172040

In article <3a64c54e.17041444@news.seanet.com>, rwclark@seanet.com (Richard Clark) writes:

>>> list some cases where CW was used by hams on the HF CW ham bands to
>>save lives
>>> that would otherwise have been lost.
>>
>>http://www.callingcq.org/desoto/chap7.html
>>
>>73 de Jim, N2EY
>
>Hi Jim,
>
>An interesting story (the first of the three). Moreso, because I've
>lived thru those winters in that part of the country.
>
Hello Richard,

All three of the stories are good. If you liked them, also check out:

http://www.callingcq.org/ham/plows.html

and

http://www.callingcq.org/ham/roadless.html

73 de Jim, N2EY

1367. 220MHZ Mobile Radio

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 13:48:17 UTC
From: carl domanico <carl.domanico@verizon.net>
Message-ID: <3A65A2AF.B4427987@verizon.net>
Source record: 172042

Looking for a Mobile 220MHz. FM Radio....Nice condition...prefer Kenwood...but will accept any manufacture.....

Thanks
Carl
N2MFW

1368. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 13:48:41 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a65a24a.42818293@news.azstarnet.com>
Source record: 172041

On Tue, 16 Jan 2001 19:51:57 -0700, "Chuck" <wa7rai@raibeam.com> wrote:

>
>Roy Lewallen <w7el@eznec.com> wrote in message
>news:3A64E87E.853DEC8D@eznec.com...
><snip>
>>
>> Have the results been published yet? I think all of us would be
>> interested in taking a look at your "emperical" evidence. And how big
>> did the "S units" end up being in dB?
>>
>Hi Roy,
>
>FYI; Originally I was under the impression that the tests being conducted in
>Canada was being done by the RAC. This has since been clarified and these tests
>are being conducted by RAC member VA3KA independently of the RAC. Nevertheless,
>the results of these tests will be included in an article, but I have no further
>knowledge regarding the particulars. In the VA3KA tests, the Raibeam RB-36x
>continues to outperform the Cushcraft A4s by a respectable margin on all
>bands... FWIW.
>
>I suggest however, that you don't miss the review of the Raibeam RB-24w by Paul
>Carr, N4PC in the upcoming February issue of CQ Magazine. Perhaps you can then
>focus on deriding other people's findings and get off of my back :-(
>
>Chuck, WA7RAI

I'm going to assume that CQ magazine is not "peer reviewed", at least not in
advance of publication. I'm sure, however, that the article will be reviewed in
this forum after the fact. Pity if a lot of bogus claims and conclusions are
foisted off on the uncritical readership of CQ before that happens.

If those claims are based upon, as it was suggested earlier, mounting different
antennas in different locations and "comparing" them in "S-unit" differences
then the discussion is going to be a catfight.

Wes Stewart
>
>
>
>

1369. Re: Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 13:57:51 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A65A4DF.C13FA1F1@dvol.com>
Source record: 172043

Floyd Sense wrote:

>
> Note that conducting this test requires a VERY cooperative store staff,
> since you want to power off all but the TV being tested. If you don't do
> that, you'll hear nothing but white noise and birdies everywhere in the
> store.

>
So much for FCC device approvals . . . Both the GE and RCA brands of consumer electronics lines are actually produced by Thomson. I've had nothing but grief with their stuff starting with a GE feature phone & answering machine which was a complete crapper then a tabletop AM/FM clock radio which was just as bad. I wouldn't touch a "GE" or "RCA" anything with a ten foot pole. When it comes to TV rcvrs I stick to Hitachi, Sony & Mitsubishi, ya get what ya pay for.
>
w3rv

1370. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 14:27:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65ABB5.91A9CC4C@IEEE.org>
Source record: 172044

N2EY wrote:
> Then you agree that your earlier statements about nobody wanting to eliminate
> Morse were incorrect. "Nobody" means "not one person". Thanks for admitting
> your mistake, Cecil.

Last year, I changed that statement to, "Hardly anyone wants to eliminate
Morse code. Let me rephrase: Nobody who matters wants to eliminate Morse
code. A lot of people who matter want to eliminate the Morse code *requirement*.

> Here's a hint: The organization isn't called "No Code TEST International".

Now Jim, you know that TLAs are much superior to FLAs. Please read the
NCI charter. It specifically states that they want to remove the code
requirement, not the code. Do you have any valid evidence that the
NCI BOD doesn't intend to abide by their own charter?
--
http://www.mindspring.com/~w6rca

1371. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 14:39:21 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65AE99.FD55CCE8@IEEE.org>
Source record: 172047

```
Dick Carroll wrote:
>
> Richard Harrison wrote:
> >
> > Jim, N2EY wrote:
> > > There are folks who want the Morse mode itself to die out, either by
> > > eliminating the available spectrum for it or by an outright ban.
> >
> > Hard to persuade someone who is determined "they" (those folks) are out
> > to get him. Remember, "they" banned spark transmitters. "they" may be
> > returning to victimize us again!
>
> See what I mean Cecil?

I see Richard poking fun at paranoid people who believe the the black
helicopters are swooping down to eliminate Morse code.
--
http://www.mindspring.com/~w6rca
```

1372. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 14:42:02 UTC
From: Steve Woodruff <sjwoodr.nospam@nospam.email.com>
Message-ID: <944avp$q7a$1@flood.xnet.com>
Source record: 172045
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"LRod" <lr0d@my-deja.com> wrote in message
news:943h9b$9s4$1@nnrp1.deja.com...
> Unless the ARRL has changed, it's not quite a session fee. It is insofar
> as you can take one of every element for one fee. Retakes of failed
> elements are subject to another fee.

Are all VE's subject to the same set of rules? These guys seemed pretty confident that they could charge $10 per exam ... which is why i did not even attempt the extra class written element.... figured i'd wait an extra month and study a little more so i wouldn't be wasting my money.

--steve

1373. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 14:42:02 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65AF3A.34DE0EC9@IEEE.org>
Source record: 172048

Dick Carroll wrote:
>
> Richard Harrison wrote:
> >
> > Jim, N2EY wrote:
> > "There are folks who want the Morse mode itself to die out, either by
> > eliminating the available spectrum for it or by an outright ban."
> >
> > Hard to persuade someone who is determined "they" (those folks) are out
> > to get him. Remember, "they" banned spark transmitters. "they" may be
> > returning to victimize us again!
>
> It is extremely revealing that you see NO difference between a spark
> transmitter and radiotelegraphy using continuous waves.

Dang Dick, it was a joke about "them" trying to "get" all the paranoid
PCTA folk. Seen any black helicopters lately? Do you really feel victimized?
--
http://www.mindspring.com/~w6rca

1374. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 14:47:40 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A65B08C.9FAD22B3@dvol.com>
Source record: 172046

> If those claims are based upon, as it was suggested earlier, mounting different
> antennas in different locations and "comparing" them in "S-unit" differences
> then the discussion is going to be a catfight.

>
Put it up at a real test range and do apples to apples data collection with real instrumentation or there's nothing to talk about.

> Wes Stewart

>
w3rv

1375. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 14:53:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65B1E4.B0F7AC18@IEEE.org>
Source record: 172049

N2EY wrote:
>
> In article <3A645258.879C6790@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:
>
> >Bill Nelson wrote:
> >> Most new hams these days are appliance operators - with little or no grasp
> >> of electronics. So, let's get rid of the theory tests as well, as the
> >> reason for such testing is gone.
> >>
> >Electronics is not outdated.
> >--
> Morse isn't outdated, either.

Jim, your opinion is antiquated. When the great majority of radio services
drop a mode, that is the defining characteristic of being outdated. From
Webster's: "outdated - antiquated, continued from the past".
--
http://www.mindspring.com/~w6rca

1376. Help: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 15:03:25 UTC
From: "J. Sun" <jsun@lucent.com>
Message-ID: <944c7u$hp1@nntpb.cb.lucent.com>
Source record: 172050

if I put outdoor TV antenna in the attic ?

Detailed story:
After my last post I bought an RCA 3036x (110 in. boom and 36 elements)
as suggested. I would like to put it in the attic. But I do not know if I
need to
ground the antenna in case of lightening.

Thanks !

Rus

Last post:
==========
Hi,

I live in the flat area about 50-60 mile from new york city.
I would like to buy a outdoor TV antenna to boot the TV
signal broadcasted from NYC..

I have several questions as follows:

1. what is the difference between
the antennas where the UHF element
are either vertical to the axis or V-shaped ?

top view:

```
| | | | / / / /
---------- or ----------
I | | | \ \ \ \
```

2. how many elenmet is appropriate ?
3. how long the boom is appropriate ?

Thanks !

Rus

1377. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 15:23:51 UTC
From: richardharrison@webtv.net
Message-ID: <21770-3A65B907-64@storefull-117.iap.bryant.webtv.net>
Source record: 172053

Dick Carroll wrote:
"You`ve just managed to describe CB and the Family Radio Service. To say nothing about Freebanders - I saw nothing in your post that said "ham radio license"."

Dick quoted me: "All applicants for either license should be tested on is how to operate and how to obey the law. And my quote: "The distinguishing characteristics of amateur radio are, it is non-commercial, and has no prescribed channel assignments."

Hello! Amateur radio = ham radio.
Hello! Licensed is not unlicensed.
Hello! Channels 1 through 40 are not the same as 28,000 through 29,700 kHz.

The Pizza Hut could legally take your order and dispatch it using CB radio, but could legallynot use amateur radio to do the same. This is simply the difference between commercial and non-commercial.

Dick Carroll obviously chooses not to understand what he reads.

Best regards, RIchard Harrison, KB5WZI

1378. MFJ dual band comments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 15:30:50 UTC
From: JD
Message-ID: <944drksnk1@dns3.cae.ca>
Source record: 172051

I just recently purchased a Mfj 1724B daul band mobile antenna and was wondering if anyone has experience with this item. I haven't actually installed mine yet(still to cold up here in the great white north to be playing outsidewith the vehicle) but the package says its ready to operate out of the box is this so or will I need to tweak it for swr?
Thank,
John VE2JDR

1379. Re: All in one meter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 15:41:39 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A65BD33.2B6E8214@zylay.com>
Source record: 172052

Crazy George wrote:
>
> Ooooh! And, it's in *ment* condition!
>
> --
> Crazy George

That's better than being *de-mented* ain't it?

1380. Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 16:36:18 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <pSj96.4285$Oe.19573@tor-nn1.netcom.ca>
Source record: 172054

Hi,

I am thinking of putting up either a 40 meter or 80 meter skywire antenna. I understand that a skywire (which is just a horizontal loop) can be a VERY effective DX antenna especially if you have it up high enough!

I have room for both. Which is a better antenna a skywire cut for 40 meters or a skywire cut for 80 meters??

I assume that the 80 meter skywire may not perform as well on 10 meters etc.

I also understand that you can use the feedline to the skywire as a VERTICAL with the loop being a top hat!! So I could use a 80 meter skywire as a vertical on 160 meters!

How should I feed the skywire?? Should I use coax or ladder line??

I would like the use the antenna on SSTV and RTTY using a kilowatt. I am afraid that the coax might melt due to high SWR on the feedline.

If I use ladder line, can I use the ladder line as the VERTICAL element with the sky wire being the top hat?? Or is coax a better feedline when using the skywire as a Vertical / Top Hat??

Any ideas?

73
Rob

1381. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 16:44:27 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <944i5d$kam@r02n01.cac.psu.edu>
Source record: 172055
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

The ARRL VE book, said, 1 fee for each test session, and it covered as many elements as the test taker wanted to take, or the VE have. But it is a new fee to retake a failed element. So as long as you keep passing you can do as many elements as you can pass for 1 fee. Remember though that most VE sessions have only 2 or 3 versions of a test element available and if you flunk all that they have, your done for that session.

--
John Passaneau, W3JXP
Physics Dept. Electronics Shop
Penn State University
104 Davey Lab, University Park , Pa. 16802
814.863.4297, jxp16@psu.edu

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:943d37$5ch$0@208.207.71.134...
>
>
> Steve Woodruff wrote:
> >
>
> but i was suprised tonight to learn that
> > i had to
> > pay the $10 fee for EACH exam i took. I upgraded to general, and had
> > intentions
> > of attempting the extra class exam.... but when i found out it would
cost me
> > an
> > additional $10 i figured i'd wait until next month when i could be
> > reasonably sure
> > that i'd pass with ease.
>
>
> If that is permissable evidently they have changed the rules. When I
> ran a VE team ('85 thru '93) the rules said one fee for all tests taken
> at that session. Later it was deemed permissable to charge an additional
> fee for a retest of a failed element at the same session, but we never
> did.

1382. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 16:48:57 UTC
From: richardharrison@webtv.net
Message-ID: <20241-3A65CCF9-4@storefull-118.iap.bryant.webtv.net>
Source record: 172058

Dick Carroll wrote:
"It is extremely revealing that you see NO difference between a spark transmitter and radiotelegraphy using continuous waves."

Incorrectly reading between the lines, Dick Carroll again makes a false accusation.

Electronic "smoke signals" can be transmitted to convey information. A variety of display sources can be used. Spark or CW transmitters can be switched on and off. A light source can be flashed in code. A.G. Bell used a mirror to flash coded and modulated signals using the sun as his light source. This technique isn`t limited to on-off coding, a variant of this, the light valve, has been used to record sound on film since the inception of the talking motion picture. Edison probably initiated the light valve as another use for his incandescent lamp.

Morse code was designed to convey information by interrupting an electric current. Any interruptable medium can be coded. RF can be interrupted almost as easily as d-c. It makes no difference if the source is a spark transmitter or a CW transmitter when it comes to coding.

Spark transmitters were banned because they polluted the radio spectrum. Smoke signals are banned in many jurisdictions because smoke is an atmospheric polluter.

Once A.G. Bell invented a transducer between sound waves and an electric current, on-off signaling was mostly superseded. Bell`s patent has proved to be the most valuable ever issued.

Obsolescence is the commonest occurrence in technical experience. You write with a ball point pen. Quills and ink wells have few users today.

Antiques are highly prized by many. More power to those who would protect and preserve that heritage. Just don`t impose that junk on me.

Best regards, Richard Harrison, KB5WZi

1383. Re: Apartment antenna follow on question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 16:50:49 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A65CD69.B8F2013@oio.net>
Source record: 172056

bozekk@my-deja.com wrote:
>
> Could I use a ligher wire and could it be insulated. If I could should
> I use more than one counterpoise?
>
> Keith
> N3HGN

Keith,
the size of the wire isn't important. As long as it's strong
enough
to hold it's own weight, it's big enough. What that means is that if
it's bigger than a #24(?), it ought to work fine. I would use
insulated
wire. It certainly won't hurt (and may help) if you use more than one
counterpoise.
'Doc

1384. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 16:59:57 UTC
From: rwclark@seanet.com
Message-ID: <3a65cede.85025770@news.seanet.com>
Source record: 172057

On Tue, 16 Jan 2001 21:37:00 -0500, "W4JLE" <Fred@w4jle.com> wrote:

>So Richard er Ya fer it or agin it?
>

Hi Fred,

I just love inspecific questions! It? Hmmm, my film studies suggest that the last "It Girl" was Clara Bow. Well, I'm sure that Clara is beyond "It," but the "It" she so represented is something I am certainly for. Vive la difference!

73's
Richard Clark, KB7QHC

1385. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 17:59:35 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A65DD87.3F54BC7E@rupert.tds-az.lmco.com>
Source record: 172059
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

John Passaneau wrote:
>
> The ARRL VE book, said, 1 fee for each test session, and it covered
> as many elements as the test taker wanted to take, or the VE have.
> But it is a new fee to retake a failed element. So as long as you
> keep passing you can do as many elements as you can pass for 1 fee.
> Remember though that most VE sessions have only 2 or 3 versions
> of a test element available and if you flunk all that they have,
> your done for that session.
>
> Dick Carroll"wrote:
> >
> > Steve Woodruff wrote:
> > >
> > > ..but i was suprised tonight to learn that i had to
> > > pay the $10 fee for EACH exam i took. I upgraded to general,
> > > and had intentions of attempting the extra class exam....
> > > but when i found out it would cost me an additional $10
> > > i figured i'd wait until next month when i could be
> > > reasonably sure that i'd pass with ease.
> >
> > If that is permissable evidently they have changed the rules. When I
> > ran a VE team ('85 thru '93) the rules said one fee for all tests taken
> > at that session. Later it was deemed permissable to charge an additional
> > fee for a retest of a failed element at the same session, but we never
> > did.

It's been a few years, but when I made General, I took the Tech,
General, and 13 WPM code at the same time for one fee ($6.45).
At another session I took the Extra and the 20 WPM code tests
again for one fee ($6.45). At the time, I was under the impression
that this fee went directly to the ARRL, to cover the cost
of the testing materials that they supplied. That ment that the
club, which was running the VE session, was really charging
nothing for their time.

Was I correct in my reasoning? Aren't they, the club, also allowed
to charge a small fee to cover their expenses?

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

1386. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:09:49 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65DFED.255062E9@IEEE.org>
Source record: 172062

Rob wrote:
> If I use ladder line, can I use the ladder line as the VERTICAL element with
> the sky wire being the top hat?? Or is coax a better feedline when using
> the skywire as a Vertical / Top Hat??

It doesn't matter since you short both feedline conductors together
at the ground level feedpoint. You need a good ground plane just
like any other ground-mounted vertical.
--
http://www.mindspring.com/~w6rca

1387. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:12:22 UTC
From: rwclark@seanet.com
Message-ID: <3a67da2c.87919181@news.seanet.com>
Source record: 172060

On Tue, 16 Jan 2001 21:05:44 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>The distinguishing characteristics of amateur radio are, it is
>non-commercial, and it has no prescribed channel assignments.
>
>Best regards, Rchard Harrison, KB5WZI

Hi Richard,

There are far more distinguishing elements - many are cumbersome deferences to commercial interests. Commercial interests are a very defensive bunch (moreso than ourselves).

I cannot transmit entertainment. In essence there is no non-commercial entertainment radio operations permitted by our class of licenses - not simply non-commercial operation.

The "Rules and Regs" are tested to this point for the dry and soul-killing reason of a commercial interest mandate. No one will come to harm if I did - except by the perception of commercial interests. We need look no further than LPFM and the commercial lobby trying to strangle it in the crib.

We broadcast now. Every sunday morning here in the Pacific NW we have a Ham swap, my buddy's repeaters carry the HF coverage. And yet this provision of no entertainment was balanced on the notion that we could not "broadcast." That distinction is clouded and there are other examples.

I would love to operate an amateur radar station to do Ionospheric testing - this too is not allowed. What harm does it bring? Speculations may abound, but certainly it falls under that now foggy precept of broadcast (a transmission without an intention of conversation).

As for the claim of not being channelized, that is simply a faint observation of a slim technicality. If the Ham bands don't qualify in this regard, it is only because of the strict reading of the statement, not the practical rendering of it in operations. Given SW broadcasters can shift their frequencies as their marketing officer dictates, the notion of channelization is simply which frequency do you sit on today, this month or last year. Channelization is for market stability, not spectrum accomodation. (This does not go to other commercial operations such as dispatching, but then they are confined to UHF/VHF where we as Hams have what appear to be ...

channels!)

73's
Richard Clark, KB7QHC

1388. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:14:43 UTC
From: rwclark@seanet.com
Message-ID: <3a66d1bb.85758374@news.seanet.com>
Source record: 172061

On 17 Jan 2001 02:15:14 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>
> And when I assert, based on 8 years as a practicing VE, that the
>current version of amateur radio license testing tests for nothing but
>the determination of the examinee to get the license, and that no
>learning whatever is required,
>I am slammed by several learned persons who basically despise my
>attitude toward Morse code. They insist that hams should have NO
>particular technical qualifications, rather they will all be certain to
>learn whatever they need after the license arrives! I assert that many
>ham applicants come away from the testing process with Extra class
>licenses yet can't work an Ohms law problem nor figure the demensions of
>a halfwave dipole, and I am castigated for even mentioning any such
>thing.
> Methinks there exists an Agenda with perhaps twin purposes. Get rid of
>Morse code in ham radio and get rid of technical content in the tests.
>What will become of the ARS following all that is problematic. For sure
>it won'tbe recognizable.

Hi Dick,

First, a commendation for your tenure as a VE.

As you may note by my two tiered approach, I find nothing wrong with novices (not the license categorization) finding their way into the hobby by fumbling through the technology - that is the single greatest opportunity offered us and why we are called amateurs. I would let anyone in as an Operator who can offer proof of breathing. Technician? No ******* way! Even some pro's wouldn't qualify (especially those who hold doctorates - their bozo certificates - to my face).

Richard Harrison has taken me to task for this two tiered approach (I too held FCC 1st now GeneralRadioTelephone) where there is no apparent mandate on the commercial side for distinctions of Operator and Technician. But that is why they (and he) are professionals. My suggestions in that regard are perhaps not met with universal appeal (are anyone's?), but the sense of what I am trying to impart is that Ham radio needs more people and those people need the immediate gratification of actually talking to someone, somewhere else, by the effort of their persistence (rather than dialing a number or logging on) to appreciate that perhaps they could do better if the knew more. They need to feel the spirit of the call, rather than the hammer of the code.

On the other hand, there are those who have much less interest in that thrill of the call, and are more interested in its quality, or how it could possibly happen in the first place. For these folk, the spark of interest resides within the intellect or the skill of hands on. This is not to say they are cold and indifferent intellectuals, neither does it suggest a criteria for entry into these ranks. Technicians have as much opportunity for the chase as Operators.

The two distinctions of Operator/Technician are not self negating, they aid one another. Those Operators, when their interest rises above the static, will want authoritative answers. If they are not satisfied with what they perceive to be bogus answers, they have every opportunity to challenge them by study and move into those ranks of recognized authority.

The current tack is the promise of some future reward if the current Novices/Techs can perform the stages of the cross now. This is entirely unacceptable for the future of Ham radio.

73's
Richard Clark, KB7QHC

1389. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:34:10 UTC
From: kb0hae@hotmail.com
Message-ID: <3a65e558.2221618@news>
Source record: 172063
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Hi Guys. You can get the latest ARR> VE manual here.
http://www2.arrl.org/arrlvec/vemanual/index.html

On Tue, 16 Jan 2001 22:19:18 +0800, "Ilan Rabinovitch" <ilan@fonz.net>
wrote:

>I paid $6 when I took my Technician test in Decmeber.
>
>Ilan
>KG6ERM
>
>In article <93bh3v$p32$1@nnrp1.deja.com>, jamesrhampton@my-deja.com wrote:
>
>> The cost is actually minimal anywhere. I think I paid $5.90
>> when I decided to get back into amateur radio and tested out in 1993
>> (after letting my tickets expire over 10 years earlier). Whats the
>> cost today?
>>
>> 73 from Rochester, NY
>> Jim (AA2QA)

1390. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:40:02 UTC
From: kb0hae@hotmail.com
Message-ID: <3a65e712.2663560@news>
Source record: 172065
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Hi Guys. You can get the latest ARR> VE manual here.
http://www2.arrl.org/arrlvec/vemanual/index.html

On Tue, 16 Jan 2001 22:19:18 +0800, "Ilan Rabinovitch" <ilan@fonz.net>
wrote:

>I paid $6 when I took my Technician test in Decmeber.
>
>Ilan
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>> The cost is actually minimal anywhere. I think I paid $5.90
>> when I decided to get back into amateur radio and tested out in 1993
>> (after letting my tickets expire over 10 years earlier). Whats the
>> cost today?
>>
>> 73 from Rochester, NY
>> Jim (AA2QA)

Cul8r

Martin kb0haespam.stinks@arrl.net KB0HAE

Spam Security is ON! To reply via e-mail remove the "spam.stinks" from
the above address.

Want to help stop Spam? (also known as UNSOLICITED COMMERCIAL E-MAIL)
Support the Anti-Spam Amendment. Join at http://www.cauce.org/

1391. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:42:09 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A65E781.2535@wt.net>
Source record: 172064

Rob wrote:
>
> Hi,
>
> I am thinking of putting up either a 40 meter or 80 meter skywire antenna.
> I understand that a skywire (which is just a horizontal loop) can be a VERY
> effective DX antenna especially if you have it up high enough!

Almost anything is effective to dx if it's high enough. I don't know if
I would call it VERY. Compare to a good beam on 20-10m, and the VERY of
the loop will refer to as in VERY MEDIOCRE. But saying that , it'll
work. But so would a dipole at the same height.
>
> I have room for both. Which is a better antenna a skywire cut for 40 meters
> or a skywire cut for 80 meters??

Dunno, depends what band it's used on. I would download the eznec demo
and run it though the mill on all bands used. That should give you a
decent idea. If you plan on using 80m, of course the 80 loop will be
better.
>
> I assume that the 80 meter skywire may not perform as well on 10 meters etc.

Maybe not. eznec might give a you good idea about that. It might be
better or worse...
>
> I also understand that you can use the feedline to the skywire as a VERTICAL
> with the loop being a top hat!! So I could use a 80 meter skywire as a
> vertical on 160 meters!

Yep.
>
> How should I feed the skywire?? Should I use coax or ladder line??

Ladder line if all band use.
>
> I would like the use the antenna on SSTV and RTTY using a kilowatt. I am
> afraid that the coax might melt due to high SWR on the feedline.

You sure you need that much juice on sstv/rtty? Good gravy, you will be
browning the food in the area.
Your tuner used will be the critical part if you use ladder line. You
will need a BIG STOUT tuner. And ladder line with thick gauge wire. Like
#14 or so. Don't get the thin wimpy stuff. I used to run SSTV on 20m a
bit. But I found 300-400 watts video usually plenty. My henry wouldn't
even hardly blush the tubes at that level. A full KW of sstv is going to

hard on everything involved. Rig, amp, the whole bit. For an example, on my 100w icom I ran on sstv at that time, I didn't feel comfortable running more than about 30-40 watts sstv. I go by the rated AM duty cycle just to be on the safe side. Running a full 100w sstv from a rig for minutes on end will get things a cooking good unless you have some good blowers going.

> If I use ladder line, can I use the ladder line as the VERTICAL element with
> the sky wire being the top hat?? Or is coax a better feedline when using
> the skywire as a Vertical / Top Hat??

You can try different routes. Some might work better than others. You can short the ladder line together and feed as a random wire. You could also have a jumper to disconnect the opposite side of the loop from the feedpoint. Unhook the jumper and convert the 80 loop into a 160 diamond shaped dipole. It might work ok. Most of the people I know that run these type deals just experiment until they find what "works" the best on 160. You can usually feed two or three different ways. PS. you can make a remote "switch" from coax to short the far end of the loop. Lets you change to dipole mode from the shack. Or at least I hear it will work.. I haven't tried it. MK

--
http://web.wt.net/~nm5k

1392. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 18:47:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65E8CA.6FC2CF1A@IEEE.org>
Source record: 172066

Richard Clark wrote:
> As you may note by my two tiered approach, I find nothing wrong with
> novices (not the license categorization) finding their way into the
> hobby by fumbling through the technology - that is the single greatest
> opportunity offered us and why we are called amateurs.

Yep, that's what I did. I even fumbled through a EE degree later.
--
http://www.mindspring.com/~w6rca

1393. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:01:03 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <8_l96.4308$Oe.19738@tor-nn1.netcom.ca>
Source record: 172067

Thanks for all the info. I probably will not run more than 500 watts but I always like to overdesign things hi

73
Rob

"Mark Keith" <nm5k@wt.net> wrote in message news:3A65E781.2535@wt.net...
> Rob wrote:
> >
> > Hi,
> >
> > I am thinking of putting up either a 40 meter or 80 meter skywire antenna.
> > I understand that a skywire (which is just a horizontal loop) can be a VERY
> > effective DX antenna especially if you have it up high enough!
>
> Almost anything is effective to dx if it's high enough. I don't know if
> I would call it VERY. Compare to a good beam on 20-10m, and the VERY of
> the loop will refer to as in VERY MEDIOCRE. But saying that , it'll
> work. But so would a dipole at the same height.
> >
> > I have room for both. Which is a better antenna a skywire cut for 40 meters
> > or a skywire cut for 80 meters??
>
> Dunno, depends what band it's used on. I would download the eznec demo
> and run it though the mill on all bands used. That should give you a
> decent idea. If you plan on using 80m, of course the 80 loop will be
> better.
> >
> > I assume that the 80 meter skywire may not perform as well on 10 meters etc.
>
> Maybe not. eznec might give a you good idea about that. It might be
> better or worse...
> >
> > I also understand that you can use the feedline to the skywire as a VERTICAL
> > with the loop being a top hat!! So I could use a 80 meter skywire as a
> > vertical on 160 meters!
>
> Yep.
> >
> > How should I feed the skywire?? Should I use coax or ladder line??

>
> Ladder line if all band use.
> >
> > I would like the use the antenna on SSTV and RTTY using a kilowatt. I
am
> > afraid that the coax might melt due to high SWR on the feedline.
>
> You sure you need that much juice on sstv/rtty? Good gravy, you will be
> browning the food in the area.
> Your tuner used will be the critical part if you use ladder line. You
> will need a BIG STOUT tuner. And ladder line with thick gauge wire. Like
> #14 or so. Don't get the thin wimpy stuff. I used to run SSTV on 20m a
> bit. But I found 300-400 watts video usually plenty. My henry wouldn't
> even hardly blush the tubes at that level. A full KW of sstv is going to
> hard on everything involved. Rig, amp, the whole bit. For an example, on
> my 100w icom I ran on sstv at that time, I didn't feel comfortable
> running more than about 30-40 watts sstv. I go by the rated AM duty
> cycle just to be on the safe side. Running a full 100w sstv from a rig
> for minutes on end will get things a cooking good unless you have some
> good blowers going.
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> > If I use ladder line, can I use the ladder line as the VERTICAL element
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> > the sky wire being the top hat?? Or is coax a better feedline when
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> > the skywire as a Vertical / Top Hat??
>
> You can try different routes. Some might work better than others. You
> can short the ladder line together and feed as a random wire. You could
> also have a jumper to disconnect the opposite side of the loop from the
> feedpoint. Unhook the jumper and convert the 80 loop into a 160 diamond
> shaped dipole. It might work ok. Most of the people I know that run
> these type deals just experiment until they find what "works" the best
> on 160. You can usually feed two or three different ways. PS. you can
> make a remote "switch" from coax to short the far end of the loop. Lets
> you change to dipole mode from the shack. Or at least I hear it will
> work.. I haven't tried it. MK
>
> --
> http://web.wt.net/~nm5k

1394. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:05:22 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <b2m96.4309$Oe.19741@tor-nn1.netcom.ca>
Source record: 172068

Oh yes, I agree with you that almost any antenna will work pretty good for DX if it is high enough.

But I am not a big fan of dipoles. (It has nulls at the end and is NOT omni directional enough for me). I like verticals (which I use successfully for DX on 10 to 40 meters).

But I do not have an antenna for 80 or 160. I am looking at a skywire since it is my understanding that a skywire is more omni-directional than a dipole and is likely more effective!

73
Rob

"Mark Keith" <nm5k@wt.net> wrote in message news:3A65E781.2535@wt.net...
> Rob wrote:
> >
> > Hi,
> >
> > I am thinking of putting up either a 40 meter or 80 meter skywire antenna.
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> the loop will refer to as in VERY MEDIOCRE. But saying that , it'll
> work. But so would a dipole at the same height.
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> and run it though the mill on all bands used. That should give you a
> decent idea. If you plan on using 80m, of course the 80 loop will be
> better.
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> > I assume that the 80 meter skywire may not perform as well on 10 meters etc.
>
> Maybe not. eznec might give a you good idea about that. It might be
> better or worse...
> >

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> > with the loop being a top hat!! So I could use a 80 meter skywire as a
> > vertical on 160 meters!
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> > How should I feed the skywire?? Should I use coax or ladder line??
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> >
> > I would like the use the antenna on SSTV and RTTY using a kilowatt. I
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> You sure you need that much juice on sstv/rtty? Good gravy, you will be
> browning the food in the area.
> Your tuner used will be the critical part if you use ladder line. You
> will need a BIG STOUT tuner. And ladder line with thick gauge wire. Like
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> bit. But I found 300-400 watts video usually plenty. My henry wouldn't
> even hardly blush the tubes at that level. A full KW of sstv is going to
> hard on everything involved. Rig, amp, the whole bit. For an example, on
> my 100w icom I ran on sstv at that time, I didn't feel comfortable
> running more than about 30-40 watts sstv. I go by the rated AM duty
> cycle just to be on the safe side. Running a full 100w sstv from a rig
> for minutes on end will get things a cooking good unless you have some
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> >
> > If I use ladder line, can I use the ladder line as the VERTICAL element
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> > the sky wire being the top hat?? Or is coax a better feedline when
using
> > the skywire as a Vertical / Top Hat??
>
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> feedpoint. Unhook the jumper and convert the 80 loop into a 160 diamond
> shaped dipole. It might work ok. Most of the people I know that run
> these type deals just experiment until they find what "works" the best
> on 160. You can usually feed two or three different ways. PS. you can
> make a remote "switch" from coax to short the far end of the loop. Lets
> you change to dipole mode from the shack. Or at least I hear it will
> work.. I haven't tried it. MK
>
> --
> http://web.wt.net/~nm5k

1395. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:22:11 UTC
From: nielsen@WashingtonStateResident.oz.net
Message-ID: <944rd3$12v$0@216.39.171.5>
Source record: 171919
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

On Wed, 17 Jan 2001 10:59:35 -0700, K7MEM wrote:
>John Passaneau wrote:
>>
>> The ARRL VE book, said, 1 fee for each test session, and it covered
>> as many elements as the test taker wanted to take, or the VE have.
>> But it is a new fee to retake a failed element. So as long as you
>> keep passing you can do as many elements as you can pass for 1 fee.
>> Remember though that most VE sessions have only 2 or 3 versions
>> of a test element available and if you flunk all that they have,
>> your done for that session.
>>
>> Dick Carroll"wrote:
>> >
>> > Steve Woodruff wrote:
>> > >
>> > > ..but i was suprised tonight to learn that i had to
>> > > pay the $10 fee for EACH exam i took. I upgraded to general,
>> > > and had intentions of attempting the extra class exam....
>> > > but when i found out it would cost me an additional $10
>> > > i figured i'd wait until next month when i could be
>> > > reasonably sure that i'd pass with ease.
>> >
>> > If that is permissable evidently they have changed the rules. When I
>> > ran a VE team ('85 thru '93) the rules said one fee for all tests taken
>> > at that session. Later it was deemed permissable to charge an additional
>> > fee for a retest of a failed element at the same session, but we never
>> > did.
>
>It's been a few years, but when I made General, I took the Tech,
>General, and 13 WPM code at the same time for one fee ($6.45).
>At another session I took the Extra and the 20 WPM code tests
>again for one fee ($6.45). At the time, I was under the impression
>that this fee went directly to the ARRL, to cover the cost
>of the testing materials that they supplied. That ment that the
>club, which was running the VE session, was really charging
>nothing for their time.
>
>Was I correct in my reasoning? Aren't they, the club, also allowed
>to charge a small fee to cover their expenses?

The ARRL VEC allows the VEs to retain a portion of the fee (up to $4 of
the current $10 fee, which is per session, not per exam) to cover
expenses if they wish to do so (this wasn't originally the case). The

ARRL requires that records of such expenses be kept, although the FCC no longer requires reporting. The FCC also no longer specifies the maximum amount which can be charged (there never has been a minimum). ARRL/VEC is charging $10, but others may charge more or less; the marketplace will probably decide.

From the ARRL letter, December 15, 2000:
==>FCC OPENS DOOR TO INCREASED TEST FEES FOR 2001

The FCC has suspended its regulatory limit on the reimbursement fee for Amateur Radio examinations, and the ARRL VEC says a new $10 test fee will go into effect January 1. An FCC Public Notice released December 4 explained that the Commission did not plan to announce a maximum reimbursement fee for 2001 since the requirement to do so no longer appears in the Communications Act.

For now, the FCC says, it will suspend enforcement of the fee provision, ?97.527(b), which continues to appear in the FCC rules. Some, if not all, of the nation's other Volunteer Examiner Coordinators are expected to follow suit, although at least one VEC charges no test fee whatsoever.

ARRL VEC Manager Bart Jahnke, W9JJ, says the ARRL VEC's current fee of $6.65 was based on the provision in the Communications Act, adopted in 1984, that established a $4 cap on reimbursement of out-of-pocket costs with an annual adjustment based on the Consumer Price Index. The new, higher fee reflects the fact that the ARRL VEC is doing more of the work on behalf of the FCC than was originally envisioned when the provision was included in the Communications Act. That effort includes data entry for all new and upgrade license applications once done by FCC staffers.

ARRL VEC volunteer examiners will continue to charge applicants $6.65 through the end of 2000.

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen

1396. Re: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:22:29 UTC
From: Jeff Farrar <jeff@farrar.com>
Message-ID: <Vhm96.81848$g6.35827119@news1.elmhst1.il.home.com>
Source record: 171920

I did the same thing but I didn't ground it. Good question though. Let me
know what you find out.

"J. Sun" <jsun@lucent.com> wrote in message
news:944c7u$hp1@nntpb.cb.lucent.com...
> if I put outdoor TV antenna in the attic ?
>
> Detailed story:
> After my last post I bought an RCA 3036x (110 in. boom and 36 elements)
> as suggested. I would like to put it in the attic. But I do not know if I
> need to
> ground the antenna in case of lightening.
>
>
> Thanks !
>
> Rus
>
> Last post:
> ==========
> Hi,
>
> I live in the flat area about 50-60 mile from new york city.
> I would like to buy a outdoor TV antenna to boot the TV
> signal broadcasted from NYC..
>
> I have several questions as follows:
>
> 1. what is the difference between
> the antennas where the UHF element
> are either vertical to the axis or V-shaped ?
>
> top view:
>
> | | | | / / / /
> ---------- or ----------
> I | | | \ \ \ \
>
> 2. how many elenmet is appropriate ?
> 3. how long the boom is appropriate ?
>
> Thanks !
>
> Rus

>
>
>
>
>

1397. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:30:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A65F2B8.36AD15E6@IEEE.org>
Source record: 171922

Rob wrote:
> But I am not a big fan of dipoles. (It has nulls at the end and is NOT omni
> directional enough for me).

That's why you need to make it rotatable. :-)
--
http://www.mindspring.com/~w6rca

1398. Re: Take the NO CODE argument elsewhere..this is antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:35:09 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a65f50f.0@oracle.zianet.com>
Source record: 171921

It's easy enough to set a "filter" that trashes any message with "NO CODE"
in the subject so you'll never see another one.

Ed, W5EJ

"wombat" <chingada_madre@hotmail.com> wrote in message
news:5%b96.184872$I5.4234353@news1.rdc1.sdca.home.com...
> Dick Carroll wrote
> >Your protest is pointless, you might as well just toggle past whatever
> >you don't want to read.
>
> The scary thing about this post is its accuracy. I just hope the same
argument
> is never offered when PSK31 is being transmitted on 14.015
>
> It's just a thought.
>
> wombat
> -.-
>
>

1399. Scanner Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 19:45:57 UTC
From: Roger Maynard <rmaynard@taqua.com>
Message-ID: <2DA506BBAFE3D92E.E5879863FDF46AF4.C0F5FB0366F7E0B6@lp.airnews.net>
Source record: 171923

Hello,

What is an effective scanner antenna that can mount on the eave of house? A vertical or the spider type I see advertised? I live out in the country but on top of a hill. O web location for best service and pricing would be great as well

Thanks

Roger

1400. Black list

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 20:19:47 UTC
From: Swann <swann@dromadaire.com>
Message-ID: <944uog$f7o$1@front1m.grolier.fr>
Source record: 171924

Don't waste QSL and time and visit :

http://www.dromadaire.com/black-list/1

73's

1401. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 20:35:46 UTC
From: richardharrison@webtv.net
Message-ID: <10247-3A660222-64@storefull-113.iap.bryant.webtv.net>
Source record: 171925

Cecil, W6RCA wrote:
"Yep, that`s what I did, I even tumbled through an EE degree later."

Richard Clark had written : "--I find nothing wrong with novices (not the license category) tumbling through technology - that is the single greatest opportunity offered us and why we are called amateurs."

Agreed. A little knowledge is a dangerous thing. It sharpens the appetite for more knowledge. I took the tumble through the EE degree too. But, I surely don`t think technical knowledge beyond a bare minimum should be required of radio amateurs.

Best regards, Richard Harrison, KB5WZI

1402. Re: Scanner Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:14:12 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <9451up$jv3$1@nnrp1.deja.com>
Source record: 171928

http://www.valcoelectronics.com/scanner/scanner.htm

In article
<2DA506BBAFE3D92E.E5879863FDF46AF4.C0F5FB0366F7E0B6@lp.airnews.net>,
Roger Maynard <rmaynard@taqua.com> wrote:
> Hello,
>
> What is an effective scanner antenna that can mount on the eave of
> house? A vertical or the spider type I see advertised? I live out in
the
> country but on top of a hill. O web location for best service and
> pricing would be great as well
>
> Thanks
>
> Roger
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

1403. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:17:39 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A660BF3.F42E8E5A@mwci.net>
Source record: 171926

Richard Harrison wrote:

> But, I surely don`t think technical knowledge beyond a bare minimum
> should be required of radio amateurs.

It should not be required, but it should never be considered as an end goal.

Bill W0IYH

1404. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:21:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A660CBF.295B@wt.net>
Source record: 171927

Rob wrote:
>
> Oh yes, I agree with you that almost any antenna will work pretty good for
> DX if it is high enough.
>
> But I am not a big fan of dipoles. (It has nulls at the end and is NOT omni
> directional enough for me). I like verticals (which I use successfully for
> DX on 10 to 40 meters).
>
> But I do not have an antenna for 80 or 160. I am looking at a skywire since
> it is my understanding that a skywire is more omni-directional than a
> dipole and is likely more effective!
>
> 73
> Rob

But they would have to be really high in terms of wavelength to really see those nulls on the low bands. At least a halfwave up. Which would be appx 250, and 120 ft up for each band. In the real world you do not really notice the nulls to any great extent when the antenna is low. So either is really omnidirectional enough unless super high. If you want a real good omnidirectional pattern with a horizonally polarized antenna, use a turnstile. "crossed dipoles" fed with a 90 degree phase line between the two. But these antennas are all best for regional use on the low bands. If you want to work dx, you would be better off with a vertical on the low bands also. A one w/l loop on 80m will not really be any better than a dipole at the same usually avg low 30-60 ft height, so to me it's just extra work needed to install the loop. I've tried them both here on 80m and couldn't really notice much difference in overall performance. For general coverage work on 80m I think the turnstile hard to beat. It's always been noticable when I've switched from a dipole to a turnstile. And the increase is in all directions. Doesn't really make sense on paper, but they work well. MK
--
http://web.wt.net/~nm5k

1405. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:22:50 UTC
From: rwclark@seanet.com
Message-ID: <3a6609f7.100154865@news.seanet.com>
Source record: 171929

On Wed, 17 Jan 2001 10:48:57 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>Obsolescence is the commonest occurrence in technical experience. You
>write with a ball point pen. Quills and ink wells have few users today.
>

Hi Richard,

You are correct about obsolescence - I haven't used a ballpoint in 30 years. However the pen in my pocket is a fountain pen (Mont Blanc). OK! OK! It's mostly for looks (the Mont Blanc is actually inferior to my Cross fountain pen).

When I have to scribble something (often), I generally reach for a Pilot (but that technology, a porous ceramic tip, has been around for a long time too). When I want to "write" something (rarely), I use a fountain pen. Either way it comes out in drafting/engineering block print - heaven help those who have to drag their eyes across my cursive (another obsolete mode? after all, it isn't "required" anywhere beyond the 6th grade).

There I go again, upsetting the demographics. :-)

73's
Richard Clark, KB7QHC

1406. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:38:38 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6610DE.44E6@wt.net>
Source record: 171930

Richard Harrison wrote:

>
> Agreed. A little knowledge is a dangerous thing. It sharpens the
> appetite for more knowledge. I took the tumble through the EE degree
> too. But, I surely don`t think technical knowledge beyond a bare minimum
> should be required of radio amateurs.
>
> Best regards, Richard Harrison, KB5WZI

And it isn't I don't think. The tests are pretty minimum now for a tech that can run up to 1500w output on vhf/uhf. I question the abilty of many of the no-code techs I've heard on the air to properly deal with that kind of power on vhf/uhf. You see very little if anything on the tests about it. They are pretty much left to their own devices in that dept. I think the combo of a new technician ticket and a legal limit tube amp for high frequencies is a fairly risky proposition unless they have experience dealing with them in a previous life. Luckily most seem to not need that much horsepower for the repeaters...I'm sure not all new techs are dummies, but frankly I was surprised they gave an entry level ticket holder full power on those bands with no real test questions in that area. I've seen a few have trouble hooking up a mirage brick, much less dealing with a 2 meter henry floor console. I'm surprised more haven't fried themselves than we've heard of lately. :/
MK

--
http://web.wt.net/~nm5k

1407. Re: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:47:41 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6612FD.724C@wt.net>
Source record: 171931

Jeff Farrar wrote:
>
> I did the same thing but I didn't ground it. Good question though. Let me
> know what you find out.

I would ground the mast holding the antenna to a water pipe that runs
though the attic if there are any. If there aren't any, I probably
wouldn't worry about it. It's possible for it to attract a strike, but
the chances are fairly low. If your house is out in the open with no
trees or anything around, I would worry more than if the house had trees
and other objects around it. If you are really nervous, put a lightning
rod on the house. That will lower the chances of a strike to the antenna
to nearly zip. MK
--
http://web.wt.net/~nm5k

1408. Re: Anyone using loop antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:50:00 UTC
From: "andrew.young5" <andrew.young5@ntlworld.com>
Message-ID: <Sto96.5455$UC4.99897@news6-win.server.ntlworld.com>
Source record: 171933

contact mike
G4HOL
hes the man on loops ,

73
M0CQL
ANDY

Max Donoghue wrote in message ...
>If I am not granted permission to erect a rooftop antenna, I may build a
>loop to use. I'm looking for operating impressions from those using these
>types of antennas.
>
>Thanks,
>
>Max,
>
>

1409. RE: ICOM AT-120 Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 21:52:48 UTC
From: Lucio Estrada <lem123@ono.com>
Message-ID: <Quo96.2262$T03.16421@newsr01.ono.com>
Source record: 171932

Virgil Stamps <stamps@brokersys.com> escribi&#65533; en el mensaje de noticias 93vhbnhka1@news.hal-pc.org...
> Anyone with experience using this tuner ?
> It was designed for marine use with a long wire from 2-24Mhz.
> Can it be used with a G5RV antenna?
> Virgil AD5BH
>
>
>
Hello
My name it&#65533;s lucio and my work is in a ship repair, electronic and other.
The automatic antenna tuner AT-120 work very fine, not problem with operation in mobile marine station, the current antenna in marine it&#65533;s a simple vertical wire or antenna with 7.5 meters and the ground it&#65533;s a connection to the sea, all amateur ship with navigation to the sea work in this conditions, in this moment they are a regatta Cadiz (sud of Spain) to La Habana (Cuba), (http://www.cadizlahabana.com), the first day had a 3/01/2001 and the finish aproximately 29/01/2001 in Marina of Heminway (Cuba), all ship&#65533;s working with a Furuno or Icom BLU, with automatic antenna tuner but the better it&#65533;s a Icom AT-130E.
With G5RV, sorry they have not experiency.
But in marine conditions it&#65533;s the currently solutions,

73

1410. Re: Cushcraft R5 mathching network inop need help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 22:02:54 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3A6616C3.395D3242@worldnet.att.net>
Source record: 171934

Cushcraft has a web page with links to their .pdf manual files. I believe
it is www.cushcraft.com. The R-5 antenna is one of them. Also check the
aluminum strap which connects the loading box to the antenna. I had one
fail due to metal fatigue. Expect little or no help from Cushcraft.
Experience talking.

Dick K7RNZ

rharrisdeja@my-deja.com wrote:

> I just purchased an older R5 vert. and now find that the SWR is very
> high on all bands. I have tried a different coax and signal source and
> still the same result.
>
> I assume that the matching network is bad. I have tried to get a
> diagram from Cushcraft...no help.
>
> Does anyone have a diagram of the unit?
>
> Does anyone know what the range of the matching unit is? Can I replace
> it with a 4:1 balun etc.
>
> If I could find out the impedance of the trap vertical I might be able
> to build a new matching network.
>
> Or....does anyone know of a replacement Cushcraft R5 matching network
> that I could buy for a reasonable price.
>
> Tnx.
>
> KY6N
> ron@rainbow.to
>
> Sent via Deja.com
> http://www.deja.com/

1411. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 22:07:46 UTC
From: n2ey@aol.com
Message-ID: <94553bmun1@nnrp1.deja.com>
Source record: 171935

In article <3A65ABB5.91A9CC4C@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> > Then you agree that your earlier statements about nobody wanting to
eliminate
> > Morse were incorrect. "Nobody" means "not one person". Thanks for
admitting
> > your mistake, Cecil.
>
> Last year, I changed that statement to, "Hardly anyone wants to
eliminate
> Morse code.

I was referring to the recent post where you said there was no crusade and nobody wanted to cut out anyone's fun with CW. Or words to that effect. You made a mistake, that's all.

> Let me rephrase: Nobody who matters wants to eliminate Morse
> code.

So you deny the rights of those who want to eliminate it. How would you feel if someone said "Nobody who matters wants to eliminate the Morse code test"?

>A lot of people who matter want to eliminate the Morse code
requirement.

I see. Their opinion determines whether they "matter" or not. Uh huh.

> > Here's a hint: The organization isn't called "No Code TEST
International".
>
> Now Jim, you know that TLAs are much superior to FLAs.

I don't know what you mean by TLAs or FLAs. Please explain.

>Please read the NCI charter.

I have. If they mean what they say, why the name?

> It specifically states that they want to remove the code
> *requirement*, not the code.

And I think, and have said, that most of their members want that and nothing more.

> Do you have any valid evidence that the
> NCI BOD doesn't intend to abide by their own charter?

I'm talking about certain individuals. Read their posts - the evidence is right there. When somebody wants to do away with all subbands by mode, and allow HF DSSS with no consideration of its effect on narrowband users, that cuts into my CW fun. And others' SSB fun, etc.

Even when the impact of such proposed operation is pointed out, the person I'm thinking of still thinks it's a good idea. "Let there be a free market of modes" was one buzzphrase. And if it raises everybody's noise floor for miles around, too bad.

Is that a good ham attitude to have towards other modes?

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1412. Re: Anybody make a NMO to SO-239 (female PL-259) adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 22:22:12 UTC
From: w4llk@aol.comkarst
Message-ID: <20010117172212.15922.00001950@ng-bg1.aol.com>
Source record: 171936

ALso check RF Parts

Tom

1413. Re: screwdriver ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 22:53:10 UTC
From: Brendan Minish <bminish@oceanfree.net>
Message-ID: <cc7c6t0hloj5bp10201lkuvup3k5puciaj@4ax.com>
Source record: 171941

On Wed, 27 Dec 2000 12:49:26 -0600, "Henry Kolesnik"
<wd5jfr@oklahoma.net> wrote:

If your friend hasn't already spent money...

>i have a freind who is looking for a decent scewdriver for use on 80 meters
>in a full sized ford van...
>what are two or three good options?

High Sierra & Don Johnston's DK3
There are various others making screwdrivers but they all seem to be
knock off copies of the DK3, Why buy a copy when you can have the
original for less.

High Sierra Is more expensive but would appear to be more complete
(I.e mount is properly sorted out for cars etc.) Since your friend
will need to make his own mount anyway to mount on his van (I mounted
my DK3 on the front bumper) he may be better off with the DK3

The DK3 is better than the High Sierra in several ways

1/ it has A Zmatch built into the antenna (No need for matching
xformer)
2/ it has a very nice Quick release system.
3/ it is cheaper ($150 from www.hamradiotoys.com)
4/ It's nicely made (as is the High Sierra) and Don is the original
patent holder for this type of antenna.

With the DK3 you will have to build your own mounting arrangements and
you will have to do your own weather proofing, but this actually
allows for more flexibilty in a van install.

Vans make GREAT mobile stations as there is a decent ground plane for
the antenna to work against. Just get all the System (antenna, RIG
etc) grounding properly sorted and the antenna base matching
arangements optimized and you will be a booming mobile Signal on any
HF band.

if you want more info and some pictures of how I installed my DK3 on
my VAN (My VAN is a Long wheel base Volkswagen T4 transporter) just
drop me an e-mail.

--
Brendan Minish
The reply address works but
This will get to me faster
bminish at eircom dot net

1414. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 22:59:09 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94584i$9oc$1@iac5.navix.net>
Source record: 171937

Simply my poor attempt at some humor in response to you excellent but somewhat verbose explanation.

"Richard Clark" <rwclark@seanet.com> wrote in message news:3a65cede.85025770@news.seanet.com...
> On Tue, 16 Jan 2001 21:37:00 -0500, "W4JLE" <Fred@w4jle.com> wrote:
>
> >So Richard er Ya fer it or agin it?
> >
>
> Hi Fred,
>
> I just love inspecific questions! It? Hmmm, my film studies suggest
> that the last "It Girl" was Clara Bow. Well, I'm sure that Clara is
> beyond "It," but the "It" she so represented is something I am
> certainly for. Vive la difference!
>
> 73's
> Richard Clark, KB7QHC

1415. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 23:13:43 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <9458uuqit1@nnrp1.deja.com>
Source record: 171938
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <3A65DD87.3F54BC7E@rupert.tds-az.lmco.com>,
K7MEM <jda@rupert.tds-az.lmco.com> wrote:

> At the time, I was under the impression that this fee went directly
> to the ARRL, to cover the cost of the testing materials that they
> supplied.

At one time that was completely correct. I ran a DeVry/Great Lakes core from 1984 (before League involvement, by the way) through 1993. At first the local core didn't get anything, but eventually DeVry/Great Lakes started a core reimbursement progam. By the time they folded and we changed over to ARRL, the League was reimbursing up to $4 to the local core.

> That ment that the club, which was running the VE session, was
> really charging nothing for their time.

Also correct. That's why we are called "volunteer examiners." My club, however, covered all my costs for materials since I prepared all of our written and code exam materials and purchased or prepared other materials such as blank paper, pencils, 610s, etc.

> Was I correct in my reasoning? Aren't they, the club, also allowed
> to charge a small fee to cover their expenses?

Not at the VE Core level. Only at the VEC (coordinator) level. And when a VEC does allow expenses to be covered by a core, it's always as a rebate from the VEC (I speak from DeVry/Great Lakes and ARRL experience only).

LRod

Sent via Deja.com
http://www.deja.com/

1416. Re: Anybody make a NMO to SO-239 (female PL-259) adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 23:16:34 UTC
From: Mark Russo <mrrusso@optonline.net>
Message-ID: <3A6627D5.AB3ABD9B@optonline.net>
Source record: 171939

THANKS FOR YOUR HELP!!!!!!!!!!!!

Mark Russo wrote:

> it would solve a problem.
>
> THANKS, Mark N2FLF

1417. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 23:19:17 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <94599b$qv4$1@nnrp1.deja.com>
Source record: 171940
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <944avp$q7a$1@flood.xnet.com>,
"Steve Woodruff" <sjwoodr.nospam@nospam.email.com> wrote:

> Are all VE's subject to the same set of rules? These guys seemed
pretty
> confident that they could charge $10 per exam ... which is why i did
not
> even attempt the extra class written element.... figured i'd wait an
extra
> month and study a little more so i wouldn't be wasting my money.

I'm sorry you had that experience. I can't answer whether a VEC can instruct their cores to charge for each element. I can say that ARRL does not, nor did DeVry/Great Lakes when I was with them.

Who was the VEC for your exam? I have my own suspicion, and if I'm correct it's further confirmation of why I will never have anything to do with him.

Irrespective of who it is, it's an example of poor training of the VE team. That's one of the things that should have been basic in their instruction. I suggest you write a letter of complaint to the VEC.

LRod

Sent via Deja.com
http://www.deja.com/

1418. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-17 23:59:31 UTC
From: rwclark@seanet.com
Message-ID: <3a6630d1.110100546@news.seanet.com>
Source record: 171942

On Wed, 17 Jan 2001 17:59:09 -0500, "W4JLE" <Fred@w4jle.com> wrote:

>Simply my poor attempt at some humor in response to you excellent but
>somewhat verbose explanation.
>

Hi Fred,

To which I (again) replied verbosely - hopefully with humor (forgive
me if it is too dry).

73's
Richard Clark, KB7QHC Empiricist Extraordinaire ;-)

1419. FS:MONOGRAM 16 CH.PROGRAM

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 00:10:06 UTC
From: DBTech <dbraggs@hcis.net>
Message-ID: <3a6631fd_1@corp.newsfeeds.com>
Source record: 171943

I have 16 ch.programable monogram radio for sale .
I am trying to buy a ham dual band radio.
Please mack an offer.
Thanks N9ZDZ/Darren

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1420. Re: Replacing Telescope

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 00:37:10 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <vg8blBA2qjZ6Ewu3@g3ohx.demon.co.uk>
Source record: 171945

In article <df846tsem3n7gucr17lr7k18hq7cnk630a@4ax.com>, Bill Turner, W7TI <w7ti@jps.net> writes
>On Sun, 14 Jan 2001 18:05:39 GMT, robertj <robertj-7@excite.comn>
>wrote:
>
>>I bought a nice radio from Sony, the CFD-S39. Unfortunately the
>>antenna which is a telescope isn't great and I would probably do
>>better using some other antenna. Is there anyway I can modify so I
>>can install another antenna? There is no external connection for
>>attaching another antenna. Thanks
>
>>----------
>
>Just clip a longwire to the end of the telescoping antenna. Also
>clip a ground wire if there is a ground connection available. If
>you're running off the AC line you probably won't even need that.
>
>73, Bill W7TI

I've often done this, especially in hotel rooms in metal-framed buildings which killed the signal inside (I hooked up the wire near the window). It's often the only way of receiving the good old BBC (and REAL news) in benighted places (eg like the USA!). However, a long 'clip-on' wire might cause overloading of the receiver (possibly on frequencies well away from from where you are tuning). It may be better to put the wire where it has the best chance of picking up a signal (near a window, as I said) but give the radio only a 'sniff' of the signal. Ideally, you would place a variable capacitor at the junction of the wire and the telescopic antenna (in series), and use it to adjust the amount of signal fed to the receiver. However, if you don't have such a capacitor about your person, you might try simply winding the wire (I'm assuming that it is insulated, so that there is no direct connection) MANY times around the telescopic antenna. Adjust the number of turns, as necessary, if you have to. It's a bit cheap and cheerful, but it does work.

A more 'sophisticated' method would be to use a proper antenna tuner (you would probably have to make it yourself - not complicated, but not quite the same as tuners used to feed radios with a proper 'antenna input' socket. You would connect the ground side of the tuner to the 'chassis' side of the circuit (yes, I know there is no chassis - try the ground side of the battery clip - if it has batteries). The tuner design would have to give a high impedance feed to couple to the antenna. This actually might work pretty well!

Ian.

1421. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 00:39:32 UTC
From: Glenn Miller <glennmiller@worldnet.att.net>
Message-ID: <8Xq96.363$7b2.15060@bgtnsc05-news.ops.worldnet.att.net>
Source record: 171944
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"LRod" <lr0d@my-deja.com> wrote in message
news:943h9b$9s4$1@nnrp1.deja.com...
>
> Unless the ARRL has changed, it's not quite a session fee. It is insofar
> as you can take one of every element for one fee. Retakes of failed
> elements are subject to another fee.

I guess it's a matter of semantics. Retests of failed elements are, for
paperwork purposes, considered separate sessions (or sittings).

The ARRL/VE Manual says "The ARRL/VEC charges $6.65 per candidate, per
session." Of course, that was published before the fee increased to $10.

The original poster said they were going to charge for each exam (element),
which is inappropriate.

Glenn AA5PK

1422. Re: Help: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 01:30:14 UTC
From: w5lz@oio.net
Message-ID: <3A664726.43C2C5CE@oio.net>
Source record: 171946

"J. Sun" wrote:
>
> if I put outdoor TV antenna in the attic ?
>
> Detailed story:
> After my last post I bought an RCA 3036x (110 in. boom and 36 elements)
> as suggested. I would like to put it in the attic. But I do not know if I
> need to
> ground the antenna in case of lightening.
>
> Thanks !
>
> Rus
>
> Last post:
> ==
> Hi,
>
> I live in the flat area about 50-60 mile from new york city.
> I would like to buy a outdoor TV antenna to boot the TV
> signal broadcasted from NYC..
>
> I have several questions as follows:
>
> 1. what is the difference between
> the antennas where the UHF element
> are either vertical to the axis or V-shaped ?
>
> top view:
>
> | | | | / / / /
> ----------- or ----------
> I | | | \ \ \ \
>
> 2. how many elenmet is appropriate ?
> 3. how long the boom is appropriate ?
>
> Thanks !
>
> Rus

1423. Re: Help: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 01:33:31 UTC
From: w5lz@oio.net
Message-ID: <3A6647EA.AF93BC93@oio.net>
Source record: 171947

Rus,
If the antenna is in the attic, I just wouldn't worry too much about grounding, especially for lightning. If the antenna in the attic is hit by lightning, it would have to come through the roof to 'get' it. If the roof is struck by lightning, that antenna and your radios are going to be the least of your worrys!
'Doc

1424. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 01:48:28 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A664B6C.8BC03C00@IEEE.org>
Source record: 171948

n2ey@aol.com wrote:
> So you deny the rights of those who want to eliminate it. How would you
> feel if someone said "Nobody who matters wants to eliminate the Morse
> code test"?

My feelings have nothing to do with it. There simply are not enough
people who want to eliminate Morse code to matter.

> >A lot of people who matter want to eliminate the Morse code
> *requirement*.
>
> I see. Their opinion determines whether they "matter" or not. Uh huh.

Nope, the number of them is what matters. Tens of thousands of hams
want to eliminate Morse code testing. Less than 100 want to eliminate
Morse code. IMO, of course.

> I don't know what you mean by TLAs or FLAs. Please explain.

Three Letter Acronyms Vs Four Letter Acronyms.

> >Please read the NCI charter.
>
> I have. If they mean what they say, why the name?

TLAs are better than FLAs. NCTI just doesn't have any ring to it.

> I'm talking about certain individuals. Read their posts - the evidence
> is right there.

There simply are not enough of those people to matter.
--
http://www.mindspring.com/~w6rca

1425. Re: Using a SKYWIRE as a TOP HAT for a VERICAL!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 01:58:47 UTC
From: klocko@toad.net
Message-ID: <945ikk$35s$1@nnrp1.deja.com>
Source record: 171949

In article <pSj96.4285$Oe.19573@tor-nn1.netcom.ca>,
"Rob" <Pse@NoEmail.Com> wrote:
> Hi,
>
> I am thinking of putting up either a 40 meter or 80 meter skywire
antenna.
> I understand that a skywire (which is just a horizontal loop) can be a
VERY
> effective DX antenna especially if you have it up high enough!
>
> I have room for both. Which is a better antenna a skywire cut for 40
meters
> or a skywire cut for 80 meters??
>

How about a random-length skywire? Put up as much wire as you can. Make it as square as you can. Put it up as high as you can. Run it through the trees and use an insulator and rope at a corner. Let the wire droop some. Don't run it over power lines. Feed it with ladder line. With a good tuner, you'll probably be able to tune it on all bands 160m to 10m. Moderate DX performance on the higher bands, good local coverage on the lower bands. The skywire comes up every couple of months, so search in the archives of DejaNews for more info. 73
Bill N3WK

Sent via Deja.com
http://www.deja.com/

1426. TVI HELP!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 03:07:52 UTC
From: "David J. Moge" <n1rzb@mailops.com>
Message-ID: <3a6661e2@excalibur.gbmtech.net>
Source record: 171969

In brief, I have a multi element TV antenna with a amplifier connecting to 4 televisions. The house lot is laid out in such a way that it's very hard to string antennas up with out having them in close proximity to the TV antenna.

At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW 10 Watts) which my wife gave me. I put up a dipole to try it out and to my surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.

My wife hasn't stopped yelling at me sense. Every time I key the mike or try out CW the TV's go blank. I have tried a HI PASS filter but that doesn't do much go at all.
My HF rigs cause no problems at all. I do have a good RF ground

WHAT AM I DOING WRONG??? HELP!!!

Any comments and suggestions would be gratefully appreciated.

Thanks

1427. Any experience w/ the Diamond CP-6 ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:05:05 UTC
From: Richard <richard@optima-optics.com>
Message-ID: <QXt96.1185$ff4.399326@dfiatx1-snr1.gtei.net>
Source record: 171950

Looking for user comments on the Diamond CP-6 Multiband vertical.

Thanks, 73
Richard
W7YES

1428. Re: Alarm system RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:06:21 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <1Zt96.2915$8r2.370136@newshog.newsread.com>
Source record: 171951

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Robert Fanfant" <fanfant@ix.netcom.com> wrote in message
news:3a5b92b8@news.microsoft.com...
> A neighbor is asking for advice about how to cure RFI that is getting into
> his alarm system when I'm on the air. When I'm on the air, both his alarm
> keypad(s) LEDs start to flicker, sometimes causing his alarm system to
"turn
> on".
>
> I"ve ordered some torriods from Amidon (FT-240-77). Will ask him to
install
> as close to the keypads as possible. Does he need to install the torriods
> on the keypad inputs at the alarm system also?
>
Me? I'd suggest that the alarm company fix it

OK, so first I'd try to work things out, but I'd want the alarm company to
give its blessing to any mods. They really should RF proof their
installation.
Around here, the ordinances are such that they have to fix it, or put up
with any interferrence they receive. (If the station is clean)

Just wait till I go on 160 with a KW.

Some one in the neighborhood got a scanner for christmas. It has a birdy
right on 446.00 just strong enough to break the squelch. I haven't located
it yet, but it sure is a nuisance.

73,

Roger (K8RI)

> Any other suggestions?
>
> -rob N7QT
>
>

1429. Re: 1,6 Mhz Duplex for 433 Mhz

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:11:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <z1u96.2916$8r2.370653@newshog.newsread.com>
Source record: 171952

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Radio3" <jk@yahoo.com> wrote in message
news:uC696.2853$Yv.350499@juliett.dax.net...
>
> We need a Duplex (1,6 Khz) for 70 cm repeater`s.
>
Sure that isn't 1.6 MHz?

I saw a set of 4 on e-bay a while back. I prefer 6 when duplex on the same antenna. 4 work fine with two antennas. Then again it depends on how much power you run.

I did see a set of 6 at our swap last June, but I had already spent my money on a new HF rig, a UHF/VHF mobile, and an old Henry 2K4. If I'd brought home one more thing, I'd have had to sleep in the dog house and we don't have a dog.

Roger (K8RI)

> need help.....
>
>
>
> Txn
>
> Mr.klonk
>
>

1430. Re: Yaesu rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:14:10 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <m4u96.2917$8r2.370934@newshog.newsread.com>
Source record: 171953

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Per LC3WAT" <pm@NO_SPAM_HERE_inorbit.com> wrote in message
news:3a658354.96164146@news.online.no...
>
> Hello,
>
> I recently came by an Yaesu G-1000SDX rotator at an very affordable
> price, I was however warned the the rotator's control cable plug was
> missing. Upon checking with our national Yaesu distributor I was told
> that this was an propritary plug and they would like to charge about
> 80 USD for it. This is the round 6 ping plug which goes into the
> rotator, not the rectangular entering the control unit.
> Does anyone know if there exist an replacement for this plug?

They are "similar" to the "Winchester" series of military plugs. You might
have to modify/replace the socket, but there has to be a way. I have one of
the old Wilsons which is much like the one you have, but as I recall, it
uses an 8, or 10 conductor cable. I had the plug and it has to be around
here *some where* in all the junk <sigh>

Roger (K8RI)
>
>
> --- per
> LC3WAT

1431. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:21:50 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ybu96.2918$8r2.370222@newshog.newsread.com>
Source record: 171954

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Bob M." <kcxxxxxx@snet.net> wrote in message
news:mL496.22743$OD.8423643@typhoon.snet.net...
> Since I happen to have a 3000psi pressure washer, I was planning on
> installing its zero-degree nozzle, and tracing the existing wires, letting
> the water cut a slot in the ground. I also plan on wearing plastic all
over
> myself as the water will push up mud that will try to land on me !
>
Careful with that pressure washer. I can cut 2 X 4s with it on high pressure
(3,300 psi) and yes, the rubber suit is a must. Wear some heavy clothes
under it though. That pressure washer will pick up small stones and throw
them like a bullet! From experience I know that they can really hurt and I
had heavy clothes on under the suit.

It probably goes without saying that a face shield (and goggles) are
mandatory.

A simple hook like cutting bladeon the back of a garden tractor (with a
piece of 3/8 ths tubing down the back makes an excelent ground installer.
Hook the end of the wire to the ground and then you just feed in the wire
off a roll as you drive away. <:-))

> I also had considered the same setup but attaching a small wheel to the
end
> of the pressure washer's wand. This wheel would have a groove in it that
> would follow the wire and keep the nozzle the same distance above the
ground
> at all times.
>
> Naturally this won't be tested until the spring.......

If you have a pressure washer you could install the wire down 6 inches (a
bit deep) when it's below freezing <G>
>
Roger (K8RI)

> ==================================
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A605A88.69DC5EEF@IEEE.org...
> > Mike wrote:
> > > What is the best way to bury ground radials ?

> > > Lets say the ground is kinda soft from a light rain.I was thinking
maybe
> > > a spade.
> > > The tv cable company has something that will push the line in the
ground
> > > kinda like a spade but about as wide as a snow shovel.Does anyone know
> > > how its made and maybe rig up something like this or whatever your
idea
> > > might be ?
> >
> > There's an edging tool that looks like a straightened-out hoe.
> > It works well for me in sandy clay.
> > --
> > http://www.mindspring.com/~w6rca
>
>

1432. Re: Glen Martin Tower & Hazer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:23:18 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Wcu96.2919$8r2.370222@newshog.newsread.com>
Source record: 171955

What's a Hazer?

--
Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Mark Erbaugh" <mark@nospam.microenh.com> wrote in message
news:3a630ffd$0$1506$6daed22a@news.infinet.com...
> I'm planning a new tower installation for a new QTH. I'm intrigued the
Glen
> Martin aluminum tower and Hazer package. I'm afraid to climb a tower (even
> with proper safety gear) and like the idea of working on the antenna from
> the ground. Fortunately, at the new QTH, I will have enough room (about 4
> acres) to put in a guyed tower.
>
> I'd appreciate any comments or experience with the Hazer.
>
> I guess another option would be to get the Hazer for a Rohn 45 or 55
tower.
> Comments?
>
> 73,
> Mark
>
>

1433. Re: Glen Martin Tower & Hazer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 04:56:40 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <1htc6t4ctgu51lafp3jp6att0gicaft8j6@4ax.com>
Source record: 171956

It's a little trolley that rides on the outside of a fixed tower that allows you to mount and work on your antennas at ground level, then raise it back up to the top of the tower. Hazer sells both the mount as well as complete tower systems.

Dick - W6CCD

On Thu, 18 Jan 2001 04:23:18 GMT, "Roger Halstead" <rdhalste@tm.net> wrote:

>What's a Hazer?

1434. Re: Glen Martin Tower & Hazer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 05:59:44 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <9460ov$49$1@iac5.navix.net>
Source record: 171957

Someone who would require that folks learn code to become hams 8>)

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:Wcu96.2919$8r2.370222@newshog.newsread.com...
> What's a Hazer?
>

1435. Raised radials vs. longer radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 07:06:33 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <gJw96.4461$d25.28614@newsfeed.slurp.net>
Source record: 171958

I have been studying lots of articles about relative efficiencys of verticals with differend numbers of radials, different heigths of the radials, etc. What I have not found yet is a comparison for a fixed total height. For instance if the top of the vertical could be only 1/8 wavelength above ground (terra firma that is, not the radial system) how would a raised feedpoint and radial system compare to a radial system on the ground. So lets say in my neighborhood I could only get away with a 60 foot vertical with no top hat. What would be better 60 radials at ground level and a full sixty foot radiator, or four radials ten feet up and only a fifty foot radiator?

1436. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 08:48:33 UTC
From: Travis Zdanski <tirix@bellsouth.net>
Message-ID: <3A66ADE1.DF3@bellsouth.net>
Source record: 171959
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Delbert McCord wrote:
>
> I have a R8 that is less than 6 months old and I am having problems
> witht he antenna also. It was working Great and then all of a sudden
> its like having a dummy load on the end of the coax!
>
> I checked the coax (Which is also new) and Its not shorted and gives
> me a perfect SWR when I connect a dummy load out there on the end of
> the coax. Cushcraft (After a bunch of phone tag) had me send them the
> matching box back to them, they tested it and returned it saying its
> fine. I used to get better than a 2 on every band with out my tuner
> now I get over a 8 swr and I can receive better if I connect the coax
> to my dogs collar!
>
> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
> ever get from me!
>
> Worked great, Looks Great, Does not last
> I can not afford almost 100$ a month for an antenna!
>
> Delbert McCord
> KA8OCN
>
> On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
>
> >Hello to all,
> >
> >First let me say that up until now I've been a happy camper
> >using Cushcraft products. However, I've just learned something
> >that may be of interest to anyone considering purchasing a
> >new Cushcraft antenna.
> >
> >I recently bought an R-8 vertical. It was just damaged by
> >lightning and I e-mailed Cushcraft tech support regarding
> >parts availability....the answer was 2 sentences that suggested
> >I buy a new antenna and try to collect on insurance. Needless
> >to say, I was not happy with that so I wrote a letter to the
> >Cushcraft manager of amateur products. This gentleman was kind
> >enough to telephone me today. Essentially, the conversation
> >focused on the fact that the parts I needed would be so expensive
> >as to make buying a new antenna more practical. However, one
> >interesting fact did come to light. Parts for the R-8 vertical
> >had not been "priced" yet and were thus unavailable. Further,

> >Cushcraft does not "price" replacement parts until the product
> >has been out for 9 to 12 months. I'd suggest you keep this
> >in mind....if you drop your new R-8 or new whatever, you may
> >not be able to get parts for it for up to a year!!
> >
> >thanks & 73,
> >Phil
> >W5BVB

Thanks for telling us all. I was this close to buying one of those
today.

1437. Re: Antenna for sailboat?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 09:11:12 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A66B330.9AB8A156@dvol.com>
Source record: 171960

captbrian wrote:

> I could write six books about this endlessly fascinating challenge.(How to
> get a 67' dipole on a 36' boat)
> He will need 40 metres for the Waterway Net. 7268 every morning wet or fine
> at 0745 ET.
> Far and away the best is an inverted Vee from the masthead .feed via a coax
> balun simply made by making a coil of the coax .
> Feed the coax down inside the mast where the Marine VHF coax goes.
> Use nylon fishing line for insulators of the plastic insulated ant.
> wire.make the leg lengths equal and tie one to the pulpit and the other to
> taffrail or pushpit.

>
What, no back-to-back Hamsticks??
>

> When sailing take each leg down the nearest shroud, out of the way.Get a
> simple manual tee-match ATU with SWR meter.

>
Oh. Temporary antenna. I was wondering how you could possibly be underway in a
ragboat with an antenna like that cluttering the rigging.
>

> SSB gear is very expensive , you need a different licence. Don't get marine
> ssb until you have sailed a few thousand miles with just the ham-gear.

>
Zero justification for marine ssb unless you cruise 'way offshore. The license
is no biggie, just fill out the paperwork. Given a 36 foot Columbian who the
hell cares what radios cost?
>

> Start by monitoring 7268 every day at 0745 ET. Don't break in - its for
> people on boats. From the Chesapeake to the Virgins.
>
> Go and study his boat mast. Impress him with your (newly acquired)
> expertise. Build up brownie points. You may get invited sailing. Then you
> too will want to do it. Your wife won't.
> So divorce her. Its worth a little hassle to cruise all winter in the
> Bahamas sunshine,drinking beer and operating with the finest ground plane
> God could make.

>
That's one of the reasons She is my ex . . .
>

> 73, Bryan- AC4UA/C6A

>
w3rv

1438. FS:Cushcraft A-3S with kit $200.00 firm

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 10:01:28 UTC
From: Buffalo Soldier <goldfinger_byu@my-deja.com>
Message-ID: <946etloqv1@nnrp1.deja.com>
Source record: 171961

I have a Cushcraft A-3s new in box works
for 20 meter/15 meter/10 meter antenna
has 3 elements 14 foot boom 8 db gain
stainless hardware multiband antenna.Aso
have the 40 meter or 10mhz add on kit for
antenna also both are new selling antenna
and kit for $200.00 firm! Great for dx pile-ups!

Sent via Deja.com
http://www.deja.com/

1439. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 13:32:50 UTC
From: n2ey@aol.com
Message-ID: <20010118083250.22631.00000799@nso-fz.aol.com>
Source record: 171963

In article <3A664B6C.8BC03C00@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>n2ey@aol.com wrote:
>> So you deny the rights of those who want to eliminate it. How would you
>> feel if someone said "Nobody who matters wants to eliminate the Morse
>> code test"?
>
>My feelings have nothing to do with it.

They have everything to do with it. Whether or not something should be tested or not, and how much testing is "enough" is really just an opinion question - based on feelings. That's not a bad thing.

> There simply are not enough
>people who want to eliminate Morse code to matter.

All it takes is a few in the right places.

You didn't write that there weren't enough to matter. You wrote that nobody who matters wants to eliminate the Morse code. Not the same thing at all.
>
>> >A lot of people who matter want to eliminate the Morse code
>> *requirement*.
>>
>> I see. Their opinion determines whether they "matter" or not. Uh huh.
>
>Nope, the number of them is what matters.

That's not what you wrote.

> Tens of thousands of hams
>want to eliminate Morse code testing.

I don't see that at all. Maybe two, three thousand, max. Hundreds of thousands want to keep it.

> Less than 100 want to eliminate
>Morse code. IMO, of course.

In other words, you don't have any facts.
>
>> I don't know what you mean by TLAs or FLAs. Please explain.
>
>Three Letter Acronyms Vs Four Letter Acronyms.

Ah - OK. So it was OK with you to steal the TLA of the National Cancer Institute.
>

>> >Please read the NCI charter.
>>
>> I have. If they mean what they say, why the name?
>
>TLAs are better than FLAs. NCTI just doesn't have any ring to it.

Neither does NCI.

>> I'm talking about certain individuals. Read their posts - the evidence
>> is right there.
>
>There simply are not enough of those people to matter.

Depends on who they are. Do you agree that allowing DSSS on the HF ham bands could seriously disrupt the use of other modes?

Here's an example:

Suppose Station A is using SSB on 20 meters with a 2.5 kHz wide receiver. Station B, running 100 watts, on SSB, is S9+40 dB at Station A. This makes a few kHz of the band unusable by Station A. No big deal.

Now Station B switches to DSSS and spreads his signal evenly over 250 kHz of 20 meters. (Yes, I know it doesn't spread evenly, but to simplify we'll assume even spectral power density). Spreading that S9+40dB signal over 100 times as much spectrum lowers the apparent level at Station A by 100 times - 20 dB. So now Station B is heard by Station A as an S9+20 dB noise source covering 250 kHz of the band. If Station A doesn't have a directional antenna to null out Station B, there's not much that can be done. Noise blanker is of no use.

Even if Station B reduces power by 20 dB - to just 1 watt - Station A has to deal with an S9 noise source. From ONE DSSS station. How many S9+40 dB SSB stations does one hear on 20 when the band is open?

Would you say somebody who thought that the above scenario was not a problem "didn't matter"?

73 de Jim, N2EY

1440. Stand-offs for ladder line feed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 13:35:26 UTC
From: Dodge Johnson <djohnson@voicenet.com>
Message-ID: <djohnson-3BB4E7.08352618012001@netnews.voicenet.com>
Source record: 171918

(I posted a similar message a few minutes ago, but my line dropped and I don't think it got through.)

I'm putting up a dipole with ladder line feed on the other side of the house. So I need to route it around the house, over downspouts, etc.

Does anyone know of anything that works as a stand-off? (Metal won't do, of course.)

I saw at Agway a standoff for electric fence that you nail to a post, with a clamp arrangement that's wide enough to take ladder line. But they have it only in bright yellow. This might work if I could find it in black, clear, or brown (the color of the house).

Thanks for the help.

Dodge

M3HUO

1441. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 13:45:23 UTC
From: richardharrison@webtv.net
Message-ID: <4113-3A66F373-16@storefull-115.iap.bryant.webtv.net>
Source record: 171964

Bill Sabin, W0IHY wrote:
(On extensive technical knowledge required of hams) "It should not be required, but it should never be considered an end goal."

Did Bill mean we never know it all? Or, is there always something new? Or, is a little knowledge only a little potential until it is exercsed?

Did Bill mean technical prowess shouldn`t be required for admission, but continued ignorance is no aim?

Succinct is good. Succinct is powerful. We need to keep it simple, but not too simple.

I think Bill is right. I think I agree. But, I`ve thought I agreed with what some politicians said also.

I expect Bill meant exactly what he said, and that I shouldn`t try to put words in his statement.

Best regards, Richard Harrison, KB5WZI

1442. Re: Anyone using loop antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 14:06:07 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a66f95b1vtanpl$mr2ice@news.uga.edu>
Source record: 171962

I use a home-brewed loop made of 1/4 inch copper pipe. It is mounted about 2.5 m high so that I can tune it manually. In a wooden house or in an open space it works very well but needs to be retuned very often. In an apartament with a lot of wires and some concrete, a ceiling dipole was better. 73,
Ignacy, NO9E
no9e@arrl.net

1443. Re: Raised radials vs. longer radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 14:20:19 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A66FBA3.5F9A3BC9@IEEE.org>
Source record: 171965

Ken & Mary wrote:
> What would be better 60 radials at ground level and a full
> sixty foot radiator, or four radials ten feet up and only a fifty foot
> radiator?

Assuming this is a 75m antenna, 60' and 60 radials would be
better. Four elevated radials are not all that effective when
they are only .04WL from the ground.
--
http://www.mindspring.com/~w6rca

1444. Re: Yaesu rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 14:58:00 UTC
From: etagg <etagg@twcny.rr.com>
Message-ID: <YvD96.101727$_G5.15236534@typhoon.nyroc.rr.com>
Source record: 171967

make your own use fast setting epoxy in a mold with the bottom of the plug
formed with a round pice of plastic
"Per LC3WAT" <pm@NO_SPAM_HERE_inorbit.com> wrote in message
news:3a658354.96164146@news.online.no...
>
> Hello,
>
> I recently came by an Yaesu G-1000SDX rotator at an very affordable
> price, I was however warned the the rotator's control cable plug was
> missing. Upon checking with our national Yaesu distributor I was told
> that this was an propritary plug and they would like to charge about
> 80 USD for it. This is the round 6 ping plug which goes into the
> rotator, not the rectangular entering the control unit.
> Does anyone know if there exist an replacement for this plug?
>
>
> --- per
> LC3WAT

1445. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:02:28 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <9470jq$880$1@nnrp2.phx.gblx.net>
Source record: 171966

Cecil posted to RRAA a couple of days ago:

> If I cannot think about 'truth' without referencing the English language
> word for 'truth', how can I possibly use CW to think about
> - .-. ..- - .... without referencing the English language word
> for 'truth'?

Actually, the CW word for 'truth' is -.-....- ;-)

The "CW is a language" crowd is partially right. Given several centuries of heavy usage and rapid evolution, CW could come up with a unique grammar and syntax with little or no relationship to English.....I think. The process would be something like that going on with sign language where the sentence word order has changed to a postfix subject-object-verb one. But it's easy to see that "CW as a language" is stillborn for a number of reasons. First and foremost, if it loses its one-to-one mapping to English and other established languages, it loses much of its utility as a message relay system. An English-language message submitted on one end of the circuit would probably come out the other end in a substantially different form. Imagine every message having to be translated from English to Navajo and then back to English. It might work fine for artillery firing coordinates but would really lose something on a philosophical treatise. And then there's the economic aspect. It just isn't worth the time to learn and evolve the language when the financial incentives disappear due to technological advances such as teleprinting. Man-months aren't mythical, they're paid for with real dollars and even existential pleasures have costs.

This isn't to discourage the preservation and further development of a unique CW language and culture. Just don't expect my participation, OK?

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

1446. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:11:10 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A67078E.11B5E128@mwci.net>
Source record: 171968

Richard Harrison wrote:

> Bill Sabin, W0IHY wrote:
> (On extensive technical knowledge required of hams) "It should not be
> required, but it should never be considered an end goal."
>
> Did Bill mean we never know it all? Or, is there always something new?
> Or, is a little knowledge only a little potential until it is exercsed?
>
> Did Bill mean technical prowess shouldn`t be required for admission, but
> continued ignorance is no aim?

The really important thing is not what I said, or even what I meant. The really important thing is that whatever it meant (I'm not exactly sure any more what it meant), you agree with it.

A guy can't ask any more than that.

Bill W0IYH (please note not W0IHY)

1447. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:34:39 UTC
From: richardharrison@webtv.net
Message-ID: <6820-3A670D0F-1@storefull-111.iap.bryant.webtv.net>
Source record: 171970

Jim, N2EY wrote:
"All three of the stories are good."

The 1935 story of a Colorado "cure by radio" is gratifying. The event would not be repeated now. A seriously ill persn would be transported off the mountain by helicopter for hospitalization. Help would be summoned by the mining company`s business phone, cell, satellite, or other radio subscriber service. Should ham radio be used for an emergency call, SSB would allow the physician to rid himself of one or more intermediaries to consult directly with those closest to the situation.

The Colorado cure is an historic human interest story, but irrelevant to Morse testing or antennas.

Best regards, Richard Harrison, KB5WZI

1448. What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:45:53 UTC
From: jason_hsu@my-deja.com
Message-ID: <94733e$9ln$1@nnrp1.deja.com>
Source record: 171973

Exactly what is a half wavelength vertical antenna? What is the general configuration? Why doesn't it need a ground plane or radials? What does its radiation pattern look like?

Is a half wavelength vertical simply an end-fed dipole? Or a dipole configured vertically instead of horizontally? Or both?

I know from recent experience that a half wavelength vertical is not simply an enlarged version of a vertical monopole antenna. My 18-foot wire monopole antenna performed about as well as a 20m Hamstick (and even tuned better) on 20m. I couldn't get this wire to tune at all on 10m. (I have heard that a random wire antenna should be close to an odd multiple of 1/4 of a wavelength.)

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

1449. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:48:54 UTC
From: richardharrison@webtv.net
Message-ID: <6818-3A671066-5@storefull-111.iap.bryant.webtv.net>
Source record: 171975

Bill, W0IYH wrote:
"Please note not W0IHY."

So sorry. I have an IHY friend, and that`s not a good excuse. I`ll try to be more careful.

Best regards, Richard Harrison, KB5WZI

1450. Re: TVI HELP!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:52:11 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A67112B.92006868@oio.net>
Source record: 171971

David,
I don't think your doung anything 'wrong'. But, in your
situation, you don't stand a chance of doing anything 'right',
either. Try disconnecting the amplifier from your distribution
system, and I'll bet you RFI is at least reduced. Those TV
amplifiers are an open invitation to RFI.
'Doc

1451. Re: Anybody make a NMO to SO-239 (female PL-259) adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 15:54:50 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <qd4e6tc60oe1e3ra7f042b51nvt032mi9d@4ax.com>
Source record: 171972

Contact Jean @ wb0w 800.626.0834
I bought one from her at a hamfest.

73,

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

1452. Re: Raised radials vs. longer radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 16:04:54 UTC
From: mike.luther@ziplog.com
Message-ID: <t6e516s6bcfv8b@corp.supernews.com>
Source record: 171974

In <gJw96.4461$d25.28614@newsfeed.slurp.net>, "Ken & Mary" <kenmary@interpac.net> writes:

>I have been studying lots of articles about relative efficiencys of
>verticals with differend numbers of radials, different heigths of the
>radials, etc. What I have not found yet is a comparison for a fixed total
>height. For instance if the top of the vertical could be only 1/8 wavelength
>above ground (terra firma that is, not the radial system) how would a raised
>feedpoint and radial system compare to a radial system on the ground. So
>lets say in my neighborhood I could only get away with a 60 foot vertical
>with no top hat. What would be better 60 radials at ground level and a full
>sixty foot radiator, or four radials ten feet up and only a fifty foot
>radiator?

Four raised radials up less than 16 feet on 80 are not as good as the
ground mounted solution. Not only that, they introduce the really bad
problem of a step voltage that blows everything away if it gets hit by
lightning. You may not realize it, but even milli-ohms are a huge problem
when 10K amps of RF is involved! I warn you, it's a mess, I know.

There is likely a better one for you that will make everyone happy
including you!

Sixty radials on the ground with a folded monopole at less than 60 feet
will probably be your best bet of all if you cannot get enough top hat up
there to be effective in lengthing the antenna without notice!

A variation on the conical monopole idea, you can effectively shorten the
element length by making it into a long skinny 'loop' and it works just
beautifully, in comparison to what you are suggesting!

Not only that but the 60 radials will do a heck of a lot better at
protecting the site from strikes if they are properly coordinated with
the feed to the system and the ground layout for the shack.

A very interesting solution done this way by Lawrence Behr for WTAW-AM
on 1150Khz here in College Station provided a multi-element full directional
array for night time use here with about 3/4th's the height of the main
256 foot center radiator! There are an additional two towers somewhat
shorter than the main stick! Below the height of the main tower, it didn't
have to be lighted as well. It was the first time I'd been introduced to
the idea of shortened monopoles as decent elements for low band work.

Haven't tried it yet, but the same technique is one I intend to try for
a 160 meter array on only 65 foot towers. There ought to be a magic
configuration of either feeding the free end of the loop on 160 or
grounding it to the tower base with a relay which should get you a
combination shunt fed, gamma matched, 80 meter full sized element, as

well as a monopole 160 element on the same mast. It will result in some shortening of the whole full sized element for 80, due to the expanded element diameter on 80. However, my hunch is that there is a "magic" lashup that will get you both, including a full 160 meter 4 square out of a full sized 80 meter 4 square, if you can solve the 1/8 wave spacing problem.

Further, there ought to be a "spacing of joy" setting even wider than the conventional 65 feet or so on 80, that would give you increased versitiily as to F/B ratio on 80. At at the same time, it would help in getting rid of some of the feed problems associated with 1/8 wave spacing for a 4 square that have been noted elsewhere.

It would be a *HECK* of a lot chaper than a full sized 4 square for 160!

All slated for research here at my QTH, if I ever get the time to do it..

"Starry starry night! ..." Enjoy!

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

1453. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 16:43:54 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A671D4A.D42F8529@wgcr.org>
Source record: 171976

jason_hsu@my-deja.com wrote:
> Exactly what is a half wavelength vertical antenna? What is the general
> configuration? Why doesn't it need a ground plane or radials? What does
> its radiation pattern look like?

There can be two configurations -- the end-fed Zep, IIRC, is an end fed
half-wave. Make it vertical.....

> Is a half wavelength vertical simply an end-fed dipole? Or a dipole
> configured vertically instead of horizontally? Or both?

The vertical half-wave monopole is a completely different animal. Due
to the ground system of radials if acts as a full-wave dipole, not an
end-fed half-wave dipole.

> I know from recent experience that a half wavelength vertical is not
> simply an enlarged version of a vertical monopole antenna. My 18-foot

Your experience is misleading, due to the very high impedance found at
the feedpoint of a full-wave dipole (half-wave monopole over ground).

A J-Pole, fed the typical way by feeding the two legs of the J, is an
end-fed vertical half-wave with no ground system. Of course, you could
feed a J-Pole at the standard dipole feed point -- the J configuration
is for both tuning and for decoupling the dipole from the coax and the
ground.

AM broadcasters have used half-wave vertical monopoles for years -- they
produce an interesting exercise in the design of tuning networks. The
nicest thing about the halfwave monopole is the high impedance, which
reduces the ground system current, making the antenna more efficient
than one with low feedpoint impedance. But you have to design the
tuning networks to properly handle the voltage produced to make power on
that high impedance -- a completely different problem from the typical
short monopole, which needs current capability instead of voltage
capability.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

1454. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 17:19:55 UTC
From: rwclark@seanet.com
Message-ID: <3a6722f4.172087799@news.seanet.com>
Source record: 171978

On Thu, 18 Jan 2001 09:34:39 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Jim, N2EY wrote:
>"All three of the stories are good."
>
>The 1935 story of a Colorado "cure by radio" is gratifying. The event
>would not be repeated now. A seriously ill persn would be transported
>off the mountain by helicopter for hospitalization. Help would be
>summoned by the mining company`s business phone, cell, satellite, or
>other radio subscriber service. Should ham radio be used for an
>emergency call, SSB would allow the physician to rid himself of one or
>more intermediaries to consult directly with those closest to the
>situation.
>
>The Colorado cure is an historic human interest story, but irrelevant to
>Morse testing or antennas.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I was raised in Colorado at Fort Kit Carson where they had a mobile cavalry (helicopters). Fort Carson, on the plains, is at an elevation of more than 6000 feet. Getting anywhere in the Rockies requires flight at least at a 10,000 foot elevation (and you could bump into at least 100 mountains) to get to the parks with altitudes ranging 8-10,000 feet. Helicopters don't do very well up there. Or at least the generation of copters (Chinooks - familiar to most who watched TV news of Viet Nam) from the '60's.

One of my favorite haunts is Victor Colorado (birthplace of Lowell Thomas) which is only 20 miles from my parents home in Colorado Springs. Used to be an hour drive, the long way, on a good summer day. Used to be three hours drive, the short way, on a very good summer day. With Winter, don't count on it. That is, until they legalized gambling in Cripple Creek, a neighbor of Victor (just a couple of miles apart) and the gamblers paid the way with road improvements.

73's
Richard Clark, KB7QHC

1455. Helix antennas for hydrogen line (1420MHz) work

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 18:16:37 UTC
From: Ash <abuse@gravitywell.org>
Message-ID: <3A673301.F8915D56@gravitywell.org>
Source record: 171979

Hi
I've been considering using 4 phased Helix antennas instead of a parabolic dish
since they are quite hard to get here in sweden , a 3-5meter dish that is...
I've only used my radioscanner for a couple of years but have been into amateur radio
and satellite work alot during this time and radio communication is my largest interest
since a few years back.
Now I'm tired of playing with weather satellites and such, and is looking to explore what
I'm
really interested in - space. And the waterhole looks like a nice spot to start, I'll be
doing both
hydrogen line work and seti search.
Although I'm an electronics engineer I'm planning on buying most of the stuff ,
from DownEastMicrowave I'm going to buy 1420-144RX downconverter (my scanner only
goes from 10kHz to 1300MHz) and the 1420ULNA <0.4dB NF pre-amp.
Some questions I have about helix's is how directional are they?
Phasing 4 would improve that alot (compared to just one) I guess?
I've seen on some helix designs some use a piece of metal from the last winding and
adjusting it
closer or further from the groundplane, is this necessary for a rx only antenna too?
Is it really possible to replace the dish with helix's? Otherwise I can wait on buying the
downconverter etc.
One other thing, for rx purposes I've been using standard home satellite - low loss 75ohm
cable
(14.5dB loss @ 500MHz compared to RG-214's 18dB loss @ 500MHz (per 100meter) with great
results
for years, and would very much prefer to continue so, will there be much loss jumping from
50 to 75ohm for
downlead only! the 75ohm will still have LNA / downconverter / mmic line amplifier in front
of it,
and on 144mhz the losses are minimal are they not?
I'd really much appreciate valuable thoughts and replies

Regards
Anders Gimseus
Sweden
ash@telia.com

--
< This is my actual email adress, hopefully the spam programs filter out abuse@*!* adresses
>

1456. Re: Recommend an Active Indoor Antenna for Short Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 18:29:18 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <sDRnOjz2GrpWW=XrulpjI9K8Aupq@4ax.com>
Source record: 171980

"James Polack" <jppc@uswest.net> wrote:

>Does anyone recommend a particular active indoor antenna for SW listening?
>
>Any experience compared to 15 foot long wire in a 3d floor apartment?
>
>Reply to
>
>jppc@uswest.net
>
>if you have thoughts and the time.
>
>Thanks.
>
>Jim
>

I have an NRD-525 with an active antenna hooked to it, indoors. It's a
Stoner Dymek DA 100D. I'm not even sure whether they make it any more,
but it's a good indoor antenna. An Alpha Delta dx shortwave sloper,
outdoors, was about 3db better on the S-meter. I couldn't really tell
you whether the active antenna would be better than a 15-foot long
wire, but I'm satisfied with the Dymek, for what it is...

Bob
k5qwg

1457. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 18:33:40 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A673704.7B396B2F@oio.net>
Source record: 171981

Jason,
A 1/2 wave vertical antenna is an antenna that is 1/2
wave length long. It requires some method of impedance
matching, if fed at one end (impedance > 50 ohms).
A vertical 1/2 wave dipole is a 'normal' 1/2 wave dipole
stood on one end. It's a 1/2 wave vertical antenna fed in
the center. It's input impedance should be about the same
as a horizontal dipole.
Random wire antennas require some method of impedance
matching, the simplest probably being a 'tuner'. The range
of impedances the tuner will handle is the determining factor.
How well the random wire antenna radiates is a completely
different story, and depends on all the 'usual' variables like
height, length, oreintation, gremlins, etc.
'Doc

1458. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 19:00:45 UTC
From: richardharrison@webtv.net
Message-ID: <26317-3A673D5D-60@storefull-113.iap.bryant.webtv.net>
Source record: 171982

Jason, AG4DG wrote:
"Is a half wavelength vertical simply an end-fed dipole?"

Feedpoint, center or end, should have no effect on radiation.

A vertical antenna fed against ground is part of a complete series load circuit which includes radiation resistance (the work output) and loss resistance. The same current flows through the desired load resistance and the undesired loss resistance. The power delivered to each is proportional to its resistance (current squared times the resistance). The conducting material in the antenna should have low resistance. Most of the resistance is probably in the ground system.

Say the ground loss is a few ohms. A quarter-wave vertical may have a radiation resistance near 30 ohms. A few ohms loss may be noticeable, but not notorious.

A half-wave vertical may have a radiation resistance near 800 ohms. A few ohms loss is likely hard to detect.

If ground loss were 30 ohms, about half the power fed to the vertical quarter-wave antenna would be lost in the ground. The loss in power fed to the vertical half-wave antenna would be measurable, but probably not notable.

Impedance is not the only advantage of the half-wave vertical antenna. The half-wave antenna concentrates radiation towards the horizon and this produces more millivolts per meter at a distance of one mile from the antenna near the ground as a result of antenna gain. This adds to more millivolts from having less loss in the ground system around the antenna.

Best regards, Richard Harrison, KB5WZI

1459. Recommend an Active Indoor Antenna for Short Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 19:07:07 UTC
From: James Polack <jppc@uswest.net>
Message-ID: <1vF96.339$RW1.175098@news.uswest.net>
Source record: 171977

Does anyone recommend a particular active indoor antenna for SW listening?

Any experience compared to 15 foot long wire in a 3d floor apartment?

Reply to

jppc@uswest.net

if you have thoughts and the time.

Thanks.

Jim

1460. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 19:22:07 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A67425E.F891736F@ix.netcom.com>
Source record: 171983

Yep -- its is a dipole stood on end. It can be fed anywhere provided the impedance is matched. For end fed the Z is very high so a matching network is required -- like the black box on the bottom of the Cushcraft half wave antennas or design a mathing line. It can be center fed (72 ohms) but best run the feed line perpendicular to the vertical radiator, I have done this on a 10M vertical -- works very well.

Cushcraft claims (and is the usual explanation for same) that because it is fed at a high impedance point -- and ground is a low Z point losses are low and -- no radials required, although some claim a ground screen below the antenna (not connected to it, will improve performance). Radiation pattern is claimed as low angle - I've seen 15 - 20 degree claims, but check ON4UN's book on Low Band DXing for these antennas -- varies as several factors. Don't make a radial array for the Cushcraft or Hy-Gain half wave verticals -- messes up the antenna - so sez Cushcraft and me -- I've tried it -- doesn't work.

Do they work -- yep they do -- I've worked a lot DX with my R5 and R-7000. Would rather have a tower or beam or even a dipole at 70 + feet but HOA sez no to that.

Tuning an antenna -- the Antenna Analyzers will tell all. Great device.

jason_hsu@my-deja.com wrote:

> Exactly what is a half wavelength vertical antenna? What is the general
> configuration? Why doesn't it need a ground plane or radials? What does
> its radiation pattern look like?
>
> Is a half wavelength vertical simply an end-fed dipole? Or a dipole
> configured vertically instead of horizontally? Or both?
>
> I know from recent experience that a half wavelength vertical is not
> simply an enlarged version of a vertical monopole antenna. My 18-foot
> wire monopole antenna performed about as well as a 20m Hamstick (and
> even tuned better) on 20m. I couldn't get this wire to tune at all on
> 10m. (I have heard that a random wire antenna should be close to an odd
> multiple of 1/4 of a wavelength.)
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com
> http://www.deja.com/

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

1461. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 19:33:39 UTC
From: richardharrison@webtv.net
Message-ID: <6817-3A674513-78@storefull-111.iap.bryant.webtv.net>
Source record: 171984

Richard Clark wrote:
"Fort Carson, on the plains, is at an elevation of more than 6000 feet."

I`ve stayed in Colorado Springs. They have aircraft. The Air Force Academy isn`t far away. Pike`s Peak, 14,110 feet isn`t far away, and the "Mile-High City of Denver" isn`t far for a Texan.

I`ve lived and worked in La Paz, Bolivia, around 15,000 feet, where we operated our own aircraft, so I wasn`t speaking from complete ignorance.

Best regards, Richard Harrison, KB5WZI

1462. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 19:42:49 UTC
From: tom_bruhns@agilent.com
Message-ID: <947gvm$nf8$1@nnrp1.deja.com>
Source record: 171985

OK, first some general comments: A halfwave vertical is a linear antenna with a vertical element half a wavelength long. That would generally imply a half-wave resonance, but you don't have to use it at resonance. You can feed it in the center, off-center, or at the end. If you feed it at the end, you must have a return path (e.g. counterpoise or ground plane) of SOME sort for the current from the generator. If you feed it at the center, it may be a challenge to find a way to get the transmission line to it while properly decoupling it from the transmission line. The current distribution will be similar to what you see on a horizontal dipole, though if it's over ground, there will be some skewing because of the ground. If it's resonant, the current distribution will be nearly independent of where you feed it along its length. In freespace, it will have a pattern just like a horizontal dipole; after all, in freespace it gets hard to tell "horizontal" from "vertical". Over a ground plane, you have the effects of the image on the other side of the plane, and the pattern's vertical shape will depend on how far it is off the ground plane. In azimuth, the pattern will be omnidirectional to the extent the antenna's environment is symmetrical.

Specifics: Sounds like you are trying to feed one against a set of radials. That will work, but at resonance the impedance will be rather high. If you use a large effective wire diameter, the impedance will be significantly lower, without greatly affecting the impedance of the same antenna as a quarter wave on half the frequency. You might try a set of four parallel vertical wires arranged at the corners of a square about a foot on a side. A foot or so above the feedpoint, let the wires angle toward the feedpoint, forming an inverted pyramid at the base of the antenna. That should make the antenna much easier to feed at its half-wave resonance...in fact, the half-wave resonance will drop to a much lower frequency, not so terribly far from 15 meters, and be a few hundered ohms instead of thousands of ohms; and at 10 meters, it will be somewhat reactive but still a low impedance, in the low hundreds of ohms. I'm sure Reg's site has a program for this, and the demo version of EZNec will probably handle it well too.

Cheers,
Tom

In article <94733e$9ln$1@nnrp1.deja.com>,
jason_hsu@my-deja.com wrote:
> Exactly what is a half wavelength vertical antenna? What is the general
> configuration? Why doesn't it need a ground plane or radials? What does

> its radiation pattern look like?
>
> Is a half wavelength vertical simply an end-fed dipole? Or a dipole
> configured vertically instead of horizontally? Or both?
>
> I know from recent experience that a half wavelength vertical is not
> simply an enlarged version of a vertical monopole antenna. My 18-foot
> wire monopole antenna performed about as well as a 20m Hamstick (and
> even tuned better) on 20m. I couldn't get this wire to tune at all on
> 10m. (I have heard that a random wire antenna should be close to an
odd
> multiple of 1/4 of a wavelength.)
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
> Sent via Deja.com
> http://www.deja.com/
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

1463. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 20:04:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A674C50.80CDAC00@IEEE.org>
Source record: 171986

Richard Harrison wrote:
> I`ve lived and worked in La Paz, Bolivia, around 15,000 feet, where we
> operated our own aircraft, so I wasn`t speaking from complete ignorance.

I once took off from Bogata in August. When the plane ran off the end
of the runway, it dropped like a rock. Luckily, it dropped into a
valley.
--
http://www.mindspring.com/~w6rca

1464. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 20:22:12 UTC
From: rwclark@seanet.com
Message-ID: <3a674ca9.182765002@news.seanet.com>
Source record: 171987

On Thu, 18 Jan 2001 13:33:39 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"Fort Carson, on the plains, is at an elevation of more than 6000 feet."
>
>I`ve stayed in Colorado Springs. They have aircraft. The Air Force
>Academy isn`t far away. Pike`s Peak, 14,110 feet isn`t far away, and the
>"Mile-High City of Denver" isn`t far for a Texan.
>
>I`ve lived and worked in La Paz, Bolivia, around 15,000 feet, where we
>operated our own aircraft, so I wasn`t speaking from complete ignorance.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

But by aircraft do you mean helicopters? Fort Carson was also the site of the Mountain Forces Team, and they did not typically operate with helicopters even though they were available. As I understood it at the time, altitude was the prohibitive element.

73's
Richard Clark, KB7QHC

1465. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 21:08:13 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <947m0s$qi7$1@iac5.navix.net>
Source record: 171988

I sat there myself once waiting for the temperature to go down. We were flying a Lear 23 and could not make a legal takeoff because of the combination of altitude and temperature.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A674C50.80CDAC00@IEEE.org...
> Richard Harrison wrote:
> > I`ve lived and worked in La Paz, Bolivia, around 15,000 feet, where we
> > operated our own aircraft, so I wasn`t speaking from complete ignorance.
>
> I once took off from Bogata in August. When the plane ran off the end
> of the runway, it dropped like a rock. Luckily, it dropped into a
> valley.
> --
> http://www.mindspring.com/~w6rca

1466. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 21:15:34 UTC
From: Michael Edelman <mje@spamcop.net>
Message-ID: <3A675CF6.A6D3DD86@spamcop.net>
Source record: 171989
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

jason_hsu@my-deja.com wrote:
>
> Why am I not having better luck with a wire antenna?
>
> I enlisted the help of two local friends this morning to test the
> performance of a 20m Hamstick that I borrowed and an 18-foot wire
> (mostly straight).

<snip>

> What gives? At 20m, why didn't the 18-foot wire antenna with HIGHER
> power and LOWER SWR trounce the 20m Hamstick with LOWER power and
> HIGHER SWR?

1. SWR doesn't tell you anything about an antenna's performance. All it tells you is how close the feedpoint impedance of the antenna is to the rig coupled to it. And since you're using a tuner, what you're measuring is simply the match between the tuner and the rig.

2. Neither one of these antennas has an ideal isotropic radiation pattern, and the proximity to the house didn't help much either. No doubt neither antenna was performing in an ideal manner. But the hamstick comes a lot closer to having a useful and predictable radiation pattern.

-- KE8YY

Michael Edelman mje@spamcop.net
http://www.foldingkayaks.org (nomadics)
http://www.findascope.com (choosing a telescope)

1467. Re: TVI HELP!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 21:50:33 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <947of4ulr1@nnrp1.deja.com>
Source record: 171990

In article <3a6661e2@excalibur.gbmtech.net>,
"David J. Moge" <n1rzb@netzero.nte> wrote:
> In brief, I have a multi element TV antenna with a amplifier
connecting to 4
> televisions. The house lot is laid out in such a way that it's very
hard to
> string antennas up with out having them in close proximity to the TV
> antenna.
>
> At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW
10
> Watts) which my wife gave me. I put up a dipole to try it out and to
my
> surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.
>
> My wife hasn't stopped yelling at me sense. Every time I key the mike
or try
> out CW the TV's go blank. I have tried a HI PASS filter but that
doesn't do
> much go at all.
> My HF rigs cause no problems at all. I do have a good RF ground
>
> WHAT AM I DOING WRONG??? HELP!!!
>
> Any comments and suggestions would be gratefully appreciated.
>
> Thanks
>
>
Where did you put the high pass filter? The best place would be before
the input to the amp. Since the high pass filter is likely intended to
pass channel 2, six meters would not be very far down the skirt. The
typical filters are not very sharp.Cascading filters or using one with
a sharper curve could help. Also some (most) of the consumer amps are
not very good. Do you really need the amp?
--
BillN6VLR

Sent via Deja.com
http://www.deja.com/

1468. 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 22:33:19 UTC
From: Billy Young <youngbil@lcc.net>
Message-ID: <947qvn$9ua@atlas.lcc.net>
Source record: 171991

Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each side. I haven't been able to get my SWR no lower that 2:1 at best regardless of what I tried. It's suspended from at tree at one about 30' high and from the other end about 30 on a push up pole. I have nylon string that places it about 20' for either end with homemade PVC insulators. I'm not receiving well with it either. Does any one have any suggestions what the problem might be for my first homebrew antenna?

"73's
Billy Young
KD5CSD
youngbil@txucom.net

1469. Re: test

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:11:00 UTC
From: Siming Li <siming@cs.utexas.edu>
Message-ID: <Pine.GSO.4.21.0101181710420.13820-100000@ahab.cs.utexas.edu>
Source record: 171993
Cross-posted to: rec.radio.amateur.antenna,test

```
j

On Sun, 14 Jan 2001, tommy wrote:

> test
>

testtest2
```

1470. Re: Glen Martin Tower & Hazer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:15:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <3OK96.821$Pr2.93791@monger.newsread.com>
Source record: 171995

Roger Halstead (K8RI) www.RogerHalstead.com
N833R World's Oldest Debonair? s# CD-2

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:1htc6t4ctgu51lafp3jp6att0gicaft8j6@4ax.com...
> It's a little trolley that rides on the outside of a fixed tower that
> allows you to mount and work on your antennas at ground level, then
> raise it back up to the top of the tower. Hazer sells both the mount
> as well as complete tower systems.

Why on earth didn't they give it a meaningful name <:-)) ?

Roger (K8RI)

>
> Dick - W6CCD
>
> On Thu, 18 Jan 2001 04:23:18 GMT, "Roger Halstead" <rdhalste@tm.net>
> wrote:
>
> >What's a Hazer?
>

1471. Re: Coax length: One last time.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:15:24 UTC
From: sparky@cet.com
Message-ID: <3a6778ca.11004278@news.cet.com>
Source record: 171994
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

On Thu, 18 Jan 2001 17:59:52 -0800, Bob <bob@bob.com> wrote:

>Sparky,
>
>Lets get some more people involved here, enter rec.radio.amateur.antenna.
>
>

Nah. I'm not a ham so I stay out of their NGs, this post excepted.

Sparky, FLRC

1472. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:23:26 UTC
From: Steve Woodruff <sjwoodr.nospam@nospam.email.com>
Message-ID: <947tthelb1@flood.xnet.com>
Source record: 171996
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"LRod" <lr0d@my-deja.com> wrote in message
news:94599b$qv4$1@nnrp1.deja.com...
> Who was the VEC for your exam? I have my own suspicion, and if I'm
> correct it's further confirmation of why I will never have anything to
> do with him.

It was an ARRL VEC in Woodstock, IL ... put on by the
McHenry County Wireless Assocation. I could dig up the
names from the CSCE, but i don't think we want to put
anyone on trial here. :)

> Irrespective of who it is, it's an example of poor training of the VE
> team. That's one of the things that should have been basic in their
> instruction. I suggest you write a letter of complaint to the VEC.

I really don't have anything to complain about... i didn't pay the
additional fee -- i just didn't take the extra class exam after I
passed the general class one.

--steve

1473. Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:45:53 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <ReL96.102673$n%.3477915@news20.bellglobal.com>
Source record: 171998

I don't know what else to try. I am using a surge suppressor with EMI/RFI filters built in, I even took apart the computers power supply and install .01's across the AC to ground. Still no help. The HF rig picks up the noise as soon as the 'puter is turned on, and when the drives read or write, it is picked up as well. Even as I type I can hear the tones changing on the HF. Am I missing something???

1474. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:46:35 UTC
From: BillN6VLR <billn6vlr@my-deja.com>
Message-ID: <947v8p$58h$1@nnrp1.deja.com>
Source record: 171999

In article <947qvn$9ua@atlas.lcc.net>,
"Billy Young" <youngbil@lcc.net> wrote:
> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on
each
> side. I haven't been able to get my SWR no lower that 2:1 at best
regardless
> of what I tried. It's suspended from at tree at one about 30' high
and from
> the other end about 30 on a push up pole. I have nylon string that
places
> it about 20' for either end with homemade PVC insulators. I'm not
receiving
> well with it either. Does any one have any suggestions what the
problem
> might be for my first homebrew antenna?
>
> "73's
> Billy Young
> KD5CSD
> youngbil@txucom.net
>
>
Well from my experience that is about par for the course with dipoles
that low in relation to wavelength. I recently put up a 80 meter dipole
only 20 feet off the ground. At resonance it had a resistance of 20
ohms, for a 2.5:1 match. Obviously ,raising the antenna would have been
the best choice, but was not practical at my location. I put an Amidon
4:1 step down balun on it and brought the resistance up to 80 ohms and
fed it with 75 ohm coax. I suppose I could go add a 1.5:1 un/un and get
it better, but I just let the tuner make up the difference. If you have
access to an MFJ 259 or something similar, you would probably find that
at resonance you are at about 25 ohms resistance.
--
BillN6VLR

Sent via Deja.com
http://www.deja.com/

1475. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:47:34 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A678096.122670CD@dialpoint.net>
Source record: 171997

The SWR could be about normal. You did not state if you only measuered the swr at one frequency or if you checked several points to about 100 khz above and below 3953. Uaually you are using a 50 ohm line with a 70 ohm antenna for a swr of 1.5 . The height of the antenna above ground will have a very large effect on the inpeadance of the antenna. It will probably be far from 70 ohms.

Not sure of the receiving problem. Do you have anything to compair the receiver to ?
My 80 meter antenna is on;y up about 20 feet and it seems to work ok. Not the greatest but it is so low that most of the signal is going up and that makes it work well for short distances, up to say about 300 to 500 miles.

Billy Young wrote:
>
> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> side. I haven't been able to get my SWR no lower that 2:1 at best regardless
> of what I tried. It's suspended from at tree at one about 30' high and from
> the other end about 30 on a push up pole. I have nylon string that places
> it about 20' for either end with homemade PVC insulators. I'm not receiving
> well with it either. Does any one have any suggestions what the problem
> might be for my first homebrew antenna?
>
> "73's
> Billy Young
> KD5CSD
> youngbil@txucom.net

1476. Re: TVI HELP!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-18 23:57:46 UTC
From: makingwaves3548@webtv.net
Message-ID: <25254-3A6782FA-20@storefull-237.iap.bryant.webtv.net>
Source record: 172001

Ask her if she has the 30 day warranty!

1477. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:02:45 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A678425.13096488@IEEE.org>
Source record: 172000

VE3TMT wrote:
>
> I don't know what else to try. I am using a surge suppressor with EMI/RFI
> filters built in, I even took apart the computers power supply and install
> .01's across the AC to ground. Still no help. The HF rig picks up the
> noise as soon as the 'puter is turned on, and when the drives read or write,
> it is picked up as well. Even as I type I can hear the tones changing on
> the HF. Am I missing something???

My computer system radiates RF and I cannot use my HF rig when it is on.
Radiated RF is a lot harder to snuff than conducted RF. I suspect most
of mine comes from my large cheap monitor.
--
http://www.mindspring.com/~w6rca

1478. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:18:09 UTC
From: n2ey@aol.com
Message-ID: <20010118191809.15567.00000346@nso-de.aol.com>
Source record: 172002

In article <6820-3A670D0F-1@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"All three of the stories are good."
>
>The 1935 story of a Colorado "cure by radio" is gratifying.

Glad you liked it.

>The event would not be repeated now.

Probably not - but the possibility is still there.

> A seriously ill persn would be transported
>off the mountain by helicopter for hospitalization.

Of course - IF:

- a medevac helicopter capable of the altitude and range required was available

- there was a reasonably safe landing place for same
- the weather was good enough for the trip to be made
- the sick person could stand the journey

That's four big "ifs"

>Help would be
>summoned by the mining company`s business phone, cell, satellite, or
>other radio subscriber service.

Yep - IF it was available and working. Two more big "ifs".

>Should ham radio be used for an
>emergency call, SSB would allow the physician to rid himself of one or
>more intermediaries to consult directly with those closest to the
>situation.

Yep - IF SSB were available, and propagation good enough to permit decent copy
both ways. Two more big "ifs".

That's eight big "ifs", so far. Most of the time, all eight would be sure bets.
But not always.

About 3 or 4 years ago, western New York State and parts of Ontario and Quebec
were hit with ice storms. The storms were so bad that even the rugged power and
communication lines of that area began to fail under the ice. Roads were
closed, airports were closed, power was off in many areas, communication was a
mess. Ham radio did some much-needed public service work, helping out with

communications. Most of the stuff was VHF-FM local work - but a lot was also handled on HF because the distances and terrain of WNY are not the best for good VHF coverage.

To add to the problems, many of the stations were on emergency power and jury-rigged antennas. Worse, radio conditions were awful. Morse was used in many cases because SSB just couldn't make it through the auroral noise.

Were any lives saved? I don't know. But I used to live up there, and winter in western New York State is as bad as it gets anywhere in the lower 48.

So a similar situation could happen again.
>
>The Colorado cure is an historic human interest story, but irrelevant to
>Morse testing or antennas.

Who is talking about Morse testing? Not me. We're stuck with the present system until the treaty changes.

I was challenged by a skeptic to come up with examples where Morse was used by hams on the HF ham bands to save human lives. So I did - is that not allowed?

The relevant Morse TESTING questions in all this are: "What are the chances that a ham will meet up with a communications emergency requiring the use of Morse?" and "Are those chances high enough to justify a Morse test for all hams?" I've never claimed the chances of such a situation were high. Nor have I claimed that they were high enough to make Morse testing mandatory. Look up my posts - you won't find any such claim.

All it was is a true story of how hams using Morse saved a life. Guess that sort of thing is electropolitically incorrect these days.

73 de Jim, N2EY

1479. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:30:47 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <3A678B04.1AF8B390@arrl.net>
Source record: 172003

I found on several installations that running an external shield over
the video cable rom the computer to the monitor with a ground to the
station ground works wonders.
My noise level went from basically unusable to unnoticeable.

The shield is tied to the connector metal on both ends.
I used a large braid but tin foil might work as well.

Aloha,
John KH7T

1480. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:44:32 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <3A678E3F.1B77CC98@arrl.net>
Source record: 172004

Yes I know, it is from not rom.
John

1481. Re: Glen Martin Tower & Hazer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:49:06 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <dn3f6t43ji6mck3fc7rvl1adf9cpkp871m@4ax.com>
Source record: 172005

I think it's the guy's name.

Dick - W6CCD

On Thu, 18 Jan 2001 23:15:11 GMT, "Roger Halstead" <rdhalste@tm.net>
wrote:

>Roger Halstead (K8RI) www.RogerHalstead.com
>N833R World's Oldest Debonair? s# CD-2
>
>"Dick Hughes" <rhughes33@cableone.net> wrote in message
>news:1htc6t4ctgu51lafp3jp6att0gicaft8j6@4ax.com...
>> It's a little trolley that rides on the outside of a fixed tower that
>> allows you to mount and work on your antennas at ground level, then
>> raise it back up to the top of the tower. Hazer sells both the mount
>> as well as complete tower systems.
>
>Why on earth didn't they give it a meaningful name <:-)) ?
>
>Roger (K8RI)
>
>>
>> Dick - W6CCD
>>
>> On Thu, 18 Jan 2001 04:23:18 GMT, "Roger Halstead" <rdhalste@tm.net>
>> wrote:
>>
>> >What's a Hazer?
>>
>

1482. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:51:27 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <3a678f8f$1@news.microsoft.com>
Source record: 172006

I once bought a nice high end computer to run my station. Tried in vain to get this 633MHz computer to stop generating RFI. Ended up using an "old" abandoned 90 MHz computer as my shack computer. It didn't generate any detectable HF interference. Monitor,keyboard and mouse remained the same in both cases.

-rob

"John Buck" <kh7t@arrl.net> wrote in message news:3A678B04.1AF8B390@arrl.net...
> I found on several installations that running an external shield over
> the video cable rom the computer to the monitor with a ground to the
> station ground works wonders.
> My noise level went from basically unusable to unnoticeable.
>
> The shield is tied to the connector metal on both ends.
> I used a large braid but tin foil might work as well.
>
> Aloha,
> John KH7T

1483. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 00:58:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A679132.938DF1D0@eznec.com>
Source record: 172007

What you need to look for is antennas. The computer itself, being fairly small and hopefully reasonably well shielded, isn't a very effective HF radiator. But the various wires connected to it are. Even if your surge suppressor is very good, you still have the whole length of the power cable between the computer and surge suppressor to act as a radiating antenna.

I'd suggest beginning by disconnecting everything you can from the computer -- printer, speakers, monitor, keyboard, mouse, and so forth, and see if the noise is still intolerable. If it is, try winding the power cord into a coil of a few inches diameter. If that doesn't work, try a few clip-on ferrite cores on the power cord right next to the computer. Hopefully, that'll clean things up enough that you can go to step 2, which is to connect things back up one at a time. When you find a radiator, wind its cable through a ferrite toroid with 5 - 10 turns if possible. This will give as much impedance as about 25 - 100 clip on cores. If you can't wind the cable through a toroid, use several clip on cores as close to the computer as you can get them. You might run into a combination of computer and closeness to your antenna where you won't be able to solve the problem without replacing the computer with a better shielded model. But chances are that the following steps will at least help a lot.

Roy Lewallen, W7EL

VE3TMT wrote:
>
> I don't know what else to try. I am using a surge suppressor with EMI/RFI
> filters built in, I even took apart the computers power supply and install
> .01's across the AC to ground. Still no help. The HF rig picks up the
> noise as soon as the 'puter is turned on, and when the drives read or write,
> it is picked up as well. Even as I type I can hear the tones changing on
> the HF. Am I missing something???

1484. Re: Coax length: One last time.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:00:51 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6791C3.CEF57DE8@oio.net>
Source record: 172009

Bob wrote:
>
> Sparky,
>
> Lets get some more people involved here, enter rec.radio.amateur.antenna.
>

Bob,
Why don't you leave this crap where it belongs? It's old,
it's boring, and it's stupid.
'Doc

1485. Re: Computer generated RFI Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:01:19 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <zIM96.87430$JT5.2780941@news20.bellglobal.com>
Source record: 172008

"VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
news:ReL96.102673$n%.3477915@news20.bellglobal.com...
> I don't know what else to try. I am using a surge suppressor with EMI/RFI
> filters built in, I even took apart the computers power supply and install
> .01's across the AC to ground. Still no help. The HF rig picks up the
> noise as soon as the 'puter is turned on, and when the drives read or
write,
> it is picked up as well. Even as I type I can hear the tones changing on
> the HF. Am I missing something???
>
> I plugged the power cord into another outlet in the same room and 90% of
the noise is gone.

Thanks for all the suggestions, that is what makes this a great newsgroup.

73 all

Max

1486. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:06:05 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6792FD.E1B9AF42@oio.net>
Source record: 172010

Billy,
Seems like it should be better than that. Did you
find any frequency that was lower than 2:1? I don't
think I'd expect to see 70 ohms, but you should be a
bit closer than what your seeing. I doubt if the PVC
had anything to do with it.
'Doc

1487. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:14:08 UTC
From: ccom2@socket.net
Message-ID: <3a6794b5.12279355@news.socket.net>
Source record: 172011

Time to end this!
It does not belong here

n2ey@aol.com (N2EY) wrote:

1488. Re: Computer generated RFI Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:40:13 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <1WM96.3912$tD2.259026@newsread1.prod.itd.earthlink.net>
Source record: 172012

If all the other suggestions fail, you might want to try the MFJ 1026 Noise Cancellation unit. Not a cheap solution, but very effective for RFI generated within the shack. I use it to null out RFI coming from a TV set. I have virtually no RFI from my 233 MHz PC, sitting beside the rig.

K8AC
Floyd Sense - Angier, NC
"VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
news:zlM96.87430$JT5.2780941@news20.bellglobal.com...
>
> "VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
> news:ReL96.102673$n%.3477915@news20.bellglobal.com...
> > I don't know what else to try. I am using a surge suppressor with
EMI/RFI
> > filters built in, I even took apart the computers power supply and
install
> > .01's across the AC to ground. Still no help. The HF rig picks up the
> > noise as soon as the 'puter is turned on, and when the drives read or
> write,
> > it is picked up as well. Even as I type I can hear the tones changing
on
> > the HF. Am I missing something???
> >
> > I plugged the power cord into another outlet in the same room and 90% of
> the noise is gone.
>
> Thanks for all the suggestions, that is what makes this a great newsgroup.
>
> 73 all
>
> Max
>
>
>

1489. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:55:28 UTC
From: rwclark@seanet.com
Message-ID: <3a689b3b.202878994@news.seanet.com>
Source record: 172013

On Thu, 18 Jan 2001 14:04:32 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Harrison wrote:
>> I`ve lived and worked in La Paz, Bolivia, around 15,000 feet, where we
>> operated our own aircraft, so I wasn`t speaking from complete ignorance.
>
>I once took off from Bogata in August. When the plane ran off the end
>of the runway, it dropped like a rock. Luckily, it dropped into a
>valley.

Hi Cecil,

This is the problem I think was alluded to when I was told helicopters
weren't typically used in the rockies. They can fly at 10,000+ feet
because of the lift from forward motion; but the air is so thin that
their lift capacity from a ground launch is severely hampered. In
other words you can fly there, you can land there, and you can feed
quarters into the parking meter forever after. However, these were
Chinooks, not today's medivacs. They were designed for heavy lift
capacity and were perhaps considered unusable for their mission
purpose when it came to the high country.

This of course does not preclude a flight in to pick up a person
(rather than a howitzer which I observed frequently) - but even here
the mission of the Mountain Team was heavily rescue oriented and yet I
never heard of a helicopter operation.

73's
Richard Clark, KB7QHC

1490. Re: Coax length: One last time.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 01:59:52 UTC
From: Bob <bob@bob.com>
Message-ID: <3A679F97.F269D38A@bob.com>
Source record: 171992
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Sparky,

Lets get some more people involved here, enter rec.radio.amateur.antenna.

Sparky wrote:

> He's ba-a-a-a-a-ck!
>
> On Thu, 18 Jan 2001 11:32:30 -0500, CLI Police <musthave@cli.com>
> wrote:
>
> >You did indeed attribute false claims to a reference where they
> >could not be found.
>
> You didn't read the book. If you did, you would have found everything
> I said.
>
> > Why can't you tell us the page number and
> >paragraph number where your claim appear? Answer: because you
> >lied.
>
> Answer: I did provide the page number where the information I posted
> began. I was summarizing information found in several chapters, and I
> was posting it to a NG. I wasn't writing a thesis. If you want page
> numbers for each word, try the index.
>
> > You provide false information with a reference. I found
> >your reference; I called your bluff. And you have been exposed
> >as a liar.
>
> You did nothing of the sort because there was no bluff. You also said
> you would post pages, and I suggested that you post any part which
> contradicts what I said. You didn't. In fact, you quit posting
> altogether. So go ahead and post any part of the book that contradicts
> what I said.
>
> >Enough background information; now, to the current quote.
> >
> >You are using this quote out of context. You have taken an
> >excerpt from a ham radio article which uses stub lines to
> >match impedances.
>
> You didn't read the article, so don't tell me what is 'in' or 'out' of
> context when you don't know. It is an article describing stubs, what

> they are and how they work, not about their applications. And the
> paragraph was written out of context by the author, not me.
>
> >First of all, stub lines are virtually never used in a CB radio
> >installation. And I question their value for any installation
> >including ham radio. Sure, they can be used to transform impedances
> >but so can an antenna tuner which is infinitely more usable in
> >that it can be tuned and retuned for any frequency. So why bother
> >farting around with coax stubs? This is another ham radio
> >curiosity which has no place in a CB radio newsgroup.
>
> You are the one that is out of context now. I didn't post the
> paragraph to talk about stubs. Didn't you even read the first line?
> "That completes our conceptual view of stubs." The word 'stub' isn't
> used anywhere else in the quote. The paragraph is a seperate concept
> and stands alone, as it was intended by it's author.
>
> But if you _want_ to talk about stubs, I'm sure there are countless
> hams that would disagree with you. Matter of fact, even a few CBers.
> Since stubs are frequency dependant, and CB covers only one band (at
> least it's supposed to), then a stub can be a very useful item. Much
> cheaper than any antenna tuner. They can also be used as filters and
> traps to clean up dirty amps. Maybe stubs _should_ be a topic for CB
> radio discussion.
>
> >Secondly, note that the author says "the resistance of the
> >antenna, line and transmitter were horribly mismatched."
> >Virtually every CB radio has a 50 ohm transmitter and a 50 ohm
> >transmission line. They are matched. The only item left to
> >match is the antenna.
>
> You suspiciously left out the "non-reactive antenna" part. And note
> that the next sentence begins, "If the load is not matched to the
> line, . . ."
>
> > Since you pulled this article out of
> >a ham radio article, it discusses conditions where the radio
> >output impedance can be adjusted by tuning the output network.
> >This is a non-scenario for CBs.
>
> A great many ham radios use 50 ohm transmitters with 50 ohm
> transmission line, so when you say that "this is a non-scenario for
> CBs" you might as well add that it is a non-scenario for ham radios as
> well. But you would still be wrong because many CBs transceivers can
> be tuned for a different impedance. I have tuned several to use RG-11.
>
> >The article is referring to a situation where the radio output
> >network and/or coax stubs are being tuned to provide a conjugate
> >match. In this scenario (a non-CB radio scenario), the transmission
> >line input impedance MUST be maintained or the conjugate match is

> >lost. Changing the coax length does not change the SWR but it
> >does change the transmission line input impedance. In this
> >scenario, where this impedance is critical, the line length is
> >critical.
>
> Agreed to a point. In a mismatch situation the transmitter can be
> tuned to match the line's input impedance OR the length of the
> transmission line can be changed to bring the line's input impedance
> closer to that of the transmitter.
>
> >Now, consider a true-to-life CB radio scenario. The transmitter
> >has a 50 ohm output impedance and the transmission line has a
> >characteristic impedance of 50 ohms. Even with a mismatched
> >antenna, the length of the coax has no effect on the percentage
> >of power transferred to the antenna (except for minor attenuation
> >losses).
>
> If the transmitter is 50 ohms and the line input impedance is not,
> there is a mismatch. The transmitter is the source and the line input
> is the effective load. The greater the mismatch, the less power
> delivered to the load. If the length of the line can be changed to
> minimize that mismatch, then yes, the length of the line has an effect
> on the power transmitted to the antenna. The length of transmission
> line needed to minimize any mismatch is frequency dependant, and turns
> out to be any odd multiple of a quarter-wave. For V=0.66, those
> lengths are 6,18, 30, 42, . . . feet.
>
> Do you have a FSM and a 3-foot section of coax? If so, test it for
> yourself.
>
> Sparky, FLRC

1491. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 02:17:04 UTC
From: Bill Smith <bs@BSartist.com>
Message-ID: <AsN96.1641$Mu1.92444@bgtnsc06-news.ops.worldnet.att.net>
Source record: 172014
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

There may be times when using a radio out of its "type accepted" band is probably not all that offensive in spirit or practice even if technically against the letter of the law. (e.g. marine use where no harmful interference is involved). But using the FT-50 for FRS is not one of those times.

The deviation of the FT-50 is wider than that of the FRS radios. So when using the FT-50 on that band, you are not only transmitting at higher power than the FRS, but run the risk of splattering onto adjacent channels creating harmful interference.

Bill

1492. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 02:21:17 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <9488ancrm1@nnrp1.deja.com>
Source record: 172016
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <947tthelb1@flood.xnet.com>,
"Steve Woodruff" <sjwoodr.nospam@nospam.email.com> wrote:
> "LRod" <lr0d@my-deja.com> wrote in message
> news:94599b$qv4$1@nnrp1.deja.com...

> > Who was the VEC for your exam?

> It was an ARRL VEC in Woodstock, IL

Hmmm. I know a lot of those guys. I ran exams just down the river from
them in Aurora. In fact, the guy that started the testing group up there
years ago and I were both with DeVry VEC originally. I can't remember
callsigns, since I've moved, but there must have been some turnover that
leaves some uninformed VEs, because the guy I know wouldn't do that or
train his people to do that. Sorry.

> I really don't have anything to complain about...

Yes you do. You were prepared for an exam and an incorrect
interpretation by a team that should know better kept you from taking
the exam when you were ready. Although you might not get any
satisfaction, they need to be made aware of the problem so it doesn't
happen again to someone else.

LRod

Sent via Deja.com
http://www.deja.com/

1493. FS:::Alum. Tilt Over Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 02:23:13 UTC
From: Randy <rbkb8iii@erinet.com>
Message-ID: <3a67a512$0$1511$53a6afc1@news.erinet.com>
Source record: 172015
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

I have For Sale a Heights Aluminum motor screw driven Tilt Over Tower 48' tall. I'm asking $600.00 plus shipping prefer pick-up near Dayton,Ohio. For more details or any question you can call me at 937-372-2492 or E-mail me at rbkb8iii@erinet.com

1494. Re: Raised radials vs. longer radiator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:00:19 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <BYO96.5783$d25.34612@newsfeed.slurp.net>
Source record: 171875

Mike and Cecil,

Thanks for your responses, I plan on using whatever vertical I settle on, on 160, 80/75, and 40 meters. I live on a hill, not the top, with a beautiful view of Hilo Bay and a really good shot towards North America, and would like to have a decent signal there. My neighbors up the hill have an equal or better view that I'm sure they don't want to have messed up with my antenna(s). (Of course to me and you it would be a thing of beauty) I figure a vertical with a plain, straight top section, and no top hat "wheel" or other similar visually large object, may be acceptable, especially if any guying is low enough that it only interferes with their veiw of rooftops and trees. If only a single slender spike sticks up in front of their view of the ocean and the horizon I think I'll get away with it. As for the higher bands, eventually I'd like to have a motorized tubular crank-up that's only up after dark.

1495. Re: TVI HELP!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:01:56 UTC
From: ik7565@erols.com
Message-ID: <3A67AE24.FA8CD419@erols.com>
Source record: 172017

Does your dipole have a Balun on it? They seem to help with TVI.

"David J. Moge" wrote:
>
> In brief, I have a multi element TV antenna with a amplifier connecting to 4
> televisions. The house lot is laid out in such a way that it's very hard to
> string antennas up with out having them in close proximity to the TV
> antenna.
>
> At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW 10
> Watts) which my wife gave me. I put up a dipole to try it out and to my
> surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.
>
> My wife hasn't stopped yelling at me sense. Every time I key the mike or try
> out CW the TV's go blank. I have tried a HI PASS filter but that doesn't do
> much go at all.
> My HF rigs cause no problems at all. I do have a good RF ground
>
> WHAT AM I DOING WRONG??? HELP!!!
>
> Any comments and suggestions would be gratefully appreciated.
>
> Thanks

1496. FA: RCI 2950 10 Meter Transceiver

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:24:35 UTC
From: WP4LGN <fernando_luis@msn.com>
Message-ID: <7oO96.2361$A23.24157@news6.giganews.com>
Source record: 172018

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1208932984

1497. Re: CCRadio vs GE SuperRadio III

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:26:00 UTC
From: lacraft@my-deja.com
Message-ID: <948c41$g31$1@nnrp1.deja.com>
Source record: 171871

Geez Tom a Superradio AND a select a tenna? You must be listening to china with that setup already. I have a SuperradioIII myself (my favorite radio) and typically listen to AM stations from large cities on the east coast with the stock antenna. Charlotte NC, Louiville, New York City, Chicago and Cincinati come in stable like they are next door, along with a few Canadian stations depending on how the radio is turned. I am in Washington DC. I have heard the CCradio advertised, personally it sounds like an overpriced Sangean model to me. I suppose the digital tuning would help if you are trying to seperate the stations, but personally I prefer the tone of the superradio to any of my other portables. I have an 18 year old Uniden CR-2021 digital that picks stations out a little better than the superradio, but it sounds tinny and suffers from some SW interference-only good for SW. Theres a big price difference too, you can get a Superradio at Ames or Kmart for 45 bucks on sale, the CCradio (actually a Sangean)Is up around $120.

Some links for you

http://www.grove-ent.com/mt2000reviews.html

http://www.audioreview.com/reviews/Other/product_48124.shtml

http://www.sangean.com/rmulti10.htm

http://www.grove-ent.com/mt1999reviews.html

http://theslacks.com/radio/radiorevue.html

http://www.mrgadget.com/html/ccradio.html

http://www.kiwa.com/ccradio.html

In article <3A64DCFD.3AEF6741@concentric.net>,
Tom Marin <marint@concentric.net> wrote:
> I currently own the GE SuperRadio III and am thinking about buying the
> CCRadio from Crane & Co.
>
> Does anybody have an opinion on how much better (for listening to long
> distance AM Radio) the CCRadio is than the GE SuperRadio III?
>
> I also currently use the Select-A-Tenna with the GE SuperRadio III.
>
> Thanks in advance.
>
> -Tom
>
>

Sent via Deja.com
http://www.deja.com/

1498. Anyone have experience with a commercial QFH antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:30:24 UTC
From: Pervert_Extraordinair <valued_customer1@att.com>
Message-ID: <3A67B4D0.468E9B23@att.com>
Source record: 171869
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

I'm using an attic mount homebrew QFH antenna for
weather satellite APT reception.

I've decided to move the QFH from the attic to the outside,
so I'm considering my options. One of the options is to
purchase a commercial QFH. While these are quite expensive
($~250) they do come with an integral amplifier which would
certainly not hurt.

Anyone have any personal experience with any commercial suppliers?
I've only found a few for sale. The following from Norther Video
Graphics is one: http://www.nvgweather.com/page2.html

Any suggestions/comment would be appreciated.

1499. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:34:44 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <948ckk$l94$0@208.207.71.174>
Source record: 171870
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Steve Woodruff wrote:
>
> "LRod" <lr0d@my-deja.com> wrote in message
> news:943h9b$9s4$1@nnrp1.deja.com...
> > Unless the ARRL has changed, it's not quite a session fee. It is insofar
> > as you can take one of every element for one fee. Retakes of failed
> > elements are subject to another fee.
>
> Are all VE's subject to the same set of rules?

Yes,they are supposed to be.

These guys seemed pretty
> confident that they could charge $10 per exam

By the authorizing law they are not supposed to charge beyond recouping
their expenses, unless it has changed since I was active. I understand
that the FCC has stropped setting the mandatory fee, so the VEC under
which they operate should be doing it.

1500. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:42:10 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A67B792.47CAB6A1@dvol.com>
Source record: 171873

Roy Lewallen wrote:

> When you find
> a radiator, wind its cable through a ferrite toroid with 5 - 10 turns if
> possible. This will give as much impedance as about 25 - 100 clip on
> cores.

>
Are there cores out there which are big enough to pass the large flavor of printer cable connectors??
>
w3rv

1501. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:42:34 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <948d3amhd0@208.207.71.174>
Source record: 171872
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

K7MEM wrote:
>
> It's been a few years, but when I made General, I took the Tech,
> General, and 13 WPM code at the same time for one fee ($6.45).
> At another session I took the Extra and the 20 WPM code tests
> again for one fee ($6.45). At the time, I was under the impression
> that this fee went directly to the ARRL, to cover the cost
> of the testing materials that they supplied. That ment that the
> club, which was running the VE session, was really charging
> nothing for their time.
>
> Was I correct in my reasoning? Aren't they, the club, also allowed
> to charge a small fee to cover their expenses?

FCC never did stipulate nor specify what constituted an expense, they
just said that the expense must be related to the testing and that a
record of all monies received and disbursed be maintained.
The fee receipts were always split by the VEC (ARRL here) and the VE
team. The VEC sets the details of he split.

1502. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 03:49:08 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A67B934.70109900@dvol.com>
Source record: 171874

VE3TMT wrote:

> I don't know what else to try. I am using a surge suppressor with EMI/RFI
> filters built in, I even took apart the computers power supply and install
> .01's across the AC to ground. Still no help. The HF rig picks up the
> noise as soon as the 'puter is turned on, and when the drives read or write,
> it is picked up as well. Even as I type I can hear the tones changing on
> the HF. Am I missing something???

>
The usual standard approach here is to load evey cable coming out of the
computer up with ferrite beads right at the back of the computer.
>
Check for RFI on any VHF bands you use. I had an external modem which didn't
make a peep on the low bands but it obliterated 2m. The only way I could shut it
up was to toss it into the dumpster.
>
w3rv

1503. Info Needed: Saxton 8409

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 04:25:12 UTC
From: "Bob Brehm (AK6R)" <callbob@home.com>
Message-ID: <IkP96.2929$VA.133264@news1.rdc1.sdca.home.com>
Source record: 171876

Anybody know the impedence of this cable? I have about 100 feet and can't get a reference.

Bob, Ak6R

1504. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 05:02:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A67CA51.DE9AC131@eznec.com>
Source record: 171877

Brian Kelly wrote:
>
> Roy Lewallen wrote:
>
> > When you find
> > a radiator, wind its cable through a ferrite toroid with 5 - 10 turns if
> > possible. This will give as much impedance as about 25 - 100 clip on
> > cores.
>
> >
> Are there cores out there which are big enough to pass the large flavor of printer
> cable connectors??
> >
> w3rv

Yes, but they're expensive and not common. So you're pretty much stuck with using the clip on cores for the printer cable. There are some other things you could do, such as winding a few turns on a ferrite rod, or on a discarded TV yoke core. But it would take several turns on a rod to equal a single snap-on core (because of the air in the rod's magnetic path). The yoke would work ok if you can put it back together very carefully to avoid even the tiniest air gap where the halves meet. A large U-I core pair would work, too, but you don't find them at most flea markets -- especially large ones.

Incidentally, the best ferrites to use for this application are the high-permeability, "low frequency" ferrites, such as Amidon/Fair-Rite 70 series. Type 43, which has a bit lower permeability, also works well and is available in a variety of sizes. It's marketed for this purpose, so a lot of the snap on cores are this type of ferrite or similar.

Roy Lewallen, W7EL

1505. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 05:34:57 UTC
From: richardharrison@webtv.net
Message-ID: <15598-3A67D201-55@storefull-112.iap.bryant.webtv.net>
Source record: 171879

Richard Clark wrote:
" - but even here the mission of the Mountain Team was heavily rescue oriented and yet I never heard of a helicopter operation."

Our aviation department`s practices were extremely conservative. It`s how they maintained an outstanding safety record. We had many helicopters, and fixed-wing aircraft from single-engine Cessnas to BAC-111 jet airliners. In Bolivia, we only operated fixed-wing aircraft because of economics and perhaps the service ceiling problem. Our aviation department insisted on twin-engined aircraft, or aircraft with more than two engines, which could carry a full load without one engine and still clear Ilimani, Bolivia`s tallest peak. When a Cessna couldn`t meet the requrement, it was quickly replaced with a similar Beech that could.

I`ve spent the day above the soup over Bolivia looking for a hole to drop through so we could find a landing spot. We overflew our destination several hundred miles before finding a hole. Had we not had the excess altitude capability we would have been in the soup. That`s not so bad, if you know you are higher than any of the mountain peaks.

Had we needed to evacuate someone from the andes, we would have contracted with a helicopter operator skilled in such operations. With over 30 company aircraft, we still often contracted with other aircraft operators for economy, convenience, or to do a job they could handle better than we could. But, if we couldn`t come up with a contractor, we would have sent a company aircraft even if the operation didn`t fit the usual company policy. It would be dispatched only in weather clear and stable enough to be sure it would be very unlikely to be flying blind into any mountains. Many times our company aircraft were dispatched for medical evacuation and transport not only for our employees and contractors, but as a humanitarian good deed for people we had hardly heard of.

In the early days we only had Bell helicopters, but in later years, the MBB (Boelkow) became the favorite (I didn`t like the way that bird shakes when it hovers close to the ground, but the pilots like it).

Helicopters can even fly pretty high in thin air. They have to sacrifice load capacity. I`ve been aboard for sight-seeing tours in the rockies. I`ve seen video footage from them and of them from high in the andes and other mountains. but I don`t know what the elevations were in the 1935 medical information relay story. For all I know the elevations are above the service ceiling of today`s helicopters, but that would surprise me.

Best regards, Richard Harrison, KB5WZI

1506. Re: Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 05:45:08 UTC
From: k3ky@erols.nospamcom
Message-ID: <948k94$fp7$1@bob.news.rcn.net>
Source record: 171878

Interesting thread. I'm just wondering if anyone took notes in their
research just where Samsung TVs happened to fall along the
Thomson/JA continuum? Thanks, 73, David K3KY

In article <3A65A4DF.C13FA1F1@dvol.com>
Brian Kelly <kelly@dvol.com> wrote:

>
> Floyd Sense wrote:
>
>>
>> Note that conducting this test requires a VERY cooperative store staff,
>> since you want to power off all but the TV being tested. If you don't do
>> that, you'll hear nothing but white noise and birdies everywhere in the
>> store.
>
>>
> So much for FCC device approvals . . . Both the GE and RCA brands of consumer
> electronics lines are actually produced by Thomson. I've had nothing but grief
> with their stuff starting with a GE feature phone & answering machine which was
> a complete crapper then a tabletop AM/FM clock radio which was just as bad. I
> wouldn't touch a "GE" or "RCA" anything with a ten foot pole. When it comes to
> TV rcvrs I stick to Hitachi, Sony & Mitsubishi, ya get what ya pay for.
>>
> w3rv

1507. Re: Telrex 40M beam restoration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 06:07:56 UTC
From: k3ky@erols.nospamcom
Message-ID: <948ljsmks1@bob.news.rcn.net>
Source record: 171880

I know a ham in PA who restored a Telrex 3el (?) 40. I don't know which model. He had problems with a broken or deteriorated phenolic insulator. Does your Telrex have the through-the-boom elements with the phenolic insulator sleeves? My friend bought fiberglass tubing stock for a replacement. He did have to get a shop to turn them down just a bit in OD, if I remember right (or was it ID?) Anyway, worksfine/lasts a long time, and he is glad he took the trouble to repair his. 73, David K3KY

In article <01c079a3$ca493780$d88dadcf@chris>
"Chris Kepus" <ckepus@no.spam.calweb.com> wrote:

> I am in the process of restoring a Telrex 40M329 beam. I would like to
> contact anyone with experience with this fine antenna.
>
> Also am interested if anyone has tried using this on 20M by altering the
> feed system and using an antenna tuner?
>
> Thanks es 73,
> Chris
> W7JPG

1508. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 06:38:08 UTC
From: richardharrison@webtv.net
Message-ID: <7919-3A67E0D0-125@storefull-117.iap.bryant.webtv.net>
Source record: 171881

Cecil, W6RCA wrote:
"I once took off from Bogata in August. (Heat thins the air.) When the plane ran off the end of the runway it dropped like a rock. Luckily, it dropped into a valley."

The airport at La Paz, Bolivia is situated the same way. The airport is up on the Altiplano high above the City of La Paz, which is down in the valley. The runway ends at the shear precipice. I`ve had the roll off the cliff experience with Lloyd Aereo Boliviano (LAB). Fortunately, the drop produced emough speed to take flight. It can be very exciting.

I had another LAB experience. Two aborted take off attempts caused us to board and deboard twice for attemped repairs. I saw guys in monkey-suits banging on engine parts with big hammers.

On the third boarding, I noticed the first cabin attendent I saw was a new face. So I asked her why I hadn`t seen her on the previous take off attempts. She replied that all the crew was new because the previous crew had refused to fly the plane. I said, "Thank you lady. That is good enough for me and I`ll be leaving too." When I deboarded, all the Bolivians seeing the gringo leave decided to follow suit, and the flight was cancelled.

Best regards, Richard Harrison, KB5WZI

1509. FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 06:52:23 UTC
From: Stewart R Teaze <HORSESHOE7@prodigy.net>
Message-ID: <948o9h$4mg4$1@newssvr05-en0.news.prodigy.com>
Source record: 171882
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

The rapidly-expanding Family Radio Service has exposed millions of young people to the world
of radio communications. But now, where is a young kid to go who has is interested in experimenting
with radios and get more range than the typical 1/2 mile of FRS? MURS might help a bit(if Motorola doesn't
get their way), but you know that a growing mind is eventually going to want more than just this. GMRS
doesn't have the resources, and is not a service that was created to foster experimentation. Like it or not,
the typical young person ends up cutting his radio experimention teeth in the Citizen's Band service, because
there isn't a reasonable entry-level ham license for kids(it is even worse now after restructuring, what with the
elimination of the Novice Class).

Everyday now the USA is falling further and further behind Europe and Japan in the wireless communications
race. As hams, it is time we make an effort to insure that our young people are provided with the proper
environment, incentives, and role models to properly learn radio communications techniques and etiquette.
It is time for hams to stop complaining, step up to the plate, and take an active role in seeing that our bright,
young technical minds are being taught properly.

As a result of this, I have reworked the Communicator entry-level license proposal I submitted to the FCC last year,
and I will now be proposing a new entry-level Amateur Radio class known as the "Colt" class. I submit a draft
of the proposal for your review below. Please keep in mind that the future of American involvement in wireless
communications development depends on us to properly encourage and teach tomorrow's experimenters, operators,
technicians, and engineers...

****
Proposal to FCC to institute an introductory-level "Colt" license class in the Amateur Radio Service - REV A

In the late 1980's and early 1990's when the current Amateur Radio Service Technician Class license was conceived and implemented, it was
an appropriate alternate introductory license class. However, due to the recent elimination of the Novice Class license, and as a result of improving

technology; the Technician Class license no longer serves well as the only introductory license, as it is doing poorly in drawing young members into the Service. As a result of license restructuring, it is now actually harder for young people to obtain an Amateur license than it was before restructuring.

In this critical era of global competition, especially in the wireless communications arena, it is essential that we provide a means for properly educating our young people in RF communications operation and theory.

Today, technologies like the Family Radio Service, high-speed telephone & cable modems, the Internet, and inexpensive cellular telephones, have overshadowed the privileges of the Amateur Radio Service, and made the requirements for young beginners to obtain a Technician Class license out of date. Additionally, the Technician Class license has now evolved into a beginning and ending point for most modern day Amateurs, who are mostly interested in VHF/UHF communications, rather than HF communications. Incentive licensing has virtually been eliminated.

The need for a Service dedicated to the goal of teaching young radio users proper radio operation techniques and etiquette can clearly be seen in the disarray present on the 11 meter Citizen's Band Service frequencies. The fact is, the Citizen's Band has become the defacto introductory service for young people just beginning to learn to experiment with radio; yet the Citizen's Band is a very poor environment for young people to be learning in.

Therefore, it is recommended that a new "Colt Class" license be added to the Amateur Radio Service expressly to encourage young individuals to enter the Amateur Radio Service to improve their understanding of RF communications theory, provide a healthy learning environment, and encourage radio experimentation.

On the 70cm UHF band, Colt licensees would be restricted to voice communications on 5 simplex-only 20khz-spaced channels on 446.00, 446.02, 446.04, 446.06, and 446.08 Mhz; and digital communications up to 19,200bps on 1 simplex-only 60khz bandwidth channel on 446.14Mhz.

On the 1.25m VHF band, Colt licensees would be restricted to voice communications on 5 simplex-only 20khz-spaced channels on 223.42, 223.44, 223.46, 223.48, and 223.50 Mhz; and digital communications up to 19,200bps on 1 simplex-only 60khz bandwidth channel on 223.56Mhz.

To encourage experimentation/understanding of antenna and VHF/UHF RF propagation theory, Colt licensees would also be allowed to setup and/or operate through a VHF/UHF crossband, simplex user input/output, repeater station on two 20khz-bandwidth channels on 223.52Mhz and 446.10Mhz. This would allow them to setup an inexpensive repeater system by interconnecting the voice/mic connections via a resistive circuit on two simplex radios; and

would not require expensive, and difficult to understand, cavity and duplexer filtering at the repeater station site. User radio costs would be low, as they would only need a single simplex radio. As a result of the characteristics of this type of repeater, the repeater builders and users would learn to coordinate frequencies, and user groupings based on environmental conditions, so as to acheive optimal results.

Colt license users would also be subject to the following restrictions:

(1) Individuals applying for a Colt Class license must be under 19 years of age at the time of license application or renewal. The license is valid for 5 years.

(2) Fixed control station antennas will be no more than 6.1 meters (20 feet) above the ground or above the building or tree on which it is mounted.

(3) Transmissions limited to 5 watts ERP, or less.

The new license class would have the following goals:

1) Encourage more young people to enter the Amateur Radio Service, by providing an entry-level ARS license class that includes privileges allowing reliable short-range voice and data communications.

2) Not significantly impact existing users of the affected Amateur Radio Service frequency bands.

3) Encourage basic knowledge of radio, electronics, operating principles and etiquette among a wider segment of the general
population.

4) Take advantage of the success of the Family Radio Service, and provide a path for those young users interested in further radio experimentation.

The Colt license exam would consist of 25 fairly simple questions. Emphasis would be put on understanding the existing operational, safety, etiquette and emergency questions from theTechnician Class question pool that relate specifically to Colt Class license privileges. All questions containing calculations would contain small integer(whole-number) input values and have relatively small integer results. Colt licensees would be required to have a general understanding of Ohm's Law and Power relations. They should be required to have a general understanding of how antenna length relates to wavelength; and have a knowledge of transmitter power, antenna gain, transmission line loss, and the ability to perform a simple ERP calculation would be required. General knowledge of simple resistive circuits, and their power dissipation, would be required. Knowledge of capacitors and inductors would not be required.

Stewart Teaze - N0MHS

1510. "Colt" License Thread. Before responding.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 11:26:46 UTC
From: qrm2000@aol.com
Message-ID: <20010119062646.13114.00000139@ng-mh1.aol.com>
Source record: 171883

If you respond to the Colt License Proposal thread, please drop
alt.radio.family from the header. The majority of FRS users are simply
American families using these low-powered radios as short-range "intercoms".
They are not radio hobbists. Thanks.

1511. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 12:41:00 UTC
From: Keith Casey <kc7kc@bigfoot.com>
Message-ID: <949e70$dk0$1@news.bewellnet.com>
Source record: 171884
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

The VE's were incorrect to ask for another fee to take the extra. That should have been covered under the one fee.

Also, the VE group can keep a part of the fee, but only enough to cover their expenses. Their time cannot be charged. The rules did just change on keeping records of expenses incurred.

Keith, KC7KC

"K7MEM" <jda@rupert.tds-az.lmco.com> wrote in message news:3A65DD87.3F54BC7E@rupert.tds-az.lmco.com...
> John Passaneau wrote:
> >
> > The ARRL VE book, said, 1 fee for each test session, and it covered
> > as many elements as the test taker wanted to take, or the VE have.
> > But it is a new fee to retake a failed element. So as long as you
> > keep passing you can do as many elements as you can pass for 1 fee.
> > Remember though that most VE sessions have only 2 or 3 versions
> > of a test element available and if you flunk all that they have,
> > your done for that session.
> >
> > Dick Carroll"wrote:
> > >
> > > Steve Woodruff wrote:
> > > >
> > > > ..but i was suprised tonight to learn that i had to
> > > > pay the $10 fee for EACH exam i took. I upgraded to general,
> > > > and had intentions of attempting the extra class exam....
> > > > but when i found out it would cost me an additional $10
> > > > i figured i'd wait until next month when i could be
> > > > reasonably sure that i'd pass with ease.
> > >
> > > If that is permissable evidently they have changed the rules. When I
> > > ran a VE team ('85 thru '93) the rules said one fee for all tests
taken
> > > at that session. Later it was deemed permissable to charge an
additional
> > > fee for a retest of a failed element at the same session, but we never
> > > did.
>
> It's been a few years, but when I made General, I took the Tech,
> General, and 13 WPM code at the same time for one fee ($6.45).
> At another session I took the Extra and the 20 WPM code tests
> again for one fee ($6.45). At the time, I was under the impression

> that this fee went directly to the ARRL, to cover the cost
> of the testing materials that they supplied. That ment that the
> club, which was running the VE session, was really charging
> nothing for their time.
>
> Was I correct in my reasoning? Aren't they, the club, also allowed
> to charge a small fee to cover their expenses?
>
> Martin K7MEM
>
> --
> Martin E. Meserve K7MEM
> martin.e.meserve AT lmco.com
>
> I respond to news groups and E-Mail on my own time and therefore
> my responses may not be as timely as you, or I, would like them to
> be. If I seem to be ignoring you, send me another E-Mail to jog my
> memory. Opinions are my own and do not reflect the opinions of my
> employer.

1512. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 13:15:53 UTC
From: "Steven J Robeson", K4YZ <k4yz@my-deja.com>
Message-ID: <949em4$a2a$1@nnrp1.deja.com>
Source record: 171885
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <948o9h$4mg4$1@newssvr05-en0.news.prodigy.com>,
"Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote:

>As a result of this, I have reworked the Communicator entry-level
>license proposal I submitted to the FCC last year, and I will now be
>proposing a new entry-level Amateur Radio class known as the "Colt"
>class

Oh nooooooooo....NOT again!

Stewart, I think this "new" license class was the RESULT of one
too many "Colt's".....Colt 45 Laager's, that is......

The FCC MAY assign another RM, but I bet a Happy Meal that they
just say "Been There, Done That".....

They just got done paring down the number of classes...They did
NOT do that just to make room for NEW licenses.

There are already NUMEROUS stories of YOUNG kids (7-8-9) passing
the PRESENT Technician license, so I really doubt they will predisposed
to creating something "new".

If you REALLY want to make an impact on kids in Amateur Radio, try
writing a text FOR kids...THAT will help them along the way. Trying to
wrangle a "new" Amateur Radio license out of the FCC for posterity's
sake isn't it.

73

Steve, K4YZ

Sent via Deja.com
http://www.deja.com/

1513. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 13:40:51 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <t6ggvbjn6da91c@corp.supernews.com>
Source record: 171886
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

"Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote in message
news:948o9h$4mg4$1@newssvr05-en0.news.prodigy.com...
> Like it or not,
> the typical young person ends up cutting his radio experimention teeth in
> the Citizen's Band service, because
> there isn't a reasonable entry-level ham license for kids(it is even worse
> now after restructuring, what with the
> elimination of the Novice Class).

The Technician Class license is so easy to get now it's not even funny. You
sure you are not being a little jaded in your view when you think every kid
wants to work DX on H.F., hence starting out on CB Radio shooting skip?

--
Leland C. Scott
KC8LDO

1514. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 13:58:45 UTC
From: KC8JBO <roger_kc8jbo@my-deja.com>
Message-ID: <949h6h$c3m$1@nnrp1.deja.com>
Source record: 171887
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <949e70$dk0$1@news.bewellnet.com>,
"Keith Casey" <kc7kc@bigfoot.com> wrote:
> The VE's were incorrect to ask for another fee to take the extra.
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> should have been covered under the one fee.
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cover
> their expenses. Their time cannot be charged. The rules did just
change on
> keeping records of expenses incurred.
>
> Keith, KC7KC

According to the ARRL VE Manual , Eith Ed. , 2000, p. 50,
under "Retesting,"
"An applicant who fails an element at an ARRL/VEC-coordinated session
may retake that element at the same session, if (1) the administering
VE team has a different version of that element, which the applicant
hasn't taken (section 97.509), (2) the VE team has the time and
resources and is willing to readminister the additional version; and
(3) the applicant pays an ADDITIONAL (emphasis mine) TEST FEE (because
the candidate is then considered a walk-in candidate who just arrived,
even if he or she arrived at the beginning of the session). Again, a
retest fee charge is only required if an element is retaken, after
being failed at your session."

The W5YI VE manual has the same thing .

The reimbursement fee (test fee) is the only fee that may be charged at
a test session. Now, if the test session occurs at a hamfest,
instruction class, or other gathering, an admission fee may be charged
and it has to be kept seperate from the test fee. If you're just going
to the test sesion at a hamfest, you shouldn't be charged a fee.

> "K7MEM" <jda@rupert.tds-az.lmco.com> wrote in message
> news:3A65DD87.3F54BC7E@rupert.tds-az.lmco.com...
> > John Passaneau wrote:
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> > > Remember though that most VE sessions have only 2 or 3 versions
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> > to charge a small fee to cover their expenses?
> >
> > Martin K7MEM
> >
> > --
> > Martin E. Meserve K7MEM
> > martin.e.meserve AT lmco.com
> >
> > I respond to news groups and E-Mail on my own time and therefore
> > my responses may not be as timely as you, or I, would like them to
> > be. If I seem to be ignoring you, send me another E-Mail to jog my
> > memory. Opinions are my own and do not reflect the opinions of my
> > employer.

>
>

--
73 de Roger, KC8JBO
EM99 |ARRL|VE [ARRL & W5YI]|ARES |RACES
Yaesu FT-920 |Inverted Vee @ 40 ft.
Yaesu FT-90R

Sent via Deja.com
http://www.deja.com/

1515. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 14:16:17 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A684BFF.4F6566BC@GTE.net>
Source record: 171888

Billy Young wrote:

> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> side. I haven't been able to get my SWR no lower that 2:1 at best regardless
> of what I tried. It's suspended from at tree at one about 30' high and from
> the other end about 30 on a push up pole. I have nylon string that places
> it about 20' for either end with homemade PVC insulators. I'm not receiving
> well with it either. Does any one have any suggestions what the problem
> might be for my first homebrew antenna?
>
> "73's
> Billy Young
> KD5CSD
> youngbil@txucom.net

Hi Bill,
Modeling shows a best VSWR of 1.6 assuming the center is at 30' also. But allowing for a few feet of droop to the center puts the VSWR right at 2:1- so all is as it should be.
Put the center at 40' or so to get a 1:1. Of course the difference in efficiency between a 1:1 and a 2:1 would be difficult to see on the air.
Dale W4OP

1516. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 14:56:46 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6855AE.962E878D@oio.net>
Source record: 171889
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

Stewart,
Why are you wasting your time and ours with this? There
is already an 'entry level' license. It sounds like you
are advocating another 'junk' license. Give it a rest.
'Doc

1517. Re: 900MHz Yagis - solid vs. tubing as elements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 15:14:02 UTC
From: oldtimeradio@??.net
Message-ID: <3a715901.9839594@news.vnet.net>
Source record: 171890

Tom,

You may want to investigate building a quagi. You can find info via a search engine. This would be easy to build because you could use a wooden boom and almost any kind of wire or tubing for the elements. I think the big plus would be not having to make any kind of matching device.
cul

On Fri, 12 Jan 2001 12:47:54 -0500, Tom Merendino <tmerendi@fore.com> wrote:

>Hi,
>
>I am planning to experiment by building a yagi for the 900Mhz band. Will
>be used for receiving only. It will be mounted in the attic, so
>mechanical/wind loading considerations are not important.
>
>Is there any electrical performance advantage of using solid rods vs.
>small diameter hollow tubing as elements? Is there a large sensitivity
>to element diameter in this frequency range?
>
>How about the boom - any electrical performance advantage of using
>conductive vs. nonconductive boom material? Is it better to attach the
>elements to a conductive boom vs. isolating them from a conductive boom
>(above or thru?)?
>
>The electrical parameter I'm most interested in optimizing is the
>receive gain.
>
>Thanks in advance for any experience you can share.
>
>--Tom--
>

1518. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 15:51:10 UTC
From: curious_dan@my-deja.com
Message-ID: <949np9ilh1@nnrp1.deja.com>
Source record: 171892
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <948o9h$4mg4$1@newssvr05-en0.news.prodigy.com>,
"Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote:
> The rapidly-expanding Family Radio Service has exposed millions of
young
> people to the world
> of radio communications. But now, where is a young kid to go who has
is
> interested in experimenting
> with radios and get more range than the typical 1/2 mile of FRS?
MURS might
> help a bit(if Motorola doesn't
> get their way), but you know that a growing mind is eventually going
to want
> more than just this. GMRS
> doesn't have the resources, and is not a service that was created to
foster
> experimentation. Like it or not,
> the typical young person ends up cutting his radio experimention
teeth in
> the Citizen's Band service, because
> there isn't a reasonable entry-level ham license for kids(it is even
worse
> now after restructuring, what with the
> elimination of the Novice Class).
>
> Everyday now the USA is falling further and further behind Europe and
Japan
> in the wireless communications
> race. As hams, it is time we make an effort to insure that our young
people
> are provided with the proper
> environment, incentives, and role models to properly learn radio
> communications techniques and etiquette.
> It is time for hams to stop complaining, step up to the plate, and
take an
> active role in seeing that our bright,
> young technical minds are being taught properly.
>
> As a result of this, I have reworked the Communicator entry-level
license
> proposal I submitted to the FCC last year,
> and I will now be proposing a new entry-level Amateur Radio class
known as

> the "Colt" class. I submit a draft
> of the proposal for your review below. Please keep in mind that the
future
> of American involvement in wireless
> communications development depends on us to properly encourage and
teach
> tomorrow's experimenters, operators,
> technicians, and engineers...
>
> **********
> Proposal to FCC to institute an introductory-level "Colt" license
> class in the Amateur Radio Service - REV A
>
> In the late 1980's and early 1990's when the current Amateur Radio
Service
> Technician Class license was conceived and implemented, it was
> an appropriate alternate introductory license class. However, due to
the
> recent elimination of the Novice Class license, and as a result of
improving
> technology; the Technician Class license no longer serves well as the
only
> introductory license, as it is doing poorly in drawing young members
into
> the Service. As a result of license restructuring, it is now actually
> harder for young people to obtain an Amateur license than it was
before
> restructuring.
>
> In this critical era of global competition, especially in the wireless
> communications arena, it is essential that we provide a means for
properly
> educating our young people in RF communications operation and theory.
>
> Today, technologies like the Family Radio Service, high-speed
telephone &
> cable modems, the Internet, and inexpensive cellular
> telephones, have overshadowed the privileges of the Amateur Radio
Service,
> and made the requirements for young beginners to obtain a
> Technician Class license out of date. Additionally, the Technician
Class
> license has now evolved into a beginning and ending point for
> most modern day Amateurs, who are mostly interested in VHF/UHF
> communications, rather than HF communications. Incentive licensing
has
> virtually been eliminated.
>
> The need for a Service dedicated to the goal of teaching young radio
users

> proper radio operation techniques and etiquette can clearly be seen
in the
> disarray present on the 11 meter Citizen's Band Service frequencies.
The
> fact is, the Citizen's Band has become the defacto introductory
service for
> young people just beginning to learn to experiment with radio; yet the
> Citizen's Band is a very poor environment for young people to be
learning
> in.
>
> Therefore, it is recommended that a new "Colt Class" license be added
to the
> Amateur Radio Service expressly to encourage young
> individuals to enter the Amateur Radio Service to improve their
> understanding of RF communications theory, provide a healthy learning
> environment, and encourage radio experimentation.
>
> On the 70cm UHF band, Colt licensees would be restricted to voice
> communications on 5 simplex-only 20khz-spaced channels
> on 446.00, 446.02, 446.04, 446.06, and 446.08 Mhz; and digital
> communications up to 19,200bps on 1 simplex-only 60khz bandwidth
channel on
> 446.14Mhz.
>
> On the 1.25m VHF band, Colt licensees would be restricted to voice
> communications on 5 simplex-only 20khz-spaced channels
> on 223.42, 223.44, 223.46, 223.48, and 223.50 Mhz; and digital
> communications up to 19,200bps on 1 simplex-only 60khz bandwidth
channel on
> 223.56Mhz.
>
> To encourage experimentation/understanding of antenna and VHF/UHF RF
> propagation theory, Colt licensees would also be allowed to setup
and/or
> operate through a VHF/UHF crossband, simplex user input/output,
repeater
> station on two 20khz-bandwidth channels on 223.52Mhz and 446.10Mhz.
This
> would allow them to setup an inexpensive repeater system by
interconnecting
> the voice/mic connections via a resistive circuit on two simplex
radios; and
> would not require expensive, and difficult to understand, cavity and
> duplexer filtering at the repeater station site. User radio costs
would be
> low, as they would only need a single simplex radio. As a result of
the
> characteristics of this type of repeater, the repeater builders and
users

> would learn to coordinate frequencies, and user groupings based on
> environmental conditions, so as to acheive optimal results.
>
> Colt license users would also be subject to the following
restrictions:
>
> (1) Individuals applying for a Colt Class license must be under 19
years of
> age at the time of license application or renewal. The license is
valid for
> 5 years.
>
> (2) Fixed control station antennas will be no more than 6.1 meters (20
> feet) above the ground or above the building or tree on which it is
> mounted.
>
> (3) Transmissions limited to 5 watts ERP, or less.
>
> The new license class would have the following goals:
>
> 1) Encourage more young people to enter the Amateur Radio Service, by
> providing an entry-level ARS license class that includes privileges
> allowing reliable short-range voice and data communications.
>
> 2) Not significantly impact existing users of the affected Amateur
Radio
> Service frequency bands.
>
> 3) Encourage basic knowledge of radio, electronics, operating
principles and
> etiquette among a wider segment of the general
> population.
>
> 4) Take advantage of the success of the Family Radio Service, and
provide a
> path for those young users interested in further radio
experimentation.
>
> The Colt license exam would consist of 25 fairly simple questions.
Emphasis
> would be put on understanding the existing operational, safety,
etiquette
> and emergency questions from theTechnician Class question pool that
relate
> specifically to Colt Class license privileges. All questions
containing
> calculations would contain small integer(whole-number) input values
and have
> relatively small integer results. Colt licensees would be required
to have

> a general understanding of Ohm's Law and Power relations. They
should be
> required to have a general understanding of how antenna length
relates to
> wavelength; and have a knowledge of transmitter power, antenna gain,
> transmission line loss, and the ability to perform a simple ERP
calculation
> would be required. General knowledge of simple resistive circuits,
and
> their power dissipation, would be required. Knowledge of capacitors
and
> inductors would not be required.
>
> Stewart Teaze - N0MHS
>
>

yeh real cool, it is exposing kids to radio alright. what does 900 mhz
do to brain waves good buddy?,.......cd is out......

Sent via Deja.com
http://www.deja.com/

1519. Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 15:52:11 UTC
From: GaryH <garyhendricks@hotmail.com>
Message-ID: <YqZ96.4814$CR2.221273@news3.atl>
Source record: 171891

Does anyone have experience with the B&W HF
wire antennas the work all of the amatuer bands
without a tuner.

How do these antennas perform?

Thanks

1520. Cleaning Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 17:04:47 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3A6873AF.CB9A6F48@aztek-eng.com>
Source record: 171893

I have a C-L-C type antenna tuner that the roller inductor was somewhat eratic. I took it apart and cleaned all the contact points with some freon type degreaser and it worked great but the roller inductor squeaked when turned. Then I used some spray TV tuner cleaner/lubricant and the squeaking stopped but when I tarnsmitted on 17m there was an oil like smell from the tuner indicating that the TV tuner spray did not like high current. So now I went back to the squeaking mode. What should I have used to clean the roller inductor with?

73,
Larry Benko, W0QE

1521. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 17:19:27 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A68771F.ED7B32E0@wgcr.org>
Source record: 171894
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Steven, J, Robeson, K4YZ wrote:
> There are already NUMEROUS stories of YOUNG kids (7-8-9) passing
> the PRESENT Technician license, so I really doubt they will predisposed
> to creating something "new".

I personally know an eleven-year-old Extra. 20-wpm-code-test Extra, at
that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
passed the Tech exam.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

1522. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 17:29:43 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A687987.6CC68AA6@zylay.com>
Source record: 171895
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

> Steven, J, Robeson, K4YZ wrote:
> > There are already NUMEROUS stories of YOUNG kids (7-8-9) passing
> > the PRESENT Technician license, so I really doubt they will predisposed
> > to creating something "new".
>
> I personally know an eleven-year-old Extra. 20-wpm-code-test Extra, at
> that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
> passed the Tech exam.

Sounds believable to me. My 10 and 11 YOs are studying. They want to
pass the 5 WPM in time for field day.

1523. Roger doesnt use foul mouth !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 18:08:05 UTC
From: frg9600 <frg9600@home.com>
Message-ID: <9o%96.833$t5.75684@news1.frmt1.sfba.home.com>
Source record: 171896
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

KC8JBO <roger_kc8jbo@my-deja.com> wrote in message
news:949h6h$c3m$1@nnrp1.deja.com...
> In article <949e70$dk0$1@news.bewellnet.com>,
> "Keith Casey" <kc7kc@bigfoot.com> wrote:
> > The VE's were incorrect to ask for another fee to take the extra.
> That
> > should have been covered under the one fee.
> >
> > Also, the VE group can keep a part of the fee, but only enough to
> cover
> > their expenses. Their time cannot be charged. The rules did just
> change on
> > keeping records of expenses incurred.
> >
> > Keith, KC7KC
>
> According to the ARRL VE Manual , Eith Ed. , 2000, p. 50,
> under "Retesting,"
> "An applicant who fails an element at an ARRL/VEC-coordinated session
> may retake that element at the same session, if (1) the administering
> VE team has a different version of that element, which the applicant
> hasn't taken (section 97.509), (2) the VE team has the time and
> resources and is willing to readminister the additional version; and
> (3) the applicant pays an ADDITIONAL (emphasis mine) TEST FEE (because
> the candidate is then considered a walk-in candidate who just arrived,
> even if he or she arrived at the beginning of the session). Again, a
> retest fee charge is only required if an element is retaken, after
> being failed at your session."
>
> The W5YI VE manual has the same thing .
>
> The reimbursement fee (test fee) is the only fee that may be charged at
> a test session. Now, if the test session occurs at a hamfest,
> instruction class, or other gathering, an admission fee may be charged
> and it has to be kept seperate from the test fee. If you're just going
> to the test sesion at a hamfest, you shouldn't be charged a fee.
>
>
>
> > "K7MEM" <jda@rupert.tds-az.lmco.com> wrote in message
> > news:3A65DD87.3F54BC7E@rupert.tds-az.lmco.com...
> > > John Passaneau wrote:
> > > >

> > > > The ARRL VE book, said, 1 fee for each test session, and it
> covered
> > > > as many elements as the test taker wanted to take, or the VE have.
> > > > But it is a new fee to retake a failed element. So as long as you
> > > > keep passing you can do as many elements as you can pass for 1
> fee.
> > > > Remember though that most VE sessions have only 2 or 3 versions
> > > > of a test element available and if you flunk all that they have,
> > > > your done for that session.
> > > >
> > > > Dick Carroll"wrote:
> > > > >
> > > > > Steve Woodruff wrote:
> > > > > >
> > > > > > ..but i was suprised tonight to learn that i had to
> > > > > > pay the $10 fee for EACH exam i took. I upgraded to general,
> > > > > > and had intentions of attempting the extra class exam....
> > > > > > but when i found out it would cost me an additional $10
> > > > > > i figured i'd wait until next month when i could be
> > > > > > reasonably sure that i'd pass with ease.
> > > > >
> > > > > If that is permissable evidently they have changed the rules.
> When I
> > > > > ran a VE team ('85 thru '93) the rules said one fee for all
> tests
> > taken
> > > > > at that session. Later it was deemed permissable to charge an
> > additional
> > > > > fee for a retest of a failed element at the same session, but
> we never
> > > > > did.
> > >
> > > It's been a few years, but when I made General, I took the Tech,
> > > General, and 13 WPM code at the same time for one fee ($6.45).
> > > At another session I took the Extra and the 20 WPM code tests
> > > again for one fee ($6.45). At the time, I was under the impression
> > > that this fee went directly to the ARRL, to cover the cost
> > > of the testing materials that they supplied. That ment that the
> > > club, which was running the VE session, was really charging
> > > nothing for their time.
> > >
> > > Was I correct in my reasoning? Aren't they, the club, also allowed
> > > to charge a small fee to cover their expenses?
> > >
> > > Martin K7MEM
> > >
> > > --
> > > Martin E. Meserve K7MEM
> > > martin.e.meserve AT lmco.com
> > >

> > > I respond to news groups and E-Mail on my own time and therefore
> > > my responses may not be as timely as you, or I, would like them to
> > > be. If I seem to be ignoring you, send me another E-Mail to jog my
> > > memory. Opinions are my own and do not reflect the opinions of my
> > > employer.
> >
> >
>
> --
> 73 de Roger, KC8JBO
> EM99 |ARRL|VE [ARRL & W5YI]|ARES |RACES
> Yaesu FT-920 |Inverted Vee @ 40 ft.
> Yaesu FT-90R
>
>
> Sent via Deja.com
> http://www.deja.com/

1524. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 18:25:19 UTC
From: "Dr. Conrad Connie" <coontail@my-deja.com>
Message-ID: <94a0q1$ri6$1@nnrp1.deja.com>
Source record: 171898
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <948o9h$4mg4$1@newssvr05-en0.news.prodigy.com>,
"Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote:
>young kid to go who has
Like it or not,

> the typical young person ends up cutting his radio experimention teeth
in
> the Citizen's Band service, because
> there isn't a reasonable entry-level ham license for kids(it is even
worse
> now after restructuring, what with the
> elimination of the Novice Class).

Hey, why don't we just finger print them and give them a license. If a
young person cannot pass the tech exams today they are:

1. really NOT that interested in radio anyway
2. retarded and illiterate (I know lots of extras that fall into that
category)
3. Wanting to simply sign on dotted line for radio frequencies access.
(To my knowledge this is still a violation of ITU standards)

There are five and six year olds who have passed the EXTRA class test.
That's how easy it is to pass a ham exam with very relaxed exam
requirements.

--

Sent via Deja.com
http://www.deja.com/

1525. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 18:27:18 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A688706.1314@wt.net>
Source record: 171897

Billy Young wrote:
>
> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> side. I haven't been able to get my SWR no lower that 2:1 at best regardless
> of what I tried. It's suspended from at tree at one about 30' high and from
> the other end about 30 on a push up pole. I have nylon string that places
> it about 20' for either end with homemade PVC insulators. I'm not receiving
> well with it either. Does any one have any suggestions what the problem
> might be for my first homebrew antenna?
>
> "73's
> Billy Young
> KD5CSD
> youngbil@txucom.net

If it's not receiving well, sounds like a coax or connector problem. The SWR of a 80m dipole is not going to effect the receiving qualities of a 80m dipole. Or maybe you are coupling to other wires. If you check the caox and connectors and end up ok, shift the center point of the dipole to get a good match. IE: take a bit off one end and add to the other. You will have to try it to see which end you add to works the best. But I think you have a problem somewhere with connections or coupling with other wires. It is not normal to show a high SWR on a fairly low 80m dipole. Should be fairly low if it's cut right, and no coupling to other wires. MK
--
http://web.wt.net/~nm5k

1526. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 18:38:51 UTC
From: Duane Schulke <hulk@gelac.mar.lmco.com>
Message-ID: <3A6889BB.F20ADFA8@gelac.mar.lmco.com>
Source record: 171899

Billy,

You didn't say whether you were measuring the SWR at the antenna (at the center), or at the end of your feedline (at your tuner/rig). Your feedline can be influencing the SWR reading. Along that line, are you using coax or a twin-lead for a feedline? -- and, how long is your feedline: 1/8, 1/4, 1/2 wavelength of 80m (adjusted for the velocity factor (VF) of your feedline (VF=.66 for most coax)) -- or a random length? My dipoles work best when I cut them to 1/2 wavelength (adjusted for VF).

Schulk

Billy Young wrote:

> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> side. I haven't been able to get my SWR no lower that 2:1 at best regardless
> of what I tried. It's suspended from at tree at one about 30' high and from
> the other end about 30 on a push up pole. I have nylon string that places
> it about 20' for either end with homemade PVC insulators. I'm not receiving
> well with it either. Does any one have any suggestions what the problem
> might be for my first homebrew antenna?
>
> "73's
> Billy Young
> KD5CSD
> youngbil@txucom.net

--
-- F-22
Name: Duane (Schulk) Schulke KG4EBA \ /
Ramblin Wrek fm GA Tech & Zoomie Engineer _____-/\-_____
E-mail: hulk@gelac.mar.lmco.com _\/_/
WWW: http://www.qsl.net/kg4eba/

1527. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 18:52:03 UTC
From: Duane Schulke <hulk@gelac.mar.lmco.com>
Message-ID: <3A688CD3.93067A21@gelac.mar.lmco.com>
Source record: 171901

Billy,

Sorry, but I may have "mis-spoken" when I said in my last message that I use a 1/2 wavelength coax for my transmission lines. It's been a year, so it may be 1/4, instead -- I'll have to look at my notes when I get a chance. However, I'll bet somebody else can tell you faster that I can find my notes!

Also, I seem to remember that the SWR read-out itself may not be influenced by the length of your feedline, but the impedance, which can affect your receiving, and your RFI on transmit.

Are you using a tuner, or just a SWR meter?

Schulk
-- F-22
Name: Duane (Schulk) Schulke KG4EBA \ /
Ramblin Wrek fm GA Tech & Zoomie Engineer _____-/\-_____
E-mail: hulk@gelac.mar.lmco.com _\/_/
WWW: http://www.qsl.net/kg4eba/

Billy Young wrote:

> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> side. I haven't been able to get my SWR no lower that 2:1 at best regardless
> of what I tried. It's suspended from at tree at one about 30' high and from
> the other end about 30 on a push up pole. I have nylon string that places
> it about 20' for either end with homemade PVC insulators. I'm not receiving
> well with it either. Does any one have any suggestions what the problem
> might be for my first homebrew antenna?
>
> "73's
> Billy Young
> KD5CSD
> youngbil@txucom.net

1528. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 19:02:44 UTC
From: horseshoestew@my-deja.com
Message-ID: <94a30e$tr0$1@nnrp1.deja.com>
Source record: 171900
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <3A687987.6CC68AA6@zylay.com>,
Gene <webmaster@zylay.com> wrote:
> > Steven, J, Robeson, K4YZ wrote:
> > > There are already NUMEROUS stories of YOUNG kids (7-8-9)
passing
> > > the PRESENT Technician license, so I really doubt they will
predisposed
> > > to creating something "new".
> >
> > I personally know an eleven-year-old Extra. 20-wpm-code-test
Extra, at
> > that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
> > passed the Tech exam.
>
> Sounds believable to me. My 10 and 11 YOs are studying. They want to
> pass the 5 WPM in time for field day.

Do you and your 10 and 11 YOs have FRS radios? Do they want them so
that they can talk with their friends?

--
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1529. Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 19:11:27 UTC
From: jason_hsu@my-deja.com
Message-ID: <94a3gl$u4f$1@nnrp1.deja.com>
Source record: 171902

Texas Radio Products (http://www.texasradioproducts.com) sells a Texas Bugcatcher for $150, or less than half what GLA Systems charges.

Is the version from Texas Radio Products any good, or is it just a cheap imitation that doesn't work?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

1530. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 19:23:50 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A689446.56D6CB1C@zylay.com>
Source record: 171903
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

horseshoestew@my-deja.com wrote:
>
> In article <3A687987.6CC68AA6@zylay.com>,
> Gene <webmaster@zylay.com> wrote:
> > > Steven, J, Robeson, K4YZ wrote:
> > > > There are already NUMEROUS stories of YOUNG kids (7-8-9)
> passing
> > > > the PRESENT Technician license, so I really doubt they will
> predisposed
> > > > to creating something "new".
> > >
> > > I personally know an eleven-year-old Extra. 20-wpm-code-test
> Extra, at
> > > that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
> > > passed the Tech exam.
> >
> > Sounds believable to me. My 10 and 11 YOs are studying. They want to
> > pass the 5 WPM in time for field day.
>
> Do you and your 10 and 11 YOs have FRS radios? Do they want them so
> that they can talk with their friends?

Can't afford them right now as handy as they would be for our charity bike rides that we like to do (got into that through the ham club). Between them and their 3 brothers, it's tricky just trying to keep them in bikes plus save up for a an extra pair of 2M rigs and eventually an HF rig. Luckily they do neighborhood handywork and pay for half of their own hobby stuff, otherwise I'd never be able to afford it.

You can see them at http://www.tfn.net/~gfloyd7/cmn/

1531. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 19:31:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A68960A.E0285924@IEEE.org>
Source record: 171904
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

"Dr. Conrad Connie" wrote:
> There are five and six year olds who have passed the EXTRA class test.
> That's how easy it is to pass a ham exam with very relaxed exam
> requirements.

I'll bet every one of those five and six year olds have an IQ in
excess of 120 and you certainly cannot say that for every adult ham.
--
http://www.mindspring.com/~w6rca

1532. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 19:38:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6897A0.B85B9266@IEEE.org>
Source record: 171905

jason_hsu@my-deja.com wrote:
>
> Texas Radio Products (http://www.texasradioproducts.com) sells a Texas
> Bugcatcher for $150, or less than half what GLA Systems charges.
>
> Is the version from Texas Radio Products any good, or is it just a
> cheap imitation that doesn't work?

They say it is an air core coil but it isn't 100%. Find out what that
"protective tube" is made out of before you decide to buy. I wouldn't
buy it if that "protective tube" is made out of PVC.
--
http://www.mindspring.com/~w6rca

1533. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 20:19:23 UTC
From: horseshoestew@my-deja.com
Message-ID: <94a7g1$220$1@nnrp1.deja.com>
Source record: 171907
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <3A689446.56D6CB1C@zylay.com>,
Gene <webmaster@zylay.com> wrote:
> horseshoestew@my-deja.com wrote:
> >
> > In article <3A687987.6CC68AA6@zylay.com>,
> > Gene <webmaster@zylay.com> wrote:
> > > > Steven, J, Robeson, K4YZ wrote:
> > > > > > There are already NUMEROUS stories of YOUNG kids (7-8-9)
> > passing
> > > > > > the PRESENT Technician license, so I really doubt they will
> > predisposed
> > > > > > to creating something "new".
> > > > >
> > > > > I personally know an eleven-year-old Extra. 20-wpm-code-test
> > Extra, at
> > > > > that. He was 10 when he passed the 20wpm. He was 8, IIRC,
when he
> > > > > passed the Tech exam.
> > > >
> > > > Sounds believable to me. My 10 and 11 YOs are studying. They want
to
> > > > pass the 5 WPM in time for field day.
> > >
> > > Do you and your 10 and 11 YOs have FRS radios? Do they want them so
> > > that they can talk with their friends?
> >
> > Can't afford them right now as handy as they would be for our charity
> > bike rides that we like to do (got into that through the ham club).
> > Between them and their 3 brothers, it's tricky just trying to keep
them
> > in bikes plus save up for a an extra pair of 2M rigs and eventually an
> > HF rig. Luckily they do neighborhood handywork and pay for half of
their
> > own hobby stuff, otherwise I'd never be able to afford it.

They do neigborhood handywork? Man - now that is really a dying breed.

I remember I used to have a paper route when I was a kid. Nowadays the
newspapers are all delivered by adults in cars, because(I assume) there
aren't enough kids that are interested in doing it anymore.

As much as I respect your kid's work ethic, the reality is that in
today's society, the notion of having to actually work for something
has been virtually lost. I'm attempting to return to some kind

of "reward for work" ethic that reflects today's reality. The thing is - most kids aren't interested in getting on HF nowadays - because they can just get on the telephone or Internet and communicate more reliably around the world. Also, kids want to be able to communicate with their own peers(who have the same general interests). The idea is to create a critical mass of kids to make the whole thing feasible - provide a big enough carrot, and a small enough hill to climb to get to it. Obviously, we shouldn't just let anyone on who just signs their name on a piece of paper; but requiring all youngsters to have to learn about inductors is a little bit overboard, when all they want to start out with is to learn to communicate a little further than their 500mW fixed-antenna UHF rigs allow them. I want to teach them the right way to get there, and give them enough rewards that they are going to want to learn the right way to get there. This is an entryway to the Service - hopefully many will go on to get their Technician and higher licences.

I think MURS could be somewhat of a help in getting kids educated about radios - but the fastest digital speed possible on MURS will be about 4800bps(in reality 1200bps). This is not enough of an incentive. 19,200bps can be cheaply and easily done on the 1.25m/70cm ham bands, and I think that would be a VERY big incentive.

> You can see them at http://www.tfn.net/~gfloyd7/cmn/

--
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1534. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 20:27:31 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94a80f$d8e$1@iac5.navix.net>
Source record: 171906

Even at Georgia Tech they must teach that changing an impedance changes SWR.
8>)

As a half wave repeats the termination, it is probably what you wanted.

That being said, it don't matter...

"Duane Schulke" <hulk@gelac.mar.lmco.com> wrote in message
news:3A688CD3.93067A21@gelac.mar.lmco.com...
> Billy,
>
> Sorry, but I may have "mis-spoken" when I said in my last message that I
use a
> 1/2 wavelength coax for my transmission lines. It's been a year, so it may
be
> 1/4, instead -- I'll have to look at my notes when I get a chance.
However, I'll
> bet somebody else can tell you faster that I can find my notes!
>
> Also, I seem to remember that the SWR read-out itself may not be
influenced by
> the length of your feedline, but the impedance, which can affect your
receiving,
> and your RFI on transmit.
>
> Are you using a tuner, or just a SWR meter?
>
> Schulk
> -- F-22
> Name: Duane (Schulk) Schulke KG4EBA \ /
> Ramblin Wrek fm GA Tech & Zoomie Engineer _____-/\-_____
> E-mail: hulk@gelac.mar.lmco.com _\/_/
> WWW: http://www.qsl.net/kg4eba/
> --
>
> Billy Young wrote:
>
> > Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> > side. I haven't been able to get my SWR no lower that 2:1 at best
regardless
> > of what I tried. It's suspended from at tree at one about 30' high and
from
> > the other end about 30 on a push up pole. I have nylon string that
places
> > it about 20' for either end with homemade PVC insulators. I'm not

receiving
> > well with it either. Does any one have any suggestions what the problem
> > might be for my first homebrew antenna?
> >
> > "73's
> > Billy Young
> > KD5CSD
> > youngbil@txucom.net
>
>
>

1535. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 20:38:34 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94a8k9$36s$1@nnrp1.deja.com>
Source record: 171908
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

N0MHS.... (In discussing a proposed Amateur Radio license whose purposes would be to "Encourage basic knowledge of radio, electronics.." and "provide a path for ... further radio experimentation")

...said:

> ....to have to learn about inductors is a little bit overboard....

Can _ANYONE_ take this proposal seriously?

73, Hans, K0HB
Lord High Liberator of the Electric Smoke

Sent via Deja.com
http://www.deja.com/

1536. 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 20:57:31 UTC
From: TruckDrivingMan <tansorg@cs.tu-berlin.de>
Message-ID: <94a9ha$5a7$06$1@news.t-online.com>
Source record: 171909

Hi OMs
I want to build a 2-element yagi for 10 m.Should I make the second element
as reflector or as director ? What is better ?

vy 73
Tom

1537. Multiple Antennas. Single Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:08:01 UTC
From: Roger <rmaynard@taqua.com>
Message-ID: <4A6C6F1DCD996321.5858804B820C4F40.E23DD30C3F442E8D@lp.airnews.net>
Source record: 171910

Hi Folks,

Can you point me in the direction for horizontal extender poles? IOW's If I have a pole with a 2 meter and I want to add other antennas but set out from the main pole. Sure as heck I have the venacular wrong for this message but I think you know what I am asking for. Or some plans to make my own.

Thanks

1538. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:09:46 UTC
From: horseshoestew@my-deja.com
Message-ID: <94aaeg$4vm$1@nnrp1.deja.com>
Source record: 171912
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <94a8k9$36s$1@nnrp1.deja.com>,
K0HB <K0HB@arrl.org> wrote:
> N0MHS.... (In discussing a proposed Amateur Radio license whose
> purposes would be to "Encourage basic knowledge of radio,
> electronics.." and "provide a path for ... further radio
> experimentation")
>
> ...said:
>
> > ....to have to learn about inductors is a little bit overboard....
>
> Can _ANYONE_ take this proposal seriously?

I suppose you didn't take the Novice exam seriously either, eh? The last version(intended to be used up to June, 2001!) contained no mention of inductors, and contained zero questions that involved a correct answer involving a capacitor.

Also, please note that this new "Novice" license does not involve any HF privileges - where the possibility of widespread interference was a possibility.

> 73, Hans, K0HB
> Lord High Liberator of the Electric Smoke

------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1539. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:10:08 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94aagaese1@iac5.navix.net>
Source record: 171911
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

This sounds like a right wing, jackbooted, Nazi attempt to make someone work to obtain a license. We can not allow this to happen!

We should issue a license to anyone who shows an interest.

We need to be sensitive to the desires of today's youth. Are none of you able to fathom the deep loss to a young persons self esteem were they to try and fail for what ever reason.

Only a group of insensitive old hams that want to feel superior because they expended some amount of effort is keeping this from reality.

As of today I am forming NHI (No Hassle International) A group dedicated to remove the artificial barriers keeping young people from what they have a "right" to and deserve.

To fight this fight against the narrow minded ego driven old hams that are holding us down will require substantial funds.

Please send $10, $20, or what ever you can afford to my address as listed on QRZ. You can be sure the money will be put to the best possible use as determined by the Board of Directors of NHI. (Me)

Yours to rid the bands of any incentives

3's and 8's
Fred W4JLE

<horseshoestew@my-deja.com> wrote in message
news:94a7g1$220$1@nnrp1.deja.com...
> In article <3A689446.56D6CB1C@zylay.com>,
> Gene <webmaster@zylay.com> wrote:
> > horseshoestew@my-deja.com wrote:
> > >
> > > In article <3A687987.6CC68AA6@zylay.com>,
> > > Gene <webmaster@zylay.com> wrote:
> > > > > Steven, J, Robeson, K4YZ wrote:
> > > > > > There are already NUMEROUS stories of YOUNG kids (7-8-9)
> > > passing
> > > > > > the PRESENT Technician license, so I really doubt they will
> > > predisposed
> > > > > > to creating something "new".
> > > > >
> > > > > I personally know an eleven-year-old Extra. 20-wpm-code-test
> > > Extra, at
> > > > > that. He was 10 when he passed the 20wpm. He was 8, IIRC,

> when he
> > > > > passed the Tech exam.
> > > >
> > > > Sounds believable to me. My 10 and 11 YOs are studying. They want
> to
> > > > pass the 5 WPM in time for field day.
> > >
> > > Do you and your 10 and 11 YOs have FRS radios? Do they want them so
> > > that they can talk with their friends?
> >
> > Can't afford them right now as handy as they would be for our charity
> > bike rides that we like to do (got into that through the ham club).
> > Between them and their 3 brothers, it's tricky just trying to keep
> them
> > in bikes plus save up for a an extra pair of 2M rigs and eventually an
> > HF rig. Luckily they do neighborhood handywork and pay for half of
> their
> > own hobby stuff, otherwise I'd never be able to afford it.
>
> They do neigborhood handywork? Man - now that is really a dying breed.
>
> I remember I used to have a paper route when I was a kid. Nowadays the
> newspapers are all delivered by adults in cars, because(I assume) there
> aren't enough kids that are interested in doing it anymore.
>
> As much as I respect your kid's work ethic, the reality is that in
> today's society, the notion of having to actually work for something
> has been virtually lost. I'm attempting to return to some kind
> of "reward for work" ethic that reflects today's reality. The thing
> is - most kids aren't interested in getting on HF nowadays - because
> they can just get on the telephone or Internet and communicate more
> reliably around the world. Also, kids want to be able to communicate
> with their own peers(who have the same general interests). The idea is
> to create a critical mass of kids to make the whole thing feasible -
> provide a big enough carrot, and a small enough hill to climb to get to
> it. Obviously, we shouldn't just let anyone on who just signs their
> name on a piece of paper; but requiring all youngsters to have to learn
> about inductors is a little bit overboard, when all they want to start
> out with is to learn to communicate a little further than their 500mW
> fixed-antenna UHF rigs allow them. I want to teach them the right way
> to get there, and give them enough rewards that they are going to want
> to learn the right way to get there. This is an entryway to the
> Service - hopefully many will go on to get their Technician and higher
> licences.
>
> I think MURS could be somewhat of a help in getting kids educated about
> radios - but the fastest digital speed possible on MURS will be about
> 4800bps(in reality 1200bps). This is not enough of an incentive.
> 19,200bps can be cheaply and easily done on the 1.25m/70cm ham bands,
> and I think that would be a VERY big incentive.

>
> > You can see them at http://www.tfn.net/~gfloyd7/cmn/
>
> --
> ------- Stewart - N0MHS --------
> Wireless Entertainment/Communication Devices, Networks, and
> Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
> http://www.pubcel.com
>
>
> Sent via Deja.com
> http://www.deja.com/

1540. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:21:53 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A68AFF1.FF1CA4A@zylay.com>
Source record: 171913
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

horseshoestew@my-deja.com wrote:
>
> In article <3A689446.56D6CB1C@zylay.com>,
> Gene <webmaster@zylay.com> wrote:
> > horseshoestew@my-deja.com wrote:
> > >
> > > In article <3A687987.6CC68AA6@zylay.com>,
> > > Gene <webmaster@zylay.com> wrote:
> > > > > Steven, J, Robeson, K4YZ wrote:
> > > > > > There are already NUMEROUS stories of YOUNG kids (7-8-9)
> > > passing
> > > > > > the PRESENT Technician license, so I really doubt they will
> > > predisposed
> > > > > > to creating something "new".
> > > > >
> > > > > I personally know an eleven-year-old Extra. 20-wpm-code-test
> > > Extra, at
> > > > > that. He was 10 when he passed the 20wpm. He was 8, IIRC,
> when he
> > > > > passed the Tech exam.
> > > >
> > > > Sounds believable to me. My 10 and 11 YOs are studying. They want
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> > > > pass the 5 WPM in time for field day.
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> > > Do you and your 10 and 11 YOs have FRS radios? Do they want them so
> > > that they can talk with their friends?
> >
> > Can't afford them right now as handy as they would be for our charity
> > bike rides that we like to do (got into that through the ham club).
> > Between them and their 3 brothers, it's tricky just trying to keep
> them
> > in bikes plus save up for a an extra pair of 2M rigs and eventually an
> > HF rig. Luckily they do neighborhood handywork and pay for half of
> their
> > own hobby stuff, otherwise I'd never be able to afford it.
>
> They do neigborhood handywork? Man - now that is really a dying breed.
>
> I remember I used to have a paper route when I was a kid. Nowadays the
> newspapers are all delivered by adults in cars, because(I assume) there
> aren't enough kids that are interested in doing it anymore.
>

> As much as I respect your kid's work ethic, the reality is that in
> today's society, the notion of having to actually work for something
> has been virtually lost. I'm attempting to return to some kind
> of "reward for work" ethic that reflects today's reality. The thing
> is - most kids aren't interested in getting on HF nowadays - because
> they can just get on the telephone or Internet and communicate more
> reliably around the world. Also, kids want to be able to communicate
> with their own peers(who have the same general interests). The idea is
> to create a critical mass of kids to make the whole thing feasible -
> provide a big enough carrot, and a small enough hill to climb to get to
> it. Obviously, we shouldn't just let anyone on who just signs their
> name on a piece of paper; but requiring all youngsters to have to learn
> about inductors is a little bit overboard, when all they want to start
> out with is to learn to communicate a little further than their 500mW
> fixed-antenna UHF rigs allow them. I want to teach them the right way
> to get there, and give them enough rewards that they are going to want
> to learn the right way to get there. This is an entryway to the
> Service - hopefully many will go on to get their Technician and higher
> licences.

My kids love the idea of HF...they've talked on sideband on CB at a
friend's house before and thought that was really neat. Maybe one of
these days, you'll hear them down there, but it will probably be on CW
because they are fascinated by the code.

> I think MURS could be somewhat of a help in getting kids educated about
> radios - but the fastest digital speed possible on MURS will be about
> 4800bps(in reality 1200bps). This is not enough of an incentive.
> 19,200bps can be cheaply and easily done on the 1.25m/70cm ham bands,
> and I think that would be a VERY big incentive.
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> > You can see them at http://www.tfn.net/~gfloyd7/cmn/
>
> --
> ------- Stewart - N0MHS --------
> Wireless Entertainment/Communication Devices, Networks, and
> Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
> http://www.pubcel.com
>
> Sent via Deja.com
> http://www.deja.com/

1541. Re: Multiple Antennas. Single Pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:40:55 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <Hv2a6.780$ZB2.166761@paloalto-snr1.gtei.net>
Source record: 171914

"Roger" <rmaynard@taqua.com> wrote in message
news:4A6C6F1DCD996321.5858804B820C4F40.E23DD30C3F442E8D@lp.airnews.net...
> Hi Folks,
>
> Can you point me in the direction for horizontal extender poles? IOW's
> If I have a pole with a 2 meter and I want to add other antennas but set
> out from the main pole. Sure as heck I have the venacular wrong for this
> message but I think you know what I am asking for. Or some plans to make
> my own.
>
> Thanks

Get yourself a length of 2" OD aluminum tubing and attach it horizontally to your mast with either a store bought or home made u-bolt mast mounting plate like those used on any yagi...

73 de W6DKN

1542. Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:57:59 UTC
From: Dodge Johnson <djohnson@voicenet.com>
Message-ID: <djohnson-3DA35F.16575819012001@netnews.voicenet.com>
Source record: 171915

(I tried posting this before, but I don't think it made it

I'm putting up an 80 meter dipole with ladder line as the feed.

Because the shack is on the other side, I have to route it around the outside of the house.

Does anybody have a solution as to what kind of stand-off will work well. Everything I can think of would put metal close to the feeder.

Somebody must have solved this!

Thanks.

Dodge N3HUO

1543. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 21:59:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A68B8DD.5E289847@IEEE.org>
Source record: 171917

Dodge Johnson wrote:
> Somebody must have solved this!

I use plastic cup hooks.
--
http://www.mindspring.com/~w6rca

1544. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:05:01 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A68BA0D.FD37CB2D@zylay.com>
Source record: 171916

Dodge Johnson wrote:
>
> (I tried posting this before, but I don't think it made it
>
> I'm putting up an 80 meter dipole with ladder line as the feed.
>
> Because the shack is on the other side, I have to route it around the
> outside of the house.
>
> Does anybody have a solution as to what kind of stand-off will work
> well. Everything I can think of would put metal close to the feeder.
>
> Somebody must have solved this!
>
> Thanks.
>
> Dodge N3HUO

PVC pipe

1545. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:14:21 UTC
From: n2ey@aol.com
Message-ID: <94ae7m$8it$1@nnrp1.deja.com>
Source record: 171820
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In article <948o9h$4mg4$1@newssvr05-en0.news.prodigy.com>,
"Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote:
> The rapidly-expanding Family Radio Service has exposed millions of
young
> people to the world
> of radio communications.

Ahh, Stew, they are also exposed to cell phones, satellite TV,
broadcasting, and other types of radio.

> But now, where is a young kid to go who has is
> interested in experimenting
> with radios and get more range than the typical 1/2 mile of FRS?

Ham radio - just like the past 100 years or so.

> MURS might
> help a bit(if Motorola doesn't
> get their way), but you know that a growing mind is eventually going
to want
> more than just this. GMRS
> doesn't have the resources, and is not a service that was created to
foster
> experimentation.

Neither was FRS or GMRS.

> Like it or not,
> the typical young person ends up cutting his radio experimention
teeth in
> the Citizen's Band service,

Not true.

> because
> there isn't a reasonable entry-level ham license for kids(it is even
worse
> now after restructuring, what with the
> elimination of the Novice Class).
>
Have you actually looked at the new Technician class tests? 35 multiple
choice questions, mostly on the regs and safety. Most of them are
common sense.

> Everyday now the USA is falling further and further behind Europe and
Japan

> in the wireless communications
> race.

I don't know about that. I do know what you propose won't help matters
any.

>As hams, it is time we make an effort to insure that our young people
> are provided with the proper
> environment, incentives, and role models to properly learn radio
> communications techniques and etiquette.

Yup.

> It is time for hams to stop complaining, step up to the plate, and
take an
> active role in seeing that our bright,
> young technical minds are being taught properly.

Sounds good to me. Teach a class, donate some books and/or equipment,
set up a demo, make Field Day more of a family picnic/radio demo thing.
Works for me.
>
> As a result of this, I have reworked the Communicator entry-level
license
> proposal I submitted to the FCC last year,
> and I will now be proposing a new entry-level Amateur Radio class
known as
> the "Colt" class.

Now I need a Colt. At least a sixpack's worth.

> I submit a draft
> of the proposal for your review below. Please keep in mind that the
future
> of American involvement in wireless
> communications development depends on us to properly encourage and
teach
> tomorrow's experimenters, operators,
> technicians, and engineers...

Let's stop wrapping ourselves in Old Glory and see what you've got.
>
> **********
> Proposal to FCC to institute an introductory-level "Colt" license
> class in the Amateur Radio Service - REV A
>
> In the late 1980's and early 1990's when the current Amateur Radio
Service
> Technician Class license was conceived and implemented, it was
> an appropriate alternate introductory license class. However, due to
the
> recent elimination of the Novice Class license, and as a result of
improving

> technology; the Technician Class license no longer serves well as the
only
> introductory license,

Whoa there. First you say it was good, then you say it was bad. Huh?

> as it is doing poorly in drawing young members into
> the Service.

How do you know that? Data, please.

> As a result of license restructuring, it is now actually
> harder for young people to obtain an Amateur license than it was
before
> restructuring.

I disagree. It's easier. Instead of two exams totalling 65 questions
there is now just one totalling 35 questions. Almost no theory at all.
>
> In this critical era of global competition, especially in the wireless
> communications arena, it is essential that we provide a means for
properly
> educating our young people in RF communications operation and theory.

EE school.
>
> Today, technologies like the Family Radio Service, high-speed
telephone &
> cable modems, the Internet, and inexpensive cellular
> telephones, have overshadowed the privileges of the Amateur Radio
Service,
> and made the requirements for young beginners to obtain a
> Technician Class license out of date.

How?

> Additionally, the Technician Class
> license has now evolved into a beginning and ending point for
> most modern day Amateurs, who are mostly interested in VHF/UHF
> communications, rather than HF communications.

So what's the problem, then?

> Incentive licensing has
> virtually been eliminated.

Sadly, yes. You think it will come back? I don't.
>
> The need for a Service dedicated to the goal of teaching young radio
users
> proper radio operation techniques and etiquette can clearly be seen
in the
> disarray present on the 11 meter Citizen's Band Service frequencies.

Agreed.

> The
> fact is, the Citizen's Band has become the defacto introductory
service for
> young people just beginning to learn to experiment with radio; yet the
> Citizen's Band is a very poor environment for young people to be
learning
> in.

Do you really think young cbers are "experimenting"? How many of them
build anything?
>
> Therefore, it is recommended that a new "Colt Class" license be added
to the
> Amateur Radio Service expressly to encourage young
> individuals to enter the Amateur Radio Service to improve their
> understanding of RF communications theory, provide a healthy learning
> environment, and encourage radio experimentation.
>
> On the 70cm UHF band, Colt licensees would be restricted to voice
> communications on 5 simplex-only 20khz-spaced channels
> on 446.00, 446.02, 446.04, 446.06, and 446.08 Mhz; and digital
> communications up to 19,200bps on 1 simplex-only 60khz bandwidth
channel on
> 446.14Mhz.
>
> On the 1.25m VHF band, Colt licensees would be restricted to voice
> communications on 5 simplex-only 20khz-spaced channels
> on 223.42, 223.44, 223.46, 223.48, and 223.50 Mhz; and digital
> communications up to 19,200bps on 1 simplex-only 60khz bandwidth
channel on
> 223.56Mhz.

Such restricted privileges will FOSTER experimentation? Nope. The few
who get such licenses will simply buy the available gear.
>
> To encourage experimentation/understanding of antenna and VHF/UHF RF
> propagation theory, Colt licensees would also be allowed to setup
and/or
> operate through a VHF/UHF crossband, simplex user input/output,
repeater
> station on two 20khz-bandwidth channels on 223.52Mhz and 446.10Mhz.
This
> would allow them to setup an inexpensive repeater system by
interconnecting
> the voice/mic connections via a resistive circuit on two simplex
radios; and
> would not require expensive, and difficult to understand, cavity and
> duplexer filtering at the repeater station site. User radio costs
would be
> low, as they would only need a single simplex radio. As a result of

the
> characteristics of this type of repeater, the repeater builders and
users
> would learn to coordinate frequencies, and user groupings based on
> environmental conditions, so as to acheive optimal results.

Uh huh. Techs can do that now.
>
> Colt license users would also be subject to the following
restrictions:
>
> (1) Individuals applying for a Colt Class license must be under 19
years of
> age at the time of license application or renewal. The license is
valid for
> 5 years.

Age discrimination. Forget it.

At least one 8 year old has passed the OLD Extra. Lots of preteen hams
in the past. You insult the intelligence of children.
>
> (2) Fixed control station antennas will be no more than 6.1 meters (20
> feet) above the ground or above the building or tree on which it is
> mounted.

Unenforceable and useless
>
> (3) Transmissions limited to 5 watts ERP, or less.

Why?
>
> The new license class would have the following goals:
>
> 1) Encourage more young people to enter the Amateur Radio Service, by
> providing an entry-level ARS license class that includes privileges
> allowing reliable short-range voice and data communications.

We have that now.
>
> 2) Not significantly impact existing users of the affected Amateur
Radio
> Service frequency bands.

Ghetto.
>
> 3) Encourage basic knowledge of radio, electronics, operating
principles and
> etiquette among a wider segment of the general
> population.

How, with such rigid limits and simple tests? You think they are gonna
build radios?

>
> 4) Take advantage of the success of the Family Radio Service, and
provide a
> path for those young users interested in further radio
experimentation.

FRS is a success because you don't need to know anything about radio to
use it.
>
> The Colt license exam would consist of 25 fairly simple questions.

The Tech is only 35.

>Emphasis
> would be put on understanding the existing operational, safety,
etiquette
> and emergency questions from theTechnician Class question pool that
relate
> specifically to Colt Class license privileges.

You can only test for stuff that is in the regs.

> All questions containing
> calculations would contain small integer(whole-number) input values
and have
> relatively small integer results. Colt licensees would be required
to have
> a general understanding of Ohm's Law and Power relations. They
should be
> required to have a general understanding of how antenna length
relates to
> wavelength; and have a knowledge of transmitter power, antenna gain,
> transmission line loss, and the ability to perform a simple ERP
calculation
> would be required. General knowledge of simple resistive circuits,
and
> their power dissipation, would be required.

That's a lot more than the current Tech requires. Try one, and
intentionally get all the questions requiring math wrong and see how
you do.

> Knowledge of capacitors and
> inductors would not be required.

Why not?

It's pointless, Stew. Young people will be drawn to ham radio by the
challenge, not by being spoonfed and treated like they are helpless
babies.

73 de JIm, N2EY
--

FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1546. Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:17:17 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94aed5$8mn$1@nnrp1.deja.com>
Source record: 171822
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

When you don't understand why somebody is doing something which seems senseless to you, sometimes it pays to try to "follow the money".

In this case it led me to a company called "PubCel". According to their web site, that company is involved in:

"Wireless Entertainment and Communications Solutions:

- MURS and ARS Voice and Data Communications Systems

- FRS and GMRS Voice Communication Systems"

I think it is safe to say that the "ARS" acronym might mean "Amateur Radio Service".

Also according to their web site, the company President is none other than Stewart Teaze, N0MHS.

Suddenly this proposal for the "Barbie Doll" Amateur Radio license isn't quite so senseless.

73, Hans, K0HB

Sent via Deja.com
http://www.deja.com/

1547. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:21:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A68BDF6.4F3187B4@eznec.com>
Source record: 171819

Cecil wrote:
>
> jason_hsu@my-deja.com wrote:
> >
> > Texas Radio Products (http://www.texasradioproducts.com) sells a Texas
> > Bugcatcher for $150, or less than half what GLA Systems charges.
> >
> > Is the version from Texas Radio Products any good, or is it just a
> > cheap imitation that doesn't work?
>
> They say it is an air core coil but it isn't 100%. Find out what that
> "protective tube" is made out of before you decide to buy. I wouldn't
> buy it if that "protective tube" is made out of PVC.
> --
> http://www.mindspring.com/~w6rca

Why is that?

Roy Lewallen, W7EL

1548. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:24:10 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A68BE8A.C475613C@oio.net>
Source record: 171821

Dodge,
How about using nylon string and just tieing it up?
'Doc

1549. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:25:25 UTC
From: horseshoestew@my-deja.com
Message-ID: <94aesc$968$1@nnrp1.deja.com>
Source record: 171824
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <94aagaese1@iac5.navix.net>,
"W4JLE" <Fred@w4jle.com> wrote:
> This sounds like a right wing, jackbooted, Nazi attempt to make
someone work
> to obtain a license. We can not allow this to happen!
>
> We should issue a license to anyone who shows an interest.
>
> We need to be sensitive to the desires of today's youth. Are none of
you
> able to fathom the deep loss to a young persons self esteem were they
to try
> and fail for what ever reason.
>
> Only a group of insensitive old hams that want to feel superior
because they
> expended some amount of effort is keeping this from reality.
>
> As of today I am forming NHI (No Hassle International) A group
dedicated to
> remove the artificial barriers keeping young people from what they
have a
> "right" to and deserve.
>
> To fight this fight against the narrow minded ego driven old hams
that are
> holding us down will require substantial funds.
>
> Please send $10, $20, or what ever you can afford to my address as
listed on
> QRZ. You can be sure the money will be put to the best possible use as
> determined by the Board of Directors of NHI. (Me)
>
> Yours to rid the bands of any incentives

Sarcasm noted, Fred. I'm not trying to produce a giveaway license -
but I am trying to forge a modern replacement to the lost Novice Class
license.

Maybe the right idea is to just call this class Novice, and call all
existing Novice Class operators "Novice Plus" - where "Plus" indicates
plus HF, as it does with the similarly closed Technician Plus class.
Novice Pluses would also pick up the extra sliver of privileges on 70cm.

> 3's and 8's
> Fred W4JLE
>
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1550. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:35:14 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A68C122.3A413D22@oio.net>
Source record: 171823

GaryH wrote:
>
> Does anyone have experience with the B&W HF
> wire antennas the work all of the amatuer bands
> without a tuner.
>
> How do these antennas perform?
>
> Thanks

Gary,
The B&W antennas have been discussed here before. I
have had one of them, and they just really are not worth
what they want for them. ($ave your money)
'Doc

1551. Re: Best Indoor TV Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 22:42:55 UTC
From: Travis Zdanski <tirix@bellsouth.net>
Message-ID: <3A68C2EE.1C1C@bellsouth.net>
Source record: 171825

Tom Marin wrote:
>
> Hi All:
>
> Can anyone suggest a good indoor TV antenna?
>
> Any opinions on the Millennium Amplified Indoor Antenna from C. Crane
> CO.?
>
> Thanks in advance.

This is for Ham radio. ATV ans SSTV if it's a good day. If you're cheap enough NOT to have cable which by the way will be MUCH cheaper installed than a freaking aerial, you not only don't belong here, but you're a cheapskate. Now if you're looking for an indoor TV transmission antenna, you're just plain stupid.

1552. My name is Timmy

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 23:15:54 UTC
From: "www.kp82.com" <kp82@my-deja.com>
Message-ID: <94ahr3bpj1@nnrp1.deja.com>
Source record: 171826
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

http://www.geocities.com/aunteekeyklown/Keyclown_wedding.html
73 de Tim

Knight Patrol #82

http://www.kp82.com

Sent via Deja.com
http://www.deja.com/

1553. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 23:16:03 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <94ahrcbpo1@nnrp1.deja.com>
Source record: 171827
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <94aed5$8mn$1@nnrp1.deja.com>,
K0HB <K0HB@arrl.org> wrote:

> Also according to their web site, the company President is none other
> than Stewart Teaze, N0MHS.

Ka Ching!

Nice job Hans. I knew this thing smelled, but I thought he just wanted
to get his kids on the air and they were too lazy to get even the Tech.

LRod

Sent via Deja.com
http://www.deja.com/

1554. fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 23:52:59 UTC
From: colin <colinjbrown@btinternet.com>
Message-ID: <94aju7$d94$1@uranium.btinternet.com>
Source record: 171828

does anyone know where i can get 5/8 inch fiberglass rod here in the uk ?

Thanks Colin GM0RLZ

1555. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 23:56:18 UTC
From: "Steven J Robeson", K4YZ <k4yz@my-deja.com>
Message-ID: <94ak6udrg1@nnrp1.deja.com>
Source record: 171831
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <94a7g1$220$1@nnrp1.deja.com>,
horseshoestew@my-deja.com wrote:

>I think MURS could be somewhat of a help in getting kids educated
>about radios -

MURS will no more "educate" kids about radio than chatting in a
porn chat room "educates" you about computer technology.

You turn on the box, select a channel and talk.

Steve

--
"If You're Not A Ham....You're SPAM!"

Sent via Deja.com
http://www.deja.com/

1556. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 23:58:10 UTC
From: n2ey@aol.com
Message-ID: <20010119185810.01651.00000097@nso-fp.aol.com>
Source record: 171829

In article <94a0q1$ri6$1@nnrp1.deja.com>, Dr. Conrad Connie
<coontail@my-deja.com> writes:

>There are five and six year olds who have passed the EXTRA class test.

OK, I'll bite. What are their calls? The youngest I know was 8.

73 de Jim, N2EY

1557. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-19 23:58:10 UTC
From: n2ey@aol.com
Message-ID: <20010119185810.01651.00000098@nso-fp.aol.com>
Source record: 171830

In article <3A68771F.ED7B32E0@wgcr.org>, Lamar Owen <lamar.owen@wgcr.org>
writes:

>Steven, J, Robeson, K4YZ wrote:
>> There are already NUMEROUS stories of YOUNG kids (7-8-9) passing
>> the PRESENT Technician license, so I really doubt they will predisposed
>> to creating something "new".
>
>I personally know an eleven-year-old Extra. 20-wpm-code-test Extra, at
>that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
>passed the Tech exam.

A year or two ago I worked a 10 year old Extra who got her Extra when she was
8. Good operator, too. Nice fist.

73 de Jim, N2EY

1558. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:11:16 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a68d7a1_2@news3.prserv.net>
Source record: 171832

As I remember from 40 years ago, a reflector will give slightly more gain
than a director. Maybe with the new software, the answer is different.

Roy?? Eznec??

--
Crazy George
TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote in message
news:94a9ha$5a7$06$1@news.t-online.com...
> Hi OMs
> I want to build a 2-element yagi for 10 m.Should I make the second element
> as reflector or as director ? What is better ?
>
> vy 73
> Tom
>
>
>

1559. Looking for information on remote-controlled ATU for end-fed wire antennna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:23:09 UTC
From: Richard Fullerton <newsgroup_email@ntlworld.com>
Message-ID: <KS4a6.2360$vH6.48325@news6-win.server.ntlworld.com>
Source record: 171834
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I'm looking for construction details for a remote-controlled antenna tuner
that will work with an end-fed antenna. Quite possibly it is dedicated to
work with such an antenna. (For non UK folks: I'm in UK, but perhaps that
fact won't make much difference (I'm on 240v AC)). It would be good if
the ATU was capable of handling 400W PEP. But in the early days I will
be using about 150 Watts RF out, so any ATU that was suitable for
that level of output would be looked at.

(Has anyone in UK one for sale?)

Thank you.

Rich.
--
Please add an, "s" to "newsgroup" in email address to reply direct.

1560. Screwdriver Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:27:23 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A68DB2C.7615@bellsouth.net>
Source record: 171833

I build a version of the popular Screwdriver antennas that, I believe are superior in a couple of ways. Instead of the 1 1/2" coil wound with #16 wire, my coils are 2" or 3", depending on model, and are wound with #14 wire spaced to give maximum efficiency. There is NO PVC used in any operating/radiating portion of the system. If you are considering the purchase of a screwdriver for your mobile, please contact me via email for pics and prices.

73

Jerry
K4KWH

1561. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:28:18 UTC
From: horseshoestew@my-deja.com
Message-ID: <94am2q$fc8$1@nnrp1.deja.com>
Source record: 171836
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <94aed5$8mn$1@nnrp1.deja.com>,
K0HB <K0HB@arrl.org> wrote:
> When you don't understand why somebody is doing something which seems
> senseless to you, sometimes it pays to try to "follow the money".
>
> In this case it led me to a company called "PubCel". According to
> their web site, that company is involved in:
>
> "Wireless Entertainment and Communications Solutions:
>
> - MURS and ARS Voice and Data Communications Systems
>
> - FRS and GMRS Voice Communication Systems"
>
> I think it is safe to say that the "ARS" acronym might mean "Amateur
> Radio Service".
>
> Also according to their web site, the company President is none other
> than Stewart Teaze, N0MHS.
>
> Suddenly this proposal for the "Barbie Doll" Amateur Radio license
> isn't quite so senseless.

I've never tried to hide the fact that I'm trying to create a
business. Quite the opposite - why would I list the web site on the
signature to all my posts, if I was trying to hide something

Hey, Hans, I wonder why you switched your approach to this slimly
veiled "personal attack"? It couldn't be that I was right about the
point regarding inductors and capacitors on the Novice test, could it?

Let's stick to the point at hand. You made a good point about the lack
of digital modes in the proposal - THIS is the kind of stuff I'm
looking for.

> 73, Hans, K0HB

--
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1562. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:32:02 UTC
From: horseshoestew@my-deja.com
Message-ID: <94ama3ffc1@nnrp1.deja.com>
Source record: 171837
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <94ak6udrg1@nnrp1.deja.com>,
Steven J Robeson, K4YZ <k4yz@my-deja.com> wrote:
> In article <94a7g1$220$1@nnrp1.deja.com>,
> horseshoestew@my-deja.com wrote:
>
> >I think MURS could be somewhat of a help in getting kids educated
> >about radios -
>
> MURS will no more "educate" kids about radio than chatting in a
> porn chat room "educates" you about computer technology.
>
> You turn on the box, select a channel and talk.

Not true. MURS allows external antennas and digital modes. These are
big differences over simple FRS.

If ARS is to "compete" with MURS, we are going to have to come up with
something new.

> Steve

------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1563. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:34:23 UTC
From: horseshoestew@my-deja.com
Message-ID: <94ameffnp1@nnrp1.deja.com>
Source record: 171838

In article <20010119185810.01651.00000098@nso-fp.aol.com>,
n2ey@aol.com (N2EY) wrote:
> In article <3A68771F.ED7B32E0@wgcr.org>, Lamar Owen
<lamar.owen@wgcr.org>
> writes:
>
> >Steven, J, Robeson, K4YZ wrote:
> >> There are already NUMEROUS stories of YOUNG kids (7-8-9)
passing
> >> the PRESENT Technician license, so I really doubt they will
predisposed
> >> to creating something "new".
> >
> >I personally know an eleven-year-old Extra. 20-wpm-code-test Extra,
at
> >that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
> >passed the Tech exam.
>
> A year or two ago I worked a 10 year old Extra who got her Extra when
she was
> 8. Good operator, too. Nice fist.

Whoa! Your drifting off frequency on me here. Let's try to stick to
the issue at hand. HF is not mentioned in the proposal, and is
irrelevant to the discussion.

> 73 de Jim, N2EY

--
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

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1564. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:42:40 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fb5a6.1017$e5.2513495@news.ntplx.net>
Source record: 171839
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

<Steven J Robeson>; K4YZ <k4yz@my-deja.com> wrote:

> MURS will no more "educate" kids about radio than chatting in a
> porn chat room "educates" you about computer technology.

Some of us have more experience in that than others, I guess. :-)

Those who use the MURS radios will learn something in the process. First, the radio has a range. They will learn that buildings and obstructions limit that range. They will learn that the range is farther if you are at the top of the building than if you are in a valley.

I think a better analogy that the porn chat room (where did you dig that one up) would be to ask what education has been the result of giving kids internet access in general? As a big kid, I can't begin to describe how much I learned that way.

> You turn on the box, select a channel and talk.

That is indeed most of the picture. Now, can we use the good and bad of MURS to find the subset of those kids that don't yet know they would like to be hams?

73,
Ed Hare, W1RFI

1565. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:44:41 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A68DF79.C72E9848@erols.com>
Source record: 171840
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Jason,

First of all making measurements of a 20 meter antenna over a path length of a 'few blocks' means you are really measuring the near field radiation, not what you want.

Now about your questions. Your Hamstick is a full quarter wavelength on 20 meters compressed to 8 feet by winding the wire around a fiberglass pole. You attached radials to the mag mount base. The wire is a half wavelength on 20 meters. End feeding it means you have a high impedance for the feed point! Your tuner was fortunate enough to resolve the situation!

Connecting wires using wire nuts is iffy at best. What you want and need for antenna work is good solid connections, low resistance connections. The resistance added by your connections shows up in the SWR, That is probably why you saw a 2.5:1 SWR for the hamstick.

To properly compare antennas at HF you should have a way to switch between the antennas very quickly. Get them both tuned properly, and make a contact. Ask the other ham if he will mind listening when you change antennas. Do this several times over long path lengths, and you will have a better answer.

73

jason_hsu@my-deja.com wrote:
>
> Why am I not having better luck with a wire antenna?
>

1566. Re: Temporary Condo Antennas??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:54:01 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A68E1A9.3856FF2@erols.com>
Source record: 171842

Frank,

There ae as many ideas about condo antenna as there are condos! I have used a MFJ Loop from a condo but I must say the performance was not very good. This unit was sold in competition ot the AEA Isoloop.

Perhaps it was the orientation I chose. I used the loop in the horizontal plane. Tuning was probably influenced by the close proximity of other objects like the building! I found it radiated enough energy in the near field to cause my radio, a Kenwood TS130V, to lock up at the 5 watt level! Of course in a condo there are only so many places you can put the radio and all of them are near the antenna!

Do you have any trees close to your condo? I published an article in QST for June 1995 on my condo antenna. Aside from the launching system it was a simple end fed long wire that ran out a window at my operating position to a near by tree. I used this antenna off and on for nearly 20 years, I worked all states with it an probably DXCC too. Much of the operation was at QRP levels!

73

1567. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:57:44 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <94anst$rf7$1@nntp9.atl.mindspring.net>
Source record: 171841

Dodge Johnson <djohnson@voicenet.com> wrote in message
news:djohnson-3DA35F.16575819012001@netnews.voicenet.com...
> (I tried posting this before, but I don't think it made it
>
> I'm putting up an 80 meter dipole with ladder line as the feed.
>
> Because the shack is on the other side, I have to route it around the
> outside of the house.
>
> Does anybody have a solution as to what kind of stand-off will work
> well. Everything I can think of would put metal close to the feeder.
>
> Somebody must have solved this!
>
> Thanks.
>
> Dodge N3HUO

Dodge,

I use plastic rain gutter brackets as window line standoffs to feed my horizontal house loop. They are sort of a 3 sided square shape (U shaped).Since use they are used to hold up rain gutters in all kinds of weather (hot and cold), as well as not deteriorate in the sun, they are an excellent, long lasting, and durable solution.

The bottom part of the U can be screwed to the house with non-rusting decking screws. The arms of the bracket have little indentations on them that I cut with a dremel tool cutoff wheel. This creates a slot in each arm that the window line can be pressed into. I alternate the bracket between the left and right side of the line to keep it secure. The brackets last, do not rust or break, and are inexpensive. As an added bonus, it is easy to pop the line out of the bracket, if needed for repair or maintenance, yet holds the line secure. They come in white or dark brown to help match house or trim colors. You can even cut one bracket in half and have two "L" shaped brackets to save more money. It sounds more complicated than it is. Just go down to any well stocked hardware store and check one out. You will see how easy to work with they are.

I looked at many and tried a few other solutions with lesser results. The biggest problem, finding a decent way to attach the standoff to the house, or a decent way to attach the wire to the standoff. Too many of the other options will rot in the sun or break in the cold. I even use these as standoffs for my horizontal house loop as the antenna wire standoffs. This gets the wire off the house, but is very stealthy.

Hope this helps.

73, Tracy
W7TRX

1568. Re: Apartment antenna follow on question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 00:58:18 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A68E2AA.D794FE5C@erols.com>
Source record: 171844

Keith,

You would be best off if you didn't double the radial back on itself. MFJ and Ten Tec both make "ground tuners" or "Artificial Grounds". Look at them as a way to tune your ground wire to resonance. They aren't very expensive and they do work!

Using number SIX wire is OK, the most important part is that you make low resistance contacts. Tie downs made of poly are perfectly OK.

73

1569. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:00:17 UTC
From: CitySlicker <not_enuf_time@foolscorner.net>
Message-ID: <94anv1$2b4@dispatch.concentric.net>
Source record: 171843
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

Another group of geniuses cross posting this dribble in the CB group. Keep studying those manuals you will get it figured out. Question 66.

<horseshoestew@my-deja.com> wrote in message
news:94am2q$fc8$1@nnrp1.deja.com...
> In article <94aed5$8mn$1@nnrp1.deja.com>,
> K0HB <K0HB@arrl.org> wrote:
> > When you don't understand why somebody is doing something which seems
> > senseless to you, sometimes it pays to try to "follow the money".
> >
> > In this case it led me to a company called "PubCel". According to
> > their web site, that company is involved in:
> >
> > "Wireless Entertainment and Communications Solutions:
> >
> > - MURS and ARS Voice and Data Communications Systems
> >
> > - FRS and GMRS Voice Communication Systems"
> >
> > I think it is safe to say that the "ARS" acronym might mean "Amateur
> > Radio Service".
> >
> > Also according to their web site, the company President is none other
> > than Stewart Teaze, N0MHS.
> >
> > Suddenly this proposal for the "Barbie Doll" Amateur Radio license
> > isn't quite so senseless.
>
> I've never tried to hide the fact that I'm trying to create a
> business. Quite the opposite - why would I list the web site on the
> signature to all my posts, if I was trying to hide something
>
> Hey, Hans, I wonder why you switched your approach to this slimly
> veiled "personal attack"? It couldn't be that I was right about the
> point regarding inductors and capacitors on the Novice test, could it?
>
> Let's stick to the point at hand. You made a good point about the lack
> of digital modes in the proposal - THIS is the kind of stuff I'm
> looking for.
>
> > 73, Hans, K0HB
>
> --

> ------- Stewart - N0MHS --------
> Wireless Entertainment/Communication Devices, Networks, and
> Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
> http://www.pubcel.com
>
>
> Sent via Deja.com
> http://www.deja.com/

1570. Re: Stand-offs for ladder line feed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:04:27 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <94ao82$4c5$1@slb7.atl.mindspring.net>
Source record: 171846

Dodge Johnson <djohnson@voicenet.com> wrote in message
news:djohnson-3BB4E7.08352618012001@netnews.voicenet.com...
> (I posted a similar message a few minutes ago, but my line dropped and I
> don't think it got through.)
>
> I'm putting up a dipole with ladder line feed on the other side of the
> house. So I need to route it around the house, over downspouts, etc.
>
> Does anyone know of anything that works as a stand-off? (Metal won't
> do, of course.)
>
> I saw at Agway a standoff for electric fence that you nail to a post,
> with a clamp arrangement that's wide enough to take ladder line. But
> they have it only in bright yellow. This might work if I could find it
> in black, clear, or brown (the color of the house).
>
> Thanks for the help.
>
> Dodge
>
> M3HUO

Dodge,

I also checked into electric fence insulators as standoffs. Like you, I found they all came in bright safety colors. Probably another new law there. I also found that, while easy to attach the window line to the insulator, getting the insulator on the house was problematic. They are meant to be clipped to a metal fence post, not screwed to the side of a house.

I then stumbled onto the plastic rain gutter brackets and smiled all the way home. They were easy to screw to the house, easy to slip the wire in notches cut on the arms, and work better than I had hoped. Matched the house trim too, so no painting to hassle with.

Good luck, Tracy
W7TRX

1571. Re: Stand-offs for ladder line feed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:04:46 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A68E42E.223740FE@oio.net>
Source record: 171845

Dodge,
Might work fine. Paint it.
'Doc

1572. Re: End fed Zepp question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:04:52 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A68E434.E1BDEAE7@erols.com>
Source record: 171847

Michael,

In a traditional End Fed Zepp The far end of the twinlead feeder is not connected to anything. I believe the antenna wants to see 600 ohm open wire feeders.

an antenna I know much more about, is the End Fed Wire. Very similar but it has no feedline. You connect a wire as long as you can to the tuner output for a single wire. And you're in business, sort of.

My antenna here runs from a first floor window out and up to a tree that is about 50 feet above ground. Then it runs across the back yore to another tree where it runs down to about 6 feet above ground. It loads easily on all bands from 80 through 10 meters. It does need a good ground at the station end. I use an MFJ artificial ground tuner and a 15 foot piece of wire!

73

1573. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:14:01 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A68E659.FF81A08B@erols.com>
Source record: 171848
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

Stewart,

The idea has already been tried. Back about 15 or 20 years the Dutch instituted a license class for beginners. It consisted of about 5 frequencies in the two meter band. Licenses required only a simple test. No code. It was hoped that these Novices would upgrade and become regular licensees. As for as I know none ever did. The service still exists, I believe.

If you want to have youngsters or oldsters learn about radio the best way is the old Novice license. % wpm code, a simple theory test, and a one or two year limit within which they HAVE to upgrade!

73

1574. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:35:44 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <94aq1gilk1@nnrp1.deja.com>
Source record: 171851
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <94anv1$2b4@dispatch.concentric.net>,
"CitySlicker" <not_enuf_time@foolscorner.net> wrote:

> Another group of geniuses cross posting this dribble in the CB group.

Doncha just love it when some "genius" badmouths the (learned)
opposition, and then uses "dribble" for drivel...in the same sentence?

LRod

Sent via Deja.com
http://www.deja.com/

1575. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:40:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A68EC9B.1B042097@IEEE.org>
Source record: 171852

Roy Lewallen wrote:
>
> Cecil wrote:
> > They say it is an air core coil but it isn't 100%. Find out what that
> > "protective tube" is made out of before you decide to buy. I wouldn't
> > buy it if that "protective tube" is made out of PVC.
>
> Why is that?

Air core is less lossy.
--
http://www.mindspring.com/~w6rca

1576. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:43:17 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A68ED35.E5ED0FA4@zylay.com>
Source record: 171849
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Steven, J, Robeson, K4YZ wrote:

> In article <94a7g1$220$1@nnrp1.deja.com>,
> horseshoestew@my-deja.com wrote:
>
> >I think MURS could be somewhat of a help in getting kids educated
> >about radios -
>
> MURS will no more "educate" kids about radio than chatting in a
> porn chat room "educates" you about computer technology.
>
> You turn on the box, select a channel and talk.

The only way it might help is if they have an Elmer type to explain what is actually happening when they talk. From that standpoint, CB would be better because at least they can practice antenna and electronics theory (especially if they get busted radios donated for practice demolition er I mean repair), and there's at least a little bit of propagation that might get their attention and give them something more to learn about.

At the same time, having adult supervision would be even more necessary in case "emergency censorship" of the ongoing conversations become necessary.

1577. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 01:46:41 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A68EE00.F52D6B6F@zylay.com>
Source record: 171850
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

horseshoestew@my-deja.com wrote:

> In article <94ak6udrg1@nnrp1.deja.com>,
> Steven J Robeson, K4YZ <k4yz@my-deja.com> wrote:
> > In article <94a7g1$220$1@nnrp1.deja.com>,
> > horseshoestew@my-deja.com wrote:
> >
> > >I think MURS could be somewhat of a help in getting kids educated
> > >about radios -
> >
> > MURS will no more "educate" kids about radio than chatting in a
> > porn chat room "educates" you about computer technology.
> >
> > You turn on the box, select a channel and talk.
>
> Not true. MURS allows external antennas and digital modes. These are
> big differences over simple FRS.
>
> If ARS is to "compete" with MURS, we are going to have to come up with
> something new.

I'm not familiar with MURS and wasn't aware of the extra room to play. I would still be concerned about the cost of equipment though.

1578. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 02:08:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A68F32E.4EF74415@eznec.com>
Source record: 171853

This is something you can easily and accurately model with even the free
EZNEC demo program, available from http://eznec.com. I'd begin by
knocking off one element or the other from the NBS Yagi example,
fiddling the parasitic element length and/or spacing, and going from
there. Bandwidth, gain, and front/back ratio can be traded with each
other, and no one configuration will be best in all three regards.

Roy Lewallen, W7EL

Crazy George wrote:
>
> As I remember from 40 years ago, a reflector will give slightly more gain
> than a director. Maybe with the new software, the answer is different.
>
> Roy?? Eznec??
>
> --
> Crazy George
> TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote in message
> news:94a9ha$5a7$06$1@news.t-online.com...
> > Hi OMs
> > I want to build a 2-element yagi for 10 m.Should I make the second element
> > as reflector or as director ? What is better ?
> >
> > vy 73
> > Tom
> >
> >
> >

1579. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 02:24:42 UTC
From: horseshoestew@my-deja.com
Message-ID: <94ast5kms1@nnrp1.deja.com>
Source record: 171855
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <3A68EE00.F52D6B6F@zylay.com>,
Gene <webmaster@zylay.com> wrote:
> horseshoestew@my-deja.com wrote:
>
> > In article <94ak6udrg1@nnrp1.deja.com>,
> > Steven J Robeson, K4YZ <k4yz@my-deja.com> wrote:
> > > In article <94a7g1$220$1@nnrp1.deja.com>,
> > > horseshoestew@my-deja.com wrote:
> > >
> > > >I think MURS could be somewhat of a help in getting kids educated
> > > >about radios -
> > >
> > > MURS will no more "educate" kids about radio than chatting
in a
> > > porn chat room "educates" you about computer technology.
> > >
> > > You turn on the box, select a channel and talk.
> >
> > Not true. MURS allows external antennas and digital modes. These
are
> > big differences over simple FRS.
> >
> > If ARS is to "compete" with MURS, we are going to have to come up
with
> > something new.
>
> I'm not familiar with MURS and wasn't aware of the extra room to
play. I
> would still be concerned about the cost of equipment though.

Everybody is holding their breath until the Motorola objection to FCC's creation of MURS is settled. If that gets settled positively (Motorola's objection is set aside), then I expect many manufacters to begin making MURS radios. Prices will drop, accordingly. I expect that within a year we will see decent MURS radios in the $70-$100 range. Right now the only thing specifically available are offerings from Radio Shack in the $125 range, or the 1W Motorola Spirit single channel(9 selectable)VHF business radios(don't get the two watt version, it is not useful for MURS, as the only two MURS specific channels it supports use a 25Khz bandwidth, MURS will be using 12.5).

--
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and

Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1580. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 02:30:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A68F85F.64339484@eznec.com>
Source record: 171854
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

I'd like to add a slightly different opinion.

A few blocks away is well into the far field. From a simple antenna like a dipole or Hamstick, the far field begins at well under a wavelength (20 meters in this case) from the antenna.

I've used wire nuts for many years to connect antenna wires, both inside and outside. If they didn't provide a low resistance connection, your house would catch fire, since they're widely used in house wiring.

Finally, I agree with the advice to switch rapidly back and forth between antennas. But instead of relying on reports from other stations, simply compare the antennas when listening. There are a number of good reasons for this. One is that you don't have any idea what size the other station's "S-Units" are. They might be anywhere from 2 to 6 dB -- a big difference. Another reason is that signals can fade from one antenna to the other, giving one an advantage at one moment, while the other will look better a couple of minutes later. By listening, you can average out these changes. And you can also do a lot more comparisons from a lot more directions, since an observation takes less time than a QSO. By listening, you can compare antennas on signals from stations you're not able to work. With a simple step attenuator, you can make decent quantitative comparisons in dB if you're so inclined -- or you can calibrate your S meter for the same purpose.

You'll probably find one antenna to be better in some directions and at some distances and the other better at the others. If one is better in all directions and at all angles, it's probably poorly matched or there's some source of loss in the system.

Roy Lewallen, W7EL

Bruce Muscolino wrote:
>
> Jason,
>
> First of all making measurements of a 20 meter antenna over a path
> length of a 'few blocks' means you are really measuring the near field
> radiation, not what you want.
>
> Now about your questions. Your Hamstick is a full quarter wavelength on
> 20 meters compressed to 8 feet by winding the wire around a fiberglass
> pole. You attached radials to the mag mount base. The wire is a half
> wavelength on 20 meters. End feeding it means you have a high impedance
> for the feed point! Your tuner was fortunate enough to resolve the

> situation!
>
> Connecting wires using wire nuts is iffy at best. What you want and
> need for antenna work is good solid connections, low resistance
> connections. The resistance added by your connections shows up in the
> SWR, That is probably why you saw a 2.5:1 SWR for the hamstick.
>
> To properly compare antennas at HF you should have a way to switch
> between the antennas very quickly. Get them both tuned properly, and
> make a contact. Ask the other ham if he will mind listening when you
> change antennas. Do this several times over long path lengths, and you
> will have a better answer.
>
> 73
>
> jason_hsu@my-deja.com wrote:
> >
> > Why am I not having better luck with a wire antenna?
> >

1581. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 02:33:44 UTC
From: horseshoestew@my-deja.com
Message-ID: <94ate8$l4r$1@nnrp1.deja.com>
Source record: 171856
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <94anv1$2b4@dispatch.concentric.net>,
"CitySlicker" <not_enuf_time@foolscorner.net> wrote:
> Another group of geniuses cross posting this dribble in the CB group.
Keep
> studying those manuals you will get it figured out. Question 66.

I originally posted to rec.radio.cb to support my argument that CB is
obviously NOT the proper environment to be starting our kids off in
radio - and you folks did not disappoint me, as the typical vulgarity
of your posts show.

Look, I don't have anything against you folks - I just don't think it
is appropriate for kids to be learning radio on the 11 meter band.

------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1582. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:10:29 UTC
From: n2ey@aol.com
Message-ID: <20010119221029.14777.00000768@nso-bd.aol.com>
Source record: 171857

In article <94ameffnp1@nnrp1.deja.com>, horseshoestew@my-deja.com writes:

>In article <20010119185810.01651.00000098@nso-fp.aol.com>,
> n2ey@aol.com (N2EY) wrote:
>> In article <3A68771F.ED7B32E0@wgcr.org>, Lamar Owen
><lamar.owen@wgcr.org>
>> writes:
>>
>> >Steven, J, Robeson, K4YZ wrote:
>> >> There are already NUMEROUS stories of YOUNG kids (7-8-9)
>passing
>> >> the PRESENT Technician license, so I really doubt they will
>predisposed
>> >> to creating something "new".
>> >
>> >I personally know an eleven-year-old Extra. 20-wpm-code-test Extra,
>at
>> >that. He was 10 when he passed the 20wpm. He was 8, IIRC, when he
>> >passed the Tech exam.
>>
>> A year or two ago I worked a 10 year old Extra who got her Extra when
>she was
>> 8. Good operator, too. Nice fist.
>
>Whoa! Your drifting off frequency on me here. Let's try to stick to
>the issue at hand. HF is not mentioned in the proposal, and is
>irrelevant to the discussion.

Did I mention HF at all? Nope.

The point I'm making is that young people are more than capable of passing the existing tests and being good ham operators. I know by my own experience and numerous examples like the young ham I worked. And many more. That's dead-nuts-on the subject of the discussion at hand.

73 de Jim, N2EY

1583. Feeding a loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:12:47 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <Pm7a6.109786$n%.3643697@news20.bellglobal.com>
Source record: 171858

I have got the base and loop made, and now ready to rig up the coupling coil to the loop. I have seen many different ways to feed it, ground the small loop here, don't ground it there, and so on. Is there one way that is better than the rest? I only want to do this once..famous last words!

Thanks,
Max

1584. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:17:21 UTC
From: jflanders2@home.com
Message-ID: <3a6901d4.690504114@news>
Source record: 171859

I just ran some ladder line about a hundred feet through some pine trees here. On the first 40 ft of the run, I laced a small dacron rope through the holes about 5 feet apart, tying it to the LL at each end and in the middle (at 20 feet). Then I secured this dacron rope to the trees and it supports the LL nicely. Very little dacron in the RF field. Then I used pieces of nylon twine to support the remainder of the run below the branches at several points where it runs through the trees.

Seems to work OK, and don't see any effect on the RF.

If you can pull a rope tight along your run path, either run the rope through the holes in the LL or use ty-wraps to suspend theL the rope.

Jerry W4UK

On Fri, 19 Jan 2001 21:57:59 GMT, Dodge Johnson
<djohnson@voicenet.com> wrote:

>(I tried posting this before, but I don't think it made it
>
>I'm putting up an 80 meter dipole with ladder line as the feed.
>
>Because the shack is on the other side, I have to route it around the
>outside of the house.
>
>Does anybody have a solution as to what kind of stand-off will work
>well. Everything I can think of would put metal close to the feeder.
>
>Somebody must have solved this!
>
>Thanks.
>
>Dodge N3HUO

1585. Re: Cushcraft R5 mathching network inop need help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:23:46 UTC
From: earlve3ab@igs.net
Message-ID: <3a690493.1526609@news.ott.igs.net>
Source record: 171835

>Or....does anyone know of a replacement Cushcraft R5 matching network
>that I could buy for a reasonable price.
Re R5 high swr. I had same problem once. I cleaned all the junctions
of the aluminum tubing as especially the bottom insulator. Clean it
thoroghtly ..also be sure to get the bottom piece where it slides into
the insulator at the right depth..OTHERWISE..SWRs will be funny.
I have a good diagram of the innards of the black box that another ham
gave me if you are interested...73 Earl VE3AB

>
>KY6N
>ron@rainbow.to
>
>
>Sent via Deja.com
>http://www.deja.com/

On Tue, 16 Jan 2001 02:55:18 GMT, rharrisdeja@my-deja.com wrote:

>I just purchased an older R5 vert. and now find that the SWR is very
>high on all bands. I have tried a different coax and signal source and
>still the same result.
>
>I assume that the matching network is bad. I have tried to get a
>diagram from Cushcraft...no help.
>
>Does anyone have a diagram of the unit?
>
>Does anyone know what the range of the matching unit is? Can I replace
>it with a 4:1 balun etc.
>
>If I could find out the impedance of the trap vertical I might be able
>to build a new matching network.
>
>Or....does anyone know of a replacement Cushcraft R5 matching network
>that I could buy for a reasonable price.
>
>Tnx.
>
>KY6N
>ron@rainbow.to
>
>
>Sent via Deja.com
>http://www.deja.com/

1586. Re: Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:39:56 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <gM7a6.109899$n%.3649535@news20.bellglobal.com>
Source record: 171860

"David Sinclair" <k3ky@erols.nospamcom> wrote in message
news:948k94$fp7$1@bob.news.rcn.net...
> Interesting thread. I'm just wondering if anyone took notes in their
> research just where Samsung TVs happened to fall along the
> Thomson/JA continuum? Thanks, 73, David K3KY
>
> In article <3A65A4DF.C13FA1F1@dvol.com>
> Brian Kelly <kelly@dvol.com> wrote:
>
> >
> > Floyd Sense wrote:
> >
> >>
> >> Note that conducting this test requires a VERY cooperative store staff,
> >> since you want to power off all but the TV being tested. If you don't
do
> >> that, you'll hear nothing but white noise and birdies everywhere in the
> >> store.
> >
> >>
> > So much for FCC device approvals . . . Both the GE and RCA brands of
consumer
> > electronics lines are actually produced by Thomson. I've had nothing but
grief
> > with their stuff starting with a GE feature phone & answering machine
which was
> > a complete crapper then a tabletop AM/FM clock radio which was just as
bad. I
> > wouldn't touch a "GE" or "RCA" anything with a ten foot pole. When it
comes to
> > TV rcvrs I stick to Hitachi, Sony & Mitsubishi, ya get what ya pay for.
> >>
> > w3rv
>
>
> BTW, the offending TV in my case is a Toshiba 25"
>

1587. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:59:23 UTC
From: Keith McQueen <kb7m@arrl.net>
Message-ID: <t28a6.2182$E52.635055@news.uswest.net>
Source record: 171862
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

For once a constructive suggestion! My 11 year old has asked me several times if I can find a ham radio technician text that is geared for young people. So far I haven't found anything. Anybody for getting something like this together? It doesn't need to talk down to the kids. Kids are bright and intelligent and can understand amazing things. But it HAS to be made interesting to THEM. If you could disguise it in a Nintendo game it would work even better. If it were available for download for a free or minimal cost so much the better. Now THAT would be a contribution!

<Steven J Robeson>; "K4YZ" <k4yz@my-deja.com> wrote in message news:949em4$a2a$1@nnrp1.deja.com...
>
> If you REALLY want to make an impact on kids in Amateur Radio, try
> writing a text FOR kids...THAT will help them along the way. Trying to
> wrangle a "new" Amateur Radio license out of the FCC for posterity's
> sake isn't it.
>
> 73
>
> Steve, K4YZ
>
>
> Sent via Deja.com
> http://www.deja.com/

1588. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 03:59:27 UTC
From: WE0H <mikereid1@qwest.net>
Message-ID: <q18a6.2180$E52.632209@news.uswest.net>
Source record: 171861

Well Gary,
I have the 90' copper weld folded dipole. It is up at 55'. It does work pretty good on 75 through 10 meters. It has an unacceptable SWR on 160 though. I have to run a tuner to match the line on that band. It has served it's purpose here as a multiband antenna to run mostly without a tuner. I understand that the efficiency isn't the greatest, but it works ok for me. I am taking it down tomorrow, as I need to get a better antenna for 160 up. I will miss the "just tune around the dial without worrying about the swr" feature, but I need to get a real good signal on 160 right now. You can build ALOT of multiband wire antenna's for the $180 or so that I spent on the B&W dipole. I would dig around on the net and make a trip to your local building supply dealer and pick up some wire and insulators and go have a good time homebrewing. Have fun, Mike> WE0H.

1589. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 04:00:59 UTC
From: Steve <STEVEMIKEM@prodigy.net>
Message-ID: <94bebo$6q3a$1@newssvr06-en0.news.prodigy.com>
Source record: 171866

Try putting ferrites on the various cables from your computer. I got rid of most of my noise this way. Especially try the keyboard cable. Sometimes you will need ferrites at both ends. There are some large split beads with 0.5 inch holes which allow you several turns of larger cables. Most split beads are in material 43 which works well, especially with several turns.

Steve

1590. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 04:21:57 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A691265.E99ED57B@dvol.com>
Source record: 171863

GaryH wrote:

> Does anyone have experience with the B&W HF
> wire antennas the work all of the amatuer bands
> without a tuner.
>
> How do these antennas perform?

>
Sorta like an air-cooled dummy load with lousy sheilding. .
>

> Thanks

>
w3rv

1591. NEC forum?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 05:26:44 UTC
From: me <wshanks3@home.com>
Message-ID: <3A68F998.272F938@home.com>
Source record: 171864

Is there a NEC forum to discuss the finer points of NEC. like for instance..

can you simulate a dielectric object with a patch or wire frame object with a mostly imaginary conductivity?

Wayne Shanks

1592. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 05:41:49 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <94b8mnpvr1@slb7.atl.mindspring.net>
Source record: 171865
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Something new appears to be all that you are after. The current Technician
serves all the needs you have outlined.
--
CW
KC7NOD
<horseshoestew@my-deja.com> wrote in message
news:94ama3ffc1@nnrp1.deja.com...
> In article <94ak6udrg1@nnrp1.deja.com>,
> Steven J Robeson, K4YZ <k4yz@my-deja.com> wrote:
> > In article <94a7g1$220$1@nnrp1.deja.com>,
> > horseshoestew@my-deja.com wrote:
> >
> > >I think MURS could be somewhat of a help in getting kids educated
> > >about radios -
> >
> > MURS will no more "educate" kids about radio than chatting in a
> > porn chat room "educates" you about computer technology.
> >
> > You turn on the box, select a channel and talk.
>
> Not true. MURS allows external antennas and digital modes. These are
> big differences over simple FRS.
>
> If ARS is to "compete" with MURS, we are going to have to come up with
> something new.
>
> > Steve
>
> ------- Stewart - N0MHS --------
> Wireless Entertainment/Communication Devices, Networks, and
> Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
> http://www.pubcel.com
>
>
> Sent via Deja.com
> http://www.deja.com/

1593. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:21:37 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94bea1osv8@bashir.peak.org>
Source record: 171719

Cecil <Cecil.A.Moore@ieee.org> wrote:
: Bill Nelson wrote:
:> Most new hams these days are appliance operators - with little or no grasp
:> of electronics. So, let's get rid of the theory tests as well, as the
:> reason for such testing is gone.

: Electronics is not outdated.

I did not imply that.

My posting was a parody of the "eliminate code testing 'cause it is
outmoded" argument.

--
Bill Nelson (billn@peak.org)

1594. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:27:33 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94bel5gfv0@208.206.142.99>
Source record: 171867
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

'Doc wrote:
>
> Stewart,
> Why are you wasting your time and ours with this? There
> is already an 'entry level' license. It sounds like you
> are advocating another 'junk' license. Give it a rest.
> 'Doc

Don't worry, Doc, FCC will promptly file it in the (Ahem!) proper file.

1595. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:32:03 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94betjosv9@bashir.peak.org>
Source record: 171720
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

In rec.radio.amateur.antenna Michael Edelman <mje@spamcop.net> wrote:

:> What gives? At 20m, why didn't the 18-foot wire antenna with HIGHER
:> power and LOWER SWR trounce the 20m Hamstick with LOWER power and
:> HIGHER SWR?

: 1. SWR doesn't tell you anything about an antenna's performance. All it
: tells you is how close the feedpoint impedance of the antenna is to the
: rig coupled to it. And since you're using a tuner, what you're measuring
: is simply the match between the tuner and the rig.

Not true. All it tells you is the ratio of the feepoint impedance of the
antenna to that of the characteristic impedance of the transmission line.

If using a tuner, and the meter is between the rig and the tuner, then
the SWR only tell you how well the tuner matches the transmission line.

The match of the rig to the transmission line is immaterial.

--
Bill Nelson (billn@peak.org)

1596. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:35:48 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94bf4kosv10@bashir.peak.org>
Source record: 171721

Cecil <Cecil.A.Moore@ieee.org> wrote:
: VE3TMT wrote:
:>
:> I don't know what else to try. I am using a surge suppressor with EMI/RFI
:> filters built in, I even took apart the computers power supply and install
:> .01's across the AC to ground. Still no help. The HF rig picks up the
:> noise as soon as the 'puter is turned on, and when the drives read or write,
:> it is picked up as well. Even as I type I can hear the tones changing on
:> the HF. Am I missing something???

: My computer system radiates RF and I cannot use my HF rig when it is on.
: Radiated RF is a lot harder to snuff than conducted RF. I suspect most
: of mine comes from my large cheap monitor.

Out chokes on all wires that come out of the monitor and computer case.
The ferrite cores work fairly well. Suppress ALL wiring - don't forget to
put cores on the wiring where it comes out of the keyboard.

I have no detectable interference from my computer, and it sits right next
to the HF rig.

--
Bill Nelson (billn@peak.org)

1597. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:38:24 UTC
From: Bill Wilson <res043vp@verizon.net>
Message-ID: <Qfba6.1946$w84.462844@dfiatx1-snr1.gtei.net>
Source record: 171868

More loss in RG 58 makes VSWR look better???

KG7CK

"Craig" <cpg@xtra.co.nz> wrote in message
news:qqbi6t0fpnpduebscnq8iu8dkp2d7bf8r2@4ax.com...
> I've put up a 75Mhz-800MHz discone and fed it with new RG-213
> terminating with a Type N-connector, however, on both 2 Meters and
> 70cm I'm getting an SWR of 1:1.5. As an experiment, I replaced it
> with RG-58 (of shorter length) terminating with a PL-259 connector,
> and the SWR dropped down to less than 1:1.2.
>
> I'm stumped as to why the lower loss RG-213 is behaving this way at
> 70cm and would be grateful for any advice.
>
> Craig ZL2WCG

1598. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:47:10 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94bfpuosv11@bashir.peak.org>
Source record: 171723

Billy Young wrote:

: Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
: side. I haven't been able to get my SWR no lower that 2:1 at best regardless
: of what I tried. It's suspended from at tree at one about 30' high and from
: the other end about 30 on a push up pole. I have nylon string that places
: it about 20' for either end with homemade PVC insulators. I'm not receiving
: well with it either. Does any one have any suggestions what the problem
: might be for my first homebrew antenna?

Let's assume that your meter is reading correctly - which may, or may not, be the actual case. I am also assuming that you are feeding the antenna with 50 ohm coax.

If you cannot get lower than 2:1 VSWR, that means that your dipole has an impedance of 100 ohms or more at resonance. That is not out of sight for a dipole mounted fairly close to the ground. It is highly unlikely that the impedance could be as low as 25 ohms - the other possibility.

There are a couple of things you can do to improve this. The first is get the dipole higher into the air. If that does not bring the SWR down enough for you, then you can lower the ends - making it an inverted V. Try to keep about a 120 degree included angle between the legs. As you make the angle more acute, you lose more and more of the directivity of the dipole.

You can also feed the antenna with 72 ohm coax - which would be a better match for a dipole that is well up in the air.

--
Bill Nelson (billn@peak.org)

1599. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 07:48:46 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94bfsuosv12@bashir.peak.org>
Source record: 171722

TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote:
: Hi OMs
: I want to build a 2-element yagi for 10 m.Should I make the second element
: as reflector or as director ? What is better ?

Make the second element a reflector. You will appreciate the better F/B
ratio more than any slight gain advantage that you would get with a
director.

--
Bill Nelson (billn@peak.org)

1600. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 09:32:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A695B41.6B68967@eznec.com>
Source record: 171724

Yes. Suppose you had a very lossy piece of cable. You put power into it, but only a small fraction of that power gets to the far end. Whatever is reflected from the far end is attenuated by the same factor on the way back. So even if the far end is open or shorted, that is, all the power is reflected, very little reflected power appears at the input. So at the input you see a very good match. For example, if a cable has 3 dB of loss and is terminated in a short or open circuit, the SWR at the output will be infinite, since the reflected power equals the forward power. But the SWR at the input will be 3:1, since only 1/4 of the forward power appears coming back. A cable with 6 dB of loss (where no more than 1/16 of the forward power gets back) will never show more than 1.67:1 SWR at the input, and so forth. A long piece of coax makes a good dummy load, and at high frequencies it doesn't take a very long piece.

This is a good solution for those folks who like a quiet antenna with low SWR.

Roy Lewallen, W7EL

Bill Wilson wrote:
>
> More loss in RG 58 makes VSWR look better???
>
> KG7CK

1601. Re: Cleaning Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 10:49:41 UTC
From: Rod Marsh <rredbeak2@dingoblue.net.au>
Message-ID: <3a696d2f$0$15501$7f31c96c@news01.syd.optusnet.com.au>
Source record: 171725

Any "DE WATERING" fluid like crc wet start spray etc etc.My roller inductor [MFJ989C] does the same thing with "dry spots" when tuning but crc fixes it IMMEDIATLEY and lasts a few months.Ive not had any funny smells while tx'ing but i can imagine it.I used other cleaners like degreaser but quickly came back to crc ,cheers Rod VK4XI

PS im NOT impressed with the MFJ roller inductor as its NOT on a quality ceramic FORMER but merely AIRWOUND and supported by strips of PC board,it does NOT impede the tuners ability but i'd thought with a name like MFJ i might get the "BEST".Rod

"Larry Benko" <benko@aztek-eng.com> wrote in message news:3A6873AF.CB9A6F48@aztek-eng.com...
> I have a C-L-C type antenna tuner that the roller inductor was
> somewhat eratic. I took it apart and cleaned all the contact
> points with some freon type degreaser and it worked great but
> the roller inductor squeaked when turned. Then I used some
> spray TV tuner cleaner/lubricant and the squeaking stopped but
> when I tarnsmitted on 17m there was an oil like smell from the
> tuner indicating that the TV tuner spray did not like high
> current. So now I went back to the squeaking mode. What should
> I have used to clean the roller inductor with?
>
> 73,
> Larry Benko, W0QE

1602. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:02:49 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <tfea6.649$db6.12450@paloalto-snr1.gtei.net>
Source record: 171726

"Craig" <cpg@xtra.co.nz> wrote in message
news:qqbi6t0fpnpduebscnq8iu8dkp2d7bf8r2@4ax.com...
> I've put up a 75Mhz-800MHz discone and fed it with new RG-213
> terminating with a Type N-connector, however, on both 2 Meters and
> 70cm I'm getting an SWR of 1:1.5. As an experiment, I replaced it
> with RG-58 (of shorter length) terminating with a PL-259 connector,
> and the SWR dropped down to less than 1:1.2.
>
> I'm stumped as to why the lower loss RG-213 is behaving this way at
> 70cm and would be grateful for any advice.
>
> Craig ZL2WCG

Because the losses in the RG-58 are so great that it is absorbing almost all of the reflected power before it gets to your meter - given enough length, you could leave it disconnected from the antenna and get about the same reading.

73 de W6DKN

1603. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:25:42 UTC
From: Exham@nospam.com
Message-ID: <3a697521.1719157@news.accessnv.com>
Source record: 171727
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

On Thu, 18 Jan 2001 17:23:26 -0600, "Steve Woodruff"
<sjwoodr.nospam@nospam.email.com> wrote:

>I really don't have anything to complain about... i didn't pay the
>additional fee -- i just didn't take the extra class exam after I
>passed the general class one.

Yes you do have something to complain about. It's going to cost you
another $10 to take the Extra exam at the next session when it should
have been included in the last session. Whether you took it when you
upgraded for general or later, they are still going to charge you an
extra $10. I'd show them the FCC regulation (I posted it here in
another reply to you) and ask for a freebie.

1604. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:30:16 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6976C8.70BB90B8@oio.net>
Source record: 171728

```
Cecil wrote:
>
> Roy Lewallen wrote:
> >
> > Cecil wrote:
> > > They say it is an air core coil but it isn't 100%. Find out what that
> > > "protective tube" is made out of before you decide to buy. I wouldn't
> > > buy it if that "protective tube" is made out of PVC.
> > >
> > > Why is that?
> >
> > Air core is less lossy.

Probably, but do you really think it's going
to make that much difference?
'Doc
```

1605. After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:42:47 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A6979B7.48571825@erols.com>
Source record: 171729

Keith wrote "After all this is QRP."

I took a certain amount of umbrage at this statement, not because I do use QRP, but because of the attitude it seems to present. Keith, QRP is as valid a form of ham radio as QRO. Your mistakes will be broadcast to the worked just as well as those of your QRO friends. If anything you should ne more aware of problems presented to your rig by your antenna because you have only so much power you can throw away in inefficiency!

QRP is not worse, it does require more attention to detail or you will be talking to yourself!

73

1606. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:53:48 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A697C4C.943281BF@erols.com>
Source record: 171731
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

Stewart,

The Netherlands implemented a license class very close to what you propose back about 1985 or so. A communicators license intended to bring the Citizens Band under control. About 5 frequencies were set aside in the two meter band for users. A ham license was granted with no code and only a simple theory test, about adequate to determine if the on light was on! People flocked to get in on the simple ham license. The government hoped if they were really interested they would upgrade, and if they weren't they could still take advantage of the thrill of communication and not bother the others. Holland requires evidence of a ham license before you can buy a ham radio,

The result? Almost no upgrades. Those who got into it stayed there. IS that what you want for our kids?

73

Stewart R Teaze wrote:
>
> The rapidly-expanding Family Radio Service has exposed millions of young
> people to the world
> of radio communications.

1607. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:54:29 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <94bu33$s70$03$1@news.t-online.com>
Source record: 171730

I've heard the distance between the active element and the reflector should
be 0.2 lambda.Is this correct ?

"Bill Nelson" <billn@spock.peak.org> schrieb im Newsbeitrag
news:94bfsuosv12@bashir.peak.org...
> TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote:
> : Hi OMs
> : I want to build a 2-element yagi for 10 m.Should I make the second
element
> : as reflector or as director ? What is better ?
>
> Make the second element a reflector. You will appreciate the better F/B
> ratio more than any slight gain advantage that you would get with a
> director.
>
> --
> Bill Nelson (billn@peak.org)
>

1608. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 11:59:40 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A697DAC.359B6DD1@erols.com>
Source record: 171733

Gary,

I'd be careful about saying they work all ham bands without using a tuner. The B&W antenna I'm familiar with is a wide spaced folded dipole type fed with twinlead. At a minimum you need a way to have a balanced feed to the antenna. You will also find widely verying SWRs on different bands without a tuner. A good tuner should be part of ANY modern station!

73

1609. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 12:02:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94buof$nv8$1@uranium.btinternet.com>
Source record: 171732
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

To add just one more snippet of info - the radiation and near fields are of equal intensity at 1/(2*Pi) or about 1/6th of a wavelength from the radiator.

At a distance of 5 wavelengths from the radiator the near field is about 30 dB weaker than the radiation field and can be ignored.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Roy Lewallen <w7el@eznec.com> wrote in message
news:3A68F85F.64339484@eznec.com...
> I'd like to add a slightly different opinion.
>
> A few blocks away is well into the far field. From a simple antenna like
> a dipole or Hamstick, the far field begins at well under a wavelength
> (20 meters in this case) from the antenna.
>
> I've used wire nuts for many years to connect antenna wires, both inside
> and outside. If they didn't provide a low resistance connection, your
> house would catch fire, since they're widely used in house wiring.
>
> Finally, I agree with the advice to switch rapidly back and forth
> between antennas. But instead of relying on reports from other stations,
> simply compare the antennas when listening. There are a number of good
> reasons for this. One is that you don't have any idea what size the
> other station's "S-Units" are. They might be anywhere from 2 to 6 dB --
> a big difference. Another reason is that signals can fade from one
> antenna to the other, giving one an advantage at one moment, while the
> other will look better a couple of minutes later. By listening, you can
> average out these changes. And you can also do a lot more comparisons
> from a lot more directions, since an observation takes less time than a
> QSO. By listening, you can compare antennas on signals from stations
> you're not able to work. With a simple step attenuator, you can make
> decent quantitative comparisons in dB if you're so inclined -- or you
> can calibrate your S meter for the same purpose.
>
> You'll probably find one antenna to be better in some directions and at
> some distances and the other better at the others. If one is better in
> all directions and at all angles, it's probably poorly matched or

> there's some source of loss in the system.
>
> Roy Lewallen, W7EL
>
> Bruce Muscolino wrote:
> >
> > Jason,
> >
> > First of all making measurements of a 20 meter antenna over a path
> > length of a 'few blocks' means you are really measuring the near field
> > radiation, not what you want.
> >
> > Now about your questions. Your Hamstick is a full quarter wavelength on
> > 20 meters compressed to 8 feet by winding the wire around a fiberglass
> > pole. You attached radials to the mag mount base. The wire is a half
> > wavelength on 20 meters. End feeding it means you have a high impedance
> > for the feed point! Your tuner was fortunate enough to resolve the
> > situation!
> >
> > Connecting wires using wire nuts is iffy at best. What you want and
> > need for antenna work is good solid connections, low resistance
> > connections. The resistance added by your connections shows up in the
> > SWR, That is probably why you saw a 2.5:1 SWR for the hamstick.
> >
> > To properly compare antennas at HF you should have a way to switch
> > between the antennas very quickly. Get them both tuned properly, and
> > make a contact. Ask the other ham if he will mind listening when you
> > change antennas. Do this several times over long path lengths, and you
> > will have a better answer.
> >
> > 73
> >
> > jason_hsu@my-deja.com wrote:
> > >
> > > Why am I not having better luck with a wire antenna?
> > >

1610. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 12:56:54 UTC
From: Dodge Johnson <djohnson@voicenet.com>
Message-ID: <djohnson-DF4881.07565320012001@netnews.voicenet.com>
Source record: 171734

Thanks Gene.
>
>PVC pipe

1611. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 13:59:26 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A6999BE.E8D21B47@zylay.com>
Source record: 171735

Dodge Johnson wrote:

> Thanks Gene.
> >
> >PVC pipe

I forgot to mention. Put a short T on the end of the pipe and you can
use zip-ties to attach your ladderline through the cross-T

1612. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:07:16 UTC
From: Bigdad <Bigdad@rworld.com>
Message-ID: <EQha6.9777$1%2.423406@sjc-read.news.verio.net>
Source record: 171736

"TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message
news:94a9ha$5a7$06$1@news.t-online.com...
> Hi OMs
> I want to build a 2-element yagi for 10 m.Should I make the second element
> as reflector or as director ? What is better ?
>
> vy 73
> Tom

Some guy built a 2 element beam for 10 and i THINK the article for it is
available on the arrl site not sure tho. It was titled 2 on 10 i believe.
Ive seen several other articles tho on 2 element beams for 10 meters...try a
search for the same on arrl.org

1613. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:33:33 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69AFCD.E7C3BE3D@IEEE.org>
Source record: 171739
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

Bill Nelson wrote:
> The match of the rig to the transmission line is immaterial.

Not to the rig. :-)
--
http://www.mindspring.com/~w6rca

1614. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:34:03 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94cb5b$kt3$1@nnrp1.deja.com>
Source record: 171738
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <94am2q$fc8$1@nnrp1.deja.com>,
horseshoestew@my-deja.com wrote:

> > Suddenly this proposal for the "Barbie Doll" Amateur Radio license
> > isn't quite so senseless.
>
> I've never tried to hide the fact that I'm trying to create a
> business. Quite the opposite - why would I list the web site on the
> signature to all my posts, if I was trying to hide something
>
> Hey, Hans, I wonder why you switched your approach to this slimly
> veiled "personal attack"? It couldn't be that I was right about the
> point regarding inductors and capacitors on the Novice test, could it?

Don't be paranoid! I didn't say you were hiding anything.
I didn't say it was wrong to have a business (lot's of people
have ham radio businesses). I just pointed out that I now have
a better insight into the reasons for your nonsensical proposal.
Doesn't make you a bad person.

73, de Hans, K0HB

PS: My old ARRL license manual has questions about capacitors and
inductors in the Novice section, so you weren't "right about the
point".

--
"We are fellow travelers on a journey between two
eternities, and it's a trip far too brief for me
to be concerned about your speed at the Code of
Morse."

Sent via Deja.com
http://www.deja.com/

1615. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:35:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69B044.C2D3C7@IEEE.org>
Source record: 171741

Bruce Muscolino wrote:
> QRP is not worse, it does require more attention to detail or you will
> be talking to yourself!

I saw a T-shirt that said, "Life's Too Short For QRP. :-)
--
http://www.mindspring.com/~w6rca

1616. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:36:36 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Hq9pOpOovu9a=JFXCNu2bYYxUKQx@4ax.com>
Source record: 171737

Dodge Johnson <djohnson@voicenet.com> wrote:

>(I tried posting this before, but I don't think it made it
>
>I'm putting up an 80 meter dipole with ladder line as the feed.
>
>Because the shack is on the other side, I have to route it around the
>outside of the house.
>
>Does anybody have a solution as to what kind of stand-off will work
>well. Everything I can think of would put metal close to the feeder.
>
>Somebody must have solved this!
>
>Thanks.
>
>Dodge N3HUO

At one time I had some official ladderline stand-offs -- I bought them
from Radio Works...

They were little plastic dealies: there was a raised plastic square
that fit the cut-out in the ladder line, and there was a hole in the
middle of the piece. You put a screw through the hole to hold the
piece in place. Then you snapped the ladderline in place, right over
the raised plastic square.

You might try Radio Works, Wireman and some of the other guys that
supply antenna wire and insulators -- or go with something homebrew...
a perusal of your hardware store might turn up something useful...

Bob
k5qwg

1617. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:37:19 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69B0AF.58EBA8CE@IEEE.org>
Source record: 171742

Bill Nelson wrote:
>
> Cecil <Cecil.A.Moore@ieee.org> wrote:
> : My computer system radiates RF and I cannot use my HF rig when it is on.
> : Radiated RF is a lot harder to snuff than conducted RF. I suspect most
> : of mine comes from my large cheap monitor.
>
> Out chokes on all wires that come out of the monitor and computer case.
> The ferrite cores work fairly well. Suppress ALL wiring - don't forget to
> put cores on the wiring where it comes out of the keyboard.

Naahhhhh, that's too much trouble. I just bought a laptop. :-)
--
http://www.mindspring.com/~w6rca

1618. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:42:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69B200.3B110A76@IEEE.org>
Source record: 171744

'Doc wrote:
>
> Cecil wrote:
> > Air core is less lossy.
>
> Probably, but do you really think it's going
> to make that much difference?

To the best of my knowledge, no one using PVC pipe for the coil form has ever won a 75m shootout.
--
http://www.mindspring.com/~w6rca

1619. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:43:12 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94cbmg$l9e$1@nnrp1.deja.com>
Source record: 171743
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

In article <94ama3ffc1@nnrp1.deja.com>,
horseshoestew@my-deja.com wrote:

> If ARS is to "compete" with MURS, we are going to have to come up with
> something new.

Amateur Radio is not intended as competition to MURS, FRS, GMRS, CB,
MARS, or any other radio service. And creating a new "Barbie Doll
Radio Service" distinctly segregated from mainstream Amateur Radio
will ultimately be damaging to Amateur Radio.

73, Hans, K0HB

--
"We are fellow travelers on a journey between two
eternities, and it's a trip far too brief for me
to be concerned about your speed at the Code of
Morse."

Sent via Deja.com
http://www.deja.com/

1620. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:45:21 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a69afa3.1999368@news.azstarnet.com>
Source record: 171740

On 20 Jan 2001 07:47:10 GMT, Bill Nelson <billn@spock.peak.org> wrote:

> Billy Young wrote:
>
>: Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
>: side. I haven't been able to get my SWR no lower that 2:1 at best regardless
>: of what I tried. It's suspended from at tree at one about 30' high and from
>: the other end about 30 on a push up pole. I have nylon string that places
>: it about 20' for either end with homemade PVC insulators. I'm not receiving
>: well with it either. Does any one have any suggestions what the problem
>: might be for my first homebrew antenna?
>
>Let's assume that your meter is reading correctly - which may, or may not,
>be the actual case. I am also assuming that you are feeding the antenna
>with 50 ohm coax.
>
>If you cannot get lower than 2:1 VSWR, that means that your dipole has an
>impedance of 100 ohms or more at resonance. That is not out of sight for
>a dipole mounted fairly close to the ground. It is highly unlikely that
>the impedance could be as low as 25 ohms - the other possibility.

It is entirely possible, and true in this case, that the real part of the
impedance is close to 25 ohm.

Roy (www.eznec.com) has generously provided a demo version of his program that
is entirely adequate for modeling this situation and ending the seemingly
endless speculation about what is going on.

Wes Stewart N7WS

>
>There are a couple of things you can do to improve this. The first is
>get the dipole higher into the air. If that does not bring the SWR down
>enough for you, then you can lower the ends - making it an inverted V.
>Try to keep about a 120 degree included angle between the legs. As you
>make the angle more acute, you lose more and more of the directivity of
>the dipole.
>
>You can also feed the antenna with 72 ohm coax - which would be a better
>match for a dipole that is well up in the air.
>
>--
>Bill Nelson (billn@peak.org)
>

1621. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:53:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69B46E.6511562A@IEEE.org>
Source record: 171746

TruckDrivingMan wrote:
> I've heard the distance between the active element and the reflector should
> be 0.2 lambda.Is this correct ?

The spacing depends on what parameter you want to optimize for.
What is most important to you - feedpoint impedance, gain, front-
to-back ratio, bandwidth, ...? 0.2WL gives you close to a 50 ohm
radiation resistance.
--
http://www.mindspring.com/~w6rca

1622. Re: Feeding a loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:53:28 UTC
From: mike.luther@ziplog.com
Message-ID: <t6jd3obht7bud0@corp.supernews.com>
Source record: 171745

In <Pm7a6.109786$n%.3643697@news20.bellglobal.com>, "VE3TMT" <mdonoghue1@sympatico.ca> writes:

>I have got the base and loop made, and now ready to rig up the coupling coil
>to the loop. I have seen many different ways to feed it, ground the small
>loop here, don't ground it there, and so on. Is there one way that is
>better than the rest? I only want to do this once..famous last words!
>
>Thanks,
>Max

Max, you didn't say what sizwe loop and frequency? Sure, the size and frequency don't matter, technically, to the feed technique, but at HF, some things might make one stunt attractive.

You can use a shunt feed section to match a coax feed line directly to the loop. Simply start at any point and extend, on HF on 40, say a six inch ladder line out about seven feet parallel with the loop wire. That's the gamma section. Of course, you tie one end to the loop wire. The other 'free' end becomes the attach point for, say a 100pf variable cap, in series with the center conductor for your coax. Tie the shield of the coax to the loop wire itself at that point.

If you use a Kerney (Split bolt!) connector at that far end to fasten the gamma to the loop wire, you can simply slide it in an out to shorten or lengthen the gamma segment. You adjust the cap and that for minimum reflected power on the line. Once the capacitance is known and it's all perfect where you want it, you can substitute a short length of RG-8 used as a capacitor, for the variable cap. Tie the shield to one side, and the center conductor to the other at one end. Let the other end hang free. Make it a little longer than needed. Strip a bit away from the shield at the far end. Coil it up for test until it's just right as part of the work. Trim it shorter until minimum SWR then tape the far end. No more feed problems for years if nothing changes.

About three feet or so of RG-8 is about right to start with for the final work on 40 meters, for example.

You can scale these values for 80, 160, or 20 meters and so on.

As another hint at HF loops, where you feed this thing, break the loop wire with a common antanna insulator. But bridge it with a hard single conductor #14 bare copper wire with a little three or four turn coil in it made from wrapping the wire around a small screwdriver handle, for example. Then, using that little probe coil, you can poke a grid dip oscillator into that little coupling coil! Presto, instant way to

adjust the size of the loop for reasonance! It you use this same Kerney connector as a clamp for the wire at that point, you can shorten or lengthen the loop wire to get it exactly on frequency for the desired target.

As well, since the coax end isn't wire connected to anything for DC, if you use this kind of feed, you can carry or AC voltage up the cable on the coax to the end. The use of a small RF choke at that point can get you signal voltage to control a relay. It can be used to move element lengths between two values. That can let you adjust a low band array between the CW and phone sections of the band, if needed...

Of course all this is, in practice, much different if the band in question is up on 440 or such! Maybe this was wasted suggestion for you!

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

1623. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 15:56:36 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69B534.AFEB00DA@IEEE.org>
Source record: 171747

Roy Lewallen wrote:
> This is a good solution for those folks who like a quiet antenna with
> low SWR.

200ft of RG58 on 440MHz gives such a "good" SWR that no
antenna is needed. :-)
--
http://www.mindspring.com/~w6rca

1624. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 16:04:30 UTC
From: richardharrison@webtv.net
Message-ID: <7838-3A69B70E-10@storefull-115.iap.bryant.webtv.net>
Source record: 171750

Bill Nelson wrote:
"I did not imply that." (Electronics is not outdated, said Cecil.)

We have amateur allocations in the radio spectrum because amateur radio predates allocations.

Allocations became law because the importance of radio to safety and commerce emerged, and regulation was imposed to preserve the utility of radio.

Amateurs were considered beneficial to radio development and operator training. Training was not trivial. Public familiarity with electrical phenomena and the Morse code needed to use radio did not abound. Radio expertise was needed to exploit the new communications medium and was not obtained overnight. Amateur radio was a training ground for military and commercial operators. This satisfied a public need. Amateur radio also provided emergency communications for disconnected and remote sites.

The needs above are almost gone. Morse operators aren`t used by the military and industry anymore. Extra ears aren`t needed to listen for Morse SOS signals. A pool of ready-trained Morse operators to call upon tn times of national emergency is not needed.

Why should amateurs continue to take spectrum space that could be used for beneficial business and industry radios?

Amateur radio spectrum should continue to be allocated for the life, liberty, and pursuit of happiness of as many people as possible. Public lands are set aside for parks and recreation. These are non-commercial oases, as are amateur bands.

Yet another public benefit derives from amateur bands. Amateur experimenters have an opportunity to advance on-the-air communications arts and sciences.

Cecil implied that while Morse is outdated, electronics is not outdated. So, hams still need bands.

Best regards, Richard Harrison, KB5WZI

1625. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 16:10:57 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <94cd3t$8uh$03$1@news.t-online.com>
Source record: 171749

50 ohm,that would be good.I want to use a 50-ohm koax-cable.And it would be better if I could use the koax without a balun.Is that possible ?

"Cecil" <Cecil.A.Moore@IEEE.org> schrieb im Newsbeitrag news:3A69B46E.6511562A@IEEE.org...
> TruckDrivingMan wrote:
> > I've heard the distance between the active element and the reflector should
> > be 0.2 lambda.Is this correct ?
>
> The spacing depends on what parameter you want to optimize for.
> What is most important to you - feedpoint impedance, gain, front-
> to-back ratio, bandwidth, ...? 0.2WL gives you close to a 50 ohm
> radiation resistance.
> --
> http://www.mindspring.com/~w6rca

1626. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 16:29:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A69BCD4.D4E9A875@IEEE.org>
Source record: 171751

TruckDrivingMan wrote:
> 50 ohm,that would be good.I want to use a 50-ohm koax-cable.And it would be
> better if I could use the koax without a balun.Is that possible ?

The balun function can be performed by ten loops of coax at the
feedpoint. I would recommend that you do that.
--
http://www.mindspring.com/~w6rca

1627. Re: Problem tuning shielded loop rx antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 16:41:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94cf2ifkm1@plutonium.btinternet.com>
Source record: 171752

15,000 pounds Sterling = 24,000 US dollars.

The sooner we shift to Euro-dollars the better.

****

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A60BD8F.9B01975F@IEEE.org...
> Reg Edwards wrote:
>
> Hey Reg, this is off the subject but why are Land Rovers in England
> so heavy? I'm watching a TV program of cop chases. They said the
> English cops were chasing a 15,000 pound Land Rover.
> --
> http://www.mindspring.com/~w6rca

1628. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 16:46:49 UTC
From: CitySlicker <not_enuf_time@foolscorner.net>
Message-ID: <94cfdp$mbq@dispatch.concentric.net>
Source record: 171753
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

No, I meant "dribble" that is what morons start to do when they talk excitedly. Go learn some more.
Opposition? Hardly; go play in the mall with your FRS radios and stop taking up space in this group with your nonsense. Cross posting can go both ways.

"LRod" <lr0d@my-deja.com> wrote in message news:94aq1gilk1@nnrp1.deja.com...
> In article <94anv1$2b4@dispatch.concentric.net>,
> "CitySlicker" <not_enuf_time@foolscorner.net> wrote:
>
> > Another group of geniuses cross posting this dribble in the CB group.
>
> Doncha just love it when some "genius" badmouths the (learned)
> opposition, and then uses "dribble" for drivel...in the same sentence?
>
> LRod
>
>
> Sent via Deja.com
> http://www.deja.com/

1629. Re: how to bury ground radials ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 17:12:55 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3a69b9ee_1@news1.prserv.net>
Source record: 171748

I bought a Black & Decker "edger" (about $60, IIRC) that does a good job. It cuts a narrow slit about 2" deep and usually throws small rocks out of the way. If you have lots of small rocks (like I do), the cutting is a little messy, but it works. After cutting the slit, I work the radial wire into it with a broad screw driver. A 60' radial takes about 20 minutes to complete. (I am thinking about placing two wires in the slit for my next antenna --- one being the coated, soft-drawn copper wire I usually use, and the second being a shorter insulated wire scavenged from multiconductor communications cables.) After placing the wire(s), I stamp down the ground, water it, and let nature repair the damage. After a few weeks, all signs are usually gone.

Bill Ogden
W2WO

1630. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 18:38:29 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A69DB25.D9C0FC00@dvol.com>
Source record: 171754

Bill Nelson wrote:

> TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote:
> : Hi OMs
> : I want to build a 2-element yagi for 10 m.Should I make the second element
> : as reflector or as director ? What is better ?
>
> Make the second element a reflector. You will appreciate the better F/B
> ratio more than any slight gain advantage that you would get with a
> director.

>
One advantage of a driven/director configuration is that the boom can be
shorter. Pretty much a no-counter on 10m but it drove the decision to go with a
director back when I put together several full size heavy, awkward 40m beams.
>

>
> --
> Bill Nelson (billn@peak.org)

>
w3rv

1631. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 18:43:21 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A69DC49.8F1E92BD@dvol.com>
Source record: 171755

Roy Lewallen wrote:

> There are some other
> things you could do, such as winding a few turns on a ferrite rod,

>
Heh. The old homebrewed filament choke trick.
>

>Incidentally, the best ferrites to use for this application are the

> high-permeability, "low frequency" ferrites, such as Amidon/Fair-Rite 70
> series. Type 43, which has a bit lower permeability, also works well and
> is available in a variety of sizes. It's marketed for this purpose, so a
> lot of the snap on cores are this type of ferrite or similar.
>
> Roy Lewallen, W7EL

>
Useful input, thanks Roy.
>
w3rv

1632. Re: Cleaning Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 18:52:16 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A69DE60.C150B0AE@dvol.com>
Source record: 171756

Rod Marsh wrote:

>
> PS im NOT impressed with the MFJ roller inductor as its NOT on a quality
> ceramic FORMER but merely AIRWOUND and supported by strips of PC board,it
> does NOT impede the tuners ability but i'd thought with a name like MFJ i
> might get the "BEST".Rod

>
Ya hafta take MFJ with a bit of salt, MFJ is not Collins or Kenwood. You're
actually better off with an air-wound inductor, a ceramic form would introduce
some (minor) loss.
>
w3rv

1633. Dish antennas/mounts for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 18:53:53 UTC
From: Art Rice <arice@ix.netcom.com>
Message-ID: <94cmsq$28i$1@slb6.atl.mindspring.net>
Source record: 171757

I have several dishes for sale.
The biggest is a KLM 12 foot with solid aluminum petals, and an az-el base with controller. I'm asking $200 for it.
I have an incomplete KLM 11 foot that uses screen petals. I have the ribs, etc. but not the screen petals or the mount. Make me an offer.
I have a KLM 8 foot using screen petals and a polar mount with controller. I'm asking $150 for it.
I also have a 6 foot solid aluminum spun dish. If you are interested, it could be used with the polar mount/controller that the 8 foot dish uses. I'll sell it for $125, polar mount/controller included.
Located near San Jose, CA. I can deliver in the SF bay area.

1634. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 18:58:18 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <94cn9j$1cv$1@slb6.atl.mindspring.net>
Source record: 171758

That big resistor in the middle of them smoothes out the SWR swings pretty
well.
--
CW
KC7NOD
"Bruce Muscolino" <w6toy@erols.com> wrote in message
news:3A697DAC.359B6DD1@erols.com...
>
>
You will also find widely verying SWRs on
> different bands without a tuner. A good tuner should be part of ANY
> modern station!
>
> 73

1635. Re: Feeding a loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 19:03:18 UTC
From: k1bqt@aol.com
Message-ID: <20010120140318.21704.00000385@ng-mj1.aol.com>
Source record: 171759

> I only want to do this once....

What fun is that (hi)?

Since a well-constructed small loop has very low driving resistance and uniform current distribution, why not try feeding it with a ferrite toroid core. Slip the toroid over the radiator, treating it as a single turn primary. Then, wind several turns on the form to make up a 50-Ohm secondary (you'll need to experiment with the number of secondary turns to obtain minimum SWR). I think I saw this idea first in QST as a "hint and kink", and it might provide a good alternative to a coax loop.

Rick K1BQT

1636. Re: Looking for information on remote-controlled ATU for end-fed wire antennna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 19:31:38 UTC
From: sparta@freeuk.PAS-DE-SPAM.net
Message-ID: <3a69d8f0.23358328@news.freeuk.net>
Source record: 171760
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

On Sat, 20 Jan 2001 00:23:09 -0000, "Richard Fullerton"
<newsgroup_email@ntlworld.com> wrote:

>I'm looking for construction details for a remote-controlled antenna tuner
>that will work with an end-fed antenna. Quite possibly it is dedicated to
>work with such an antenna. (For non UK folks: I'm in UK, but perhaps that
>fact won't make much difference (I'm on 240v AC)). It would be good if
>the ATU was capable of handling 400W PEP. But in the early days I will
>be using about 150 Watts RF out, so any ATU that was suitable for
>that level of output would be looked at.

See recent issues of RadCom for details of a homebrew
one.

--

---
73 de G4RGA, nordland@line one.net
George Dubya Bush-isms. No 1:
'If we don't succeed, we run the risk of failure'.

Rallies: http://website.lineone.net http://www.netcomuk.co.uk

1637. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 19:44:47 UTC
From: Anita Andringa <a.andringa@rhayward.demon.nl>
Message-ID: <980020018.29474.0.pluto.d4ee2a65@news.demon.nl>
Source record: 171761
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

The information you had access to may have been stale, and never was
entirely accurate.
The class-D license did in fact give you 6 channels. You had to upgrade
within two years. THe upgrade requirement was later dropped.
After a short while the examination level was graded up quite considerably.
The license class was changed accordingly and now gives you a CW subband, an
SSB subband and an FM subband on 2 meters and on 70 centimeters.
The D-callsigns were assigned alphabetically, starting with pd0aab, then
aac, aad etc.
If you look in the callbook, you will notice that there are not many left
over. Many of the "old" names are now found under the A or C class entries
nowl
To recap: Dutch A-class is "everything" (hf, vhf and up, all modes) and
requires morse code and electronics theory. C-class is VHF and up, all
modes, requires same theory but no morse code. N-class replaces D-class (N
for Novice) and requires limited theory, gives acces to Novice subbands on
2m and 70cm.
No-code on HF has never existed in Holland, but we all know the rumours..
just have to see what happens now.

have a good one,

Rudolf

Bruce Muscolino <w6toy@erols.com> schreef in berichtnieuws
3A697C4C.943281BF@erols.com...
> Stewart,
>
> The Netherlands implemented a license class very close to what you
> propose back about 1985 or so. (...)

1638. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 20:11:01 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A69F0D5.D2D0E8F3@oio.net>
Source record: 171762

```
Cecil wrote:
>
> 'Doc wrote:
> >
> > Cecil wrote:
> > > Air core is less lossy.
> >
> > Probably, but do you really think it's going
> > to make that much difference?
>
> To the best of my knowledge, no one using PVC pipe for the coil
> form has ever won a 75m shootout.
> --
> http://www.mindspring.com/~w6rca

Ah ha... I guess that's a real benchmark.
'Doc
```

1639. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 20:46:49 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94ctfo$39n$1@nnrp1.deja.com>
Source record: 171763
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

N0MHS writes:

> The rapidly-expanding Family Radio Service has exposed
> millions of young people to the world of radio communications.
> But now, where is a you kid to go who has is interested in
> experimenting with radios..... clip.

OK, rather than a bunch of old geezers sitting around casting cold water on Stewarts idea, let's look at it from the view of the intended market.

Dick and Jane, 14 years old, have "had it" with the limitations of the FRS and now are "interested in experimenting with radios". They've heard of something called "ham radio" and are investigating the entry classes.

Jane says "Here's something called the Technician class. You have to take a simple 35-question test."

Dick says "Here's something called the Colt class. You have to take a simple 25-question test from the same pool."

Dick and Jane decide to investigate further, to see what difference the 10 additional simple questions make.

Dick says "Colt gives you six simplex voice/digital channels on 446, and another six simplex voice/digital channels on 223MHz. You can even build a simple little repeater between them, as long as input and output are not on the same band."

Jane says "Technician gives you 22,243 Megahertz of spectrum on 16 bands between 50MHz and 250GHz. Holy Cow, Dick, that's millions and millions of frequencies instead of just 12."

Dick says "With a Colt license you can transmit 5 watts of power. That's a lot better than FRS!"

Jane says "5 watts is for sissies. With Technician we can transmit 1,500 watts of power!"

Dick says "Yes, but the Colt radios are cheap."

Jane says "Sure, but there are lots and lots of used radios around for Technicians, even cheaper, and your Colt radio will be basicly useless if you upgrade."

Dick says "Hey, but I could put my Colt antenna 20 feet above the house if I want."

Jane says "Big deal, Technicians have no arbitrary height limit like that; they can go as high as zoning laws allow, and even higher with conditional use permits."

Dick says "The Colt license will be a lot of other kids just like me."

Jane says "I thought we were sick of kid stuff, and wanted to experiment. The Technician license lets us talk to kids and doctors and lawyers and indian chiefs and satelites and astronauts and W1RFI even."

Dick says "Colts can use both voice and digital modes."

Jane says "Hey, with only 10 more simple questions the Technicians are allowed all of that, and other neat stuff like SSTV, FSTV, telecommand, and space communications."

Dick says "Jane, you are right. This Colt thing is really lame. I always said you were smarter than me. I could just kiss you."

Jane says "Dick, only after you pass your Technician License test, and keep your clammy paws off my double bazooka antenna."

73, de Hans, K0HB

--
"We are fellow travelers on a journey between two eternities, and it's a trip far too brief for me to be concerned about your speed at the Code of Morse."

Sent via Deja.com
http://www.deja.com/

1640. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 20:50:51 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94ctn9$3df$1@nnrp1.deja.com>
Source record: 171764
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <94ate8$l4r$1@nnrp1.deja.com>,
horseshoestew@my-deja.com wrote:

> Look, I don't have anything against you folks - I just don't think it
> is appropriate for kids to be learning radio on the 11 meter band.

OK, rather than a bunch of old geezers sitting around casting
cold water on Stewarts idea, let's look at it from the view
of the intended market.

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limitations of the FRS and now are "interested in experimenting
with radios". They've heard of something called "ham radio"
and are investigating the entry classes.

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have to take a simple 35-question test."

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to take a simple 25-question test from the same pool."

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on 446, and another six simplex voice/digital channels on
223MHz. You can even build a simple little repeater between
them, as long as input and output are not on the same band."

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on 16 bands between 50MHz and 250GHz. Holy Cow, Dick, that's
millions and millions of frequencies instead of just 12."

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power. That's a lot better than FRS!"

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like that; they can go as high as zoning laws allow, and even
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like me."

Jane says "I thought we were sick of kid stuff, and wanted to
experiment. The Technician license lets us talk to kids and
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are allowed all of that, and other neat stuff like SSTV, FSTV,
telecommand, and space communications."

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I always said you were smarter than me. I could just kiss you."

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test, and keep your clammy paws off my double bazooka antenna."

73, de Hans, K0HB

--
"We are fellow travelers on a journey between two
eternities, and it's a trip far too brief for me
to be concerned about your speed at the Code of
Morse."

Sent via Deja.com
http://www.deja.com/

1641. Re: Looking for information on remote-controlled ATU for end-fed wire antennna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:05:34 UTC
From: Richard Fullerton <newsgroup_email@ntlworld.com>
Message-ID: <l3na6.4237$4k4.118949@news2-win.server.ntlworld.com>
Source record: 171765
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

JimD <sparta@freeuk.PAS-DE-SPAM.net> wrote in message
news:3a69d8f0.23358328@news.freeuk.net...

> See recent issues of RadCom for details of a homebrew
> one.

Thanks.

I'm now on rec.radio.amateur.homebrew discussing the matter.

Rich.

1642. Re: Looking for information on remote-controlled ATU for end-fed wire antennna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:08:17 UTC
From: Richard Fullerton <newsgroup_email@ntlworld.com>
Message-ID: <76na6.4245$4k4.119216@news2-win.server.ntlworld.com>
Source record: 171767

I'm now on rec.radio.amateur.homebrew discussing the matter.

Rich.

1643. Seeking a source for a Quadrafilar Helix (QFH) antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:09:10 UTC
From: Pervert_Extraordinair <valued_customer1@att.com>
Message-ID: <3A69FE78.B884F069@att.com>
Source record: 171766

I'm using an attic mount homebrew QFH antenna for
weather satellite APT reception.

I've decided to move the QFH from the attic to the outside,
so I'm considering my options. One of the options is to
purchase a commercial QFH. While these are quite expensive
($~250) they do come with an integral amplifier which would
certainly not hurt.

Anyone have any personal experience with any commercial suppliers?
I've only found a few for sale. The following from Norther Video
Graphics is one: http://www.nvgweather.com/page2.html

Any suggestions/comment would be appreciated.

1644. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:11:04 UTC
From: CitySlicker <not_enuf_time@foolscorner.net>
Message-ID: <94cut8$b9t@freepress.concentric.net>
Source record: 171768
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

I am sure Dick and Jane even have clue what your talking about. Give them a
CB and stop complicating their life.

"K0HB" <K0HB@arrl.org> wrote in message news:94ctn9$3df$1@nnrp1.deja.com...
> In article <94ate8$l4r$1@nnrp1.deja.com>,
> horseshoestew@my-deja.com wrote:
>
> > Look, I don't have anything against you folks - I just don't think it
> > is appropriate for kids to be learning radio on the 11 meter band.
>
> OK, rather than a bunch of old geezers sitting around casting
> cold water on Stewarts idea, let's look at it from the view
> of the intended market.
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> Dick and Jane, 14 years old, have "had it" with the
> limitations of the FRS and now are "interested in experimenting
> with radios". They've heard of something called "ham radio"
> and are investigating the entry classes.
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> have to take a simple 35-question test."
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> Dick says "Here's something called the Colt class. You have
> to take a simple 25-question test from the same pool."
>
> Dick and Jane decide to investigate further, to see what
> difference the 10 additional simple questions make.
>
> Dick says "Colt gives you six simplex voice/digital channels
> on 446, and another six simplex voice/digital channels on
> 223MHz. You can even build a simple little repeater between
> them, as long as input and output are not on the same band."
>
> Jane says "Technician gives you 22,243 Megahertz of spectrum
> on 16 bands between 50MHz and 250GHz. Holy Cow, Dick, that's
> millions and millions of frequencies instead of just 12."
>
> Dick says "With a Colt license you can transmit 5 watts of
> power. That's a lot better than FRS!"
>
> Jane says "5 watts is for sissies. With Technician we can
> transmit 1,500 watts of power!"
>

> Dick says "Yes, but the Colt radios are cheap."
>
> Jane says "Sure, but there are lots and lots of used radios
> around for Technicians, even cheaper, and your Colt radio
> will be basicly useless if you upgrade."
>
> Dick says "Hey, but I could put my Colt antenna 20 feet above the
> house if I want."
>
> Jane says "Big deal, Technicians have no arbitrary height limit
> like that; they can go as high as zoning laws allow, and even
> higher with conditional use permits."
>
> Dick says "The Colt license will be a lot of other kids just
> like me."
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> Jane says "I thought we were sick of kid stuff, and wanted to
> experiment. The Technician license lets us talk to kids and
> doctors and lawyers and indian chiefs and satelites and
> astronauts and W1RFI even."
>
> Dick says "Colts can use both voice and digital modes."
>
> Jane says "Hey, with only 10 more simple questions the Technicians
> are allowed all of that, and other neat stuff like SSTV, FSTV,
> telecommand, and space communications."
>
> Dick says "Jane, you are right. This Colt thing is really lame.
> I always said you were smarter than me. I could just kiss you."
>
> Jane says "Dick, only after you pass your Technician License
> test, and keep your clammy paws off my double bazooka antenna."
>
> 73, de Hans, K0HB
>
>
> --
> "We are fellow travelers on a journey between two
> eternities, and it's a trip far too brief for me
> to be concerned about your speed at the Code of
> Morse."
>
>
>
>
>
>
> Sent via Deja.com
> http://www.deja.com/

1645. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:11:55 UTC
From: k1bqt@aol.com
Message-ID: <20010120161155.10028.00000478@ng-cr1.aol.com>
Source record: 171769

>I saw a T-shirt that said, "Life's Too Short For QRP. :-)<

Hi Cecil--

Some people's dick's are too short to risk QRP!

Rick K1BQT

1646. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:17:56 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6A0084.51D0@wt.net>
Source record: 171770

Cecil wrote:
>
> 'Doc wrote:
> >
> > Cecil wrote:
> > > Air core is less lossy.
> >
> > Probably, but do you really think it's going
> > to make that much difference?
>
> To the best of my knowledge, no one using PVC pipe for the coil
> form has ever won a 75m shootout.
> --
> http://www.mindspring.com/~w6rca

I'm curious...Has anyone ever tried using a "good" PVC coil in that shootout? I use PVC coil forms here and haven't really noticed any bad effects. I've compared to bug catcher coil antennas and couldn't really tell much difference. Actually I won, in one case I'm thinking of, but the other antenna was a bit shorter, so not a fair test. I've never had any problems with them here so far. I use the 2-3 inch grey PVC that has no metal content. I tested by cooking in the microwave and stayed ice cold. Dunno, I've never entered the shootout yet. Maybe thats why they "pvc" haven't done well yet...g I bet mine will compare pretty well. As one test which I have done, I compared my coil to a hustler which everyone knows is kinda lossy. The hustler coil was terrible against mine, just as it would have been against a bug coil. So I don't think the difference between the two is large at all. "PVC and open". MK
--
http://web.wt.net/~nm5k

1647. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:23:49 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6A01E5.A47@wt.net>
Source record: 171771

Cecil wrote:
>
> 'Doc wrote:
> >
> > Cecil wrote:
> > > Air core is less lossy.
> >
> > Probably, but do you really think it's going
> > to make that much difference?
>
> To the best of my knowledge, no one using PVC pipe for the coil
> form has ever won a 75m shootout.
> --
> http://www.mindspring.com/~w6rca

I was thinking of something else...Isn't a screwdriver wound on a form
of some type? W@hat do they use? Ceramic or pvc? MK
--
http://web.wt.net/~nm5k

1648. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:37:06 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A6A04D2.13239764@GTE.net>
Source record: 171772

Craig wrote:

> I've put up a 75Mhz-800MHz discone and fed it with new RG-213
> terminating with a Type N-connector, however, on both 2 Meters and
> 70cm I'm getting an SWR of 1:1.5. As an experiment, I replaced it
> with RG-58 (of shorter length) terminating with a PL-259 connector,
> and the SWR dropped down to less than 1:1.2.
>
> I'm stumped as to why the lower loss RG-213 is behaving this way at
> 70cm and would be grateful for any advice.
>
> Craig ZL2WCG

The higher the cable loss, the better the swr will look. Take a 500'
piece of RG58 and leave the far end open circuited (or shorted) and
measure the VSWR at 70 cM at the other end- it will look great!

Dale W4OP

1649. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:49:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6A07E3.F5B11921@IEEE.org>
Source record: 171774

Mark Keith wrote:
> I was thinking of something else...Isn't a screwdriver wound on a form
> of some type? W@hat do they use? Ceramic or pvc? MK

My HS-1600 uses something like phenolic. Wonder if hsantennas.com tells
what it is made of? And srewdrivers come close but rarely win 75m shootouts.
--
http://www.mindspring.com/~w6rca

1650. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 21:59:23 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94d1od$6rl$1@iac5.navix.net>
Source record: 171773
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

The need for all of this will go away once my group leaps into action. When we have eliminated all the "elitism" on the bands and issue every citizen an Extra class license, as is their God given right, all will be right with the world.

No Code!
No Test!
No Hassle!

--
Fred W4JLE NHI#1001
Executive Grand Pooba - No Hassle International
Doing away with all requirements for a Ham ticket
"We want, therefore we deserve"
Send your non-tax deductible donations today!

"K0HB" <K0HB@arrl.org> wrote in message news:94ctn9$3df$1@nnrp1.deja.com...
> In article <94ate8$l4r$1@nnrp1.deja.com>,
> horseshoestew@my-deja.com wrote:
>
> > Look, I don't have anything against you folks - I just don't think it
> > is appropriate for kids to be learning radio on the 11 meter band.
>
> OK, rather than a bunch of old geezers sitting around casting
> cold water on Stewarts idea, let's look at it from the view
> of the intended market.
>
> Dick and Jane, 14 years old, have "had it" with the
> limitations of the FRS and now are "interested in experimenting
> with radios". They've heard of something called "ham radio"
> and are investigating the entry classes.
>
> Jane says "Here's something called the Technician class. You
> have to take a simple 35-question test."
>
> Dick says "Here's something called the Colt class. You have
> to take a simple 25-question test from the same pool."
>
> Dick and Jane decide to investigate further, to see what
> difference the 10 additional simple questions make.
>
> Dick says "Colt gives you six simplex voice/digital channels
> on 446, and another six simplex voice/digital channels on
> 223MHz. You can even build a simple little repeater between

> them, as long as input and output are not on the same band."
>
> Jane says "Technician gives you 22,243 Megahertz of spectrum
> on 16 bands between 50MHz and 250GHz. Holy Cow, Dick, that's
> millions and millions of frequencies instead of just 12."
>
> Dick says "With a Colt license you can transmit 5 watts of
> power. That's a lot better than FRS!"
>
> Jane says "5 watts is for sissies. With Technician we can
> transmit 1,500 watts of power!"
>
> Dick says "Yes, but the Colt radios are cheap."
>
> Jane says "Sure, but there are lots and lots of used radios
> around for Technicians, even cheaper, and your Colt radio
> will be basicly useless if you upgrade."
>
> Dick says "Hey, but I could put my Colt antenna 20 feet above the
> house if I want."
>
> Jane says "Big deal, Technicians have no arbitrary height limit
> like that; they can go as high as zoning laws allow, and even
> higher with conditional use permits."
>
> Dick says "The Colt license will be a lot of other kids just
> like me."
>
> Jane says "I thought we were sick of kid stuff, and wanted to
> experiment. The Technician license lets us talk to kids and
> doctors and lawyers and indian chiefs and satelites and
> astronauts and W1RFI even."
>
> Dick says "Colts can use both voice and digital modes."
>
> Jane says "Hey, with only 10 more simple questions the Technicians
> are allowed all of that, and other neat stuff like SSTV, FSTV,
> telecommand, and space communications."
>
> Dick says "Jane, you are right. This Colt thing is really lame.
> I always said you were smarter than me. I could just kiss you."
>
> Jane says "Dick, only after you pass your Technician License
> test, and keep your clammy paws off my double bazooka antenna."
>
> 73, de Hans, K0HB
>
>
> --
> "We are fellow travelers on a journey between two

> eternities, and it's a trip far too brief for me
> to be concerned about your speed at the Code of
> Morse."
>
>
>
>
>
>
> Sent via Deja.com
> http://www.deja.com/

1651. Re: 2-element yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 22:08:05 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a6a0c0b_1@news3.prserv.net>
Source record: 171775

Thanks, Roy.
The excerpt from your reply below ought to be the motto of this NG.
--
Crazy George

Roy Lewallen <w7el@eznec.com> Wrote:

...........(N)no one configuration will be best in all three regards.
>
> Roy Lewallen, W7EL

1652. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 22:11:32 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94d2ek$oi6$3@bashir.peak.org>
Source record: 171778
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

In rec.radio.amateur.antenna Cecil <Cecil.A.Moore@ieee.org> wrote:
: Bill Nelson wrote:
:> The match of the rig to the transmission line is immaterial.

: Not to the rig. :-)

Of course not. But the discussion was about VSWR, not about coupling power
into the coax.

--
Bill Nelson (billn@peak.org)

1653. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 22:22:27 UTC
From: CitySlicker <not_enuf_time@foolscorner.net>
Message-ID: <94d333$37h@dispatch.concentric.net>
Source record: 171776
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

You still can't let go of the license. Must be a paper fetish.

"W4JLE" <Fred@w4jle.com> wrote in message
news:94d1od$6rl$1@iac5.navix.net...
> The need for all of this will go away once my group leaps into action.
When
> we have eliminated all the "elitism" on the bands and issue every citizen
an
> Extra class license, as is their God given right, all will be right with
the
> world.
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> No Code!
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> Fred W4JLE NHI#1001
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> Doing away with all requirements for a Ham ticket
> "We want, therefore we deserve"
> Send your non-tax deductible donations today!
>
>
> "K0HB" <K0HB@arrl.org> wrote in message
news:94ctn9$3df$1@nnrp1.deja.com...
> > In article <94ate8$l4r$1@nnrp1.deja.com>,
> > horseshoestew@my-deja.com wrote:
> >
> > > Look, I don't have anything against you folks - I just don't think it
> > > is appropriate for kids to be learning radio on the 11 meter band.
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> > cold water on Stewarts idea, let's look at it from the view
> > of the intended market.
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> > with radios". They've heard of something called "ham radio"
> > and are investigating the entry classes.
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> >
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> > higher with conditional use permits."
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> > Jane says "Dick, only after you pass your Technician License
> > test, and keep your clammy paws off my double bazooka antenna."
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> > 73, de Hans, K0HB
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> >
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> > "We are fellow travelers on a journey between two
> > eternities, and it's a trip far too brief for me
> > to be concerned about your speed at the Code of
> > Morse."
> >
> >
> >
> >
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
>

1654. All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 22:31:43 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <94d3kg$808$1@nnrp1.deja.com>
Source record: 171777

I currently use a 136' doublet fed with 450 ohm ladder line and an old Johnson Kilowatt Matchbox to tune it. It is only up about 25' at the feed point (my chimney) and it slopes down from there to within 6 feet of ground in some places. It also is bent back on itself in a few places beause it follows the contours of the house and yard. In no area is it really out in the clear. I am not very pleased with the antenna, it seems to be about 50db down from others in my geographical area on receive. I do have an amplifier that helps transmitted power but TVI is also a problem. I tried a Gap Titan but it was about equal to the doublet. I recently got a MFJ259B Analyzer and thought that I would try pruning the antenna but I wonder what others think that have been in this situation. What is more important, a higher antenna or an antenna in the clear? Does it make more sense to have a shorter antenna if you can get it higher or more in the clear? I live in a city area that frowns on antennas (CCR's) so whatever I do I must be sly. Thanks for any help/tips.

Steve
K9SL

Sent via Deja.com
http://www.deja.com/

1655. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 22:56:28 UTC
From: John P Franklin <jpfrankl@teleport.com>
Message-ID: <kHoa6.606$1x1.877890@nntp3.onemain.com>
Source record: 171779

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20010120161155.10028.00000478@ng-cr1.aol.com...
> >I saw a T-shirt that said, "Life's Too Short For QRP. :-)<
>
> Hi Cecil--
>
> Some people's dick's are too short to risk QRP!
>
> Rick K1BQT

This made me laugh quite alot... good one Rick! I too like QRP...I love my FT-817!

Pat

1656. Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 23:12:37 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <YVoa6.2453$ed.2021008@nntp2.onemain.com>
Source record: 171780
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

"CitySlicker" attempted to dump 3/4 megabits into my mail server.

Nothing that is said on any newsgripe in Usenet is worth 750 KB

Killfiled for arrogance beyond belief.

1657. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 23:36:02 UTC
From: k1bqt@aol.com
Message-ID: <20010120183602.21633.00000673@ng-fy1.aol.com>
Source record: 171781

Hi Pat--

You lucky dawg! I tried to get one of those for review, and everybody at every magazine in the entire universe beat me to the punch. Poot! The 817 is still a little scarce, even if you've got the bucks waving in your hand. Hope it's everything it's cracked up to be!

Actually, I'm bi....or bi-amped I should clarify. I love QRP and have devoted a big chunk of my ham life to it--especially when working DX. But, when I ragchew on 75 SSB, nothing beats a big antenna and ugly amounts of clear-channel QRO power. Some of us just have to go to the gym and "flex" once in awhile!

73

Rick K1BQT

1658. MFJ-1750 2m 5/8-wave groundplane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 23:44:44 UTC
From: mjlinden@mcs.net
Message-ID: <Mppa6.353$UX4.41725@news.goodnet.com>
Source record: 171782

I'm looking for input on the MFJ-1750 2m 5/8-wave groundplane antenna. I'm looking for something inexpensive that has a little bit of gain for use in my attic. This antenna, at $19.95, looks like it should fit the bill. Any input from anybody who may have purchased one?

Tnx & 73, Michael N9BDF

1659. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 23:46:30 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6A2356.232B6179@oio.net>
Source record: 171783

Steve,
If your talking about an 'all-band' antenna, I wouldn't
worry too much about trying to make it resonant on other
than the lowest band you plan to use. Now, that takes for
granted that you use the 'Matchbox' and the doublet on all
bands, or at least the bands the 'Matchbox' will cover.
Most verticals, no matter what/how they advertise them,
do require a good ground. If you can provide a good ground,
a vertical will work well (as well as any vertical!?).
Good luck with it...
'Doc

1660. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 23:46:40 UTC
From: Rod Marsh <rredbeak2@dingoblue.net.au>
Message-ID: <3a6a2360$0$15483$7f31c96c@news01.syd.optusnet.com.au>
Source record: 171784

Your in a situation that so many other hams have struggled with for
countless years Steve.
The simple facts are that physical length [proportionate to wavelength] is a
far better radiator than electrical length [loading coils etc] so you're on
the RIGHT track.Your half wave [80m] fed with ladder line via a tuner is THE
most simplest and EASIEST to use of all antennas because of its harmonic
relationship to all other HF bands.
NOW, having said that,HF physical length can be monsterous as you're well
aware of.what you've already done by mounting it as high as you can etc etc
then bending it to fit is what most of us are at now,add to that the city
restrictions and you've compounded the issue.
Ive found that providing the "legs" are not closer that 60' AND are at least
6' off the ground it should work reasonably well [i fed mine with 300 ohm tv
ribbon] .
Another wire job i love is the long wire.my back yard is "LONG ENOUGH" for a
1/4 at 80m 66' etc and i gets out well.

May i suggest you've not done anything wrong but more to the point you
merely have not discoverred the BEST option for your location.
We ALL know "get it high" etc but its not practical sometimes.
Hope you solve it mate,GOD BLESS,Rod VK4XI

"motorhomer" <motorhomer@my-deja.com> wrote in message
news:94d3kg$808$1@nnrp1.deja.com...
> I currently use a 136' doublet fed with 450 ohm ladder line and an old
> Johnson Kilowatt Matchbox to tune it. It is only up about 25' at the
> feed point (my chimney) and it slopes down from there to within 6 feet
> of ground in some places. It also is bent back on itself in a few places
> beause it follows the contours of the house and yard. In no area is it
> really out in the clear. I am not very pleased with the antenna, it
> seems to be about 50db down from others in my geographical area on
> receive. I do have an amplifier that helps transmitted power but TVI is
> also a problem. I tried a Gap Titan but it was about equal to the
> doublet. I recently got a MFJ259B Analyzer and thought that I would try
> pruning the antenna but I wonder what others think that have been in
> this situation. What is more important, a higher antenna or an antenna
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> frowns on antennas (CCR's) so whatever I do I must be sly. Thanks for
> any help/tips.
>
> Steve
> K9SL
>
>

> Sent via Deja.com
> http://www.deja.com/

1661. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-20 23:49:59 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6A2427.57FC69D4@oio.net>
Source record: 171785

Mark Keith wrote:
>

>
> I was thinking of something else...Isn't a screwdriver wound on a form
> of some type? W@hat do they use? Ceramic or pvc? MK
> --
> http://web.wt.net/~nm5k

They probably use a phenolic composition of some kind.
'Doc

1662. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 00:47:52 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6A31B8.897F98E9@dvol.com>
Source record: 171786

John P Franklin wrote:

>
> This made me laugh quite alot... good one Rick! I too like QRP...I love my
> FT-817!

>
Hot button here. Is the 817 actually a decent radio? I don't care about the
transmitting side or how cool the carrying pouches are or the battery life, I
care about the HF receiver performance. Front end dynamic range, intermod,
crossmod, sensitivity, cw filter characteristics, internal noise, glitches, the
usual. Comments on the technical performance in receive vs.other HF xcvrs
you're familiar with?
>
>
w3rv

1663. Re: MFJ-1750 2m 5/8-wave groundplane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 01:17:55 UTC
From: kg4ggx@aol.com
Message-ID: <20010120201755.25815.00000475@ng-fd1.aol.com>
Source record: 171787

Hi Michael
I had one of these up at 35 feet.I was able to work repeaters 35 to 45 miles away on 50 watts, and sometimes 10 or 25 watts.I also worked simplex with a friend about 40 miles away.Note also that my elevation is not that good compared to the surrounding area.I replaced the 5/8 ground plane with a Diamond CP-22E, a 2 5/8s colinear at the same location, on the same 35 feet of mast.There was an improvement, but not that much.Considering that the ground plane was $25, and the CP-22E was $69.95, I would say the MFJ 5/8 wave did very good.I still have it, and if something happens to the Diamond I 'll put the MFJ back up and forget it.It's small light and easy to get up.Good omni antenna for 2m.If you need more look at a beam.Thats my experience, and 2cents worth.Good luck with whatever you choose.
73 Rob

1664. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 01:34:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A6A3C8D.80906234@eznec.com>
Source record: 171788

I'm surprised that a PVC covering would make a significant difference. Tom, W8JI, has pointed out that on the lower bands at least, ground loss is generally so much greater than inductor loss that it would take a pretty poor inductor to hurt things noticeably. But even at that, I wouldn't expect a PVC covering to lower the Q much, unless the Q is exceptionally high to begin with. It's certainly better than no covering at all -- I'll bet that one drop of water between two turns lowers the inductor Q a whole lot more than any PVC covering.

The 75m shootout sounds like a great way to collect data. I wonder if you could furnish a little more information. For example, has anyone with a solid copper antenna ever won a shootout? How about a silver plated one? One with a gold plated inductor? If not, I assume these are also low efficiency antennas that should be avoided?

Roy Lewallen, W7EL

Cecil wrote:
>
> 'Doc wrote:
> >
> > Cecil wrote:
> > > Air core is less lossy.
> >
> > Probably, but do you really think it's going
> > to make that much difference?
>
> To the best of my knowledge, no one using PVC pipe for the coil
> form has ever won a 75m shootout.
> --
> http://www.mindspring.com/~w6rca

1665. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 01:43:31 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <1kfk6toic1pccgs7bj46do098uqlvd02c3@4ax.com>
Source record: 171789

On Sat, 20 Jan 2001 09:42:56 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

>To the best of my knowledge, no one using PVC pipe for the coil
>form has ever won a 75m shootout.

Not trying to change the subject, but is there a schedule of shootouts available anywhere? Main interest is So Calif area.

Thanks,

Bill, W7TI

1666. Re: Standoffs for Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 01:48:10 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <bqfk6t0sj3f4rh634to61hqm0j8mmbcpmi@4ax.com>
Source record: 171790

On Sat, 20 Jan 2001 03:17:21 GMT, jflanders2@home.com (Jerry Flanders) wrote:

>I just ran some ladder line about a hundred feet through some pine
>trees here.

Guys, please be careful running ladder line through trees or anything combustible, especially with a high SWR. I had some ladder line arc to a metal object just outside my window one night and it was a sight to behold. Had it been in a tree... well, use your imagination. Trees are conductive and flammable.

A word to the wise.

Bill, W7TI

1667. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 01:53:15 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <b5gk6ts5698b732tab63slmjt0scm8jgcd@4ax.com>
Source record: 171791

On Sat, 20 Jan 2001 06:42:47 -0500, Bruce Muscolino <w6toy@erols.com> wrote:

>QRP is not worse, it does require more attention to detail or you will
>be talking to yourself!

On the other hand, screw up QRO and you'll be talking to LOTS of people. Been there, done that. :-)

Bill, W7TI

1668. Re: 2:1 SWR on Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 02:12:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94dgj2$d7c$0@208.207.71.139>
Source record: 171792

Billy Young wrote:
>
> Recently I built a dipole tuned at 3.953 . It's 120' or 60 feet on each
> side. I haven't been able to get my SWR no lower that 2:1 at best regardless
> of what I tried. It's suspended from at tree at one about 30' high and from
> the other end about 30 on a push up pole. I have nylon string that places
> it about 20' for either end with homemade PVC insulators. I'm not receiving
> well with it either. Does any one have any suggestions what the problem
> might be for my first homebrew antenna?

If you used the standard formula for a halfwave dipole and cut it to
that length, it will resonant substantially lower in frequency when
mounted close to the ground, since the standard formula is for a
halfwave dipole in free space.
Try checking it about 200 kc lower in frequency and see what the SWR
is. It should be lower. If it comes in lower, you will need to prune
some off the ends and try again, the old "cut and try" syndrome.
If it is not, I'd be looking the feedline and your coax connectors over
real close, that receive problem is usually caused by a connector/coax
problem rather than the antenna. PL259 connector installation gives lots
of problems as a single strand the braid can easily short it internally
if proper care isn't given. That antenna should receive well closer to
the ground than that.

Dick W0EX

1669. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 02:37:58 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6A4B86.DDE5D557@dvol.com>
Source record: 171793
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

K0HB wrote:

> N0MHS writes:
>
> > The rapidly-expanding Family Radio Service has exposed
> > millions of young people to the world of radio communications.
> > But now, where is a you kid to go who has is interested in
> > experimenting with radios....... clip.
>
> OK, rather than a bunch of old geezers sitting around casting
> cold water on Stewarts idea, let's look at it from the view
> of the intended market.
>
> Dick and Jane, 14 years old, have "had it" with the
> limitations of the FRS and now are "interested in experimenting
> with radios". They've heard of something called "ham radio"
> and are investigating the entry classes.
>
> Jane says "Here's something called the Technician class. You
> have to take a simple 35-question test."
>
> Dick says "Here's something called the Colt class. You have
> to take a simple 25-question test from the same pool."
>
> Dick and Jane decide to investigate further, to see what
> difference the 10 additional simple questions make.
>
> Dick says "Colt gives you six simplex voice/digital channels
> on 446, and another six simplex voice/digital channels on
> 223MHz. You can even build a simple little repeater between
> them, as long as input and output are not on the same band."
>
> Jane says "Technician gives you 22,243 Megahertz of spectrum
> on 16 bands between 50MHz and 250GHz. Holy Cow, Dick, that's
> millions and millions of frequencies instead of just 12."
>
> Dick says "With a Colt license you can transmit 5 watts of
> power. That's a lot better than FRS!"
>
> Jane says "5 watts is for sissies. With Technician we can
> transmit 1,500 watts of power!"
>
> Dick says "Yes, but the Colt radios are cheap."

>
> Jane says "Sure, but there are lots and lots of used radios
> around for Technicians, even cheaper, and your Colt radio
> will be basicly useless if you upgrade."
>
> Dick says "Hey, but I could put my Colt antenna 20 feet above the
> house if I want."
>
> Jane says "Big deal, Technicians have no arbitrary height limit
> like that; they can go as high as zoning laws allow, and even
> higher with conditional use permits."
>
> Dick says "The Colt license will be a lot of other kids just
> like me."
>
> Jane says "I thought we were sick of kid stuff, and wanted to
> experiment. The Technician license lets us talk to kids and
> doctors and lawyers and indian chiefs and satelites and
> astronauts and W1RFI even."
>
> Dick says "Colts can use both voice and digital modes."
>
> Jane says "Hey, with only 10 more simple questions the Technicians
> are allowed all of that, and other neat stuff like SSTV, FSTV,
> telecommand, and space communications."
>
> Dick says "Jane, you are right. This Colt thing is really lame.
> I always said you were smarter than me. I could just kiss you."
>
> Jane says "Dick, only after you pass your Technician License
> test, and keep your clammy paws off my double bazooka antenna."
>
> 73, de Hans, K0HB

>
Beautiful.
>
w3rv

1670. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 02:49:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94din0huq0@208.207.71.139>
Source record: 171794

There are some split-core ferrites in plastic cages out there that will snap over the cables, Rat Shack carries a small RG58 size version, like Roy say, a bit pricey. I've seen a half inch version that will work on RG-8 size coax or other cables at hamfests several times offered new by vendors for $2 per, the latest was last weekend at the Springfield, MO Winterfest.

Dick W0EX

Roy Lewallen wrote:

> When you find
> a radiator, wind its cable through a ferrite toroid with 5 - 10 turns if
> possible. This will give as much impedance as about 25 - 100 clip on
> cores.

>
Are there cores out there which are big enough to pass the large flavor
of printer
cable connectors??
>
w3rv

1671. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 03:08:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6A529D.354624B@IEEE.org>
Source record: 171796

Roy Lewallen wrote:
> For example, has anyone
> with a solid copper antenna ever won a shootout?

Wrapping a solid copper wire around my stainless steel whip raised
my signal by about 0.3dB. The guy who won the El Paso hamfest
shootout two years ago used a two inch copper pipe for his antenna.

> How about a silver
> plated one? One with a gold plated inductor?

Only other data point is a stainless steel coil didn't do very well.
--
http://www.mindspring.com/~w6rca

1672. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 03:11:59 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94dk1vkku0@208.207.71.139>
Source record: 171795

Do a Dejanews search for B&W Terminated Folded Dipole or T2FD and you'll find everything you ever wanted to know.They have been rehashed several times here.

Dick

GaryH wrote:
>
> Does anyone have experience with the B&W HF
> wire antennas the work all of the amatuer bands
> without a tuner.
>
> How do these antennas perform?
>
> Thanks

1673. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 03:20:42 UTC
From: CitySlicker <not_enuf_time@foolscorner.net>
Message-ID: <94dkia$61a@dispatch.concentric.net>
Source record: 171797
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

Well you guys insist on cross posting your BS to this NG. I asked more than once to end it I am tired of wading through your nonsense to read what I come here for.

"Richard McCollum" <rmccoll@radiks.net> wrote in message news:YVoa6.2453$ed.2021008@nntp2.onemain.com...
>
> "CitySlicker" attempted to dump 3/4 megabits into my mail server.
>
> Nothing that is said on any newsgripe in Usenet is worth 750 KB
>
> Killfiled for arrogance beyond belief.
>
>

1674. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 03:24:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6A5662.106B5865@IEEE.org>
Source record: 171798
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

CitySlicker wrote:
> Well you guys insist on cross posting your BS to this NG. I asked more than
> once to end it I am tired of wading through your nonsense to read what I
> come here for.

Your objection will only cause people who enjoy getting goats to
just try even harder to get yours. Why not just use your newsreader
kill file feature like I do? There is no way you or I can stop
others from crossposting.
--
http://www.mindspring.com/~w6rca

1675. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 04:37:20 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <uopk6t05cfk9e8ereacd33m8b719erhg88@4ax.com>
Source record: 171799
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

On 21 Jan 2001 03:20:42 GMT, "CitySlicker" <not_enuf_time@foolscorner.net>
wrote:

>Well you guys insist on cross posting your BS to this NG. I asked more than
>once to end it I am tired of wading through your nonsense to read what I
>come here for.

_____

Does the word "killfile" have any meaning to you? I too get tired of reading
posts complaining about posts. Consider yourself killfiled.

Bill, W7TI

1676. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 05:11:01 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g7hq1h0.pminews@ca.news.verio.net>
Source record: 171800
Cross-posted to: alt.radio.family,rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.cb

On 21 Jan 2001 03:20:42 GMT, CitySlicker wrote:

>Well you guys insist on cross posting your BS to this NG. I asked more than
>once to end it I am tired of wading through your nonsense to read what I
>come here for.

Which group is "this NG"? I see your message cross-posted
into FOUR groups. Look at your headers and tell us which ones
to not find you in.

--
73 de Phil Kane - K2ASP

1677. Re: QUESTION: 18-foot wire vs. 20m Hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 05:28:52 UTC
From: kh2d@my-deja.com
Message-ID: <3a6a736d.42457907@news.guam.net>
Source record: 171801
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx

On 20 Jan 2001 22:11:32 GMT, Bill Nelson <billn@spock.peak.org> wrote:

>In rec.radio.amateur.antenna Cecil <Cecil.A.Moore@ieee.org> wrote:
>: Bill Nelson wrote:
>:> The match of the rig to the transmission line is immaterial.
>
>: Not to the rig. :-)
>
>Of course not. But the discussion was about VSWR, not about coupling power
>into the coax.

That's what we do over here in the DX newsgroup, we couple
LOTS of power into the coax.....

73, Jim KH2D

1678. Re: Any experience w/ the Diamond CP-6 ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 10:32:01 UTC
From: M0CQL <andrew.young5@ntlworld.com>
Message-ID: <eWya6.7940$vH6.120744@news6-win.server.ntlworld.com>
Source record: 171802

I use the diamond Cp-5 and i found it is a excellent antenna on 10m 15m and 20m .... its not so good on 40 or 80 though but for me its a compromise as i have not alot of garden space. SM7VGI uses the cp-6 send him a e mail and ask him what he thinks of it !

ANDY

M0CQL

Richard wrote in message ...
>Looking for user comments on the Diamond CP-6 Multiband vertical.
>
>Thanks, 73
>Richard
>W7YES
>
>

1679. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 10:57:54 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a6ac0b5_1@news.cybertours.com>
Source record: 171803

<jason_hsu@my-deja.com> wrote in message news:94733e$9ln$1@nnrp1.deja.com...
> Exactly what is a half wavelength vertical antenna? What is the general
> configuration? Why doesn't it need a ground plane or radials? What does
> its radiation pattern look like?
>
> Is a half wavelength vertical simply an end-fed dipole? Or a dipole
> configured vertically instead of horizontally? Or both?
>
> I know from recent experience that a half wavelength vertical is not
> simply an enlarged version of a vertical monopole antenna. My 18-foot
> wire monopole antenna performed about as well as a 20m Hamstick (and
> even tuned better) on 20m. I couldn't get this wire to tune at all on
> 10m. (I have heard that a random wire antenna should be close to an odd
> multiple of 1/4 of a wavelength.)
>
> --
> Jason Hsu, AG4DG

Hi Jason,
Here's a nice page that deals with some of the practical aspects of 1/2 wave Verticals. http://www.geocities.com/aa5tb/efha.html

But to answer your question a half wave vertical is nothing more than a 1/2 wave long radiator mounted vertically.. It's a good general purpose antenna.. but not much better than a Quaterwave with a good ground.. Thought it is claimed that 1/2 wave verticals do not need a ground.. that really depends on how close to ground it's mounted.. just because the antenna is resonante does not mean that ground losses in the near feild do not detract from it ability to make contacts.

The old adage is still very true.. H.C.L. (High, Clear and Long) the high you can mount most any antenna the better. The more in the Clear of other objects the Better , and generally the Longer you can make a Horizontal wire the better. (this last one does not hold true for verticals.)
Long veritcal wire say much over 5/8th wave- begin to develope high angle radiation which is pretty much usless for working dx .

73 Dave kc1di

1680. Best Price for Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 11:13:08 UTC
From: kbucher@access.mountain.net
Message-ID: <3a6ac444_1@News.Mountain.Net>
Source record: 171804

I'm going to be putting up an antenna when the weather clears, and I'd be interested in where any of you have found the best price for either Belden RG8/U or 9913. The ham radio dealers seem to be quite expensive.

Keith

1681. Re: Anyone used B&W HF wire Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 12:26:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94ekhc$5u1$1@neptunium.btinternet.com>
Source record: 171805

> GaryH wrote:
> >
> > Does anyone have experience with the B&W HF
> > wire antennas the work all of the amatuer bands
> > without a tuner.
> >
> > How do these antennas perform?
==========

LET PROGRAM VARNEY STOP THE ARGUMENTS !

To numerically compare the radiating efficiency of any dipole with any other dipole, of any length, fed with or without: tuner + coax of any length + balun + openwire of any length, of any Zo, of any wire diameter, at any height, at any frequency.

Program also provides the long sought-after resonant frequencies and feedline SWR's of any dipole - including the world-famous or infamous G5RV.

Will also provide you with L and C component settings of an L-network tuner to match input Z of feedline to 50 ohms.

Download in just a few seconds program VARNEY.exe from the website below.
Not zipped up. Run immediately

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

1682. Re: Best Price for Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 14:14:28 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <94eqqr$76n$1@slb7.atl.mindspring.net>
Source record: 171806

Keith --

You shouldn't be using either. RG-213 is a better
version of RG-8. LMR-400 is equivalent to
9913 and does not suffer from the 9913's moisture
problems.

My favorite dealer is:
http://www.davisrf.com

Be sure to read the information on non-contaminating
jackets.

Tom Wagner - N1MM
Check out the N1MM Free Contest Logger at
http://tomwagner.home.mindspring.com/n1mm.htm

<kbucher@access.mountain.net> wrote in message
news:3a6ac444_1@News.Mountain.Net...
> I'm going to be putting up an antenna when the weather clears, and
> I'd be interested in where any of you have found the best price for
> either Belden RG8/U or 9913. The ham radio dealers seem to be quite
> expensive.
>
>
>
> Keith
>

1683. FS:Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 15:30:52 UTC
From: Mark's Mail <mark@ciainc.com>
Message-ID: <NeDa6.7824$d25.47862@newsfeed.slurp.net>
Source record: 171807

FOR SALE BY STEVE, N1IBC
80' Rohn SSV series, free standing, galvanized tower.
It consists of the following sections from
bottom to top:
Section 1: N6 This section measures 4'6" across the face, at the base.
Section 2: N5
Section 3: N4
Section 4: N3 This section measures 22" across the face, at the base.

This tower is in 20' sections and is in great shape and very rugged. It
also includes a side bracket to mount an antenna on the side of the
tower,
and hardware. $1400.00. obo
For more info call Steve at 1-508-677-9005. or e-mail n1ibc@netzero.net

1684. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 16:05:41 UTC
From: horseshoestew@my-deja.com
Message-ID: <94f1cikbj1@nnrp1.deja.com>
Source record: 171808
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

In article <t28a6.2182$E52.635055@news.uswest.net>,
"Keith McQueen" <kb7m@arrl.net> wrote:
> For once a constructive suggestion! My 11 year old has asked me
several
> times if I can find a ham radio technician text that is geared for
young
> people. So far I haven't found anything. Anybody for getting
something
> like this together? It doesn't need to talk down to the kids. Kids
are
> bright and intelligent and can understand amazing things. But it HAS
to be
> made interesting to THEM. If you could disguise it in a Nintendo
game it
> would work even better. If it were available for download for a free
or
> minimal cost so much the better. Now THAT would be a contribution!

I totally agree. Don't take the negative feedback here as what the
general ham population, or the FCC really wants. Remember - most of
these folks were against lowering the CW requirements. They are still
in the "block all change' mode.

------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1685. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 16:18:15 UTC
From: klocko@toad.net
Message-ID: <94f243kqm1@nnrp1.deja.com>
Source record: 171810

In article <94d3kg$808$1@nnrp1.deja.com>,
motorhomer <motorhomer@my-deja.com> wrote:
> I currently use a 136' doublet fed with 450 ohm ladder line and an old
> Johnson Kilowatt Matchbox to tune it. It is only up about 25' at the
> feed point (my chimney) and it slopes down from there to within 6 feet
> of ground in some places. It also is bent back on itself in a few
places
> beause it follows the contours of the house and yard. In no area is it
> really out in the clear. I am not very pleased with the antenna, it
> seems to be about 50db down from others in my geographical area on
> receive. I do have an amplifier that helps transmitted power but TVI
is
> also a problem. I tried a Gap Titan but it was about equal to the
> doublet. I recently got a MFJ259B Analyzer and thought that I would
try
> pruning the antenna but I wonder what others think that have been in
> this situation. What is more important, a higher antenna or an antenna
> in the clear? Does it make more sense to have a shorter antenna if you
> can get it higher or more in the clear? I live in a city area that
> frowns on antennas (CCR's) so whatever I do I must be sly. Thanks for
> any help/tips.

Steve,
I don't know how you determined your system is 50 dB worse than others,
but that is one helluva lot, and probably not due to the antenna alone.
Try the Gap Titan with a different radio, a different transmission line,
and without the tuner, just to make sure those aren't the problem. It
also could be an external noise source. Check the posts submitted by
VE3TMT who identified noise sources in his house. A noise source could
also be outside your house, on a power line for example. Good luck.
Bill N3WK

Sent via Deja.com
http://www.deja.com/

1686. Re: Help with FT-50 Power,out of band!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 16:19:12 UTC
From: Randy Belcher <psg4u@bellsouth.net>
Message-ID: <J2Ea6.153$go3.14708@news3.atl>
Source record: 171809
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

But that's only IF you can hear the harmful interference over all the paging
tx'ers going bad..... :) I was under the assumption that the FT-50
deviation was the same as my Visars, which I use on FRS almost every day.
what gives?
thanks!
Randy

Bill Smith <bs@BSartist.com> wrote in message
news:AsN96.1641$Mu1.92444@bgtnsc06-news.ops.worldnet.att.net...
> There may be times when using a radio out of its "type accepted" band is
> probably not all that offensive in spirit or practice even if technically
> against the letter of the law. (e.g. marine use where no harmful
> interference is involved). But using the FT-50 for FRS is not one of those
> times.
>
> The deviation of the FT-50 is wider than that of the FRS radios. So when
> using the FT-50 on that band, you are not only transmitting at higher
power
> than the FRS, but run the risk of splattering onto adjacent channels
> creating harmful interference.
>
> Bill

1687. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 16:28:33 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <94f2nb$l8h$1@nnrp1.deja.com>
Source record: 171813

I use the antenna for all bands 80-10Meters. When I say 50 db down I was thinking about 20 and 15 meters primarily. I am about 50 db down on these bands
compared to others in my area. Maybe my meter is incorrect. I will be listening
to a QSO and the person in my area will give the other operator a 30 over
report and I will only receive him with a S6 or so. I know that the antenna will
not play like the beams on towers which is probably what I am comparing it to. I
am just looking for more ideas on how to get a better signal in and out.

Thanks for any info

Steve K9SL

Sent via Deja.com
http://www.deja.com/

1688. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 16:38:33 UTC
From: k1bqt@aol.com
Message-ID: <20010121113833.06201.00000559@ng-ff1.aol.com>
Source record: 171812

Hi Bill--

As one well-known antenna guru profered recently in the pages of QST, transmitting weaker signals seriously detracts from one's psychological ability to enjoy ham radio. To prove it, the author presented copius statistics and graphic evidence to support his claim.

Needless to say, I was profoundly shattered by this finding (but, if Dean Straw approved the manuscript and the League published it, it HAD to be a fact)!

As a consequence, I immediately returned my coveted QRP Hall of Fame plaque to ARCI along with a sharply worded letter critical of their efforts to mislead so many with bogus claims that QRP might be fun and have merrit! Moreover, in keeping with the spirit of this newgroup, I initiated a $20-million dollar civil suit against QRP ARCI for psychological damages! Using the irrefutable data and statistical evidence presented in the QST article (and with full support from the League's legal team), I won my case easily!

With my share of the proceeds (about 4% after legal fees and taxes), I bought new antennas and coax, had a 200-Amp entrance installed, bought several Henry 4Ks off E-Bay, and built a water-cooled power combiner.

The rest is history. Currently, I have the smug satisfaction of knowing I can work whoever I want whenever I want--and blow off anyone with 20 kHz who tries to bother me. Need I add that my psycholgical self-esteem is flying high and I literally radiate self confidence! Special thanks to QST for empowering me to restore my mental health!

Rick K1BQT

1689. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:02:40 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A6B162F.A22FF5B5@zylay.com>
Source record: 171814
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

horseshoestew@my-deja.com wrote:

> In article <t28a6.2182$E52.635055@news.uswest.net>,
> "Keith McQueen" <kb7m@arrl.net> wrote:
> > For once a constructive suggestion! My 11 year old has asked me
> several
> > times if I can find a ham radio technician text that is geared for
> young
> > people. So far I haven't found anything. Anybody for getting
> something
> > like this together? It doesn't need to talk down to the kids. Kids
> are
> > bright and intelligent and can understand amazing things. But it HAS
> to be
> > made interesting to THEM. If you could disguise it in a Nintendo
> game it
> > would work even better. If it were available for download for a free
> or
> > minimal cost so much the better. Now THAT would be a contribution!
>
> I totally agree. Don't take the negative feedback here as what the
> general ham population, or the FCC really wants. Remember - most of
> these folks were against lowering the CW requirements. They are still
> in the "block all change' mode.

I personally agree with holding on to the traditions. Instead of lowering the requirements to make it easier to get in, we should be making better study materials to make it easier to learn. No sense dumbing down. I'd love to write something like this myself, but just don't feel like I could doa good enough job on it to do itthe justice that it deserves.

1690. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:12:27 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94f59r$k6h@dispatch.concentric.net>
Source record: 171815
Cross-posted to: alt.radio.family,rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.cb

The CB group!!! Which of all the groups listed would be the least interested
in this sort of post. I see that someone is continuing to cross post.
Amazing how dumb a person can be when there aren't multiple choice answers.

"Phil Kane" <Phil.Kane@nospam.spam> wrote in message
news:cuvyxnansvbet.g7hq1h0.pminews@ca.news.verio.net...
> On 21 Jan 2001 03:20:42 GMT, CitySlicker wrote:
>
> >Well you guys insist on cross posting your BS to this NG. I asked more
than
> >once to end it I am tired of wading through your nonsense to read what I
> >come here for.
>
> Which group is "this NG"? I see your message cross-posted
> into FOUR groups. Look at your headers and tell us which ones
> to not find you in.
>
> --
> 73 de Phil Kane - K2ASP
>
>
>

1691. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:13:49 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94f5cd$jub@dispatch.concentric.net>
Source record: 171816
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

Well I can tell by your sig that I won't be losing any sleep. Hard to
killfile when it comes from so many forums.

"Bill, W7TI" <w7ti@jps.net> wrote in message
news:uopk6t05cfk9e8ereacd33m8b719erhg88@4ax.com...
> On 21 Jan 2001 03:20:42 GMT, "CitySlicker" <not_enuf_time@foolscorner.net>
> wrote:
>
> >Well you guys insist on cross posting your BS to this NG. I asked more
than
> >once to end it I am tired of wading through your nonsense to read what I
> >come here for.
>
> ____
>
> Does the word "killfile" have any meaning to you? I too get tired of
reading
> posts complaining about posts. Consider yourself killfiled.
>
> Bill, W7TI

1692. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:18:30 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94f5l6$itu@dispatch.concentric.net>
Source record: 171817
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

Please, continuing to cross post this thread will only cause problems for
the many non concerned participants in these forums.
Address your response to the proper NG. Thank you
"Gene" <webmaster@zylay.com> wrote in message
news:3A6B162F.A22FF5B5@zylay.com...
> horseshoestew@my-deja.com wrote:
>
> > In article <t28a6.2182$E52.635055@news.uswest.net>,
> > "Keith McQueen" <kb7m@arrl.net> wrote:
> > > For once a constructive suggestion! My 11 year old has asked me
> > several
> > > times if I can find a ham radio technician text that is geared for
> > young
> > > people. So far I haven't found anything. Anybody for getting
> > something
> > > like this together? It doesn't need to talk down to the kids. Kids
> > are
> > > bright and intelligent and can understand amazing things. But it HAS
> > to be
> > > made interesting to THEM. If you could disguise it in a Nintendo
> > game it
> > > would work even better. If it were available for download for a free
> > or
> > > minimal cost so much the better. Now THAT would be a contribution!
> >
> > I totally agree. Don't take the negative feedback here as what the
> > general ham population, or the FCC really wants. Remember - most of
> > these folks were against lowering the CW requirements. They are still
> > in the "block all change' mode.
>
> I personally agree with holding on to the traditions. Instead of lowering
> the requirements to make it easier to get in, we should be making better
> study materials to make it easier to learn. No sense dumbing down. I'd
love
> to write something like this myself, but just don't feel like I could doa
> good enough job on it to do itthe justice that it deserves.
>
>

1693. FS: dual roller inductors

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:26:46 UTC
From: k9sqg@aol.com
Message-ID: <20010121122646.15621.00000615@ng-bd1.aol.com>
Source record: 171818

Have an assembly that consists of two roller inductors, perfect for a double balanced tuner. While an individual coil might not handle legal limit, the fact that these are in a high impedance circuit means that they don't have to handle as much current. How much they could handle, I'm not sure. The RF parts are silver plated, no burns or arcs, the coil forms are ceramic, and the frame and gears are bakelite I believe, so there is no stray capacity to worry about. If you need more info as to sizes, number of turns in the coils, etc. feel free to email me.

Thanks for reading the posting.

73s,

Evan

1694. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:39:55 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A6B1EEB.784512F6@mwci.net>
Source record: 171669

Rick Littlefield wrote:

> As one well-known antenna guru profered recently in the pages of QST,
> transmitting weaker signals seriously detracts from one's psychological ability
> to enjoy ham radio.

There is a point here, at least for me. QRP is vy fb OM. In years long past while single and living in rented room environments I had 10 W and 20 W xmtrs with makeshift dipoles, etc.

It was OK for a while, but I found it rather tiresome and frustrating at some point.

Since then I have had no interest in QRP. It's strictly a personal thing. These days QRO is sort of politically incorrect, in some circles. I couldn't care less about that. I like my four Svetlana 811A tubes glowing slightly red. Often I run barefoot 100 W.

If I were more dedicated to operating, I could hunker down and sweat it out like a true QRP guy, I suppose. That is not my kind of game.

Bill W0IYH

1695. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 17:47:16 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A6B20A4.778FEC38@zylay.com>
Source record: 171670
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

Sorry, I wasn't aware that it was cross-posted. as I'm not subscribed to the other groups.

City_Slicker wrote:

> Please, continuing to cross post this thread will only cause problems for
> the many non concerned participants in these forums.
> Address your response to the proper NG. Thank you
> "Gene" <webmaster@zylay.com> wrote in message
> news:3A6B162F.A22FF5B5@zylay.com...
> > horseshoestew@my-deja.com wrote:
> >
> > > In article <t28a6.2182$E52.635055@news.uswest.net>,
> > > "Keith McQueen" <kb7m@arrl.net> wrote:
> > > > For once a constructive suggestion! My 11 year old has asked me
> > > several
> > > > times if I can find a ham radio technician text that is geared for
> > > young
> > > > people. So far I haven't found anything. Anybody for getting
> > > something
> > > > like this together? It doesn't need to talk down to the kids. Kids
> > > are
> > > > bright and intelligent and can understand amazing things. But it HAS
> > > to be
> > > > made interesting to THEM. If you could disguise it in a Nintendo
> > > game it
> > > > would work even better. If it were available for download for a free
> > > or
> > > > minimal cost so much the better. Now THAT would be a contribution!
> > >
> > > I totally agree. Don't take the negative feedback here as what the
> > > general ham population, or the FCC really wants. Remember - most of
> > > these folks were against lowering the CW requirements. They are still
> > > in the "block all change' mode.
> >
> > I personally agree with holding on to the traditions. Instead of lowering
> > the requirements to make it easier to get in, we should be making better
> > study materials to make it easier to learn. No sense dumbing down. I'd
> love
> > to write something like this myself, but just don't feel like I could doa
> > good enough job on it to do itthe justice that it deserves.
> >
> >

1696. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 18:05:04 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6B24D0.EC939FA5@IEEE.org>
Source record: 171672
Cross-posted to: alt.radio.family,rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.cb

City_Slicker wrote:
> The CB group!!! Which of all the groups listed would be the least interested
> in this sort of post. I see that someone is continuing to cross post.
> Amazing how dumb a person can be when there aren't multiple choice answers.

My newsreader doesn't automatically display to which groups my postings
are going. I have to spend time looking for them.
--
http://www.mindspring.com/~w6rca

1697. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 18:06:28 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6B2524.2B39@wt.net>
Source record: 171671

Roy Lewallen wrote:
>
> I'm surprised that a PVC covering would make a significant difference.
> Tom, W8JI, has pointed out that on the lower bands at least, ground loss
> is generally so much greater than inductor loss that it would take a
> pretty poor inductor to hurt things noticeably. But even at that, I
> wouldn't expect a PVC covering to lower the Q much, unless the Q is
> exceptionally high to begin with. It's certainly better than no covering
> at all -- I'll bet that one drop of water between two turns lowers the
> inductor Q a whole lot more than any PVC covering.
>

On my coils I use the PVC as a form rather than a covering. I cover them
with vinyl tape usually to keep water out. Maybe thats why I haven't
seen the problems they speak of. My coils look kinda like a section of a
hamstick except 2-3 inches dia. when viewed from the outside. MK
--
http://web.wt.net/~nm5k

1698. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 18:09:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6B25E4.E715CB4B@IEEE.org>
Source record: 171673

Roy Lewallen wrote:
> I'll bet that one drop of water between two turns lowers the
> inductor Q a whole lot more than any PVC covering.

The PVC pipe is the internal support for the coil which is still
exposed. I'll bet a drop of water clings to PVC better than
to empty air. :-) Bugs smash against the PVC and just stay
there shorting turns while the wind is likely to blow away
small bugs hitting an air-core bugcatcher coil.
--
http://www.mindspring.com/~w6rca

1699. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 18:21:55 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6B28C3.3108@wt.net>
Source record: 171674

motorhomer wrote:
>
> I use the antenna for all bands 80-10Meters. When I say 50 db down I was
> thinking about 20 and 15 meters primarily. I am about 50 db down on
> these bands
> compared to others in my area. Maybe my meter is incorrect. I will
> be listening
> to a QSO and the person in my area will give the other operator a
> 30 over
> report and I will only receive him with a S6 or so. I know that the
> antenna will
> not play like the beams on towers which is probably what I am
> comparing it to. I
> am just looking for more ideas on how to get a better signal in and
> out.
>
> Thanks for any info
>
> Steve K9SL

Sounds like it's acting as a high angle radiator on the high bands. I noticed this problem using a LL fed 80 m dipole camping one time. I tried the antenna on 10m and it was the pits. I think you are seeing about the same problem. Can you string up a 2nd 20 meter dipole somewhere? I bet you would see a big difference on 20m using a 1/2 wl compared to the 80m dipole. On 10m , as far as I'm concerned a good elevated vertical is the best way to go if you can't use a beam. I've never really liked dipoles on that band too much. With the vertical on 10m, your local coverage will be much better, and dx good too without wasting power at high angles. A cb antenna will work fine. I use a homebrew 1/2 wl vertical here at the moment for 10m. It's only 20 ft up, and does ok. BTW, if you did put up a 2nd 20m dipole, if you also fed it with LL,it would work ok on 15-12-10m. I bet better than the 80m antenna. Actually a 30m dipole fed with LL will do a good job on all the high bands. Would be a EDZ on 12m. Has a bit of gain. A 20m dipole about the same, except on 10m, you would have two half waves in phase. MK
http://web.wt.net/~nm5k

1700. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 18:36:59 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6B2C4B.BC192024@dvol.com>
Source record: 171675

Dick Carroll wrote:

> There are some split-core ferrites in plastic cages out there that will
> snap over the cables, Rat Shack carries a small RG58 size version, like
> Roy say, a bit pricey. I've seen a half inch version that will work on
> RG-8 size coax or other cables at hamfests several times offered new by
> vendors for $2 per, the latest was last weekend at the Springfield, MO
> Winterfest.
>
> Dick W0EX

>
Roy got me cranked up on this whole scene and I plowed the Web for sources. I refuse to do Radio Slack unless I'm in the most dire of circumstances. Looks like the mother lode is:
>
http://bytemark.com/amidon/
>
Might not be flea market pricing but when ya have no time to screw around with nickels and dimes Amidon looks good to me, helluva huge selection and they know what's up.
>
w3rv

1701. Re: Enough already

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 19:22:30 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94fctm$iac@dispatch.concentric.net>
Source record: 171676
Cross-posted to: alt.radio.family,rec.radio.amateur.antenna,rec.radio.amateur.policy,rec.radio.cb

Well it may be time to upgrade. Ignorance is no excuse. Isn't that what I hear preached regarding FCC rules and CB's?

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A6B24D0.EC939FA5@IEEE.org...
> City_Slicker wrote:
> > The CB group!!! Which of all the groups listed would be the least interested
> > in this sort of post. I see that someone is continuing to cross post.
> > Amazing how dumb a person can be when there aren't multiple choice answers.
>
> My newsreader doesn't automatically display to which groups my postings
> are going. I have to spend time looking for them.
> --
> http://www.mindspring.com/~w6rca

1702. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 19:29:01 UTC
From: Larry <n0sa@earthlink.net>
Message-ID: <1MGa6.2399$QM2.199693@newsread1.prod.itd.earthlink.net>
Source record: 171677

After working QRP for about 20 years I broke down and bought a new HF rig. Capable of 100 watts out. It was a real hoot for a year. Now I am back to QRP and still like it. The fact is I switch back and forth depending on my own whims and band conditions. There are some real lessons to be learned while operating QRP. I believe my operating skill is higher and I appreciate the fact that 100 watts is seldom needed for solid contacts, this includes DX. I am never short of amazed at how good a signal report I can get with 5 watts and my simple ground mounted vertical. The biggest problem I encounter while operating QRP is holding the frequency because of someone running much more power than is needed is interfering. If we all kept to the basic rule of only using the power needed for a good contact we would all be better off. As the solar cycle runs down I am sure the amount of power I use for good contacts will go up. I am also sure that when conditions improve during the next cycle my power will be cut back. Simple, isn't it?
Larry N0SA

1703. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 19:38:34 UTC
From: Gene Mason <gmason@airmail.net>
Message-ID: <34243FE72391653E.3D6D1FF034321D53.9D3D7A8439ADCAC2@lp.airnews.net>
Source record: 171811

Rod,
I sympathyse with you and have been there in the same dilema for years. My experience with the other good options suggested here, by others leads me to suggest the following: 1) a loop antenna with a 80m wire, stub . Raise it as high as you can, but 10 ' will work. 2) Use an inverted vee, it takes only one line into a tree, and at a 45 degree angle, maximizes the yard length available. Your multi band antenna is ok, but is a tvi generator. The simple coax feed of a inv-vee , and use of your tuner extends the usefull bandwidth seems ideal for your situation.
Gene KZ5V

"Rod Marsh" <rredbeak2@dingoblue.net.au> wrote in message
news:3a6a2360$0$15483$7f31c96c@news01.syd.optusnet.com.au...
> Your in a situation that so many other hams have struggled with for
> countless years Steve.
> The simple facts are that physical length [proportionate to wavelength] is
a
> far better radiator than electrical length [loading coils etc] so you're
on
> the RIGHT track.Your half wave [80m] fed with ladder line via a tuner is
THE
> most simplest and EASIEST to use of all antennas because of its harmonic
> relationship to all other HF bands.
> NOW, having said that,HF physical length can be monsterous as you're well
> aware of.what you've already done by mounting it as high as you can etc
etc
> then bending it to fit is what most of us are at now,add to that the city
> restrictions and you've compounded the issue.
> Ive found that providing the "legs" are not closer that 60' AND are at
least
> 6' off the ground it should work reasonably well [i fed mine with 300 ohm
tv
> ribbon] .
> Another wire job i love is the long wire.my back yard is "LONG ENOUGH" for
a
> 1/4 at 80m 66' etc and i gets out well.
>
> May i suggest you've not done anything wrong but more to the point you
> merely have not discoverred the BEST option for your location.
> We ALL know "get it high" etc but its not practical sometimes.
> Hope you solve it mate,GOD BLESS,Rod VK4XI
>
>
> "motorhomer" <motorhomer@my-deja.com> wrote in message

> news:94d3kg$808$1@nnrp1.deja.com...
> > I currently use a 136' doublet fed with 450 ohm ladder line and an old
> > Johnson Kilowatt Matchbox to tune it. It is only up about 25' at the
> > feed point (my chimney) and it slopes down from there to within 6 feet
> > of ground in some places. It also is bent back on itself in a few places
> > beause it follows the contours of the house and yard. In no area is it
> > really out in the clear. I am not very pleased with the antenna, it
> > seems to be about 50db down from others in my geographical area on
> > receive. I do have an amplifier that helps transmitted power but TVI is
> > also a problem. I tried a Gap Titan but it was about equal to the
> > doublet. I recently got a MFJ259B Analyzer and thought that I would try
> > pruning the antenna but I wonder what others think that have been in
> > this situation. What is more important, a higher antenna or an antenna
> > in the clear? Does it make more sense to have a shorter antenna if you
> > can get it higher or more in the clear? I live in a city area that
> > frowns on antennas (CCR's) so whatever I do I must be sly. Thanks for
> > any help/tips.
> >
> > Steve
> > K9SL
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
>

1704. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 20:11:53 UTC
From: k1bqt@aol.com
Message-ID: <20010121151153.12159.00000557@ng-cd1.aol.com>
Source record: 171678

Hi Bill--

>If I were more dedicated to operating, I could hunker down and sweat it out like a
true QRP guy, I suppose. That is not my kind of game.<

There's a tremendous network of entusiastic operators and builders who make up the modern QRP movement. And, although I'm rarely accused of being politically correct, I am proud to be counted as a "QRP" guy.

But, moderation in all things. At day's end, when I mix up a cold martini and settle down on 75 meters to shoot the bull with friends I've known since I was a kid, that extra 20-dB looks pretty good--and that 3-500Z contributes nicely to the glow.

73 and cheers

Rick K1BQT

1705. ?? NEC WIN+ Where to find examples.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 20:57:19 UTC
From: cajo1@my-deja.com
Message-ID: <94fifd$1uu$1@nnrp1.deja.com>
Source record: 171680

Have just loaded the 30 days demo.

Find it difficult to begin.

Should be glad to find some simple examples to start with.

73, SM08088; CAY. in SWEDEN

Sent via Deja.com
http://www.deja.com/

1706. Re: MFJ-1750 2m 5/8-wave groundplane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 20:57:52 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <94figc$1va$1@nnrp1.deja.com>
Source record: 171679

It works great for me. I use it on my car. First I had it with a permanent mount then later with a mag-mount. Both worked great. I rarely used over 1-watt on my HT and always hit the repeaters full-quieting. You will need to come up with a ground plane system for your attic. Maybe a piece of sheet metal hooked to the ground wire in a nearby 3-prong outlet.

In article <Mppa6.353$UX4.41725@news.goodnet.com>,
mjlinden@mcs.net (Michael J. Linden (N9BDF)) wrote:
> I'm looking for input on the MFJ-1750 2m 5/8-wave groundplane
> antenna. I'm looking for something inexpensive that has a little bit
> of gain for use in my attic. This antenna, at $19.95, looks like it
> should fit the bill. Any input from anybody who may have purchased
> one?
>
> Tnx & 73, Michael N9BDF
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

1707. Re: Feeding dipoles (cont.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 22:09:31 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <z6Ja6.8162$4k4.207031@news2-win.server.ntlworld.com>
Source record: 171681

The ARRL Antenna Book has a small piece about an antenna which might help you, try a vertical 30 feet long if you can manage it with several radials, one will do if that's all you can manage. if you can mount it two or three meters above ground then do so. Feed this with 450Ohm ribon feeder NOT coax and bring the feeder back to the shack and use a manual tuner with a balanced output. This type of antenna will give a good account of itself on all bands 40M to 10M and will work reasonably on 80M. If you cannot use 30 feet of vertical then 20 feet will work 40 - 10M. I have used this antenna in a similar situation except that my yard was 18feet and hemmed in by a three storey house and I worked loads of DX with it, even VK on 40M. I used an old CB antenna, don't forget to take out the matching coil in the bottom if you use one.

Just ask if you want any more help and let me know how you get on.

de Jon M0BQQ

VE3TMT <mdonoghue1@sympatico.ca> wrote in message
news:QOk86.98697$f36.4410987@news20.bellglobal.com...
> Perhaps I had better explain the scenario here first. I live on the ground
> floor of a large v-shaped apartment complex. My backyard is about 28' in
> length. Antennas on the roof are out of the question. I wanted to rig up
> something in the yard for the low bands (75 & 40) but as you can see I
> really don't think I have the space. I am using a 20' vertical longwire
fed
> with 52 ohm cable at the present time. The tuner in my 450S will match it
> on everyband except 20m. Not an effecient antenna but at least the rig is
> protected. My main problems are:
>
> 1. Lack of space to erect a full size dipole for any band other than 10m.
>
> 2. Nothing to support the center of the antenna (for dipole or inverted
v).
>
> 3. Certainly have the possibility of RFI to contend with.
>
> If I chose to use a vertical, homemade or other, it is not something I can
> just stick up in the center of the yard. So if I ground mount it close to
> the wall, is the brick not going to wreak havoc on the antenna's
> performance? Perhaps it would enhance my signal to the west!!
>
> Just looking for suggestions, and free advice!!
>
> 73, Max
>

>

1708. antenna analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 22:21:40 UTC
From: ON4CLN <on4cln@qsl.net>
Message-ID: <UhJa6.245229$MA1.7922763@afrodite.telenet-ops.be>
Source record: 171682

Fellow hams

I'd like to buy an antenna/SWR analyzer. Each having pro's and con's (price, liability, accuracy, availability in Belgium...).

Contestants are:

1. MFJ-259
(http://www.mfjenterprises.com/analyzers/mfj259.html)

2. Autek VA1 Vector RS analyst (http://www.autekresearch.com/va1.htm)

3. AEA Via analyzer
(http://www.aea-wireless.com/via.htm)

I think the AEA has the best possibilities but is pretty expensive. The Autek is the cheapest but I cannot find a reseller for Belgium. The MFJ is somewhere in between and less interesting (pay less and get the Autek, pay more and get the AEA).

My questions for you are:
a) who's got what kind of experience with these tools?
b) what is your advice?
c) where to find it in Belgium or around?

All input is appreciated!
Thanks and 73's
Franki ON4CLN
http://www.qsl.net/on4cln

1709. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 22:52:01 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <LGJa6.36167$Mo6.335179@e420r-atl1.usenetserver.com>
Source record: 171683

1: split beads and split ferrite filters are available from several places. If nothing else snap a core into two pieces, and hold them around the cable ,with tape, joined together. All cables leaving the computer should have a filter. Same for the cables to the radio.
2: put a star washer under each screw holding the cabinets together on both the computer and the radio.
3: I have had some success by placing a grounded piece of metal under a thin piece of plastic on the computer and radio tables, grounding these. Aluminum foil will do.
4: keep trying.
w4mb

1710. Re: Interference from my TV!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-21 22:54:00 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <tIJa6.36733$LZ5.343387@e420r-atl2.usenetserver.com>
Source record: 171684

See the thread on computer interference.
w4mb

1711. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 00:43:50 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94fvp2$5c3$1@iac5.navix.net>
Source record: 171685

The only problem with QRP is that you put the onus on the person at the other end to dig YOUR signal out of the noise for YOUR enjoyment.

--
Fred W4JLE NHI#1001
Executive Grand Pooba - No Hassle International
Doing away with all requirements for a Ham ticket
"We want, therefore we deserve"
Send your non-tax deductible donations today!

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20010121113833.06201.00000559@ng-ff1.aol.com...
> Hi Bill--
>
> As one well-known antenna guru profered recently in the pages of QST,
> transmitting weaker signals seriously detracts from one's psychological
ability
> to enjoy ham radio. To prove it, the author presented copius statistics
and
> graphic evidence to support his claim.
>
> Needless to say, I was profoundly shattered by this finding (but, if Dean
Straw
> approved the manuscript and the League published it, it HAD to be a fact)!
>
> As a consequence, I immediately returned my coveted QRP Hall of Fame
plaque to
> ARCI along with a sharply worded letter critical of their efforts to
mislead so
> many with bogus claims that QRP might be fun and have merrit! Moreover,
in
> keeping with the spirit of this newgroup, I initiated a $20-million dollar
> civil suit against QRP ARCI for psychological damages! Using the
irrefutable
> data and statistical evidence presented in the QST article (and with full
> support from the League's legal team), I won my case easily!
>
> With my share of the proceeds (about 4% after legal fees and taxes), I
bought
> new antennas and coax, had a 200-Amp entrance installed, bought several
Henry
> 4Ks off E-Bay, and built a water-cooled power combiner.
>
> The rest is history. Currently, I have the smug satisfaction of knowing I
can

> work whoever I want whenever I want--and blow off anyone with 20 kHz who
tries
> to bother me. Need I add that my psycholgical self-esteem is flying high
and I
> literally radiate self confidence! Special thanks to QST for empowering
me to
> restore my mental health!
>
> Rick K1BQT

1712. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 00:57:26 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <94g0gf$3ka$1@slb7.atl.mindspring.net>
Source record: 171686

I would NOT order from http://bytemark.com/amidon/ if I were you. I placed an order with them about 3 weeks ago and still haven't received my torriods. Called them 3 times about my order, the sales guy says he will call back but never returns my call. Later I saw mail on the net that Bytemark had gone out of biz not long ago and their 800 number had quit working.

Had to go to other sources like Fair-Rite and MicroMetals for them. I called my credit card company and they say ByteMark has not charged

"Brian Kelly" <kelly@dvol.com> wrote in message
news:3A6B2C4B.BC192024@dvol.com...
>
>
> Dick Carroll wrote:
>
> > There are some split-core ferrites in plastic cages out there that will
> > snap over the cables, Rat Shack carries a small RG58 size version, like
> > Roy say, a bit pricey. I've seen a half inch version that will work on
> > RG-8 size coax or other cables at hamfests several times offered new by
> > vendors for $2 per, the latest was last weekend at the Springfield, MO
> > Winterfest.
> >
> > Dick W0EX
>
> >
> Roy got me cranked up on this whole scene and I plowed the Web for
sources. I
> refuse to do Radio Slack unless I'm in the most dire of circumstances.
Looks
> like the mother lode is:
> >
> http://bytemark.com/amidon/
> >
> Might not be flea market pricing but when ya have no time to screw around
with
> nickels and dimes Amidon looks good to me, helluva huge selection and they
> know what's up.
> >
> w3rv
>

1713. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 01:23:23 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <fn2n6t82llidrfqorkblqsa2fv64bkjl2r@4ax.com>
Source record: 171687

On Sun, 21 Jan 2001 19:43:50 -0500, "W4JLE" <Fred@w4jle.com> wrote:

>The only problem with QRP is that you put the onus on the person at the
>other end to dig YOUR signal out of the noise for YOUR enjoyment.

Exactly. QRP awards should go to the RECEIVING station. QRPers love to brag about their superior operating practices, etc, etc. Bull. They don't do anything the rest of us don't do, they just do it longer. I give 'em credit for persistence (or is it stubbornness?) but that's all.

Bill, W7TI

1714. Re: antenna analyzers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 01:25:14 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <at2n6t4f804gk6t0nl13529sdl78iqh5kg@4ax.com>
Source record: 171688

On Sun, 21 Jan 2001 22:21:40 GMT, "ON4CLN" <on4cln@qsl.net> wrote:

>I'd like to buy an antenna/SWR analyzer. Each having pro's and con's (price,
>liability, accuracy, availability in Belgium...).

I have both the Autek and the original MFJ. I recently gave the Autek to a friend and still have the MFJ. The Autek works, but the MFJ is far more convenient.

Bill, W7TI

1715. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 02:03:08 UTC
From: n2ey@aol.com
Message-ID: <20010121210308.15567.00000458@nso-de.aol.com>
Source record: 171689

In article <94f1cikbj1@nnrp1.deja.com>, horseshoestew@my-deja.com writes:

>Don't take the negative feedback here as what the
>general ham population, or the FCC really wants.

Then why are you posting it here?

> Remember - most of
>these folks were against lowering the CW requirements.

Nope.

You have posted this same basic idea several times, Stew, with minor variations. Hams with all different views have united in telling you the basic idea is flawed. Now you're pestering the cb and FRS groups with it, even though they keep telling you they're not interested.

> They are still
>in the "block all change' mode.

They are in a "reality" mode. They are against it because it's not a good idea, period.

I have repeatedly suggested that you take a look at the current Tech test. Have you?

I took a few practice Technician tests at the QRZ website. Almost no theory questions - most of it is regs and safety. Common sense stuff, most of it. Nothing a 9 or 10 year old couldn't pass easily with a bit of study. That doesn't mean that any 9 or 10 year old will master all of the material on the test, just that they can learn more than enough to pass.

It isn't the tests. Not by a long shot.

Know why the old Novice was shut down? Because almost nobody was getting one anymore. Prospective hams looked at the privileges of the Novice vs. the Tech and Tech plus and said "I'll go for the Tech or Tech Plus, it's not that much harder". This happened BEFORE the Tech lost its code test in 1991.

Look at the recent restructuring NPRM and the R&O to see what the FCC thinks. They want fewer license classes, not more. They want simpler regs, not more complex ones. They want a more unified amateur radio. And they want to attract the CB and freeband folks, because it's easier to enforce the rules on licensed people than on unlicensed ones. The last thing the FCC wants is another license class like the one you propose.

ARRL pushed for something similar eleven years ago - a sort of VHF Novice, centered on 220. Lots more privileges than you propose, though. The FCC said no

deal and just dropped the Tech code test.

The very name "Colt" is condescending to the very people it's supposed to attract.
The real solution is more publicity and better training materials. And a realization that most young people just aren't interested in radio as a hobby. The few who are interested don't want to be talked down to and hamstrung with dumb stuff like antenna height limitations and 5 watts of power.

73 de Jim, N2EY

1716. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 02:17:34 UTC
From: k1bqt@aol.com
Message-ID: <20010121211734.03147.00000555@ng-cu1.aol.com>
Source record: 171690

Hi Bill--

>They don't do anything the rest of us don't do, they just do it longer.<

Funny, my wife thinks that's a pretty good concept.

Rick K1BQT

1717. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 02:48:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A6B9F63.C925CAA9@eznec.com>
Source record: 171691

Cecil wrote:
>
> Bruce Muscolino wrote:
> > QRP is not worse, it does require more attention to detail or you will
> > be talking to yourself!
>
> I saw a T-shirt that said, "Life's Too Short For QRP. :-)
> --
> http://www.mindspring.com/~w6rca

My favorite was "QRP is not for sissies", but alas, by the time I tried
to order one it was out of print.

Roy Lewallen, W7EL

1718. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 03:06:44 UTC
From: kk5yy@arrl.net
Message-ID: <3a6ca3c0.303003211@nntp.mindspring.com>
Source record: 171692

I don't know if there are any shootouts since Jessie quit. I tried to
get something started in the New Mexico, West Texas, Arizona area
but a lack of participation and an excess of negativity by non
participants has considerably reduced my interest. If I ever get
around to putting the equipment on Ebay I'll post a notice.

I have one of the Texas Radio Bugcatcher antennas but I don't
have an air code 2" coil to compare it to. Since coil diameter
dominates over core material with most reasonable coil
form substances I don't think a comparison is relevant.

On Sat, 20 Jan 2001 17:43:31 -0800, "Bill, W7TI" <w7ti@jps.net> wrote:

>On Sat, 20 Jan 2001 09:42:56 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:
>
>>To the best of my knowledge, no one using PVC pipe for the coil
>>form has ever won a 75m shootout.
>
>____
>
>Not trying to change the subject, but is there a schedule of shootouts available
>anywhere? Main interest is So Calif area.
>
>Thanks,
>
>Bill, W7TI

1719. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 03:52:28 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <94gaprliq1@nnrp1.deja.com>
Source record: 171694

I took some redings with my MFJ259B Analyzer today. The antenna
is:

Resonant at 2.5775Mhz
SWR 3.0
R=14
X=7

3.8Mhz
All readings were out of range
SWR greater than 25
X greater than 600

7.25Mhz
SWR= 13.5
R=58
X=230

14.3
SWR=20.2
R=32
X=216

28.5
SWR=2.5
R=115
X=38

I did not figure out if the impedance was resistive or capacitive but I
can go back and check it out. Does anybody have any suggestions on
whether it would make sense to adjust the antenna in any way? I am
guessing that the resonance at 2.5 Mhz is due to the length of the
ladder line. Would the high impedence at 15 meters cause that band to
sound flat? The signals seem to be way down on 20 and 15 meters. Thanks
for any help.

Steve K9SL

Sent via Deja.com
http://www.deja.com/

1720. How to make a beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 03:57:43 UTC
From: Peter <ve9ptr@hotmail.com>
Message-ID: <XcOa6.1890$TR6.64883@sodalite.nbnet.nb.ca>
Source record: 171693
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I'm looking for any websites relatated to setting up a beacon, primarly for 6m but any info would be great.....

Peter

1721. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 04:21:05 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94gckqdtq1@iac5.navix.net>
Source record: 171695

How did you make the measurements? The MFJ characterizes everything at 50 ohms. did you put a 4:1 balun between the meter and the ladder line. I am also curious as to your definition of resonance if the r=14 and the x=7

Did you use a grid dipper or what? The values seem about right for a ladder fed dipole, Are you using a tuner between the radio and the antenna?

--
Fred W4JLE NHI#1001
Executive Grand Pooba - No Hassle International
Doing away with all requirements for a Ham ticket
"We want, therefore we deserve"
Send your non-tax deductible donations today!

"motorhomer" <motorhomer@my-deja.com> wrote in message news:94gaprliq1@nnrp1.deja.com...
> I took some redings with my MFJ259B Analyzer today. The antenna
> is:
>
> Resonant at 2.5775Mhz
> SWR 3.0
> R=14
> X=7
>
> 3.8Mhz
> All readings were out of range
> SWR greater than 25
> X greater than 600
>
> 7.25Mhz
> SWR= 13.5
> R=58
> X=230
>
> 14.3
> SWR=20.2
> R=32
> X=216
>
> 28.5
> SWR=2.5
> R=115
> X=38
>
> I did not figure out if the impedance was resistive or capacitive but I

> can go back and check it out. Does anybody have any suggestions on
> whether it would make sense to adjust the antenna in any way? I am
> guessing that the resonance at 2.5 Mhz is due to the length of the
> ladder line. Would the high impedence at 15 meters cause that band to
> sound flat? The signals seem to be way down on 20 and 15 meters. Thanks
> for any help.
>
> Steve K9SL
>
>
> Sent via Deja.com
> http://www.deja.com/

1722. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 04:32:27 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6BB7DB.8A0BBDF1@dvol.com>
Source record: 171696

Robert Fanfant wrote:

> I would NOT order from http://bytemark.com/amidon/ if I were you. I placed
> an order with them about 3 weeks ago and still haven't received my torriods.
> Called them 3 times about my order, the sales guy says he will call back
> but never returns my call. Later I saw mail on the net that Bytemark had
> gone out of biz not long ago and their 800 number had quit working.
>
> Had to go to other sources like Fair-Rite and MicroMetals for them. I called
> my credit card company and they say ByteMark has not charged

>
Oooops! Thanks.
>
w3rv

1723. HELP WITH SMALL HF LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 05:05:23 UTC
From: VE3TMT <mdonoghue1@sympatico.ca>
Message-ID: <ncPa6.103589$JT5.3630888@news20.bellglobal.com>
Source record: 171697

Nearly got my loop finished, but I am a little confused on the coupling method. All I have to go by are crude drawings and pictures too far out to actually see what the coupling method looks like. Can someone explain it to me in a step by step way as far as how to prepare the coupling loop?

a. at the loose end of the coax, do I solder the center conductor and braid to the braid at the start of the loop? or just the braid itslef and leave the center conductor not touching?

b. at the top of the coupling loop is the braid supposed to be cut and the center conductor soldered to it?

I have seen many drawings but I am getting lost in the directions, anyone actually make one of these things work?

1724. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 05:44:24 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <3A6BC8B8.83C435D0@inreach.com>
Source record: 171698

I could be wrong on this, but if resonance is the point where reactance
is zero, and all is left is the resistance, if the MFJ 259B is read at
the points where x=0, the frequency will be the resonant freq and the
impedance at that freq will be the resistive part. If it is not 50 ohms,
the meter will give an swr reading of other than 1.
Am I right here, or way off the mark on this. I have one of these
meters, use it from time to time.
any comments welcome, tia
kc6ufe

W4JLE wrote:
>
> How did you make the measurements? The MFJ characterizes everything at 50
> ohms. did you put a 4:1 balun between the meter and the ladder line. I am
> also curious as to your definition of resonance if the r=14 and the x=7
>
> Did you use a grid dipper or what? The values seem about right for a ladder
> fed dipole, Are you using a tuner between the radio and the antenna?
>
> --
> Fred W4JLE NHI#1001
> Executive Grand Pooba - No Hassle International
> Doing away with all requirements for a Ham ticket
> "We want, therefore we deserve"
> Send your non-tax deductible donations today!
>
> "motorhomer" <motorhomer@my-deja.com> wrote in message
> news:94gaprliq1@nnrp1.deja.com...
> > I took some redings with my MFJ259B Analyzer today. The antenna
> > is:
> >
> > Resonant at 2.5775Mhz
> > SWR 3.0
> > R=14
> > X=7
> >
> > 3.8Mhz
> > All readings were out of range
> > SWR greater than 25
> > X greater than 600
> >
> > 7.25Mhz
> > SWR= 13.5
> > R=58

> > X=230
> >
> > 14.3
> > SWR=20.2
> > R=32
> > X=216
> >
> > 28.5
> > SWR=2.5
> > R=115
> > X=38
> >
> > I did not figure out if the impedance was resistive or capacitive but I
> > can go back and check it out. Does anybody have any suggestions on
> > whether it would make sense to adjust the antenna in any way? I am
> > guessing that the resonance at 2.5 Mhz is due to the length of the
> > ladder line. Would the high impedence at 15 meters cause that band to
> > sound flat? The signals seem to be way down on 20 and 15 meters. Thanks
> > for any help.
> >
> > Steve K9SL
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/

1725. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 05:50:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <94ghmf$g9r$1@slb3.atl.mindspring.net>
Source record: 171699

Computers and RFI:

I've had problems with desktops and desksides but never with laptops, and so...

If RFQuiet is the desire, and expense is no object then...

Go laptop, I've had no problems with three different models over the past three years: Dell Lattitude, Gateway Solo, or Sony VAIO. All quiet as mice...

-Peter K1PO

"Robert Fanfant" <fanfant@ix.netcom.com> wrote in message news:3a678f8f$1@news.microsoft.com...
> I once bought a nice high end computer to run my station. Tried in vain to
> get this 633MHz computer to stop generating RFI. Ended up using an "old"
> abandoned 90 MHz computer as my shack computer. It didn't generate any
> detectable HF interference. Monitor,keyboard and mouse remained the same in
> both cases.
>
> -rob
>
> "John Buck" <kh7t@arrl.net> wrote in message
> news:3A678B04.1AF8B390@arrl.net...
> > I found on several installations that running an external shield over
> > the video cable rom the computer to the monitor with a ground to the
> > station ground works wonders.
> > My noise level went from basically unusable to unnoticeable.
> >
> > The shield is tied to the connector metal on both ends.
> > I used a large braid but tin foil might work as well.
> >
> > Aloha,
> > John KH7T
>
>

1726. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 06:05:57 UTC
From: kleinNO@SPAMgilhousen.net
Message-ID: <3a6bcc7d.134363554@news>
Source record: 171700

On 21 Jan 2001 16:38:33 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>Hi Bill--
>
>As one well-known antenna guru profered recently in the pages of QST,
>transmitting weaker signals seriously detracts from one's psychological ability
>to enjoy ham radio. To prove it, the author presented copius statistics and
>graphic evidence to support his claim.

Sheesh! Does going QRP mean you have to have a crappy antenna too?
Schiller's article talked about a relationship between antenna gain
(not tx power) and fun. I believe that this relationship is
undisturbed by the amount of transmitter power you inject into the
antenna. This weekend I had lots of fun in the NAQP and I never
turned my amplifier on. Just barefoot - in fact even that was turned
down to 100 watts output. I probably could have gotten by just fine
at five watts too. But the antenna was the stack pictured in the
above cited article. hehe. Take it from me - a good antenna is
DEFINITELY more fun! But, hey, that's what this news group is all
about - better antennas, right?

Klein Gilhousen, WT6G

1727. rubberr duck for 2400

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 06:35:44 UTC
From: Eric Schumacher <WB6KCN@pacbell.net>
Message-ID: <4xQa6.13056$J%.1182996@news.flash.net>
Source record: 171701

Hello Group

Can any of you point me to an OEM manufacturer (probally Asian) for small rubberised antennas, 2~3 dbi gain) for use on 2400 Mhz. I want to purchase several thousand. A picture of the type I am interested in can be seen at http://www.proxim.com/partner/ibank/accessy/tethant.jpg

73 Eric WB6KCN

1728. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 06:43:26 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94gkqe$qj4$6@bashir.peak.org>
Source record: 171702

W4JLE <Fred@w4jle.com> wrote:
: The only problem with QRP is that you put the onus on the person at the
: other end to dig YOUR signal out of the noise for YOUR enjoyment.

Well, that is up to the other person. If digging for a weak signal
bothers them, then I am sure they won't bother to answer your call
in the first place.

--
Bill Nelson (billn@peak.org)

1729. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 07:07:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6BDC40.5A09@wt.net>
Source record: 171703

Cecil wrote:
>
> Roy Lewallen wrote:
> > I'll bet that one drop of water between two turns lowers the
> > inductor Q a whole lot more than any PVC covering.
>
> The PVC pipe is the internal support for the coil which is still
> exposed. I'll bet a drop of water clings to PVC better than
> to empty air. :-) Bugs smash against the PVC and just stay
> there shorting turns while the wind is likely to blow away
> small bugs hitting an air-core bugcatcher coil.
> --
> http://www.mindspring.com/~w6rca

I wind mine with insulated wire, and then cover with vinyl. I have seen a few bugs caked against the coil at times, but have never made a noticable effect on performance or swr. Also have never noticed any problem in the rain, and have done alot of interstate rainy driving. Doesn't seem to have any real effect that I can tell. My present coil is #12 insulated house wire, so is protected against water shorts even without the covering. I'm fixing to make me a new antenna. " My super" version. I bet it will be super ugly to boot..Most of my antennas resemble the things you see on tanks in the desert storm videos. All black except for the stinger. I finally broke down and got a new mobile rig. Went icom again due to the good luck with the 730 I had, and got a 706g. I like it quite a bit so far. MK
--
http://web.wt.net/~nm5k

1730. Re: CCRadio vs GE SuperRadio III

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 07:13:09 UTC
From: Tom Marin <marint@concentric.net>
Message-ID: <3A6BDC64.9AD085@concentric.net>
Source record: 171704

Thank you very much for all the great info.

- Tom

lacraft@my-deja.com wrote:

> Geez Tom a Superradio AND a select a tenna? You must be listening to
> china with that setup already. I have a SuperradioIII myself (my
> favorite radio) and typically listen to AM stations from large cities
> on the east coast with the stock antenna. Charlotte NC, Louiville, New
> York City, Chicago and Cincinati come in stable like they are next
> door, along with a few Canadian stations depending on how the radio is
> turned. I am in Washington DC. I have heard the CCradio advertised,
> personally it sounds like an overpriced Sangean model to me. I suppose
> the digital tuning would help if you are trying to seperate the
> stations, but personally I prefer the tone of the superradio to any of
> my other portables. I have an 18 year old Uniden CR-2021 digital that
> picks stations out a little better than the superradio, but it sounds
> tinny and suffers from some SW interference-only good for SW. Theres a
> big price difference too, you can get a Superradio at Ames or Kmart for
> 45 bucks on sale, the CCradio (actually a Sangean)Is up around $120.
>
> Some links for you
>
> http://www.grove-ent.com/mt2000reviews.html
>
> http://www.audioreview.com/reviews/Other/product_48124.shtml
>
> http://www.sangean.com/rmulti10.htm
>
> http://www.grove-ent.com/mt1999reviews.html
>
> http://theslacks.com/radio/radiorevue.html
>
> http://www.mrgadget.com/html/ccradio.html
>
> http://www.kiwa.com/ccradio.html
>
> In article <3A64DCFD.3AEF6741@concentric.net>,
> Tom Marin <marint@concentric.net> wrote:
> > I currently own the GE SuperRadio III and am thinking about buying the
> > CCRadio from Crane & Co.
> >
> > Does anybody have an opinion on how much better (for listening to long
> > distance AM Radio) the CCRadio is than the GE SuperRadio III?

> >
> > I also currently use the Select-A-Tenna with the GE SuperRadio III.
> >
> > Thanks in advance.
> >
> > -Tom
> >
> >
>
> Sent via Deja.com
> http://www.deja.com/

1731. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 07:25:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6BE077.5BE6@wt.net>
Source record: 171705

Klein Gilhousen wrote:
>
> On 21 Jan 2001 16:38:33 GMT, k1bqt@aol.com (Rick Littlefield) wrote:
>
> >Hi Bill--
> >
> >As one well-known antenna guru profered recently in the pages of QST,
> >transmitting weaker signals seriously detracts from one's psychological ability
> >to enjoy ham radio. To prove it, the author presented copius statistics and
> >graphic evidence to support his claim.
>
> Sheesh! Does going QRP mean you have to have a crappy antenna too?
> Schiller's article talked about a relationship between antenna gain
> (not tx power) and fun. I believe that this relationship is
> undisturbed by the amount of transmitter power you inject into the
> antenna. This weekend I had lots of fun in the NAQP and I never
> turned my amplifier on. Just barefoot - in fact even that was turned
> down to 100 watts output. I probably could have gotten by just fine
> at five watts too. But the antenna was the stack pictured in the
> above cited article. hehe. Take it from me - a good antenna is
> DEFINITELY more fun! But, hey, that's what this news group is all
> about - better antennas, right?
>
> Klein Gilhousen, WT6G

I haven't run my amp in a year and a half, and haven't really missed it all that much. If I'm 40 over with the amp, I'm only 30 over without. So I still make it. I took my amp apart months ago, and never put it back together as I wanted to change the caps, and replace another part. I still haven't gotten around to ordering the parts...I need to do that, as I'm afraid of what will happen to the tubes if I let them sit too long. "get gassy maybe". I need to get off my rear and get that thing cranked back up. But mainly to save the tubes rather than be an extra 10 db over 9 louder. After I do that, I'm gonna semi retire it and build a solid state amp for everyday use. I'm tired of of tube amps and their quirks. I'll keep the henry going for hard core use, but I'm gonna build a solid state "brick" to use most of the time. Only need about 500w. The henry's 1300-1400 w is overkill. I've worked qrp at times, but I get no special thrill from making people have to strain their ears. 100w about perfect usually. Maybe 500w on 75 in the summer. MK
--
http://web.wt.net/~nm5k

1732. Re: Raibeam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 07:25:53 UTC
From: Mans0n <chucky@cia.gov.hahaha>
Message-ID: <01on6tgeisuddbsphrucncabnsd7brg7vk@4ax.com>
Source record: 171706

your anonymous poster was wa7rai

On 16 Jan 2001 19:34:57 GMT, lemwnash@aol.com (Lemwnash) wrote:

>whatever happened to Raibeam??

1733. Under tropo tilt aerial above horizontal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 08:48:49 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <94ht14$ok9$1@newsg2.svr.pol.co.uk>
Source record: 171629

Has anyone tried this (vhf/uhf)
Thanks G8IXN.

1734. Re: fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 11:28:24 UTC
From: g0xay@aol.com
Message-ID: <20010122062824.28078.00000669@ng-mg1.aol.com>
Source record: 171707

Colin.
RS cat book 5 (Mechanical) has this - at a price! How about a kite shop? I think it is used for spreaders.

Dick G0XAY

1735. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 11:33:40 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <aZU+WCAUqBb6EwaZ@invest.fsbusiness.co.uk>
Source record: 171708

Cecil,

> Bugs smash against the PVC and just stay
>there shorting turns while the wind is likely to blow away
>small bugs hitting an air-core bugcatcher coil.
The bugs hitting my home-brew Bug-Catcher do not stay there for very long - they're vaporised upon key-down!

Phil G4ZOW
8 x 2SC2879

1736. Re: HELP WITH SMALL HF LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 12:32:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94h97h$e5$1@neptunium.btinternet.com>
Source record: 171709

A coupling loop is just a self-supporting length of wire connected between
the coax inner and outer conductors.

The loop need not be screened by leaving it inside the coax.

Do not connect the coax to anything else on the main loop.

For relative sizes of main and coupling loops download program MAGLOOP4 from
website below. Takes only a few seconds. Not zipped up. Run immediately.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

VE3TMT <mdonoghue1@sympatico.ca> wrote in message
news:ncPa6.103589$JT5.3630888@news20.bellglobal.com...
> Nearly got my loop finished, but I am a little confused on the coupling
> method. All I have to go by are crude drawings and pictures too far out to
> actually see what the coupling method looks like. Can someone explain it
to
> me in a step by step way as far as how to prepare the coupling loop?
>
> a. at the loose end of the coax, do I solder the center conductor and
braid
> to the braid at the start of the loop? or just the braid itslef and leave
> the center conductor not touching?
>
> b. at the top of the coupling loop is the braid supposed to be cut and the
> center conductor soldered to it?
>
> I have seen many drawings but I am getting lost in the directions, anyone
> actually make one of these things work?
>
>

1737. online antenna parts source?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 12:43:49 UTC
From: Tom Merendino <tmerendi@fore.com>
Message-ID: <3A6C2B05.6DBCCED3@fore.com>
Source record: 171710

Hi,

Any links to sites that offer specialized antenna hardware for homebrew projects would be appreciated (elements, non-conducting booms, hard-to-find element-to-boom mounts, etc). Mostly interested in UHF Yagi homebrew stuff.

I can't seem to located a source that has most of this stuff. And, I seem to be wasting too much time browsing in local hardware/electrical stores.

Thanks.

Tom N3ZEH

1738. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 13:38:44 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <94hd54fbk1@nnrp1.deja.com>
Source record: 171713

That is what the book that came with the unit said. The coarse tuning on the unit did not allow me to zero out the reading for x but the resonant frequency of 2.5775 is correct unless I am missing something. The book also said that I could take readings directly with tuned feeders but did not mention installing a 4:1 balun.

K9SL

In article <3A6BC8B8.83C435D0@inreach.com>,
whagen@inreach.com wrote:
> I could be wrong on this, but if resonance is the point where
reactance
> is zero, and all is left is the resistance, if the MFJ 259B is read at
> the points where x=0, the frequency will be the resonant freq and the
> impedance at that freq will be the resistive part. If it is not 50
ohms,
> the meter will give an swr reading of other than 1.
> Am I right here, or way off the mark on this. I have one of these
> meters, use it from time to time.
> any comments welcome, tia
> kc6ufe
>
> W4JLE wrote:
> >
> > How did you make the measurements? The MFJ characterizes everything
at 50
> > ohms. did you put a 4:1 balun between the meter and the ladder line.
I am
> > also curious as to your definition of resonance if the r=14 and the
x=7
> >
> > Did you use a grid dipper or what? The values seem about right for a
ladder
> > fed dipole, Are you using a tuner between the radio and the antenna?
> >
> > --
> > Fred W4JLE NHI#1001
> > Executive Grand Pooba - No Hassle International
> > Doing away with all requirements for a Ham ticket
> > "We want, therefore we deserve"
> > Send your non-tax deductible donations today!
> >
> > "motorhomer" <motorhomer@my-deja.com> wrote in message
> > news:94gaprliq1@nnrp1.deja.com...
> > > I took some redings with my MFJ259B Analyzer today. The antenna

> > > is:
> > >
> > > Resonant at 2.5775Mhz
> > > SWR 3.0
> > > R=14
> > > X=7
> > >
> > > 3.8Mhz
> > > All readings were out of range
> > > SWR greater than 25
> > > X greater than 600
> > >
> > > 7.25Mhz
> > > SWR= 13.5
> > > R=58
> > > X=230
> > >
> > > 14.3
> > > SWR=20.2
> > > R=32
> > > X=216
> > >
> > > 28.5
> > > SWR=2.5
> > > R=115
> > > X=38
> > >
> > > I did not figure out if the impedance was resistive or capacitive
but I
> > > can go back and check it out. Does anybody have any suggestions on
> > > whether it would make sense to adjust the antenna in any way? I am
> > > guessing that the resonance at 2.5 Mhz is due to the length of the
> > > ladder line. Would the high impedence at 15 meters cause that band
to
> > > sound flat? The signals seem to be way down on 20 and 15 meters.
Thanks
> > > for any help.
> > >
> > > Steve K9SL
> > >
> > >
> > > Sent via Deja.com
> > > http://www.deja.com/
>

Sent via Deja.com
http://www.deja.com/

1739. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 13:43:15 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <94hddi$ff9$1@nnrp1.deja.com>
Source record: 171714

Oops, left the readings for 15 meters out.

21.25
SWR=18.6
R=Out of range
X=Out of range

K9SL

In article <94gaprliq1@nnrp1.deja.com>,
motorhomer <motorhomer@my-deja.com> wrote:
> I took some redings with my MFJ259B Analyzer today. The antenna
> is:
>
> Resonant at 2.5775Mhz
> SWR 3.0
> R=14
> X=7
>
> 3.8Mhz
> All readings were out of range
> SWR greater than 25
> X greater than 600
>
> 7.25Mhz
> SWR= 13.5
> R=58
> X=230
>
> 14.3
> SWR=20.2
> R=32
> X=216
>
> 28.5
> SWR=2.5
> R=115
> X=38
>
> I did not figure out if the impedance was resistive or capacitive but
I
> can go back and check it out. Does anybody have any suggestions on
> whether it would make sense to adjust the antenna in any way? I am
> guessing that the resonance at 2.5 Mhz is due to the length of the
> ladder line. Would the high impedence at 15 meters cause that band to

> sound flat? The signals seem to be way down on 20 and 15 meters.
Thanks
> for any help.
>
> Steve K9SL
>
> Sent via Deja.com
> http://www.deja.com/
>

Sent via Deja.com
http://www.deja.com/

1740. One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 13:53:32 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a6c3b5e1vtanpl$mr2ice@news.uga.edu>
Source record: 171711

Ignacy Misztal

Department of Animal and Dairy Science,
354 Animal Science Complex, University Of Georgia,
Athens, GA 30602, USA
e-mail: ignacy@uga.edu
tel. (706) 542-0951, fax: (706) 583-0274
anonymous ftp: num.ads.uga.edu, http://nce.ads.uga.edu/~ignacy

1741. one radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 13:53:49 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a6c3e4e2vtanpl$mr2ice@news.uga.edu>
Source record: 171712

I was under the impression than more radials is always better. Last week I tried an inverted L with a drooping end and 3 20m radials. The results were poor. To Europe, I was heard l;ast and just barely. I added two extra radials and tied them to a fence, but the antenna did not seem to be any better.

I put the approximated dimensions of the antenna into EZNEC. It showed that the antenna with 2-4 radials was about 6db down from one radial. Apparently, with short radials, they radiate, and subsequenly almost all the power ends up as ground loses. The losses with one radial were much lower because of low current in that radial.

I left only one radial in my antenna, and the performance increased quite a bit. I could work every station I heard. Apparently 6db is not to be ignored on 160m.

I remember a description of an antenna for 160 and 80 m in this newsgroup that could be called either a vertical folded dipole or an inverted L with one radial. The author claimed great successes DX-wise.

Any comments?

Ignacy, NO9E

1742. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 14:31:11 UTC
From: K0HB <K0HB@arrl.org>
Message-ID: <94hg7g$i0d$1@nnrp1.deja.com>
Source record: 171718

In article <94ameffnp1@nnrp1.deja.com>,
horseshoestew@my-deja.com wrote:
> > A year or two ago I worked a 10 year old Extra who got her Extra
> > when she was 8. Good operator, too. Nice fist.
>
> Whoa! Your drifting off frequency on me here. Let's try to stick to
> the issue at hand. HF is not mentioned in the proposal, and is
> irrelevant to the discussion.

Jim didn't say anything about HF.

73, Hans, K0HB
--
"We are fellow travelers on a journey between two
eternities, and it's a trip far too brief for me
to be concerned about your speed at the Code of
Morse."

Sent via Deja.com
http://www.deja.com/

1743. Re: Feeding dipoles (cont.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:00:41 UTC
From: Mark Kenward <ae8844@wayne.edu>
Message-ID: <3A6C4B19.3E3E79B1@wayne.edu>
Source record: 171715

Can you put up a flagpole? If so a trap vertical might be hidden inside.

Jon M0BQQ wrote:

> The ARRL Antenna Book has a small piece about an antenna which might help
> you, try a vertical 30 feet long if you can manage it with several radials,
> one will do if that's all you can manage. if you can mount it two or three
> meters above ground then do so. Feed this with 450Ohm ribon feeder NOT coax
> and bring the feeder back to the shack and use a manual tuner with a
> balanced output. This type of antenna will give a good account of itself on
> all bands 40M to 10M and will work reasonably on 80M. If you cannot use 30
> feet of vertical then 20 feet will work 40 - 10M. I have used this antenna
> in a similar situation except that my yard was 18feet and hemmed in by a
> three storey house and I worked loads of DX with it, even VK on 40M. I used
> an old CB antenna, don't forget to take out the matching coil in the bottom
> if you use one.
>
> Just ask if you want any more help and let me know how you get on.
>
> de Jon M0BQQ
>
> VE3TMT <mdonoghue1@sympatico.ca> wrote in message
> news:QOk86.98697$f36.4410987@news20.bellglobal.com...
> > Perhaps I had better explain the scenario here first. I live on the ground
> > floor of a large v-shaped apartment complex. My backyard is about 28' in
> > length. Antennas on the roof are out of the question. I wanted to rig up
> > something in the yard for the low bands (75 & 40) but as you can see I
> > really don't think I have the space. I am using a 20' vertical longwire
> fed
> > with 52 ohm cable at the present time. The tuner in my 450S will match it
> > on everyband except 20m. Not an effecient antenna but at least the rig is
> > protected. My main problems are:
> >
> > 1. Lack of space to erect a full size dipole for any band other than 10m.
> >
> > 2. Nothing to support the center of the antenna (for dipole or inverted
> v).
> >
> > 3. Certainly have the possibility of RFI to contend with.
> >
> > If I chose to use a vertical, homemade or other, it is not something I can
> > just stick up in the center of the yard. So if I ground mount it close to
> > the wall, is the brick not going to wreak havoc on the antenna's
> > performance? Perhaps it would enhance my signal to the west!!
> >

> > Just looking for suggestions, and free advice!!
> >
> > 73, Max
> >
> >

1744. Re: Feeding dipoles (cont.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:00:54 UTC
From: Mark Kenward <ae8844@wayne.edu>
Message-ID: <3A6C4B26.520747C7@wayne.edu>
Source record: 171716

Can you put up a flagpole? If so a trap vertical might be hidden inside.

Jon M0BQQ wrote:

> The ARRL Antenna Book has a small piece about an antenna which might help
> you, try a vertical 30 feet long if you can manage it with several radials,
> one will do if that's all you can manage. if you can mount it two or three
> meters above ground then do so. Feed this with 450Ohm ribon feeder NOT coax
> and bring the feeder back to the shack and use a manual tuner with a
> balanced output. This type of antenna will give a good account of itself on
> all bands 40M to 10M and will work reasonably on 80M. If you cannot use 30
> feet of vertical then 20 feet will work 40 - 10M. I have used this antenna
> in a similar situation except that my yard was 18feet and hemmed in by a
> three storey house and I worked loads of DX with it, even VK on 40M. I used
> an old CB antenna, don't forget to take out the matching coil in the bottom
> if you use one.
>
> Just ask if you want any more help and let me know how you get on.
>
> de Jon M0BQQ
>
> VE3TMT <mdonoghue1@sympatico.ca> wrote in message
> news:QOk86.98697$f36.4410987@news20.bellglobal.com...
> > Perhaps I had better explain the scenario here first. I live on the ground
> > floor of a large v-shaped apartment complex. My backyard is about 28' in
> > length. Antennas on the roof are out of the question. I wanted to rig up
> > something in the yard for the low bands (75 & 40) but as you can see I
> > really don't think I have the space. I am using a 20' vertical longwire
> fed
> > with 52 ohm cable at the present time. The tuner in my 450S will match it
> > on everyband except 20m. Not an effecient antenna but at least the rig is
> > protected. My main problems are:
> >
> > 1. Lack of space to erect a full size dipole for any band other than 10m.
> >
> > 2. Nothing to support the center of the antenna (for dipole or inverted
> v).
> >
> > 3. Certainly have the possibility of RFI to contend with.
> >
> > If I chose to use a vertical, homemade or other, it is not something I can
> > just stick up in the center of the yard. So if I ground mount it close to
> > the wall, is the brick not going to wreak havoc on the antenna's
> > performance? Perhaps it would enhance my signal to the west!!
> >

> > Just looking for suggestions, and free advice!!
> >
> > 73, Max
> >
> >

1745. Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:01:21 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a6c4e6c$0$35019$44a10c7e@news.net-link.net>
Source record: 171620

What is the best way to make a short, multi band dipole to cover at least 10 through 40 meters, and possibly 80 meters. I plan to feed at center with 450 window line direct to MFJ 986 line flattener. I would like to be able to rotate this so am planning to use bamboo or fiberglass fishing poles and wrap wire around them in helical fashion. The longest poles I can find are about 20 feet long but to get any kind of strength and minimal sag, I can't use the tips ror windings, but could possible just let the "tail" of the wire hang off the ends a few feet. Should I just helically wind wire on the rods evenly out to the ends and let a few feet dangle? If so, what spacing between wraps--1", 2", 3"? More? Should I wind a coil somewhere on the rods? If so, how many turns and at what point away from center? With 1" spacing, I can get about 14 feet of wire on the first section, then less further out sections due to smaller diameter. I was thinking of using maybe 4" to 6" spacing between turns on the first section, then about 1" less spacing on each section further out in hope of getting more capacitance out at the ends and maybe a bit of gain on the higher bands. Wrapping wire in this fashion I should be able to get at least 65 feet of wire or so, and am thinking of 16 or 18 gauge to save weight.
Height of this antenna will be 35' on a fiberglass mast. How do you all think this would compare with performance of an 80 meter inverted V on this mast fed with ladder line and used on the higher bands?
Should I use less wire, say 35 to 40 feet, and skip 80? Am I wasting my time?

1746. Re: MFJ-1750 2m 5/8-wave groundplane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:06:26 UTC
From: Mark Kenward <ae8844@wayne.edu>
Message-ID: <3A6C4C72.D91B9CE3@wayne.edu>
Source record: 171717

I have done the following. Got a Hustler(Newtronics) SF-1 "buckbuster'
ant mounted it with a 3/8-24 mount to an aluminum plate. Abt $10.

Taken 4 20" wires and made radials and tuned appropriately.

I have used this antenna since 1977. As a bonus, it will load on 440.
Probably not efficient, but the rig is happy and it works.

73.

"Michael J. Linden (N9BDF)" wrote:

> I'm looking for input on the MFJ-1750 2m 5/8-wave groundplane
> antenna. I'm looking for something inexpensive that has a little bit
> of gain for use in my attic. This antenna, at $19.95, looks like it
> should fit the bill. Any input from anybody who may have purchased
> one?
>
> Tnx & 73, Michael N9BDF

1747. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:12:40 UTC
From: double_hat_trick@mydeja.com
Message-ID: <3a6c4dd2.40867581@news.pacbell.net>
Source record: 171619
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

On Sat, 20 Jan 2001 21:37:58 -0500, Brian Kelly <kelly@dvol.com>
wrote:

>Beautiful.
>>
>w3rv

Ditto!

-Jeff

1748. Re: one radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:19:05 UTC
From: k3bu@aol.com
Message-ID: <20010122101905.24886.00000786@ng-co1.aol.com>
Source record: 171621

>
>I left only one radial in my antenna, and the performance increased quite
>a bit. I could work every station I heard. Apparently 6db is not to be
>ignored on 160m.
>
>I remember a description of an antenna for 160 and 80 m in this newsgroup
>that could be called either a vertical folded dipole or an inverted L with
>one radial. The author claimed great successes DX-wise.
>
>Any comments?
>
>Ignacy, NO9E
>

Are you talking about radials on the ground or elevated?
One elevated radial adds some horizontal component and fattens the vertical's lobe. Over poor ground elevated radial can make antenna be more efficient and gives some directivity in the direction of the radial.
ON4UN has 4 square on 80 m using verticals with single radials and over extensive radial field shared with 160m vertical.

Yuri, K3BU

1749. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:27:33 UTC
From: dmartin560@aol.com
Message-ID: <20010122102733.28050.00000750@ng-mg1.aol.com>
Source record: 171622

I haven't posted to this thread, but how can I tell when posts are cross posted and to which NG? I see posts every day that are cross posted to about half a dozen radio related NG I read.

Dwayne

>Subject: Re: FCC proposal for new Amateur "Colt" License Class
>From: "City_Slicker" notenuftime@foolscorner.net
>Date: 01/21/2001 12:18 PM Eastern Standard Time
>Message-id: <94f5l6$itu@dispatch.concentric.net>
>
>Please, continuing to cross post this thread will only cause problems for
>the many non concerned participants in these forums.
>Address your response to the proper NG. Thank you
>"Gene" <webmaster@zylay.com> wrote in message
>news:3A6B162F.A22FF5B5@zylay.com...
>> horseshoestew@my-deja.com wrote:
>>
>> > In article <t28a6.2182$E52.635055@news.uswest.net>,
>> > "Keith McQueen" <kb7m@arrl.net> wrote:
>> > > For once a constructive suggestion! My 11 year old has asked me
>> > several
>> > > times if I can find a ham radio technician text that is geared for
>> > young

<snip>

1750. Re: Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:33:13 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6C52B9.B9E0DB91@IEEE.org>
Source record: 171624

Rudy Marcelletti wrote:
> What is the best way to make a short, multi band dipole to cover at least 10
> through 40 meters, and possibly 80 meters.

Take a look at the 40m-10m rotatable dipole on my web page.
--
http://www.mindspring.com/~w6rca

1751. RE: ICOM AT-120 Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:41:01 UTC
From: marzshadow@aol.comsat.com
Message-ID: <20010122104101.07456.00001301@ng-fi1.aol.com>
Source record: 171623

It really is meant to be used with a long wire. I tried wireing it to a dipole and also a vertical that was fed via coax.

While it would tune up and present a very low swr to my Icom-706, it wouldn't actually radiate much out of the Dipole or the Vertical whip. It isn't designed to be used to send on a transmisison line and then the antenna. It's expecting to be the base part of the antenna.

Allmost all of my 100watts of power was being lost as heat and stray rf around the AT-120 and the coax.

On the otherhand, I set it up outside and flung a random wire over some tree limbs and worked a dx on 20 meters ssb with a good report.

I would be interested in finding how to modify mine to drive a coax.

73 de k9cf Mark.

1752. Re: Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 15:56:53 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3A6C5845.D4272A5A@iquest.net>
Source record: 171625

Cecil's idea is a take off on Larry Cebik's '44 foot solution', a great backup and/or portable antenna.

See details on LB's site www.cebik.com

You'll also find a wealth of additional information to help you in your quest for a portable antenna. You would do well to also search Google.com (or others) using QRP as your keyword. Many excellent QRP sites offer multiple avenues to enjoying portable amateur operations and coverage of the antenna area is a main fous with these groups.

Bests,

Patrick
W9GTA

Cecil wrote:
>
> Rudy Marcelletti wrote:
> > What is the best way to make a short, multi band dipole to cover at least 10
> > through 40 meters, and possibly 80 meters.
>
> Take a look at the 40m-10m rotatable dipole on my web page.
> --
> http://www.mindspring.com/~w6rca

1753. Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 16:02:14 UTC
From: WD9IFW <wd9ifw@qrz.com>
Message-ID: <3a6c5986$1@news.newsfeeds.com>
Source record: 171626

I'm planning to use a longwire (about
150 to 200 ft of 12 gauge solid wire)
for 160/80/40/30 meters using a LDG
AT-11MP auto tuner with 4:1 Balan.
Question is do I have to use earth
ground on the Balan connector (marked
for ground) ?? I used a longwire about
20 years ago and don't remember grounding the tuner (Homebrew) then.
Remember getting a few good shocks, but
being told not to ground it.
Thanks for any help.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1754. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 17:23:36 UTC
From: maidin@tm.net.my
Message-ID: <n4ro6tg3o4es86usd708aul2tcdaf6bfav@4ax.com>
Source record: 171575

HAi there !
is there any simple software to generate a simple solution
upon this ,where to get the info on distribuution on the
different wire and azimuth.
thank
dino

On Sat, 20 Jan 2001 01:32:49 -0800, Roy Lewallen
<w7el@eznec.com> wrote:

>Yes. Suppose you had a very lossy piece of cable. You put power into it,
>but only a small fraction of that power gets to the far end. Whatever is
>reflected from the far end is attenuated by the same factor on the way
>back. So even if the far end is open or shorted, that is, all the power
>is reflected, very little reflected power appears at the input. So at
>the input you see a very good match. For example, if a cable has 3 dB of
>loss and is terminated in a short or open circuit, the SWR at the output
>will be infinite, since the reflected power equals the forward power.
>But the SWR at the input will be 3:1, since only 1/4 of the forward
>power appears coming back. A cable with 6 dB of loss (where no more than
>1/16 of the forward power gets back) will never show more than 1.67:1
>SWR at the input, and so forth. A long piece of coax makes a good dummy
>load, and at high frequencies it doesn't take a very long piece.
>
>This is a good solution for those folks who like a quiet antenna with
>low SWR.
>
>Roy Lewallen, W7EL
>
>Bill Wilson wrote:
>>
>> More loss in RG 58 makes VSWR look better???
>>
>> KG7CK

1755. Re: one radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 17:23:41 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a6c6ce8$3$vtanpl$mr2ice@news.uga.edu>
Source record: 171627

Radials elevated to about 2m.
Ignacy, NO9E
>>
>>I left only one radial in my antenna, and the performance increased quite
>>a bit. I could work every station I heard. Apparently 6db is not to be
>>ignored on 160m.
>>
>>I remember a description of an antenna for 160 and 80 m in this newsgroup
>>that could be called either a vertical folded dipole or an inverted L with
>>one radial. The author claimed great successes DX-wise.
>>
>>Any comments?
>>
>>Ignacy, NO9E
>>

>Are you talking about radials on the ground or elevated?
>One elevated radial adds some horizontal component and fattens the
>vertical's lobe. Over poor ground elevated radial can make antenna be
>more efficient and gives some directivity in the direction of the radial.
>ON4UN has 4 square on 80 m using verticals with single radials and over
>extensive radial field shared with 160m vertical.

>Yuri, K3BU

1756. Re: Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 17:26:13 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a6c6d9d4vtanpl$mr2ice@news.uga.edu>
Source record: 171628

Once I used a 40m dipole fed by the ladderline at about 30 ft. With 500W and MFJ 1.5 KW tuner, it worked on all bands, including DX on 80m and coast to coast on 160m. Ignacy, NO9E
no9e@arrl.net

1757. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 18:27:42 UTC
From: horseshoestew@my-deja.com
Message-ID: <94hu2h$vb3$1@nnrp1.deja.com>
Source record: 171630

In article <94hg7g$i0d$1@nnrp1.deja.com>,
K0HB <K0HB@arrl.org> wrote:
> In article <94ameffnp1@nnrp1.deja.com>,
> horseshoestew@my-deja.com wrote:
> > > A year or two ago I worked a 10 year old Extra who got her Extra
> > > when she was 8. Good operator, too. Nice fist.
> >
> > Whoa! Your drifting off frequency on me here. Let's try to stick
to
> > the issue at hand. HF is not mentioned in the proposal, and is
> > irrelevant to the discussion.
>
> Jim didn't say anything about HF.

Oh - so I suppose she was using her "nice fist" on 2.4Ghz?

> 73, Hans, K0HB

--
------- Stewart - N0MHS --------
Wireless Entertainment/Communication Devices, Networks, and
Public Radio Services Information(MURS,FRS,GMRS,ARS,CB):
http://www.pubcel.com

Sent via Deja.com
http://www.deja.com/

1758. Re: online antenna parts source?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 18:48:19 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <9X9sOo2t9dwm5UasD8KjI5qpd0sk@4ax.com>
Source record: 171631

Tom Merendino <tmerendi@fore.com> wrote:

>Hi,
>
>Any links to sites that offer specialized antenna hardware for homebrew
>projects would be appreciated (elements, non-conducting booms,
>hard-to-find element-to-boom mounts, etc). Mostly interested in UHF Yagi
>homebrew stuff.
>
>I can't seem to located a source that has most of this stuff. And, I
>seem to be wasting too much time browsing in local hardware/electrical
>stores.
>
>Thanks.
>
>Tom N3ZEH

Well, for beam stuff, I hear Texas Towers has a lot of tubing and
things. You might try their web site for a number and give them a
call.

Bob
k5qwg

1759. 3D Polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 18:54:43 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A6C81F3.820C666F@IEEE.org>
Source record: 171632

The latest "Science News" reports that Lucent engineers have
discovered that in addition to horizontal and vertical polarization,
EM waves can be polarized along the direction of travel, i.e.
another dimension added to polarization. They say:

"The addition of the third (dimension) permits the polarization
of the electric and magnetic fields to vary independently. That
means six separate polarization signals can be transmitted
simultaneously on the same frequency."

Is this Unspread Spectrum? :-) Wonder what James Clerk Maxwell
would say?
--
http://www.mindspring.com/~w6rca

1760. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 19:52:18 UTC
From: n2ey@aol.com
Message-ID: <94i31d$4dp$1@nnrp1.deja.com>
Source record: 171633

In article <94hu2h$vb3$1@nnrp1.deja.com>,
horseshoestew@my-deja.com wrote:
> In article <94hg7g$i0d$1@nnrp1.deja.com>,
> K0HB <K0HB@arrl.org> wrote:
> > In article <94ameffnp1@nnrp1.deja.com>,
> > horseshoestew@my-deja.com wrote:
> > > > A year or two ago I worked a 10 year old Extra who got her Extra
> > > > when she was 8. Good operator, too. Nice fist.
> > >
> > > Whoa! Your drifting off frequency on me here. Let's try to stick
> to
> > > the issue at hand. HF is not mentioned in the proposal, and is
> > > irrelevant to the discussion.
> >
> > Jim didn't say anything about HF.
>
> Oh - so I suppose she was using her "nice fist" on 2.4Ghz?

Why does it matter? You're the one drifting off frequency, Stew.

The whole basis of your proposal is that getting a ham license is too demanding for young people. That's the fundamental premise upon which your whole concept is based.

Yet I and many others have provided numerous examples of young people who have passed the tests, gotten licenses and gone on the air as responsible, skilled amateur operators. The license requirements are NOT the problem.

Hans' Dick-and-Jane story is right on the money, too. He and I have diametrically opposite views on many licensing questions (code tests, number of classes, etc.) yet we both think this "colt" thing is a nonstarter. That oughta tell you something.

73 de Jim, N2EY
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1761. Re: skeleton slot information

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 20:19:32 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <0lob6.2150$x%3.57984@news6-win.server.ntlworld.com>
Source record: 171615

Glenn

If you can get a copy then take a look at Backyard Antennas by Peter Dodd, Published by the RSGB. It's quite a good book if you ignore the hundreds of spelling mistakes, gramatical errors, missing words and extra words.

I have an article which I can scan for you if you like.

Jon M0BQQ

Glenn <g_newell@dingoblue.net.au> wrote in message news:3a639dd8$0$15492$7f31c96c@news01.syd.optusnet.com.au...
> Can someone point me towards info regarding manufacturing the skeleton slot.
>
> Thanks Glenn....vk7ab
>
>

1762. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 20:36:22 UTC
From: "Paul R. Stoetzer, N8HM" <N8HM@arrl.net>
Message-ID: <fP0b6.84$b7.121951@nntp1.onemain.com>
Source record: 171634
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

There are several problems with this proposal:

1. As a 15 year old, I can tell you that the most interesting thing of ham radio is DX, not short range VHF communications.
2. This proposal would isolate the newbies, if there are not any other recent "Colt" licensees around, they would quickly grow bored and would not upgrade. Chatting with people who have been around a while and who are talking about the Walk-a-Thon or picnic the local club is involved in or the great conditions on the HF bands today.
3. The Tech license is already extremely easy to get. I got my Tech just over a year ago and it took about a week to study enough to pass the test, and that was with 55 questions on two tests, not 35.

While I agree more young people are needed in the hobby, the problem is not the license structure, which I believe to be perfect, it is the PR deficencies.

73,
Paul
N8HM
"Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote in message news:948o9h$4mg4$1@newssvr05-en0.news.prodigy.com...
> The rapidly-expanding Family Radio Service has exposed millions of young
> people to the world
> of radio communications. But now, where is a young kid to go who has is
> interested in experimenting
> with radios and get more range than the typical 1/2 mile of FRS? MURS
might
> help a bit(if Motorola doesn't
> get their way), but you know that a growing mind is eventually going to
want
> more than just this. GMRS
> doesn't have the resources, and is not a service that was created to
foster
> experimentation. Like it or not,
> the typical young person ends up cutting his radio experimention teeth in
> the Citizen's Band service, because
> there isn't a reasonable entry-level ham license for kids(it is even worse
> now after restructuring, what with the
> elimination of the Novice Class).
>
> Everyday now the USA is falling further and further behind Europe and
Japan
> in the wireless communications

> race. As hams, it is time we make an effort to insure that our young
people
> are provided with the proper
> environment, incentives, and role models to properly learn radio
> communications techniques and etiquette.
> It is time for hams to stop complaining, step up to the plate, and take an
> active role in seeing that our bright,
> young technical minds are being taught properly.
>
> As a result of this, I have reworked the Communicator entry-level license
> proposal I submitted to the FCC last year,
> and I will now be proposing a new entry-level Amateur Radio class known as
> the "Colt" class. I submit a draft
> of the proposal for your review below. Please keep in mind that the
future
> of American involvement in wireless
> communications development depends on us to properly encourage and teach
> tomorrow's experimenters, operators,
> technicians, and engineers...
>
> **********
> Proposal to FCC to institute an introductory-level "Colt" license
> class in the Amateur Radio Service - REV A
>
>
> In the late 1980's and early 1990's when the current Amateur Radio Service
> Technician Class license was conceived and implemented, it was
> an appropriate alternate introductory license class. However, due to the
> recent elimination of the Novice Class license, and as a result of
improving
> technology; the Technician Class license no longer serves well as the only
> introductory license, as it is doing poorly in drawing young members into
> the Service. As a result of license restructuring, it is now actually
> harder for young people to obtain an Amateur license than it was before
> restructuring.
>
> In this critical era of global competition, especially in the wireless
> communications arena, it is essential that we provide a means for properly
> educating our young people in RF communications operation and theory.
>
> Today, technologies like the Family Radio Service, high-speed telephone &
> cable modems, the Internet, and inexpensive cellular
> telephones, have overshadowed the privileges of the Amateur Radio Service,
> and made the requirements for young beginners to obtain a
> Technician Class license out of date. Additionally, the Technician Class
> license has now evolved into a beginning and ending point for
> most modern day Amateurs, who are mostly interested in VHF/UHF
> communications, rather than HF communications. Incentive licensing has
> virtually been eliminated.
>

> The need for a Service dedicated to the goal of teaching young radio users
> proper radio operation techniques and etiquette can clearly be seen in the
> disarray present on the 11 meter Citizen's Band Service frequencies. The
> fact is, the Citizen's Band has become the defacto introductory service
for
> young people just beginning to learn to experiment with radio; yet the
> Citizen's Band is a very poor environment for young people to be learning
> in.
>
> Therefore, it is recommended that a new "Colt Class" license be added to
the
> Amateur Radio Service expressly to encourage young
> individuals to enter the Amateur Radio Service to improve their
> understanding of RF communications theory, provide a healthy learning
> environment, and encourage radio experimentation.
>
> On the 70cm UHF band, Colt licensees would be restricted to voice
> communications on 5 simplex-only 20khz-spaced channels
> on 446.00, 446.02, 446.04, 446.06, and 446.08 Mhz; and digital
> communications up to 19,200bps on 1 simplex-only 60khz bandwidth channel
on
> 446.14Mhz.
>
> On the 1.25m VHF band, Colt licensees would be restricted to voice
> communications on 5 simplex-only 20khz-spaced channels
> on 223.42, 223.44, 223.46, 223.48, and 223.50 Mhz; and digital
> communications up to 19,200bps on 1 simplex-only 60khz bandwidth channel
on
> 223.56Mhz.
>
> To encourage experimentation/understanding of antenna and VHF/UHF RF
> propagation theory, Colt licensees would also be allowed to setup and/or
> operate through a VHF/UHF crossband, simplex user input/output, repeater
> station on two 20khz-bandwidth channels on 223.52Mhz and 446.10Mhz. This
> would allow them to setup an inexpensive repeater system by
interconnecting
> the voice/mic connections via a resistive circuit on two simplex radios;
and
> would not require expensive, and difficult to understand, cavity and
> duplexer filtering at the repeater station site. User radio costs would
be
> low, as they would only need a single simplex radio. As a result of the
> characteristics of this type of repeater, the repeater builders and users
> would learn to coordinate frequencies, and user groupings based on
> environmental conditions, so as to acheive optimal results.
>
> Colt license users would also be subject to the following restrictions:
>
> (1) Individuals applying for a Colt Class license must be under 19 years
of

> age at the time of license application or renewal. The license is valid
for
> 5 years.
>
> (2) Fixed control station antennas will be no more than 6.1 meters (20
> feet) above the ground or above the building or tree on which it is
> mounted.
>
> (3) Transmissions limited to 5 watts ERP, or less.
>
>
> The new license class would have the following goals:
>
> 1) Encourage more young people to enter the Amateur Radio Service, by
> providing an entry-level ARS license class that includes privileges
> allowing reliable short-range voice and data communications.
>
> 2) Not significantly impact existing users of the affected Amateur Radio
> Service frequency bands.
>
> 3) Encourage basic knowledge of radio, electronics, operating principles
and
> etiquette among a wider segment of the general
> population.
>
> 4) Take advantage of the success of the Family Radio Service, and provide
a
> path for those young users interested in further radio experimentation.
>
> The Colt license exam would consist of 25 fairly simple questions.
Emphasis
> would be put on understanding the existing operational, safety, etiquette
> and emergency questions from theTechnician Class question pool that relate
> specifically to Colt Class license privileges. All questions containing
> calculations would contain small integer(whole-number) input values and
have
> relatively small integer results. Colt licensees would be required to
have
> a general understanding of Ohm's Law and Power relations. They should be
> required to have a general understanding of how antenna length relates to
> wavelength; and have a knowledge of transmitter power, antenna gain,
> transmission line loss, and the ability to perform a simple ERP
calculation
> would be required. General knowledge of simple resistive circuits, and
> their power dissipation, would be required. Knowledge of capacitors and
> inductors would not be required.
>
>
> Stewart Teaze - N0MHS
>

>

1763. Impedance mismatch ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 20:50:37 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <94i6je$dnb22$1@ID-20128.news.dfncis.de>
Source record: 171635

I have figured out that the transmitter will not deliver full power to the load unless the input and output impedances match,and downward sloping ground radials lower the impedance of a 1/2 wave vertical antenna.So does this mean that a A99 w/o the ground radials has a higher input impedance than 50 ohms? If i had access to a noise bridge i would measure it to be safe.

-- George S.

1764. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 20:54:15 UTC
From: Cathryn Mataga <cathryn@junglevision.com>
Message-ID: <3A6C9DF7.FE5CFEAE@junglevision.com>
Source record: 171636
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

"Paul R. Stoetzer, N8HM" wrote:
>
> 3. The Tech license is already extremely easy to get. I got my Tech just
> over a year ago and it took about a week to study enough to pass the test,
> and that was with 55 questions on two tests, not 35.
>
> While I agree more young people are needed in the hobby, the problem is not
> the license structure, which I believe to be perfect, it is the PR
> deficencies.

What about this as a proposal. Leave everything as it is as far as licenses
are concerned. But, then eliminate the rule that you can't charge money
for testing people. And, then work to get the FCC to cut a deal
to allow, for example, Radio Shack and ham radio stores to give ham radio
license tests right in the store -- and set up a computer system to give call signs
right on the spot. Then, the stores could make a little money giving the test.
And, might pick up some extra sales from new hams.

1765. Re: proposal for license testing for profit

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 21:14:34 UTC
From: Denver Braughler <den01@deadletter-bwcc.com>
Message-ID: <3A6CA2BA.7C126101@deadletter-bwcc.com>
Source record: 171637
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Cathryn Mataga wrote:
> for example, Radio Shack and ham radio stores to give ham radio
> license tests right in the store -- and set up a computer system to give call signs
> right on the spot. Then, the stores could make a little money giving the test.
> And, might pick up some extra sales from new hams.

If real money could be made from the extra sales, the stores would give the tests free.

Perhaps you can ask Radio Shack whether they think your proposal is viable.

1766. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 21:17:39 UTC
From: The Packrat <spam@n7uic.net>
Message-ID: <Tr1b6.297355$U46.9496569@news1.sttls1.wa.home.com>
Source record: 171638
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

The money they charge is for all the expenses of testing - there isn't a
mandatory charge

"Cathryn Mataga" <cathryn@junglevision.com> wrote in message
news:3A6C9DF7.FE5CFEAE@junglevision.com...

"Paul R. Stoetzer, N8HM" wrote:
>
> 3. The Tech license is already extremely easy to get. I got my Tech just
> over a year ago and it took about a week to study enough to pass the test,
> and that was with 55 questions on two tests, not 35.
>
> While I agree more young people are needed in the hobby, the problem is
not
> the license structure, which I believe to be perfect, it is the PR
> deficencies.

What about this as a proposal. Leave everything as it is as far as licenses
are concerned. But, then eliminate the rule that you can't charge money
for testing people. And, then work to get the FCC to cut a deal
to allow, for example, Radio Shack and ham radio stores to give ham radio
license tests right in the store -- and set up a computer system to give
call signs
right on the spot. Then, the stores could make a little money giving the
test.
And, might pick up some extra sales from new hams.

1767. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 21:48:19 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94i9so$h3p$1@iac5.navix.net>
Source record: 171639
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

You could even have the test on the computer, the computer than could grade your test(s) and as you pointed out issue your call sign on the spot. Then the computer could pop up what the store had in your price range. You would then press your selections and walk to the front of the store, pickup your license and equipment and head home ready to operate.

We could do the same thing from Mall kiosks to attract young people. This could be coupled with playstation rentals, beepers, and cell phones. A one stop communications and entertainment kiosk. ARRL could create a Sony playstation and gameboy cartridge to teach amateur radio, along with an amateur radio adventure that would require simulated contacts with DX countries to obtain clues to finish the game. Wow! I wish I had thought of that. The only problem is getting it by the old elitist hams that think you should learn a bunch of code and radio nonsense to gain what is rightfully yours because you want it..

--
Fred W4JLE NHI#1001
Executive Grand Pooba - No Hassle International
Doing away with all requirements for a Ham ticket
"We want, therefore we deserve"
Send your non-tax deductible donations today!

"Cathryn Mataga" <cathryn@junglevision.com> wrote in message
news:3A6C9DF7.FE5CFEAE@junglevision.com...
>
>
> "Paul R. Stoetzer, N8HM" wrote:
> >
> > 3. The Tech license is already extremely easy to get. I got my Tech just
> > over a year ago and it took about a week to study enough to pass the
test,
> > and that was with 55 questions on two tests, not 35.
> >
> > While I agree more young people are needed in the hobby, the problem is
not
> > the license structure, which I believe to be perfect, it is the PR
> > deficencies.
>
> What about this as a proposal. Leave everything as it is as far as
licenses
> are concerned. But, then eliminate the rule that you can't charge money
> for testing people. And, then work to get the FCC to cut a deal
> to allow, for example, Radio Shack and ham radio stores to give ham radio

> license tests right in the store -- and set up a computer system to give call signs
> right on the spot. Then, the stores could make a little money giving the test.
> And, might pick up some extra sales from new hams.

1768. Re: Follow the Money

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 21:49:00 UTC
From: zeno333@mindspring.com
Message-ID: <94i9s1$l2j$1@slb1.atl.mindspring.net>
Source record: 171640
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

I do not think there needs to be a new Amateur service, but I also think you are perhaps being a litle hard on the guys commercial and money connection etc. After all, it was Tandy Corporation that made the FRS proposal to the FCC..and Tandy is commercial for sure..(ie Rradio Shack)

In article <94aed5$8mn$1@nnrp1.deja.com>, K0HB <K0HB@arrl.org> wrote:

> When you don't understand why somebody is doing something which seems
> senseless to you, sometimes it pays to try to "follow the money".
>
> In this case it led me to a company called "PubCel". According to
> their web site, that company is involved in:
>
> "Wireless Entertainment and Communications Solutions:
>
> - MURS and ARS Voice and Data Communications Systems
>
> - FRS and GMRS Voice Communication Systems"
>
> I think it is safe to say that the "ARS" acronym might mean "Amateur
> Radio Service".
>
> Also according to their web site, the company President is none other
> than Stewart Teaze, N0MHS.
>
> Suddenly this proposal for the "Barbie Doll" Amateur Radio license
> isn't quite so senseless.
>
> 73, Hans, K0HB

1769. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 21:53:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A6CABCD.B1B8779A@eznec.com>
Source record: 171641
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

I don't like this idea very much. The part that worries me is as you say, they "might pick up some extra sales from new hams". Without accusing any store or anyone of dishonesty, I think it's a bad idea for the test giver to have such an immediate and direct financial incentive to have the examinee pass.

Roy Lewallen, W7EL

Cathryn Mataga wrote:
>
> What about this as a proposal. Leave everything as it is as far as licenses
> are concerned. But, then eliminate the rule that you can't charge money
> for testing people. And, then work to get the FCC to cut a deal
> to allow, for example, Radio Shack and ham radio stores to give ham radio
> license tests right in the store -- and set up a computer system to give call signs
> right on the spot. Then, the stores could make a little money giving the test.
> And, might pick up some extra sales from new hams.

1770. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 22:06:35 UTC
From: Cathryn Mataga <cathryn@junglevision.com>
Message-ID: <3A6CAEEB.83DF27F8@junglevision.com>
Source record: 171642
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

Roy Lewallen wrote:
>
> I don't like this idea very much. The part that worries me is as you
> say, they "might pick up some extra sales from new hams". Without
> accusing any store or anyone of dishonesty, I think it's a bad idea for
> the test giver to have such an immediate and direct financial incentive
> to have the examinee pass.
>

Money makes the world go-round. Methinks. And if you want to
get more young people in the hobby, I think you need the kind
of marketing muscle that Radio Shack can provide. And, I think the fraud
issue here is over-estimated. There's been fraud
in the testing system as it is. If you had big companies involved,
who had lawyers, they could snap the whip with the employees.
And, they'd be better positioned to enforce standards, than random
individuals. I think.

Just enact some fines for cheating. Hire a few people to go
around, and masquerade as applicants to keep the system clean. And,
open an office, that would handle reports of fraud, and then
investigate as a criminal matter. It'd probably be cleaner than
the current setup.

1771. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 22:49:00 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94idcs$inb@dispatch.concentric.net>
Source record: 171643
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

Maybe a 15 year old can explain to the rest how to stop posting to the
rec.radio.CB group.

"Paul R. Stoetzer, N8HM" <N8HM@arrl.net> wrote in message
news:fP0b6.84$b7.121951@nntp1.onemain.com...
> There are several problems with this proposal:
>
> 1. As a 15 year old, I can tell you that the most interesting thing of ham
> radio is DX, not short range VHF communications.
> 2. This proposal would isolate the newbies, if there are not any other
> recent "Colt" licensees around, they would quickly grow bored and would
not
> upgrade. Chatting with people who have been around a while and who are
> talking about the Walk-a-Thon or picnic the local club is involved in or
the
> great conditions on the HF bands today.
> 3. The Tech license is already extremely easy to get. I got my Tech just
> over a year ago and it took about a week to study enough to pass the test,
> and that was with 55 questions on two tests, not 35.
>
> While I agree more young people are needed in the hobby, the problem is
not
> the license structure, which I believe to be perfect, it is the PR
> deficencies.
>
> 73,
> Paul
> N8HM
> "Stewart R Teaze" <HORSESHOE7@prodigy.net> wrote in message
> news:948o9h$4mg4$1@newssvr05-en0.news.prodigy.com...
> > The rapidly-expanding Family Radio Service has exposed millions of young
> > people to the world
> > of radio communications. But now, where is a young kid to go who has is
> > interested in experimenting
> > with radios and get more range than the typical 1/2 mile of FRS? MURS
> might
> > help a bit(if Motorola doesn't
> > get their way), but you know that a growing mind is eventually going to
> want
> > more than just this. GMRS
> > doesn't have the resources, and is not a service that was created to
> foster
> > experimentation. Like it or not,

> > the typical young person ends up cutting his radio experimention teeth
in
> > the Citizen's Band service, because
> > there isn't a reasonable entry-level ham license for kids(it is even
worse
> > now after restructuring, what with the
> > elimination of the Novice Class).
> >
> > Everyday now the USA is falling further and further behind Europe and
> Japan
> > in the wireless communications
> > race. As hams, it is time we make an effort to insure that our young
> people
> > are provided with the proper
> > environment, incentives, and role models to properly learn radio
> > communications techniques and etiquette.
> > It is time for hams to stop complaining, step up to the plate, and take
an
> > active role in seeing that our bright,
> > young technical minds are being taught properly.
> >
> > As a result of this, I have reworked the Communicator entry-level
license
> > proposal I submitted to the FCC last year,
> > and I will now be proposing a new entry-level Amateur Radio class known
as
> > the "Colt" class. I submit a draft
> > of the proposal for your review below. Please keep in mind that the
> future
> > of American involvement in wireless
> > communications development depends on us to properly encourage and teach
> > tomorrow's experimenters, operators,
> > technicians, and engineers...
> >
> > **
> > Proposal to FCC to institute an introductory-level "Colt" license
> > class in the Amateur Radio Service - REV A
> >
> >
> > In the late 1980's and early 1990's when the current Amateur Radio
Service
> > Technician Class license was conceived and implemented, it was
> > an appropriate alternate introductory license class. However, due to
the
> > recent elimination of the Novice Class license, and as a result of
> improving
> > technology; the Technician Class license no longer serves well as the
only
> > introductory license, as it is doing poorly in drawing young members
into

> > the Service. As a result of license restructuring, it is now actually
> > harder for young people to obtain an Amateur license than it was before
> > restructuring.
> >
> > In this critical era of global competition, especially in the wireless
> > communications arena, it is essential that we provide a means for
properly
> > educating our young people in RF communications operation and theory.
> >
> > Today, technologies like the Family Radio Service, high-speed telephone
&
> > cable modems, the Internet, and inexpensive cellular
> > telephones, have overshadowed the privileges of the Amateur Radio
Service,
> > and made the requirements for young beginners to obtain a
> > Technician Class license out of date. Additionally, the Technician
Class
> > license has now evolved into a beginning and ending point for
> > most modern day Amateurs, who are mostly interested in VHF/UHF
> > communications, rather than HF communications. Incentive licensing has
> > virtually been eliminated.
> >
> > The need for a Service dedicated to the goal of teaching young radio
users
> > proper radio operation techniques and etiquette can clearly be seen in
the
> > disarray present on the 11 meter Citizen's Band Service frequencies.
The
> > fact is, the Citizen's Band has become the defacto introductory service
> for
> > young people just beginning to learn to experiment with radio; yet the
> > Citizen's Band is a very poor environment for young people to be
learning
> > in.
> >
> > Therefore, it is recommended that a new "Colt Class" license be added to
> the
> > Amateur Radio Service expressly to encourage young
> > individuals to enter the Amateur Radio Service to improve their
> > understanding of RF communications theory, provide a healthy learning
> > environment, and encourage radio experimentation.
> >
> > On the 70cm UHF band, Colt licensees would be restricted to voice
> > communications on 5 simplex-only 20khz-spaced channels
> > on 446.00, 446.02, 446.04, 446.06, and 446.08 Mhz; and digital
> > communications up to 19,200bps on 1 simplex-only 60khz bandwidth channel
> on
> > 446.14Mhz.
> >
> > On the 1.25m VHF band, Colt licensees would be restricted to voice

> > communications on 5 simplex-only 20khz-spaced channels
> > on 223.42, 223.44, 223.46, 223.48, and 223.50 Mhz; and digital
> > communications up to 19,200bps on 1 simplex-only 60khz bandwidth channel
> on
> > 223.56Mhz.
> >
> > To encourage experimentation/understanding of antenna and VHF/UHF RF
> > propagation theory, Colt licensees would also be allowed to setup and/or
> > operate through a VHF/UHF crossband, simplex user input/output, repeater
> > station on two 20khz-bandwidth channels on 223.52Mhz and 446.10Mhz.
This
> > would allow them to setup an inexpensive repeater system by
> interconnecting
> > the voice/mic connections via a resistive circuit on two simplex radios;
> and
> > would not require expensive, and difficult to understand, cavity and
> > duplexer filtering at the repeater station site. User radio costs would
> be
> > low, as they would only need a single simplex radio. As a result of the
> > characteristics of this type of repeater, the repeater builders and
users
> > would learn to coordinate frequencies, and user groupings based on
> > environmental conditions, so as to acheive optimal results.
> >
> > Colt license users would also be subject to the following restrictions:
> >
> > (1) Individuals applying for a Colt Class license must be under 19 years
> of
> > age at the time of license application or renewal. The license is valid
> for
> > 5 years.
> >
> > (2) Fixed control station antennas will be no more than 6.1 meters (20
> > feet) above the ground or above the building or tree on which it is
> > mounted.
> >
> > (3) Transmissions limited to 5 watts ERP, or less.
> >
> >
> > The new license class would have the following goals:
> >
> > 1) Encourage more young people to enter the Amateur Radio Service, by
> > providing an entry-level ARS license class that includes privileges
> > allowing reliable short-range voice and data communications.
> >
> > 2) Not significantly impact existing users of the affected Amateur Radio
> > Service frequency bands.
> >
> > 3) Encourage basic knowledge of radio, electronics, operating principles
> and

> > etiquette among a wider segment of the general
> > population.
> >
> > 4) Take advantage of the success of the Family Radio Service, and
provide
> a
> > path for those young users interested in further radio experimentation.
> >
> > The Colt license exam would consist of 25 fairly simple questions.
> Emphasis
> > would be put on understanding the existing operational, safety,
etiquette
> > and emergency questions from theTechnician Class question pool that
relate
> > specifically to Colt Class license privileges. All questions containing
> > calculations would contain small integer(whole-number) input values and
> have
> > relatively small integer results. Colt licensees would be required to
> have
> > a general understanding of Ohm's Law and Power relations. They should
be
> > required to have a general understanding of how antenna length relates
to
> > wavelength; and have a knowledge of transmitter power, antenna gain,
> > transmission line loss, and the ability to perform a simple ERP
> calculation
> > would be required. General knowledge of simple resistive circuits, and
> > their power dissipation, would be required. Knowledge of capacitors and
> > inductors would not be required.
> >
> >
> > Stewart Teaze - N0MHS
> >
> >
>
>

1772. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 22:50:26 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94idfi$jf6@dispatch.concentric.net>
Source record: 171644
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

Fred, I know you know better than to keep cross posting this thread. Your mail boxes could get awfully full.

"W4JLE" <Fred@w4jle.com> wrote in message news:94i9so$h3p$1@iac5.navix.net...
> You could even have the test on the computer, the computer than could grade
> your test(s) and as you pointed out issue your call sign on the spot. Then
> the computer could pop up what the store had in your price range. You would
> then press your selections and walk to the front of the store, pickup your
> license and equipment and head home ready to operate.
>
> We could do the same thing from Mall kiosks to attract young people. This
> could be coupled with playstation rentals, beepers, and cell phones. A one
> stop communications and entertainment kiosk. ARRL could create a Sony
> playstation and gameboy cartridge to teach amateur radio, along with an
> amateur radio adventure that would require simulated contacts with DX
> countries to obtain clues to finish the game. Wow! I wish I had thought of
> that. The only problem is getting it by the old elitist hams that think you
> should learn a bunch of code and radio nonsense to gain what is rightfully
> yours because you want it..
>
> --
> Fred W4JLE NHI#1001
> Executive Grand Pooba - No Hassle International
> Doing away with all requirements for a Ham ticket
> "We want, therefore we deserve"
> Send your non-tax deductible donations today!
>
> "Cathryn Mataga" <cathryn@junglevision.com> wrote in message
> news:3A6C9DF7.FE5CFEAE@junglevision.com...
> >
> >
> > "Paul R. Stoetzer, N8HM" wrote:
> > >
> > > 3. The Tech license is already extremely easy to get. I got my Tech just
> > > over a year ago and it took about a week to study enough to pass the
> test,
> > > and that was with 55 questions on two tests, not 35.
> > >

> > > While I agree more young people are needed in the hobby, the problem
is
> not
> > > the license structure, which I believe to be perfect, it is the PR
> > > deficencies.
> >
> > What about this as a proposal. Leave everything as it is as far as
> licenses
> > are concerned. But, then eliminate the rule that you can't charge money
> > for testing people. And, then work to get the FCC to cut a deal
> > to allow, for example, Radio Shack and ham radio stores to give ham
radio
> > license tests right in the store -- and set up a computer system to
give
> call signs
> > right on the spot. Then, the stores could make a little money giving
the
> test.
> > And, might pick up some extra sales from new hams.
>
>

1773. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 22:57:05 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94ids1$jor@dispatch.concentric.net>
Source record: 171645
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

This thread doesn't belong on the rec.radio.CB NG. Please remove it from
your replies. If you don't know how to do that ask someone.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A6CABCD.B1B8779A@eznec.com...
> I don't like this idea very much. The part that worries me is as you
> say, they "might pick up some extra sales from new hams". Without
> accusing any store or anyone of dishonesty, I think it's a bad idea for
> the test giver to have such an immediate and direct financial incentive
> to have the examinee pass.
>
> Roy Lewallen, W7EL
>
> Cathryn Mataga wrote:
> >
> > What about this as a proposal. Leave everything as it is as far as
licenses
> > are concerned. But, then eliminate the rule that you can't charge money
> > for testing people. And, then work to get the FCC to cut a deal
> > to allow, for example, Radio Shack and ham radio stores to give ham
radio
> > license tests right in the store -- and set up a computer system to
give call signs
> > right on the spot. Then, the stores could make a little money giving
the test.
> > And, might pick up some extra sales from new hams.

1774. Re: proposal for license testing for profit

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 22:59:23 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g7ky5q0.pminews@ca.news.verio.net>
Source record: 171646
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On Mon, 22 Jan 2001 16:14:34 -0500, Denver Braughler wrote:

>Cathryn Mataga wrote:
>> for example, Radio Shack and ham radio stores to give ham radio
>> license tests right in the store -- and set up a computer system to give call signs
>> right on the spot. Then, the stores could make a little money giving the test.
>> And, might pick up some extra sales from new hams.
>
>If real money could be made from the extra sales, the stores
would give the tests free.
>
>Perhaps you can ask Radio Shack whether they think your proposal is viable.

The enabling legislation clearly says that examinations are to
be given on a "reimbursement for out-of-pocket expenses" basis
which precludes making a profit. [47 USCA s. 303(f)(1)(I)]

--
73 de Phil Kane - K2ASP

1775. Re: Impedance mismatch ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:03:54 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6CBC5A.4C582AA3@oio.net>
Source record: 171647

Mad Dog wrote:
>
> I have figured out that the transmitter will not deliver full power to the
> load unless the input and output impedances match,and downward sloping
> ground radials lower the impedance of a 1/2 wave vertical antenna.So does
> this mean that a A99 w/o the ground radials has a higher input impedance
> than 50 ohms? If i had access to a noise bridge i would measure it to be
> safe.
>
> -- George S.

George,
In general your correct in what your thinking about
matching impedances. 'Droopy' radials is one way of
changing the impedance of an antenna. But that's not
the only way. The 'A99' uses a matching scheme that's
different (rings). Both do the same thing. So do
gamma matches, delta's, etc.
'Doc

1776. Re: Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:07:55 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6CBD4B.B432C9ED@oio.net>
Source record: 171648

WD9IFW wrote:
>
> I'm planning to use a longwire (about
> 150 to 200 ft of 12 gauge solid wire)
> for 160/80/40/30 meters using a LDG
> AT-11MP auto tuner with 4:1 Balan.
> Question is do I have to use earth
> ground on the Balan connector (marked
> for ground) ?? I used a longwire about
> 20 years ago and don't remember grounding the tuner (Homebrew) then.
> Remember getting a few good shocks, but
> being told not to ground it.
> Thanks for any help.
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

I think I'd ground the tuner/balun(?). It's being
picky, but your talking about a 'random length' wire
antenna, not a 'long wire'. A 'long-wire' is one that's
longer than a wave length for the particular band.
'Doc
PS - If it doesn't work too well grounded, try removing
the ground.

1777. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:15:00 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <fa3b6.1098$e5.2741797@news.ntplx.net>
Source record: 171649

W4JLE <Fred@w4jle.com> wrote:

> The only problem with QRP is that you put the onus on the person at the
> other end to dig YOUR signal out of the noise for YOUR enjoyment.

Some of those folks are might proud of that skill, too. And lots of them
set out to be QRPers themselves. :-)

73,
Ed Hare, W1RFI/QRP

1778. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:16:33 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <Ib3b6.1099$e5.2741742@news.ntplx.net>
Source record: 171650

Bill, W7TI <w7ti@jps.net> wrote:

> They don't do anything the rest of us don't do, they just do it longer.

QRPers do it until they get the exchange right. :-)

73,
Ed Hare, W1RFI/QRP

1779. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:22:20 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94ifbi$la9$1@iac5.navix.net>
Source record: 171651
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

I would suggest that you rethink that tact.

Did I miss out on the announcement where you had been appointed Usenet enforcer?

net protocol does not allow me to alter the headers on a thread I did not start. As I am not the author of this thread, you are addressing the wrong party.

I also note that your message was sent to all the newsgroups as well.
--
Fred W4JLE NHI#1001
Executive Grand Pooba - No Hassle International
Doing away with all requirements for a Ham ticket
"We want, therefore we deserve"
Send your non-tax deductible donations today!

"City_Slicker" <notenuftime@foolscorner.net> wrote in message news:94idfi$jf6@dispatch.concentric.net...
> Fred, I know you know better than to keep cross posting this thread. Your
> mail boxes could get awfully full.
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> "W4JLE" <Fred@w4jle.com> wrote in message
> news:94i9so$h3p$1@iac5.navix.net...
> > You could even have the test on the computer, the computer than could
> grade
> > your test(s) and as you pointed out issue your call sign on the spot.
Then
> > the computer could pop up what the store had in your price range. You
> would
> > then press your selections and walk to the front of the store, pickup
your
> > license and equipment and head home ready to operate.
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> > We could do the same thing from Mall kiosks to attract young people.
This
> > could be coupled with playstation rentals, beepers, and cell phones. A
one
> > stop communications and entertainment kiosk. ARRL could create a Sony
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> > countries to obtain clues to finish the game. Wow! I wish I had thought
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> > that. The only problem is getting it by the old elitist hams that think

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> > yours because you want it..
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> > --
> > Fred W4JLE NHI#1001
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> > "Cathryn Mataga" <cathryn@junglevision.com> wrote in message
> > news:3A6C9DF7.FE5CFEAE@junglevision.com...
> > >
> > >
> > > "Paul R. Stoetzer, N8HM" wrote:
> > > >
> > > > 3. The Tech license is already extremely easy to get. I got my Tech
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> > > > over a year ago and it took about a week to study enough to pass the
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> > > > While I agree more young people are needed in the hobby, the problem
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> > test.
> > > And, might pick up some extra sales from new hams.
> > >
> > >
> >
> >

1780. Re: Feeding a loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:34:33 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <ds3b6.40877$ft6.848946@typhoon.mw.mediaone.net>
Source record: 171652

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20010120140318.21704.00000385@ng-mj1.aol.com...
> > I only want to do this once....
>
> What fun is that (hi)?
>
> Since a well-constructed small loop has very low driving resistance and
uniform
> current distribution, why not try feeding it with a ferrite toroid core.
Slip
> the toroid over the radiator, treating it as a single turn primary. Then,
wind
> several turns on the form to make up a 50-Ohm secondary (you'll need to
> experiment with the number of secondary turns to obtain minimum SWR). I
think
> I saw this idea first in QST as a "hint and kink", and it might provide a
good
> alternative to a coax loop.

I built a home-brew 6m horizontal loop using 12 gage wire. The feedpoint
measured about 12 to 14 ohms so I used two quarter wave sections of RG-58 in
parallel (25 ohm) to match to a 50 ohm line. Worked great.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

1781. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:36:06 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94ig5d$m5d$1@iac5.navix.net>
Source record: 171653

QRPers are like the guy on the newsgroup who asks you a question, then posts instructions to unmung his mail address because he doesn't get on the newsgroup often.

Why, because he doesn't want SPAM?

Don't get me wrong, I have no problems with QRP operators, But, I sometimes feel as others on here that the awards should go to those that work so hard to pull them out.

My other peeve is the guy in a DX pileup who signs QRP and then you find out he thinks 100 watts is QRP.

--
Fred W4JLE NHI#1001
Executive Grand Pooba - No Hassle International
Doing away with all requirements for a Ham ticket
"We want, therefore we deserve"
Send your non-tax deductible donations today!

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in message
news:Ib3b6.1099$e5.2741742@news.ntplx.net...
> Bill, W7TI <w7ti@jps.net> wrote:
>
> > They don't do anything the rest of us don't do, they just do it longer.
>
> QRPers do it until they get the exchange right. :-)
>
> 73,
> Ed Hare, W1RFI/QRP
>
>

1782. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:39:14 UTC
From: k1bqt@aol.com
Message-ID: <20010122183914.12208.00000963@ng-cd1.aol.com>
Source record: 171654

Hi Klein--

>Take it from me - a good antenna is
DEFINITELY more fun!<

Was it that a GOOD antennas or a NICE antenna is more fun? Been so long since
I had to distinguish, I forget.

> But, hey, that's what this news group is all about - better antennas, right?<

....er, you must be from "away"! Have you read some of the posts on here??
(Hi) But, you're right--faster cars, younger women, better antennas, and more
money are exactly what this news group is about.

73

Rick K1BQT

1783. Re: Feeding a loop antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-22 23:59:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94ihfm$i1f$1@uranium.btinternet.com>
Source record: 171655

Dear Max,

Don't ground the main loop. Don't connect the main loop at RF to anything.
Keep it as isolated as possible.

The coupling loop is just a self-supporting circular wire between the inner
and outer conductor of the coax feeder. It is mounted in the same plane as
the main loop.

The conductor diameter of the coupling loop need be no greater than the
inner coaxial wire diameter because it carries the same relatively small
current.

The coupling loop need not be screened by extending the coax braid all the
way round the coupling loop. Waste of good copper braid and plastic.
Disregard the old wives.

For radiating efficiency and other data, including diameter of coupling loop
relative to the main loop, download program MAGLOOP2 from website below.

Download in a few seconds. Not zipped-up. Run immediately. User friendly.
Absolutely free to USA citizens and other similarly privileged persons.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

VE3TMT <mdonoghue1@sympatico.ca> wrote in message
news:Pm7a6.109786$n%.3643697@news20.bellglobal.com...
> I have got the base and loop made, and now ready to rig up the coupling
coil
> to the loop. I have seen many different ways to feed it, ground the small
> loop here, don't ground it there, and so on. Is there one way that is
> better than the rest? I only want to do this once..famous last words!
>
> Thanks,
> Max
>
>

1784. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 00:12:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94ii7ohnc1@plutonium.btinternet.com>
Source record: 171656

With a 1/4-wave antenna only one 1/4-wave elevated radial is needed. Any
additional radials will not improve efficiency in the slightest degree.

Whether the elevated 1/4-wave antenna is horizontal or vertical it matters
nothing - with one 1/4-wave radial it comprises a simple centre-fed
1/2-wave dipole.

Perhaps bent in the middle. So what ?

And that's the end of the matter.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

<ignacy@num.ads.uga.edu> wrote in message
news:3a6c3b5e1vtanpl$mr2ice@news.uga.edu...
>
> Ignacy Misztal
>
> Department of Animal and Dairy Science,
> 354 Animal Science Complex, University Of Georgia,
> Athens, GA 30602, USA
> e-mail: ignacy@uga.edu
> tel. (706) 542-0951, fax: (706) 583-0274
> anonymous ftp: num.ads.uga.edu, http://nce.ads.uga.edu/~ignacy
>

1785. Re: Impedance mismatch ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 00:26:24 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <94ijd2$e5q0v$1@ID-20128.news.dfncis.de>
Source record: 171657

Thats what i was afraid of , the tuning rings are missing on this Antron99
and i suspected something was wrong when i inspected it after puchase , SWR
is minimal -1.1:1 from 27.855 to 28.855. I would prefer a bandwidth centered
on 26.965Mhz. Now i am confused as to why the SWR is low even though i have
a severe impedance mismatch because the matching device (tuning rings) are
missing. The base of the antenna is 1&1/4meters high and i am using 75ft. of
RG8X coax with a RCI2950 for motivation....
by the way "hello doc" nice to see you over here....
I was afraid of "death by fire" if i posted Impedance mismatch on rec. cb
--
714 Sandpile,
The Mad Dog wavin' good bye
"'Doc" <w5lz@oio.net> wrote in message news:3A6CBC5A.4C582AA3@oio.net...
>
>
> Mad Dog wrote:
> >
> > I have figured out that the transmitter will not deliver full power to
the
> > load unless the input and output impedances match,and downward sloping
> > ground radials lower the impedance of a 1/2 wave vertical antenna.So
does
> > this mean that a A99 w/o the ground radials has a higher input impedance
> > than 50 ohms? If i had access to a noise bridge i would measure it to be
> > safe.
> >
> > -- George S.
>
> George,
> In general your correct in what your thinking about
> matching impedances. 'Droopy' radials is one way of
> changing the impedance of an antenna. But that's not
> the only way. The 'A99' uses a matching scheme that's
> different (rings). Both do the same thing. So do
> gamma matches, delta's, etc.
> 'Doc

1786. Re: 3D Polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 00:29:39 UTC
From: klocko@toad.net
Message-ID: <94ij9ajoo1@nnrp1.deja.com>
Source record: 171658

In article <3A6C81F3.820C666F@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> The latest "Science News" reports that Lucent engineers have
> discovered that in addition to horizontal and vertical polarization,
> EM waves can be polarized along the direction of travel, i.e.
> another dimension added to polarization. They say:
>
> "The addition of the third (dimension) permits the polarization
> of the electric and magnetic fields to vary independently. That
> means six separate polarization signals can be transmitted
> simultaneously on the same frequency."
>
> Is this Unspread Spectrum? :-) Wonder what James Clerk Maxwell
> would say?
> --

Sounds like another way of describing a near-field condition. There's a radial field component (the "third dimension"?), and the ratio of E and H components is not 120*pi (independently varying polarization?). Sounds like mumbo-jumbo, but I'll have to see if I can find a copy of Science News. 73,
Bill N3WK

Sent via Deja.com
http://www.deja.com/

1787. Re: Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 00:30:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94ijbu$5dp$1@neptunium.btinternet.com>
Source record: 171573

You will find a few, 3 or 4, buried radials useful. Use your metal domestic
incoming water supply pipe as one of them. That may be all you need.

Forget all about a balun. What on Earth do you want to match to which ?
You've been reading the wrong magazines.

Download program ENDFEED from website below for estimates of radiating
efficiency, etc. The program will also compute L uH and C pF component
values for an L or T 50-ohm impedance matching network.

Download in a few seconds. Not zipped-up. Run immediately. User friendly.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

WD9IFW <wd9ifw@qrz.com> wrote in message
news:3a6c5986$1@news.newsfeeds.com...
>
>
> I'm planning to use a longwire (about
> 150 to 200 ft of 12 gauge solid wire)
> for 160/80/40/30 meters using a LDG
> AT-11MP auto tuner with 4:1 Balan.
> Question is do I have to use earth
> ground on the Balan connector (marked
> for ground) ?? I used a longwire about
> 20 years ago and don't remember grounding the tuner (Homebrew) then.
> Remember getting a few good shocks, but
> being told not to ground it.
> Thanks for any help.
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1788. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 00:51:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A6CD599.AE61FD4F@eznec.com>
Source record: 171659

W4JLE wrote:
> . . .
> Don't get me wrong, I have no problems with QRP operators, But, I sometimes
> feel as others on here that the awards should go to those that work so hard
> to pull them out.
> . . .

If a weak signal turns out to be someone running 100 watts, do you fault him for not having a kW amplifier? But more fundamentally, if it's such a burden to copy a weak signal, why do you answer one? Or does copying a weak signal become a burden only if you find out the other station is running low power? It doesn't make much sense to me for someone to respond to a weak signal, then complain because it's weak. What am I missing here?

Roy Lewallen, W7EL

1789. Re: proposal for license testing for profit

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 01:05:20 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <SNhsOu7IJOUkmZzIhMg3Vh+k6ErK@4ax.com>
Source record: 171660

"Phil Kane" <Phil.Kane@nospam.spam> wrote:

>On Mon, 22 Jan 2001 16:14:34 -0500, Denver Braughler wrote:
>
>>Cathryn Mataga wrote:
>>> for example, Radio Shack and ham radio stores to give ham radio
>>> license tests right in the store -- and set up a computer system to give call signs
>>> right on the spot. Then, the stores could make a little money giving the test.
>>> And, might pick up some extra sales from new hams.
>>
>>If real money could be made from the extra sales, the stores
>would give the tests free.
>>
>>Perhaps you can ask Radio Shack whether they think your proposal is viable.
>
> The enabling legislation clearly says that examinations are to
> be given on a "reimbursement for out-of-pocket expenses" basis
> which precludes making a profit. [47 USCA s. 303(f)(1)(I)]

I also wouldn't want the person grading the test to be influenced by
the possibility of selling hundreds of dollars of equipment to the
testee, pending a passing grade...

Bob
k5qwg

1790. Re: proposal for license testing for profit

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 01:46:13 UTC
From: Jerry France <grf@ctaz.com>
Message-ID: <3A6CE24E.DA20E156@ctaz.com>
Source record: 171661

Why in the world are you Bob,Phil,Cathryn, and others, mucking up this
antenna news group with this crap?

Bob Miller wrote:
>
> "Phil Kane" <Phil.Kane@nospam.spam> wrote:
>
> >On Mon, 22 Jan 2001 16:14:34 -0500, Denver Braughler wrote:
> >
> >>Cathryn Mataga wrote:
> >>> for example, Radio Shack and ham radio stores to give ham radio
> >>> license tests right in the store -- and set up a computer system to give call signs
> >>> right on the spot. Then, the stores could make a little money giving the test.
> >>> And, might pick up some extra sales from new hams.
> >>
> >>If real money could be made from the extra sales, the stores
> >would give the tests free.
> >>
> >>Perhaps you can ask Radio Shack whether they think your proposal is viable.
> >
> > The enabling legislation clearly says that examinations are to
> > be given on a "reimbursement for out-of-pocket expenses" basis
> > which precludes making a profit. [47 USCA s. 303(f)(1)(I)]
>
> I also wouldn't want the person grading the test to be influenced by
> the possibility of selling hundreds of dollars of equipment to the
> testee, pending a passing grade...
>
> Bob
> k5qwg

1791. Re: 200+ messages - could that many be off topic?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 01:54:40 UTC
From: Denver Braughler <den001@deadletter-bwcc.com>
Message-ID: <3A6CE460.5D888C8B@deadletter-bwcc.com>
Source record: 171662

Jerry France wrote:
> Why in the world are you Bob,Phil,Cathryn, and others, mucking up this
> antenna news group...?
I'm sorry. From numerous recent messages, I had gathered that this was the newsgroup for debating code / no code.

1792. hygain rotor potentiometer source

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 02:01:47 UTC
From: George Cortez <k2jen@frontiernet.net>
Message-ID: <94ionr$14lc$1@node17.cwnet.frontiernet.net>
Source record: 171663

Any where else? I ve called rotor doc
and norms rotor and no dice...

George Cortez kg2db

1793. Coax routing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 02:05:46 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <xH5b6.6062$A23.58046@news6.giganews.com>
Source record: 171664

What's the recommended way to route coax on a 75 ft crankup tower? Inside the tower, or out?

73 de Jack

1794. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 02:09:36 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A6CE7E0.4C846AD7@hiwaay.net>
Source record: 171665

Reg- I usually read your input with pleasure, but this time I think you
are all wet. I'm not at all sure what all the effects are, but I'm
pretty sure the imbalance created by having one element in the relative
clear (the vertical), and the other affected by the proximity of the
soil below it, (and usually parallel to it) is significant, and I'm SURE
that's NOT the end of the matter.

Care to expound on the result of the imbalance I described? I really
would like to get more info, and a better feel for this.

Bill-W4BSG

Reg Edwards wrote:
>
> With a 1/4-wave antenna only one 1/4-wave elevated radial is needed. Any
> additional radials will not improve efficiency in the slightest degree.
>
> Whether the elevated 1/4-wave antenna is horizontal or vertical it matters
> nothing - with one 1/4-wave radial it comprises a simple centre-fed
> 1/2-wave dipole.
>
> Perhaps bent in the middle. So what ?
>
> And that's the end of the matter.
>
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> <ignacy@num.ads.uga.edu> wrote in message
> news:3a6c3b5e1vtanpl$mr2ice@news.uga.edu...
> >
> > Ignacy Misztal
> >
> > Department of Animal and Dairy Science,
> > 354 Animal Science Complex, University Of Georgia,
> > Athens, GA 30602, USA
> > e-mail: ignacy@uga.edu
> > tel. (706) 542-0951, fax: (706) 583-0274
> > anonymous ftp: num.ads.uga.edu, http://nce.ads.uga.edu/~ignacy
> >

1795. Re: hygain rotor potentiometer source

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 02:15:48 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A6CE954.875A813B@hiwaay.net>
Source record: 171666

Did you try Hy-Gain? Their add (and 800 number) is on page 26 of the
Feb, 2001, QST
(800-647-1800)

Bill-W4BSG

George Cortez wrote:
>
> Any where else? I ve called rotor doc
> and norms rotor and no dice...
>
> George Cortez kg2db

1796. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 02:24:36 UTC
From: Old_Timer <oldtimer@nonsuch.net>
Message-ID: <3A6CEB64.ED3435EF@nonsuch.net>
Source record: 171667
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

Cathryn Mataga wrote:
>
> Roy Lewallen wrote:
> >
> > I don't like this idea very much. The part that worries me is as you
> > say, they "might pick up some extra sales from new hams". Without
> > accusing any store or anyone of dishonesty, I think it's a bad idea for
> > the test giver to have such an immediate and direct financial incentive
> > to have the examinee pass.
> >
>
> Money makes the world go-round. Methinks. And if you want to
> get more young people in the hobby, I think you need the kind
> of marketing muscle that Radio Shack can provide. And, I think the fraud
> issue here is over-estimated. There's been fraud
> in the testing system as it is. If you had big companies involved,
> who had lawyers, they could snap the whip with the employees.
> And, they'd be better positioned to enforce standards, than random
> individuals. I think.
>
> Just enact some fines for cheating. Hire a few people to go
> around, and masquerade as applicants to keep the system clean. And,
> open an office, that would handle reports of fraud, and then
> investigate as a criminal matter. It'd probably be cleaner than
> the current setup.

Marketing muscle? Is this from the same group of drooling no-loads I've encountered in almost every RadShack I've entered over the past several decades? These folks panic when a customer refuses to provide his name and address.

The people who are Radio Shack's customers seem to be from several distinct groups: a) those who need a part in a hurry and can't wait for delivery from a "1-800" house (I generally fall into this group), b) those who don't care about price, c) those who don't care about quality and d) those who are waiting for a spouse to finish shopping at the mall.

I don't think we need individuals who are incapable of identifying an electronic component administering amateur license testing.

Dave Heil K8MN

1797. Re: Under tropo tilt aerial above horizontal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 03:15:43 UTC
From: k3bu@aol.com
Message-ID: <20010122221543.24921.00000788@ng-co1.aol.com>
Source record: 171668

>
>Has anyone tried this (vhf/uhf)
>Thanks G8IXN.
>
>

Yep, VHF guys do it, they tilt their antennas about 10 - 15 deg. and report better results.

Yuri, K3BU

1798. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 03:24:08 UTC
From: k3bu@aol.com
Message-ID: <20010122222408.24921.00000791@ng-co1.aol.com>
Source record: 171569

>
>Whether the elevated 1/4-wave antenna is horizontal or vertical it matters
>nothing - with one 1/4-wave radial it comprises a simple centre-fed
>1/2-wave dipole.
>
>Perhaps bent in the middle. So what ?
>
>And that's the end of the matter.
>

Whoaaa!
The above statement could be valid for dummy loads or freaktennas and CFAs.
Have you ever looked at the radiation pattern of horizontal dipole at various heights, and verticals with various slope elevated radials (single or multitude)?
Then you add various ground conductivities and you have "beginning of the matter". Vertical has nulls where horizontal has lobes and vice versa. Are you trying to tell Tom that he waisted 119 radials?

Yuri

1799. Re: Coax routing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 03:30:42 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6CFAE2.6A3BB85C@oio.net>
Source record: 171570

Jack Taylor wrote:
>
> What's the recommended way to route coax on a 75 ft crankup tower? Inside
> the tower, or out?
>
> 73 de Jack

Always outside. Won't interfere with, or get 'hunk-up'
on cables/pullies/etc.
'Doc

1800. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 03:32:46 UTC
From: City_Slicker <notenuftime@foolscorner.net>
Message-ID: <94iu0u$ioo@dispatch.concentric.net>
Source record: 171571
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb,rec.radio.amateur.digital.misc

For what ever reason this cross posting continues to be a problem usually stemming from the ham groups. You surely have control to which NG you direct your response to. It figures you would follow everyone off the cliff to adhere to protocol. Do you believe that anyone who is only interested in CB gives a rats @$$ about some new Brownie license to use a radio? This NG is CB no license, no policy etc. So why even post it here?

If I have to nominate myself as the enforcer of this group so be it others will support the cause. If the amateur NG would like all of the CB posts crossed to their NG it can begin immediately. You see it is like one guy turns on an amp then another then another and pretty soon the whole band is unusable. Is it time to see who's is bigger? Or can this just end and everyone take their posts where they belong?

Since I don't know the origins and really don't care to waste time researching I am posting back to all the groups so that no one can later say what happened and why. This thread being crossed to the CB group can be stopped if you want to. Or you can get prepared to read many more posts that don't pertain to your groups.

"W4JLE" <Fred@w4jle.com> wrote in message
news:94ifbi$la9$1@iac5.navix.net...
> I would suggest that you rethink that tact.
>
> Did I miss out on the announcement where you had been appointed Usenet
> enforcer?
>
> net protocol does not allow me to alter the headers on a thread I did not
> start. As I am not the author of this thread, you are addressing the wrong
> party.
>
> I also note that your message was sent to all the newsgroups as well.
> --
> Fred W4JLE NHI#1001
> Executive Grand Pooba - No Hassle International
> Doing away with all requirements for a Ham ticket
> "We want, therefore we deserve"
> Send your non-tax deductible donations today!
>
> "City_Slicker" <notenuftime@foolscorner.net> wrote in message
> news:94idfi$jf6@dispatch.concentric.net...
> > Fred, I know you know better than to keep cross posting this thread.
Your
> > mail boxes could get awfully full.

> >
> > "W4JLE" <Fred@w4jle.com> wrote in message
> > news:94i9so$h3p$1@iac5.navix.net...
> > > You could even have the test on the computer, the computer than could
> > grade
> > > your test(s) and as you pointed out issue your call sign on the spot.
> Then
> > > the computer could pop up what the store had in your price range. You
> > would
> > > then press your selections and walk to the front of the store, pickup
> your
> > > license and equipment and head home ready to operate.
> > >
> > > We could do the same thing from Mall kiosks to attract young people.
> This
> > > could be coupled with playstation rentals, beepers, and cell phones. A
> one
> > > stop communications and entertainment kiosk. ARRL could create a Sony
> > > playstation and gameboy cartridge to teach amateur radio, along with
an
> > > amateur radio adventure that would require simulated contacts with DX
> > > countries to obtain clues to finish the game. Wow! I wish I had
thought
> of
> > > that. The only problem is getting it by the old elitist hams that
think
> > you
> > > should learn a bunch of code and radio nonsense to gain what is
> rightfully
> > > yours because you want it..
> > >
> > > --
> > > Fred W4JLE NHI#1001
> > > Executive Grand Pooba - No Hassle International
> > > Doing away with all requirements for a Ham ticket
> > > "We want, therefore we deserve"
> > > Send your non-tax deductible donations today!
> > >
> > > "Cathryn Mataga" <cathryn@junglevision.com> wrote in message
> > > news:3A6C9DF7.FE5CFEAE@junglevision.com...
> > > > >
> > > > >
> > > > > "Paul R. Stoetzer, N8HM" wrote:
> > > > > >
> > > > > > 3. The Tech license is already extremely easy to get. I got my
Tech
> > just
> > > > > > over a year ago and it took about a week to study enough to pass
the
> > > test,

> > > > > and that was with 55 questions on two tests, not 35.
> > > > >
> > > > > While I agree more young people are needed in the hobby, the
problem
> > is
> > > not
> > > > > the license structure, which I believe to be perfect, it is the PR
> > > > > deficencies.
> > > >
> > > > What about this as a proposal. Leave everything as it is as far as
> > > licenses
> > > > are concerned. But, then eliminate the rule that you can't charge
> money
> > > > for testing people. And, then work to get the FCC to cut a deal
> > > > to allow, for example, Radio Shack and ham radio stores to give ham
> > radio
> > > > license tests right in the store -- and set up a computer system to
> > give
> > > call signs
> > > > right on the spot. Then, the stores could make a little money
giving
> > the
> > > test.
> > > > And, might pick up some extra sales from new hams.
> > >
> > >
> >
> >
>
>

1801. Help me!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 04:56:24 UTC
From: Bellsouth <ghettowah01@aol.com>
Message-ID: <i68b6.370$OP4.13385@news1.atl>
Source record: 171572

Hey, I know this is probably the wrong place to be posting this, but I need some help. I have recently purchaced a portable wireless communication device with a standard portable radio type antenna. Now the range of this sucker is not poor, but at times I need it to be greater. Is there any way of enhancing the antenna so that the range will be increaced? I have tinkered with things like this in the past, but to little avail. Any response would be greatly appreciated. and if possible, could you e-mail the response to

ghettowah01@aol.com

Thanks
A newbie to the world of radio-communications

1802. Re: one radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 06:13:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6D2114.5F23@wt.net>
Source record: 171574

ignacy@num.ads.uga.edu wrote:
>
> Radials elevated to about 2m.
> Ignacy, NO9E

I think thats the problem. Being as the radials/radial are elevated,they need to be resonant to really work. If you have 20m or appx 60 ft radials on a 160 L I don't see how they can do much good at all. They need to be 130 ft long if they are elevated. If you run 1/4 wl radials, I bet then 4 radials will be better than 1. If you only run 1 elevated 1/4 wl radial close to the ground, it should act as half of a "dipole". Being as it does this the ground losses along that leg should be fairly high. With your half size radials elevated, I'm surprised you are doing well with any number of them. On the ground, this would be fine though.
MK
--
http://web.wt.net/~nm5k

1803. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 06:31:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6D2556.1DC1@wt.net>
Source record: 171576

Bill Aycock wrote:
>
> Reg- I usually read your input with pleasure, but this time I think you
> are all wet. I'm not at all sure what all the effects are, but I'm
> pretty sure the imbalance created by having one element in the relative
> clear (the vertical), and the other affected by the proximity of the
> soil below it, (and usually parallel to it) is significant, and I'm SURE
> that's NOT the end of the matter.
>
> Care to expound on the result of the imbalance I described? I really
> would like to get more info, and a better feel for this.
>
> Bill-W4BSG

The leg close to the ground can show quite a bit of ground losses being so close I would think. I see where Reg is coming from with his theory of this, but I don't really agree with it unless the antenna is high in the air, and then it's true. But to me, you can't totally go by the theoretical efficiency of antenna without considering height and ground losses. An inv L with the single 1/4 wl radial at 1/2 wl up will be very efficient and have low ground losses. The same antenna with the single radial at 5 feet? Good luck in the contest...But to me an inv L with a single 1/4 wl radial that is elevated is not an inv L. It's a severely perverted dipole. And if the radial is only 1/8 wl long as he says his are, it's a bent monopole with a weird length and fairly useless counterpoise wire. MK
--
http://web.wt.net/~nm5k

1804. Re: Sprint PCS antennas on schools!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 06:59:12 UTC
From: littlejoeflubNOSPAM@yahoo.com
Message-ID: <903214DC6littlejoeflubyahooco@130.133.1.4>
Source record: 171577
Cross-posted to: alt.cellular.sprintpcs,rec.radio.amateur.antenna,misc.consumers,alt.cellular

Apologies to Ken M. I didn't have the origial message available to reply to directly so I had to use yours since it was the next available in line.

In reply to the original poster, I wish Sprint would put up a few towers at the schools in my town, that way my sprint pcs service would actually work. There's a cell tower at the high school; but it's not sprint. There's a tower at the new police/fire complex; but it's not sprint either. I'd rather pay for an Analog Cellular One service over my nonexistant Sprint one any day.

All I get ("get in the soon-to-be past tense, ordered a Voicestream package tonight, will be here wednesday") is a signal strength of nothing in my home meaning I can't make or receive calls whatsoever. I have to go clear across town just to get a signal strength of 1 or 2 bars. It's kind of ridiculous having to go clear into the next town just to make a decent call with this thing.

As for the effects of RF radiation, nobody really knows what the effects would be after long-term exposure. Other electronic items (AM/FM radio, TV, Microwave, etc.) also emit RF radiation to some degree, so cell phone and their towers shouldn't be given all the blaim.

1805. Re: Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 07:43:40 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <vBab6.2532$IO2.487891@news.uswest.net>
Source record: 171578

No, you should not connect a jumper from a tuner's chassis to either of the balanced [balun] binding posts if you are planning to feed a balanced transmission line. You should ground the tuner's chassis to the station's ground in any case. I hope this helps.

WD9IFW <wd9ifw@qrz.com> wrote in message news:3a6c5986$1@news.newsfeeds.com...
>
>
> I'm planning to use a longwire (about
> 150 to 200 ft of 12 gauge solid wire)
> for 160/80/40/30 meters using a LDG
> AT-11MP auto tuner with 4:1 Balan.
> Question is do I have to use earth
> ground on the Balan connector (marked
> for ground) ?? I used a longwire about
> 20 years ago and don't remember grounding the tuner (Homebrew) then.
> Remember getting a few good shocks, but
> being told not to ground it.
> Thanks for any help.
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1806. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 09:22:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A6D4D5B.F321A5B8@eznec.com>
Source record: 171579

Modeling has shown that a vertical with one radial close to the ground (not the example Reg gives -- he specifically said that the radial was high) is pretty inefficient(*) in that a sizable fraction of the power is lost in heating the ground. You can investigate this very easily with EZNEC v. 3.0, even the free demo version. Set the Plot Type to 3 Dimensional, the Ground Type to Real/High Accuracy, and the Wire Loss to Zero. The model shouldn't contain any resistive loads. This makes the ground the only source of loss. Run a far field pattern and look at the Average Gain. The deviation of the average gain from 1 (0 dB) is the ground loss.

This ground loss includes not only the loss due to current returning via the radial(s), but also the loss occurring due to reflection from the ground some distance out from the antenna. So you should compare various radial configurations with each other but be careful about extending the results to predict what would happen if the radial system were perfect. Example file Vert1.EZ is a vertical connected to "MININEC-type" ground. This ground has no loss from returning currents (the antenna connects to the ground with no resistance); in this respect it acts like the antenna has a perfect radial system. Yet the average gain is -5.14 dB. Does this mean that only a third of the power applied to the antenna makes it into the distant far field? Yep. The rest heats up the ground as it reflects. Changing the ground type to perfect shows an average gain very close to 1 (0 dB) as it should be. With the Vert1 results as a benchmark, compare radial systems at various heights with various ground qualities -- you should find it interesting. One more caution -- remember this says nothing about how strong the field is in any particular direction or elevation angle (although EZNEC can certainly tell you this too), which is what ultimately matters. The Average Gain simply shows you what fraction will arrive at distant points.

Roy Lewallen, W7EL

(*) Antenna efficiency is usually defined to take into account only near field losses. Average Gain calculated by EZNEC includes the effect of lossy reflection of the signal from the ground, which typically occurs largely in the far field. So the resulting figure, Average Gain, isn't the antenna efficiency in the strict classical sense. It's more of a system efficiency figure, where the ground out to a few wavelengths is part of the system. But it does represent the fraction of the applied power that actually makes it to distant points. In this sort of analysis, verticals invariably show up much worse than horizontal antennas, since a much higher percentage of the power is lost when a vertically polarized wave strikes the ground than when a horizontally polarized wave does.

Mark Keith wrote:
>
> Bill Aycock wrote:
> >
> > Reg- I usually read your input with pleasure, but this time I think you
> > are all wet. I'm not at all sure what all the effects are, but I'm
> > pretty sure the imbalance created by having one element in the relative
> > clear (the vertical), and the other affected by the proximity of the
> > soil below it, (and usually parallel to it) is significant, and I'm SURE
> > that's NOT the end of the matter.
> >
> > Care to expound on the result of the imbalance I described? I really
> > would like to get more info, and a better feel for this.
> >
> > Bill-W4BSG
>
> The leg close to the ground can show quite a bit of ground losses being
> so close I would think. I see where Reg is coming from with his theory
> of this, but I don't really agree with it unless the antenna is high in
> the air, and then it's true. But to me, you can't totally go by the
> theoretical efficiency of antenna without considering height and ground
> losses. An inv L with the single 1/4 wl radial at 1/2 wl up will be very
> efficient and have low ground losses. The same antenna with the single
> radial at 5 feet? Good luck in the contest...But to me an inv L with a
> single 1/4 wl radial that is elevated is not an inv L. It's a severely
> perverted dipole. And if the radial is only 1/8 wl long as he says his
> are, it's a bent monopole with a weird length and fairly useless
> counterpoise wire. MK
> --
> http://web.wt.net/~nm5k

1807. Re: Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 10:20:05 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6D5AD5.15DED88@dvol.com>
Source record: 171580

WD9IFW wrote:

> I'm planning to use a longwire (about
> 150 to 200 ft of 12 gauge solid wire)
> for 160/80/40/30 meters using a LDG
> AT-11MP auto tuner with 4:1 Balan.
> Question is do I have to use earth
> ground on the Balan connector (marked
> for ground) ?? I used a longwire about
> 20 years ago and don't remember grounding the tuner (Homebrew) then.
> Remember getting a few good shocks, but
> being told not to ground it.
> Thanks for any help.

>
I'll be very surprised if any autotuner will provide a decent match to
your rig on many if not most freqs considering the wide range of feedpoint
impedances you should expect to have to deal with. I use wide-range manual
MFJ tuners which can deal with any feedpoint impedance. You'll need a
common ground per Reg Edward's comments, ground strap the radio, the tuner
and the earth ground and radials in whatever form together. To keep the
"hot stuff" off the radio insert a choke balun in the line between the
radio and the tuner. Can be just 10-12 turns of coiled coax.
>
w3rv

>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1808. Double Half Wave antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 11:54:35 UTC
From: surf_tolive@yahoo.com
Message-ID: <surf_tolive-2301010654350001@t-25-182-42.dialup.wisc.edu>
Source record: 171581

I'd like to build a compact semi directional antenna for my
apartment to work on 11 or ten meters. I have SSB radios for
both bands but no high power "modified" CB enabled ham rigs.
I'd like a bit of more gain than the quarter wave bolted to my
rain gutter on my balcony. Any thoughts about how to phase two
dipoles or Jpoles for an extra 3 db of gain would be apreicated.
I plan to have a simple movable boom that would rotate the antenna
about 180 degrees. I know from the double quarter wave CB antena's
that the spacing has to be around 9 feet. The proper phasing cable
is 75ohm coax combined somehow in to a 50 ohm load. I have seen stacked
beams that use the 75 ohm to 50 ohm phasing cable arangement. I came
up with this idea yesterday. And i'm guestmating I might get about
5 db gain over a quaterwave which would increase my signal from my
about 3 times over that quater wave. The quarter wave would work
fine when condintions where up if I had 100 watt radio which I
don't. I have heard something like 2.15 db increase in gain you get
from going to from a decent quarterwave to a decent dipole. Any body build
10 meter J poles? dipoles would work because I am three strories up
and I would just hang down antenna wire and use copper tubbing for the
the main antenna. I may put a two meter antenna on top of this.

The chalenge is get that SSB CB radio working DX with out an ileagal
amp or a a big beam that the aparment managemt wouldn't like.

The other idea was to try a 5/8 wave CB antenna that could also work
on twelve meters as a half wave.

If any body has built such semi directional antennas I
really apreicate the advise and expereince in how to get
them working?

73's

Reid n9syw

1809. Antenna for FM Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 11:55:19 UTC
From: Pim <sebastien@altern.com>
Message-ID: <980251293.883150@remus.infonie.fr>
Source record: 171582

Hi,

I've ordered a 1W FM Transmittor on the Veronica website. I've received it today and it seems to work fine.
I'd like to broadcast only on 100m around my flat (for friends who live mear me).
The antenna must be plugged on the SO-239. The kit comes with a 50Ohm PL-259 (Dummy Load). When i plug the PL-259 on the circuit and when i use 13V at 90.00MhZ, a friend of mine can hear the signal at 50 meters. But the other friend at 100m hears nothing...
So i think i have to make a little antenna... And i dont want something expensive. I think a simple Dipole Aerial would be the best

I've seen this on a website : "Both elements can be either aluminum/copper tubes or wire. The lengths of each dipole, L, is calculated from your transmitting frequency by this formula:

L = 71/F (meters), where F is operating frequency in MHz"

But how can I plug the Dipole Aerial on the SO-239 ? What sort of cables should I use, how can I do ?? And what should I buy ?

Keep in mind that it's for a LITTLE broadcasting (i don't need 3 miles , hehe :p)

Please answer me on my email if you can : sebastien@altern.org

Thank you !!

1810. MFJ 1798 ANY COMMENTS?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 12:40:27 UTC
From: "D. MCG3" <mcg3@adelphia.net>
Message-ID: <%Yeb6.3951$mo2.450690@news1.news.adelphia.net>
Source record: 171583

I'VE GOT ONE OF THESE NEW IN THE BOX, IS IT WORTH BUILDING? ANY INPUT
GREATLY APP.
73

1811. seeking antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 13:48:26 UTC
From: rdalton1 <rdalton1@postoffice.swbell.net>
Message-ID: <LYfb6.189$%F1.175204@nnrp2.sbc.net>
Source record: 171584

I have looked everywhere ....I am looking for construction plans for 6mtr
halo (150 watts capacity)
Seems this would be best for 6mtr ssb mobile. thanks..........richard

1812. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 14:44:04 UTC
From: sjwoodr@my-deja.com
Message-ID: <94k5bhrfe1@nnrp1.deja.com>
Source record: 171586
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <9488ancrm1@nnrp1.deja.com>,
LRod <lr0d@my-deja.com> wrote:
> Hmmm. I know a lot of those guys. I ran exams just down the river from
> them in Aurora. In fact, the guy that started the testing group up
there
> years ago and I were both with DeVry VEC originally. I can't remember
> callsigns, since I've moved, but there must have been some turnover
that
> leaves some uninformed VEs, because the guy I know wouldn't do that or
> train his people to do that. Sorry.
> <snip>

I sent an email to the VE and he offered to let me take
the extra class exam in February for free. That's fair
enough for me; it gives me more time to study!

--steve

Sent via Deja.com
http://www.deja.com/

1813. Re: seeking antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 14:57:08 UTC
From: k6mhe@arrl.net
Message-ID: <3a6d9b97.663106@news.mcn.org>
Source record: 171589

September 1958 QST has what you may be looking for

Danny, K6MHE

On Tue, 23 Jan 2001 07:48:26 -0600, "rdalton1"
<rdalton1@postoffice.swbell.net> wrote:

>I have looked everywhere ....I am looking for construction plans for 6mtr
>halo (150 watts capacity)
>Seems this would be best for 6mtr ssb mobile. thanks.....richard
>

1814. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 15:03:10 UTC
From: richardharrison@webtv.net
Message-ID: <28347-3A6D9D2E-48@storefull-117.iap.bryant.webtv.net>
Source record: 171587

The title, "One radial better than 4 radials", makes no sense for a non-directional antenna.

More radials is better than less.

Radials near ground are connections.

4 connections have lower loss than only one connection of the same ilk.

Suppose each radial represents a connection with a loss resistance of one ohm. Suppose a total current of 4 amps is transferred between sender and ground. This is practically a constant current circuit due to relatively high Z in the source.

4 amps squared times one ohm is 16 watts lost in the connection made by one radial.

1 amp squared times one ohm is one watt lost in each of 4 radials for a total of 4 watts lost in the connection made through 4 radials.

Best regards, Richard Harrison, KB5WZI

1815. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 15:04:40 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a6da075$5$vtanpl$mr2ice@news.uga.edu>
Source record: 171585

I appreciate many responses to my problem. Perhaps some of the suggestions went too far. I am not trying to make not the optimum 160m antenna but to set up something that would fit on my city lot, could be set in an hour or two, and could be more efficient than a shortened dipole. The main purpose of the post aside from originating a discussion was:

- contradict a blanket statement that more radials for ANY antenna with a vertical component is better.

- give praise to EZNEC

There was one question why to have a 20m radial (leg) 6 ft off the ground? The answer is feeding. One can feed at apex of an L, but with that apex 70 ft up, it is a lot of cable and tuning is difficult. With a radial (or one leg of a dipole) at 6ft, one can use a simple L network at a few feet, adding ferrites to suppress the common currents. My L network is housed in a food plastic box.

73,
Ignacy, NO9E

1816. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 15:16:12 UTC
From: richardharrison@webtv.net
Message-ID: <28348-3A6DA03C-12@storefull-117.iap.bryant.webtv.net>
Source record: 171590

Ignacy, NO9E wrote:
"-contradict a blanket statement that more radials for ANY antenna with a vertical component is better."

More radials for any non-directional grounded vertical antenna IS better.

As the number of radials grows, the benefit of an added radial decreases.

Best regards, Richard Harrison, KB5WZI

1817. Re: Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 15:37:48 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a6da68c_3@news3.prserv.net>
Source record: 171588

'Doc:
I'm glad someone else besides me takes offense at these "long wire"
designations. And it's not being picky. It seems if it has length it is a
long wire. Where do these people find the designation long wire and not
random wire? If the length is measured in kilometers, then it is a long
wire, unless you are working LW. Then even that is a random wire. BTW, my
faulty memory is that either Terman or Kraus says 4 wavelengths minimum for
a long wire. 75M is about a thousand feet. Even ten meters needs 130 feet
or so for a minimal long wire.
--
Crazy George

'Doc <w5lz@oio.net> wrote in message news:3A6CBD4B.B432C9ED@oio.net...

<snip>
It's being
> picky, but your talking about a 'random length' wire
> antenna, not a 'long wire'. A 'long-wire' is one that's
> longer than a wave length for the particular band.
> 'Doc
> PS - If it doesn't work too well grounded, try removing
> the ground.

1818. Re: 3D Polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 17:42:58 UTC
From: "Brian.Farrelly" <Brian.Farrelly@nho.hydro.com>
Message-ID: <3A6DC2A2.21933A00@nho.hydro.com>
Source record: 171591

Cecil wrote:
>
> The latest "Science News" reports that Lucent engineers have
> discovered that in addition to horizontal and vertical polarization,
> EM waves can be polarized along the direction of travel, i.e.
> another dimension added to polarization. They say:
>
> "The addition of the third (dimension) permits the polarization
> of the electric and magnetic fields to vary independently. That
> means six separate polarization signals can be transmitted
> simultaneously on the same frequency."
>
> Is this Unspread Spectrum? :-) Wonder what James Clerk Maxwell
> would say?
> --
> http://www.mindspring.com/~w6rca

There is a technical letter on this in Nature, 18 Jan 2001,
together with a less technical discussion. The idea is to
use the multipath scattering between the transmitter and
receiver rather than treat it as a problem. Because the
scattered signal comes in at an angle to the direct signal
it creates an electric field which is *along* the direct
path but still perpendicular to its own direction of travel.

They consider UHF propagation in urban areas, for
example cell-phones, so that you can get large scattering
angles from buildings.

I imagine James Clerk Maxwell would have been very impressed.

Brian, LA0DG

--
mailto:Brian.Farrelly@nho.hydro.com Norsk Hydro Research Centre
phone +47 55 99 68 74 (((Postboks 7190
fax +47 55 99 69 70 2oooS N-5020 Bergen
home +47 55 13 78 49 HYDRO Norway

1819. Re: 10 bucks buys a ham license.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 17:55:17 UTC
From: LRod <lr0d@my-deja.com>
Message-ID: <94kgi0$6ha$1@nnrp1.deja.com>
Source record: 171592
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <94k5bhrfe1@nnrp1.deja.com>,
sjwoodr@my-deja.com wrote:

> I sent an email to the VE and he offered to let me take
> the extra class exam in February for free. That's fair
> enough for me; it gives me more time to study!

I'm glad you did that, and I'm glad he did that. That's a good
resolution. I wish it hadn't happened in the first place, but this will
work out. Thanks for not giving up on it.

LRod

Sent via Deja.com
http://www.deja.com/

1820. Re: seeking antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 17:58:25 UTC
From: richardharrison@webtv.net
Message-ID: <23947-3A6DC641-36@storefull-115.iap.bryant.webtv.net>
Source record: 171593

rdalton1 wrote:
"I am looking for construction plans for 6mtr halo (150 watts capacity)"

A halo is a dipole, simple or folded variety, rolled into a circle, usually with a capacitive gap between its ends.

This horizontal dipole is nearly 1/2-wavelength. Capacitance between its ends is used to increase current at the gap and get more uniform current in the dipole`s length so to get more even radiation in the horizontal plane.

An adjustable capacitor between the antenna ends permits tuning and impedance adjustment.

Vertical polarization is common for mobile operation. Whip antennas are simple and effective at 6 meters. Why use a halo?

Best regards, Richard Harrison, KB5WZI

1821. Re: 3D Polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 18:21:04 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <kYjb6.6353$Mu1.456392@bgtnsc06-news.ops.worldnet.att.net>
Source record: 171594

"Brian.Farrelly" <Brian.Farrelly@nho.hydro.com> wrote in message
news:3A6DC2A2.21933A00@nho.hydro.com...
>
>
> There is a technical letter on this in Nature, 18 Jan 2001,
> together with a less technical discussion. The idea is to
> *use* the multipath scattering between the transmitter and
> receiver rather than treat it as a problem. Because the
> scattered signal comes in at an angle to the direct signal
> it creates an electric field which is *along* the direct
> path but still perpendicular to its own direction of travel.
>

In most mobile communications systems (i.e. cellular), the RF link is established through multipath reflections. In many cases, a Line Of Sight (LOS) path does not even exist. (There is not much of an LOS path between the US and the rest of the world for HF communications either) In these cases, if the multipath signals did not exist, the communications link could not be established. As a result of these numerous multipath reflections, the total signal arriving at the receive antenna is comprised of numerous individual signals with differing polarization sense and orientation (Polarization Distortion). I have not seen the Nature or the Science News article, but this is a well known concept. I would be surprised if this was the phenomenon that the Lucent engineers were describing.

Steve, VE9SRB

1822. Re: Longwire question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 18:22:43 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A6DCBF3.EF8B00F1@dvol.com>
Source record: 171595

Crazy George wrote:

> 'Doc:
> I'm glad someone else besides me takes offense at these "long wire"
> designations. And it's not being picky. It seems if it has length it is a
> long wire. Where do these people find the designation long wire and not
> random wire? If the length is measured in kilometers, then it is a long
> wire, unless you are working LW. Then even that is a random wire. BTW, my
> faulty memory is that either Terman or Kraus says 4 wavelengths minimum for
> a long wire. 75M is about a thousand feet. Even ten meters needs 130 feet
> or so for a minimal long wire.

>
I managed to bite my tongue on that one. A "longwire" is a very specific type
of antenna which is usually quite directional. The last type of antenna a ham
needs when just surfing the bands.

>
> --
> Crazy George

>
w3rv

1823. Amp Supply Co. TLX 980131 WDMR Balun?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 18:33:22 UTC
From: "Ronald H. Evans" <revans4@nc.rr.com>
Message-ID: <i5jr6to89dscqgr7i7inoa494kstbluvq9@4ax.com>
Source record: 171596

I am using a very large Amp Supply Co. TLX 980131 WDMR Balun on my
G5RV dipole. Does anyone have the specifications for this Balun?
73, Ron, K4KTB

1824. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 19:16:51 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A6DD8A3.794BDF32@rupert.tds-az.lmco.com>
Source record: 171598

Roy Lewallen wrote:
>
> W4JLE wrote:
> > . . .
> > Don't get me wrong, I have no problems with QRP operators, But, I sometimes
> > feel as others on here that the awards should go to those that work so hard
> > to pull them out.
> > . . .
>
> If a weak signal turns out to be someone running 100 watts, do you fault
> him for not having a kW amplifier? But more fundamentally, if it's such
> a burden to copy a weak signal, why do you answer one? Or does copying a
> weak signal become a burden only if you find out the other station is
> running low power? It doesn't make much sense to me for someone to
> respond to a weak signal, then complain because it's weak. What am I
> missing here?
>
> Roy Lewallen, W7EL

Just to add a little bit more to this thread.

I agree that ,if someone responds to a weak signal, it doesn't make sense to complain because it's weak. When I CQ, I always stick a couple of "QRP"s in there. Any station answering knows in advance that I'm running low power. If they don't want to talk to me because my signal is weak or I'm running low power, that's ok. There is always someone else to talk to.

As far as who is doing all the work, most QRP rigs have pretty poor receivers (at least mine do). It very often happens that the other station hears me a lot better than I hear him. He is usually running a nice Yeasu or Kenwood with a nice receiver with good filters. Me, I'm running a direct conversion receiver with 1 rf stage and an audio filter. I can hear stations on both sides of center frequency which double the QRM. Try the 40 Meter novice band at night, with a rig like that some time.

I just think that running QRP is fun from both sides. I switch back to QRO, once in a while, and am impressed at how easy contacts are to make at the 100 watt level. I can get a 599 anywhere in the US. But with QRP, it's a little harder to get those good signal reports. I makes you pay a little bit more attention to your antenna. A little better match means less power lost in reflections and more to the antenna.

Well, just my $0.02.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

1825. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 19:28:26 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A6DDB5A.A37@wt.net>
Source record: 171597

ignacy@num.ads.uga.edu wrote:
>
> I appreciate many responses to my problem. Perhaps some of the suggestions
> went too far. I am not trying to make not the optimum 160m antenna but to
> set up something that would fit on my city lot, could be set in an hour or
> two, and could be more efficient than a shortened dipole. The main purpose
> of the post aside from originating a discussion was:
>
> - contradict a blanket statement that more radials for ANY antenna
> with a vertical component is better.
>
> - give praise to EZNEC
>
> There was one question why to have a 20m radial (leg) 6 ft off the ground?
> The answer is feeding. One can feed at apex of an L, but with that apex 70
> ft up, it is a lot of cable and tuning is difficult. With a radial (or one
> leg of a dipole) at 6ft, one can use a simple L network at a few feet,
> adding ferrites to suppress the common currents. My L network is housed in
> a food plastic box.
>
> 73,
> Ignacy, NO9E

I'm confused....An inv L is normally fed at the base. Also there are
different lengths inv L's. I'll assume yours is 1/4 wl long. Why did you
want to feed at the apex? With a normal 1/4 wl inv L fed at the base,
you should need no matching network. I know I don't. "I have a 160m inv
L at this time. Only when using a longer than 1/4 wl version do you need
matching, and in that case, you usually only need a simple cap. Some
like 3/8 wl L's. etc.
In your present config, it's not's not a real inverted L, but a form of
dipole. I'm curious.. Have you tried feeding from the base of the 1/4
wave? If you are going to use short radials with an inv L , they really
must be ground mounted to do any good. That way they will be detuned by
the earth, and the length won't matter. Also if you ground mount, and
use a radial system "any length", you likely won't have rf problems. I
know I don't. And I don't have that many radials at all. MK
--
http://web.wt.net/~nm5k

1826. Re: 3D Polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 19:50:21 UTC
From: "Brian.Farrelly" <Brian.Farrelly@nho.hydro.com>
Message-ID: <3A6DE07D.813A3C77@nho.hydro.com>
Source record: 171600

VE9SRB wrote:
>
> "Brian.Farrelly" <Brian.Farrelly@nho.hydro.com> wrote in message
> news:3A6DC2A2.21933A00@nho.hydro.com...
> >
> >
> > There is a technical letter on this in Nature, 18 Jan 2001,
> > together with a less technical discussion. The idea is to
> > *use* the multipath scattering between the transmitter and
> > receiver rather than treat it as a problem. Because the
> > scattered signal comes in at an angle to the direct signal
> > it creates an electric field which is *along* the direct
> > path but still perpendicular to its own direction of travel.
> >
>
> In most mobile communications systems (i.e. cellular), the RF link is
> established through multipath reflections. In many cases, a Line Of Sight
> (LOS) path does not even exist. (There is not much of an LOS path between
> the US and the rest of the world for HF communications either) In these
> cases, if the multipath signals did not exist, the communications link could
> not be established. As a result of these numerous multipath reflections,
> the total signal arriving at the receive antenna is comprised of numerous
> individual signals with differing polarization sense and orientation
> (Polarization Distortion). I have not seen the Nature or the Science News
> article, but this is a well known concept. I would be surprised if this was
> the phenomenon that the Lucent engineers were describing.
>
> Steve, VE9SRB

Steve,

I am not a radio engineer so my summary may be oversimplified.

I agree that a line of sight path need not exist and in
fact did not exist in the experimental setup they used.

The point is that the multipath signals will come in from a
wide range of angles so that the polarization can have 6
independent directions rather than the two we are used to
thinking about (H and V). This is presumably what you
call 'polarisation distortion'.

As I understood it one can unscramble the
multipath signals by signal processing of pilot tones
added to the signal channels and actually *use*
this polarization distortion to recover the

independent channels.

Does this make sense?

Perhaps someone else has read the articles and can
explain it better.

Brian

--
mailto:Brian.Farrelly@nho.hydro.com Norsk Hydro Research Centre
phone +47 55 99 68 74 (((Postboks 7190
fax +47 55 99 69 70 2oooS N-5020 Bergen
home +47 55 13 78 49 HYDRO Norway

1827. Re: Double Half Wave antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 19:53:09 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A6DE125.ED6F94D4@oio.net>
Source record: 171599

Reid Savage wrote:
>
> I'd like to build a compact semi directional antenna for my
> apartment to work on 11 or ten meters. I have SSB radios for
> both bands but no high power "modified" CB enabled ham rigs.
> I'd like a bit of more gain than the quarter wave bolted to my
> rain gutter on my balcony. Any thoughts about how to phase two
> dipoles or Jpoles for an extra 3 db of gain would be apreicated.
> I plan to have a simple movable boom that would rotate the antenna
> about 180 degrees. I know from the double quarter wave CB antena's
> that the spacing has to be around 9 feet. The proper phasing cable
> is 75ohm coax combined somehow in to a 50 ohm load. I have seen stacked
> beams that use the 75 ohm to 50 ohm phasing cable arangement. I came
> up with this idea yesterday. And i'm guestmating I might get about
> 5 db gain over a quaterwave which would increase my signal from my
> about 3 times over that quater wave. The quarter wave would work
> fine when condintions where up if I had 100 watt radio which I
> don't. I have heard something like 2.15 db increase in gain you get
> from going to from a decent quarterwave to a decent dipole. Any body build
> 10 meter J poles? dipoles would work because I am three strories up
> and I would just hang down antenna wire and use copper tubbing for the
> the main antenna. I may put a two meter antenna on top of this.
>
> The chalenge is get that SSB CB radio working DX with out an ileagal
> amp or a a big beam that the aparment managemt wouldn't like.
>
> The other idea was to try a 5/8 wave CB antenna that could also work
> on twelve meters as a half wave.
>
> If any body has built such semi directional antennas I
> really apreicate the advise and expereince in how to get
> them working?
>
> 73's
>
> Reid n9syw

Reid,
The simplest would be to just set another 1/4 wave antenna,
about 5% longer than the one you have now, behind the present
antenna. The second antenna would act as a reflector. Move it
to change directions.
Your over-all best bet is probably to use a 5/8 wave antenna,
practical directional antennas get sort of 'large' for in-door use.

```
'Doc
```

1828. Re: Double Half Wave antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 20:04:28 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A6DE3CC.BFDBA57@zylay.com>
Source record: 171603

'Doc wrote:
>
> Reid Savage wrote:
> >
> > I'd like to build a compact semi directional antenna for my
> > apartment to work on 11 or ten meters. I have SSB radios for
> > both bands but no high power "modified" CB enabled ham rigs.
> > I'd like a bit of more gain than the quarter wave bolted to my
> > rain gutter on my balcony. Any thoughts about how to phase two
> > dipoles or Jpoles for an extra 3 db of gain would be apreicated.
> > I plan to have a simple movable boom that would rotate the antenna
> > about 180 degrees. I know from the double quarter wave CB antena's
> > that the spacing has to be around 9 feet. The proper phasing cable
> > is 75ohm coax combined somehow in to a 50 ohm load. I have seen stacked
> > beams that use the 75 ohm to 50 ohm phasing cable arangement. I came
> > up with this idea yesterday. And i'm guestmating I might get about
> > 5 db gain over a quaterwave which would increase my signal from my
> > about 3 times over that quater wave. The quarter wave would work
> > fine when condintions where up if I had 100 watt radio which I
> > don't. I have heard something like 2.15 db increase in gain you get
> > from going to from a decent quarterwave to a decent dipole. Any body build
> > 10 meter J poles? dipoles would work because I am three strories up
> > and I would just hang down antenna wire and use copper tubbing for the
> > the main antenna. I may put a two meter antenna on top of this.
> >
> > The chalenge is get that SSB CB radio working DX with out an ileagal
> > amp or a a big beam that the aparment managemt wouldn't like.
> >
> > The other idea was to try a 5/8 wave CB antenna that could also work
> > on twelve meters as a half wave.
> >
> > If any body has built such semi directional antennas I
> > really apreicate the advise and expereince in how to get
> > them working?
> >
> > 73's
> >
> > Reid n9syw
>
> Reid,
> The simplest would be to just set another 1/4 wave antenna,
> about 5% longer than the one you have now, behind the present
> antenna. The second antenna would act as a reflector. Move it
> to change directions.

> Your over-all best bet is probably to use a 5/8 wave antenna,
> practical directional antennas get sort of 'large' for in-door use.
> 'Doc

That's what I was gonna say. double-halfwave antennas on 10 or 11 are close to 30 ft long. Not so bad if you live way up and dangle them off the balcony, but the neighbors undernetah you might not understand or appreciate it.

1829. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 20:28:40 UTC
From: cdean@firstcitizensbank.com
Message-ID: <3a6de8c0.520467382@news.epix.net>
Source record: 171602

Everyone has to remember, ham radio is suppose to be fun. Some like
digital modes, some like QRO, QRP.....

It's all up to the person. Yes, I have a 100 watt station and an
amplifier, but I also like QRP. If someone wants to answer me, then
fine, if not it won't hurt my feelings.

Stick to what you like. If you do not QRP/QRO/PACKET/PSK31, then
don't do it. Corey KF3DY

On Tue, 23 Jan 2001 12:16:51 -0700, K7MEM <jda@rupert.tds-az.lmco.com>
wrote:

>Roy Lewallen wrote:
>>
>> W4JLE wrote:
>> > . . .
>> > Don't get me wrong, I have no problems with QRP operators, But, I sometimes
>> > feel as others on here that the awards should go to those that work so hard
>> > to pull them out.
>> > . . .
>>
>> If a weak signal turns out to be someone running 100 watts, do you fault
>> him for not having a kW amplifier? But more fundamentally, if it's such
>> a burden to copy a weak signal, why do you answer one? Or does copying a
>> weak signal become a burden only if you find out the other station is
>> running low power? It doesn't make much sense to me for someone to
>> respond to a weak signal, then complain because it's weak. What am I
>> missing here?
>>
>> Roy Lewallen, W7EL
>
>Just to add a little bit more to this thread.
>
>I agree that ,if someone responds to a weak signal, it doesn't make
>sense to complain because it's weak. When I CQ, I always stick a
>couple of "QRP"s in there. Any station answering knows in advance
>that I'm running low power. If they don't want to talk to me because
>my signal is weak or I'm running low power, that's ok. There is always
>someone else to talk to.
>
>As far as who is doing all the work, most QRP rigs have pretty poor
>receivers (at least mine do). It very often happens that the other
>station hears me a lot better than I hear him. He is usually running
>a nice Yeasu or Kenwood with a nice receiver with good filters. Me,

>I'm running a direct conversion receiver with 1 rf stage and an
>audio filter. I can hear stations on both sides of center frequency
>which double the QRM. Try the 40 Meter novice band at night, with
>a rig like that some time.
>
>I just think that running QRP is fun from both sides. I switch back
>to QRO, once in a while, and am impressed at how easy contacts are
>to make at the 100 watt level. I can get a 599 anywhere in the US.
>But with QRP, it's a little harder to get those good signal reports.
>I makes you pay a little bit more attention to your antenna. A little
>better match means less power lost in reflections and more to the
>antenna.
>
>Well, just my $0.02.
>
>Martin K7MEM
>
>--
>Martin E. Meserve K7MEM
>martin.e.meserve AT lmco.com
>
>I respond to news groups and E-Mail on my own time and therefore
>my responses may not be as timely as you, or I, would like them to
>be. If I seem to be ignoring you, send me another E-Mail to jog my
>memory. Opinions are my own and do not reflect the opinions of my
>employer.

1830. Re: One radial better than 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 20:42:05 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3a6df228$6$vtanpl$mr2ice@news.uga.edu>
Source record: 171601

>I'm confused....An inv L is normally fed at the base. Also there are
>different lengths inv L's. I'll assume yours is 1/4 wl long. Why did you
>want to feed at the apex? With a normal 1/4 wl inv L fed at the base, you
>should need no matching network. I know I don't. "I have a 160m inv L at
>this time. Only when using a longer than 1/4 wl version do you need
>matching, and in that case, you usually only need a simple cap. Some like
>3/8 wl L's. etc.

The antenna used 70 ft trees for support. Because of many trees and branches, there was limited flexibility in getting any particular length of the upper section. The wire was installed with a help of a slingshot over two trees, about 150 ft total length. Three 70 ft radials were leftover from an 80m vertical. There was no space for 140 ft radials. Because the wires could not easily be pruned and feeding was at the base, the L network was an obvious choice to get matching.

Ignacy, NO9E

1831. Re: Double Half Wave antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 20:53:02 UTC
From: richardharrison@webtv.net
Message-ID: <25795-3A6DEF2E-60@storefull-114.iap.bryant.webtv.net>
Source record: 171605

Reid, N9SYW wrote:
"The challenge is to get that SSB CB radio working DX---".

A half-wave vertical dipole is possible from your 3rd floor location with ease. Use a full-length 1/4-wave whip for the upper part. Suspend a wire the same length as your whip from its drivepoint as the lower part of your dipole.

For a little gain, add a second dipole about 17 or 18 feet from the first. You will then have a broadside array if you feed them in-phase.

Use equal lengths of 75-ohm coax from each dipole to a tee. use any length of 50-ohm coax between the tee and your radio.

Best regards, Richard Harrison, KB5WZI

1832. Re: seeking antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 20:55:02 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A6DEFA5.B60D6831@ix.netcom.com>
Source record: 171604

Richard -- see URL:
http://members.aol.com/n2kbk/6m.html
Lots more antenna projects at URL:
http://ac6v.com/antprojects.htm

rdalton1 wrote:

> I have looked everywhere ....I am looking for construction plans for 6mtr
> halo (150 watts capacity)
> Seems this would be best for 6mtr ssb mobile. thanks..........richard

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

1833. Re: Antenna for FM Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 21:30:54 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3a6df848$0$7163$1dc6e903@news.corecomm.net>
Source record: 171606

You only need to place one element of the dipole ant in the center of
the pl259. This will make a 1/4 wave antenna. I used to use one on my
2meter xcvr and it worked great. Just solder the center lead and put a
90 degree bend in the wire.
What your range will be is knot known but should be sufficent for your
purposes.

Dave

Pim wrote:
>
> Hi,
>
> I've ordered a 1W FM Transmittor on the Veronica website. I've received it
> today and it seems to work fine.
> I'd like to broadcast only on 100m around my flat (for friends who live mear
> me).
> The antenna must be plugged on the SO-239. The kit comes with a 50Ohm PL-259
> (Dummy Load). When i plug the PL-259 on the circuit and when i use 13V at
> 90.00MhZ, a friend of mine can hear the signal at 50 meters. But the other
> friend at 100m hears nothing...
> So i think i have to make a little antenna... And i dont want something
> expensive. I think a simple Dipole Aerial would be the best
>
> I've seen this on a website : "Both elements can be either aluminum/copper
> tubes or wire. The lengths of each dipole, L, is calculated from your
> transmitting frequency by this formula:
>
> L = 71/F (meters), where F is operating frequency in MHz"
>
> But how can I plug the Dipole Aerial on the SO-239 ? What sort of cables
> should I use, how can I do ?? And what should I buy ?
>
> Keep in mind that it's for a LITTLE broadcasting (i don't need 3 miles ,
> hehe :p)
>
> Please answer me on my email if you can : sebastien@altern.org
>
> Thank you !!

1834. Re: FCC proposal for new Amateur "Colt" License Class

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 21:43:39 UTC
From: Dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.10101231633050.21580-100000@cluster2>
Source record: 171607
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.radio.family,rec.radio.cb

What are those freqs for the family radio service?

1835. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 21:53:45 UTC
From: n2ey@aol.com
Message-ID: <94kuh5kit1@nnrp1.deja.com>
Source record: 171609

In article <3A65B1E4.B0F7AC18@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> >
> > In article <3A645258.879C6790@IEEE.org>, Cecil
<Cecil.A.Moore@IEEE.org> writes:
> >
> > >Bill Nelson wrote:
> > >> Most new hams these days are appliance operators - with little
or no grasp
> > >> of electronics. So, let's get rid of the theory tests as well,
as the
> > >> reason for such testing is gone.
> > >
> > >Electronics is not outdated.
> > >--
> > Morse isn't outdated, either.
>
> Jim, your opinion is antiquated.

Horsefeathers, Cecil.

> When the great majority of radio services
> drop a mode, that is the defining characteristic of being outdated.

Nonsense. If that's true, then SSB, RTTY, AM and a host of other modes
are "outdated" too.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1836. Re: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 21:55:35 UTC
From: JRW <johnrwells@hotmail.com>
Message-ID: <f8nb6.1842$jn6.28764@news2-hme0>
Source record: 171608

Not connected with aerials but is to do with grounding:

I've just got my txer and other things for my station. I read that the tx and atu need grounding. Is it alright to use the water pipes (assuming they're metal all the way to ground)?

The manual does say "don't use gas pipes (sparks?) or electric conduit"

Oh, and what should be the maximum lenght of the earth wire, or doesn't it matter?

Thanks,

John
"Mark Keith" <nm5k@wt.net> wrote in message news:3A6612FD.724C@wt.net...
> Jeff Farrar wrote:
> >
> > I did the same thing but I didn't ground it. Good question though. Let me
> > know what you find out.
>
> I would ground the mast holding the antenna to a water pipe that runs
> though the attic if there are any. If there aren't any, I probably
> wouldn't worry about it. It's possible for it to attract a strike, but
> the chances are fairly low. If your house is out in the open with no
> trees or anything around, I would worry more than if the house had trees
> and other objects around it. If you are really nervous, put a lightning
> rod on the house. That will lower the chances of a strike to the antenna
> to nearly zip. MK
> --
> http://web.wt.net/~nm5k

1837. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 22:00:45 UTC
From: n2ey@aol.com
Message-ID: <94kuu7ktn1@nnrp1.deja.com>
Source record: 171610

In article <3A66FE26.D4C0DA3F@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> N2EY wrote:
> >
> > Cecil <Cecil.A.Moore@IEEE.org> writes:
> > >My feelings have nothing to do with it.
> >
> > They have everything to do with it.
>
> One would hope the FCC is operating on more than just feelings.

That's all they and you are operating on. Opinions based on feelings.
>
> > > There simply are not enough
> > >people who want to eliminate Morse code to matter.
> >
> > All it takes is a few in the right places.
>
> Only if they are at the FCC.

Exactly.
>
> > You didn't write that there weren't enough to matter. You wrote
that nobody who
> > matters wants to eliminate the Morse code. Not the same thing at
all.
>
> It means exactly the same thing to a Texan.

Let's cut to the chase. You cannot admit that you changed verbal horses
in midstream, so you are palying wordgames. Typical. Boring.

> If there's not enough of them
> to matter then they don't matter. Same thing.

Nope. You wrote "no one who matters". That says some people don't
matter.
>
> > >Nope, the number of them is what matters.
> >
> > That's not what you wrote.
>
> Yep, it is.

You are simply mistaken.

> Bone up on your Texan, Jim.

Oh goody - now we can start a new thread "is Texan a language?" The answer is obviously no, because for something to be a language it must convey meaningful information. In other words, intelligence.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1838. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 22:16:06 UTC
From: n2ey@aol.com
Message-ID: <94kvqtlsq1@nnrp1.deja.com>
Source record: 171613
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <3A65E44C.FE56CA41@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> Jim Kelley wrote:
> >
> > Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> > news:3A639E9F.304EE3D8@IEEE.org...
> > > The arguments are different. Jim says there is not one code-
tested jammer
> > > using Morse code equipment.

This is not true. You are misrepresenting what I wrote, Cecil. That's beyond the pale. I am posting this to both NGs so there's no confusion.

> I say there is at least one and probably more.

Nobody denies that. I simply refuse to play your game.
> >
> > I'm enjoying your argument in the third person here, Cecil. Which
Jim are
> > you claiming said these things? Quotes might better illustrate
your point.
> > Or they might not.
> >
> I redirect this thread from r.r.a.antenna where it doesn't belong.

Yet you continued to post to the "no-code kills" thread long after you promised to stop. At least 40 posts on that thread, involving all sorts of things like your experiences in aircraft in South America, were posted to rraa. Many were posted ONLY to rraa. Only about a third of them involved me in any way.

> Jim, N2EY, is redirecting everything back to r.r.a.antenna where it
> doesn't belong. That's the reason for the disconnect.

You keep redirecting it because you know I don't post to policy anymore. I made this exception to avoid any more of that.

> Jim will not
> admit that there ever has been a single code-tested ham using Morse
> equipment for the purpose of jamming.

That is simply not true. I just won't play your games. So you are distorting and making stuff up about me behind my back.

> He refuses to condemn code-
> tested hams who use Morse equipment for the purpose of jamming since

> he says there never has been any.

Wrong, wrong, wrong, Cecil. I have repeatedly condemned ALL jammers on the ham bands, regardless of testing or mode. The ones you mention are a subset, and so are logically included.

> That's because any admission of
> such would violate the immaculate conception virginal religious
> aspect of Morse code to the PCTA.

Nonsense. I just won't play your games anymore.

Much of what you have written about me is simply not true, Cecil. I have pointed out your mistakes above. You will not admit them, of course.

Anyone who believes what Cecil has written can check deja.com and read my posts for themselves.

Enough of your games, Cecil. I'm sorry you are so bored that you have to spend time trying to "get other people's goats".

Game over.

73 de Jim, N2EY
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1839. Re: seeking antenna plans

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 22:23:44 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <RwRuOmZ5OKeV3=4tW1vJkn+l9zn9@4ax.com>
Source record: 171611

"rdalton1" <rdalton1@postoffice.swbell.net> wrote:

>I have looked everywhere ....I am looking for construction plans for 6mtr
>halo (150 watts capacity)
>Seems this would be best for 6mtr ssb mobile. thanks...........richard
>

Back in Dallas, in the late Fifties, all the 6-meter guys had
halo-looking antennas on their cars -- dunno who made the things, or
whether anyone still makes 'em half a century later, but they were
sure common in those days -- course, back then, repeaters were unknown
and everyone was working simplex and everything was pretty much
horizontally polarized -- might be different now.

Bob
k5qwg

1840. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 22:29:36 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <m71s6t4unshvgi0aieq2dar46upmtcf0ml@4ax.com>
Source record: 171612

On Tue, 23 Jan 2001 12:16:51 -0700, K7MEM <jda@rupert.tds-az.lmco.com> wrote:

>I just think that running QRP is fun from both sides. I switch back
>to QRO, once in a while, and am impressed at how easy contacts are
>to make at the 100 watt level.

I have to agree, QRP is fun. A few days ago a ham friend was in the shack and we came across a BY calling CQ. Just for fun, I cranked the power down to five watts and called him. He came back on the first call and it was quite a kick.

On the other hand, I firmly believe that Life Is Too Short For QRP and will probably never do that again. :-) More power to those who wish to run QRP (oxymoron intended).

Bill, W7TI

1841. Re: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 22:34:31 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <eg1s6tgfmf12odrq0tsh7hls26akofe3ft@4ax.com>
Source record: 171614

On Tue, 23 Jan 2001 21:55:35 -0000, "JRW" <johnrwells@hotmail.com> wrote:

>I've just got my txer and other things for my station. I read that the tx
>and atu need grounding. Is it alright to use the water pipes (assuming
>they're metal all the way to ground)?

For the purpose of preventing electrical shock, a grounded AC outlet is all that is necessary. Just be sure there is continuity all the way from the cabinet of your rig and atu to the round plug on the AC cord.

For purposes of transmitting, the only ground, if any, should be at the antenna, not at the rig. Trying to create an antenna ground in the shack will usually cause the shack to be full of RF when you transmit (surprise!).

If you have a specific question, please ask.

Bill, W7TI

1842. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 23:36:16 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <iBob6.1142$e5.2815419@news.ntplx.net>
Source record: 171616

Bill, W7TI <w7ti@jps.net> wrote:

> On the other hand, I firmly believe that Life Is Too Short For QRP and
will
> probably never do that again. :-) More power to those who wish to run
QRP
> (oxymoron intended).

No, no, Bill, it is "less power to you!" :-)

Seriously, you probably WILL do it again. Maybe you will try to do it with 100 milliwatts, just to see if it gets through. :-)

Sounds like you are a DXer, so I have a suggestion that may bring the fun back to the thrill of the hunt. While you are waiting for the volcano to erupt somewhere and create a new country, the next time you hear one that you have already confirmed by band/mode, crank your drive control down to 5 W and work a new one. Suddently, working another G station will be fun again! See how long it takes to work a hundred, then a couple of hundred. See if you can develop that knack for cracking pileups with 5 W; I have cracked 'em with 250 milliwatts, and you aren't going to be outdone by a QRPer with an invee up 40 feet on 40 M, are you?

Okay, here's the ULTIMATE challenge -- beat my all-time world records for points-per-watt in the ARRL CW SS -- 56 QSOs in 31 sections, if memory serves, at 10 milliwatts, for a PPW of 347,200. :-)

73,
Ed Hare, W1RFI

1843. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-23 23:52:59 UTC
From: k1bqt@aol.com
Message-ID: <20010123185259.15098.00001668@ng-cs1.aol.com>
Source record: 171617

Hi Corey--

>Everyone has to remember, ham radio is suppose to be fun.<

Ohhh, I'm seeing a NEA T-shirt with a whistle hanging tastefully from the neckline.

>Some like digital modes, some like QRO, QRP...It's all up to the person.<

Right! I'm pro-choice too, but only during the first trimester. You've got to be free--but you've got to set limits!

>Yes, I have a 100 watt station and an
amplifier, but I also like QRP.<

Diversity and excellence need not be mutually exclusive. But, they often are.

>If someone wants to answer me, then
fine, if not it won't hurt my feelings.<

Dang--I'm really trying to be offensive!

>Stick to what you like.<

Sticking to someone statured somewhere between Laura Flynn Boyle and Camryn Manheim is okay for most people. My wife is short, but she's well proportioned, smarter than me, and really neat----so I'll do my sticking with her.

>If you do not QRP/QRO/PACKET/PSK31, then don't do it<

Just say NO! I agree! Right on!

73

Rick K1BQT

1844. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-24 00:15:04 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <v97s6t8klcnqg0o315olv34fdgg9u1rg4c@4ax.com>
Source record: 171618

On Tue, 23 Jan 2001 18:36:16 -0500, "Ed Hare, W1RFI" <w1rfi@arrl.net> wrote:

>Seriously, you probably WILL do it again. Maybe you will try to do it with
>100 milliwatts, just to see if it gets through. :-)

Ok, I just remembered - I did do it again. A couple of nights ago I was working a fellow in Dallas using MFSK at about 100 watts. He suggested I try lowering the power in stages to see what would happen. To make a long story short, at 500 mw my signal was still almost 100% copy. Only when I went to 100 mw did copy cease. And it WAS fun, for sure.

Maybe I will take up your challenge to try some DXing with QRP, only I think I'll go lower than five watts just to make it hard.

Thanks for the post, Ed.

Bill, W7TI

1845. 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-25 09:31:59 UTC
From: Dez <dez@cytanet.com.cy>
Message-ID: <94osih$l31$1@aristotelis.cytanet.com.cy>
Source record: 171527

Hi,

I have a 33 feet vertical which I'm currently using as a 1/4 wave
on 7 MHz. It's based fed with several buried radials of various lengths.

I'd like to try the vertical on 14 MHz as a 1/2 wave, or 18 MHz as
a 5/8 wave, but have no idea about how I can achieve a good 50 ohm match.

Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
wave.

Am I right in thinking I need an LC network at the base of the vertical
(feed point)?

Any ideas?

dez@cytanet.com.cy

Dez

1846. Re: Is there a 4 meter ham band?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 00:32:11 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A70C58A.2D7B3E0C@ix.netcom.com>
Source record: 171519

300 divided by 4 meters = 75 MHz and there is a USA FCC allotment there
for a model control (RC) frequency. See URL:
http://www.rclaser.com/radios.html
Not a ham band though -- USA Ham Bands (in meters) according to the ARRL
page are:
160 m ï¿½ 80 m ï¿½ 40 m ï¿½ 30 m ï¿½ 20 m ï¿½ 17 m ï¿½ 15 m ï¿½ 12 m ï¿½ 10 m
ï¿½ 6 m ï¿½ 2 m ï¿½ 1.25 m ï¿½ 70 cm ï¿½ 33 cm ï¿½ 23 cm ï¿½ Lots of Higher
Frequencies
Maybe a typo for 40M
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

> foffe wrote:
> >
> > The QRZ or Buckmaster online callsign lookup site has a
> > 4 meter ham band listed in the interest profile section.
> > I know there is 2m and 6m, but 4m???
>
> F0FFE,

:
<setta@uio.com>

1847. Antenna Design Resources

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 00:48:23 UTC
From: mcharles6249@qwest.net
Message-ID: <3a70c922.22789960@news.uswest.net>
Source record: 171520

Any good resources on the Internet for simple antenna designs
(dipoles, long wires, etc.)?
Thanks.
I am just getting back into the hobby and need to bone up.
Charles
K7SEA

1848. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:04:00 UTC
From: k9sqg@aol.com
Message-ID: <20010125200400.29700.00001034@ng-fz1.aol.com>
Source record: 171521

The more you use for the ground system the better.

73s,

Evan

1849. Re: Is there a 4 meter ham band?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:14:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A70CF91.1016EB5B@oio.net>
Source record: 171523

AC6V wrote:
>
> 300 divided by 4 meters = 75 MHz and there is a USA FCC allotment there
> for a model control (RC) frequency. See URL:
> http://www.rclaser.com/radios.html
> Not a ham band though -- USA Ham Bands (in meters) according to the ARRL
> page are:
> 160 m ï¿½ 80 m ï¿½ 40 m ï¿½ 30 m ï¿½ 20 m ï¿½ 17 m ï¿½ 15 m ï¿½ 12 m ï¿½ 10 m
> ï¿½ 6 m ï¿½ 2 m ï¿½ 1.25 m ï¿½ 70 cm ï¿½ 33 cm ï¿½ 23 cm ï¿½ Lots of Higher
> Frequencies
> Maybe a typo for 40M

The 75 Mhz frequencies are for R/C as you said. I don't
consider that 'normal' 'ham' use. You can't communicate on
those frequencies, can you... No '4 meter' amateur band in
the US. In the UK, yes. Here, no.
'Doc

1850. Vert Pol Yagi Coax Routing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:15:24 UTC
From: Donald Campbell <castles@jps.net>
Message-ID: <3A70CFB7.21DAFCB2@jps.net>
Source record: 171522

I just received the fiberglass mast section that I will use to mount my two meter 14 element vertically polarized yagi above my tri-bander. What is the best way to run the coax from the driven element. In the past I have run it along the boom and down the mast. Should I loop it out from the driven element perpendicular to the driven element down to the metallic mast? This would seem to be the best geometry for minimizing the coax's effect on the yagi's performance.

Trying to do this right the first time.

Thanks, Don W6QEY

1851. Re: Vert Pol Yagi Coax Routing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:44:44 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A70D68C.16BB00E2@dialpoint.net>
Source record: 171524

The best way would be to run it out the back of the beam, then out about 1/4 wave more then down for several feet and back to the mast. Very difficult to do in most cases. Might not be too hard to do if you stacked 2 beams side by side. You could come off the back and then horizontal to the center and back to the mast.

Donald Campbell wrote:
>
> I just received the fiberglass mast section that I will use to mount my
> two meter 14 element vertically polarized yagi above my tri-bander. What
> is the best way to run the coax from the driven element. In the past I
> have run it along the boom and down the mast. Should I loop it out from
> the driven element perpendicular to the driven element down to the
> metallic mast? This would seem to be the best geometry for minimizing
> the coax's effect on the yagi's performance.
>
> Trying to do this right the first time.
>
> Thanks, Don W6QEY

1852. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:46:19 UTC
From: rwclark@seanet.com
Message-ID: <3a72c016.802137662@news.seanet.com>
Source record: 171525

On Thu, 25 Jan 2001 17:48:41 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> There are no
>> Modes to my knowledge that encompass this flexibility which is the
>> downside of their advantage:
>
>I do believe that deep space probes use a variable baud rate digital
>system much superior to Morse code.

C'Mon Cecil,

What "Mode" might that be? Which band is it practiced on? What era
are you speaking of? Is this from one of our Voyager spacecraft? Or
possible Sputnik?

Most deep space craft that I am aware of use Spread Spectrum. If that
is your choice, that millstone around your neck must be chafing by now
- don't take up synchronized swimming! There is more than one reason
why wags describe Spread Spectrum being successful... straight up.
Perhaps when they surplus some unused deep space probes; then we won't
need to pony up $100 billion to build a rig.

Is there anyone in this group, other than me, that has actually worked
on building Spread Spectrum systems? I will let you know right now I
used an ARRL publication (of the same name) that provided considerable
insight back when any discussion was as sparse as trees on the moon.

Few know the genesis of SS and its antecedents being designed using
player piano rolls to encode the frequency sequencers. Tell me about
"modern" techniques and superior digital systems. That same argument
could've worked in the 50's, trotting it out in the 21st century is
pretty lame. Why? because there is a world more than CW that is
inefficient and yet they persist as well. If this is question of
degree - then again that was answered 50 years ago to no obvious
effect except for the space program, for special applications (cost)
and for scads of bandwidth in the SHF (cost again).

Hence the argument seems to be that there are many more expensive
modes than CW as if the dollar burden is proof of efficiency.

73's
Richard Clark, KB7QHC

1853. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:56:30 UTC
From: jmstmc@interaccess.com
Message-ID: <t71maeb12hau81@corp.supernews.com>
Source record: 171526

k9sqg@aol.com (K9SQG) wrote:
>The more you use for the ground system the better.
>
>73s,
>
>Evan

Thanks, Evan and Doc, for your replies. I'm going to go ahead with this antenna, I have access to an almost unlimited amount of wire from a good friend. This is by far the cheapest method for me to get on the air on HF. I just upgraded to general and I'm chomping at the bit. Funds are limited at the moment, so this would work well. Thanks again.

73, KA9MGC
Jim

1854. Re: All Band Antenna Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 01:57:02 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <94qlhbkkf1@nnrp1.deja.com>
Source record: 171528

Hi Ed,
Your right, I should have made it more clear how I work on 160. The Matchbox will not tune that band and it is in pristine shape so I don't want to modify it. I did strap the two leads of the feedline and checked resonance and it is at 1.9 Mhz with a 3:1 match. I do need to find a tuner that will match at 160. I also am using an old LK800 Amp Supply amplifier occasionally which helps a lot on the other bands. It will also load on 1.8 but I have not used it there. Are there any tuners available that will load 160 with that kind of power or would a home brew 160 only type tuner be the ticket? Thanks

Steve K9SL

In article <3A706A68.30F14629@ists.dartmouth.edu>,
"Edward A. Feustel" <efeustel@ists.dartmouth.edu> wrote:
> What interests me is that you say you are feeding it on 160 meters with
> a Johnson Matchbox which is (supposedly) for 80-10. What is the scoop?
>
> Ed, N5EI
>
> motorhomer wrote:
> >
> > Based upon the replies that I received in my original post "All Band
> > Antenna", there did not seem to be any closure on whether or not
> > the impedence readings mattered with the type of antenna that I am
> > operating. As some of you may recall, I am trying to operate on all
> > bands 160-10 meters (160 against ground) with a 136' long doublet fed
> > with 450 ohm ladder line tuned with a Johnson Matchbox. The antenna is
> > fed at the 25-30 foot level but the doublet turns and twists to match
> > the contours of my house and city lot. At one end, the antenna is
> > approximately 7 feet from ground. Therefore, I read the ARRL Antenna
> > handbook cover to cover and found some pertinent comments. One is found
> > in chapter 2 and reads in part "non-resonant antennas fed with open-wire
> > transmission lines and antenna tuners radiate signals just as well as
> > those using coaxial cable and resonant antennas, and can be used on
> > multiple frequency bands". Based upon this, I can see no need to concern
> > myself with the impedence readings of the antenna if it is fed with

open
> > wire or ladder line. Is this a correct assumption or am I missing
> > something?
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
> --
> Edward A. Feustel Research Associate
> efeustel@ists.dartmouth.edu Institute for Security Technology
Studies
> phone - (603)646-0671 Dartmouth College, Hinman Box 6226
> fax - (603)646-0660 Hanover, NH 03755
>

Sent via Deja.com
http://www.deja.com/

1855. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:11:00 UTC
From: jmstmc@interaccess.com
Message-ID: <t71n5k68rrc61d@corp.supernews.com>
Source record: 171529

Thanks, Richard. I'm looking forward to installing this antenna. I was hoping it would work, and I didn't have to run the radials all over the yard. About the only fly in the ointment is the ac service ground is at the opposite end of the house from my radio. It's less than 50', the radials will cover that much distance, should be okay.

73,
Jim

richardharrison@webtv.net (Richard Harrison) wrote:

>Could make a good r-f ground. You need to connect to the electrical
>service entrance ground for code compliance. You may also need a rod at
>your antenna to bypass large surges which could damage the concrete.
>
>Concrete is a better conductor than most soil because it contains
>distributed moisture. The chemical process which turns cement into
>concrete is never complete. It just slows but never stops. Uncombined
>water is always in the mix.
>
>If you`ve worked with electricity over a concrete floor, chances are
>you`ve been shocked as a result. You can testify as to concrete`s
>conductivity.
>
>So, spread the radials on the grounded concrete. They will couple
>conductively and capacitively with the concrete surface. But, make the
>additional connections to the a-c service ground for personal safety and
>to a ground rod at the antenna to give surge protection to the concrete
>itself. A lightning stroke could turn the trapped moisture in the
>concrete to superheated steam and blast a rift in the concrete.
>
>Best regards, Richard Harrison, KB5WZi

1856. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:31:09 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A70E16D.4B79@wt.net>
Source record: 171530

KA9MGC wrote:
>
> [Type your reply here]
> Thanks, Doc. What do you think about tvi or rf in the shack? Will it be a
> problem
> with this antenna if I use radials? If I read it correctly, the radials should
> stop
> this from happening. Thanks again.
>
> Jim
>
> 'Doc <w5lz@oio.net> wrote:
> >Jim,
> > The radials ought to work fine. I'd forget the
> >water pipes, just asking for trouble.
> > 'Doc
>
>
With that end fed wire, rf problems could be possible. Also you are
pretty much feeding the antenna from the shack, so the rf field will be
strong. Not to mention possible common mode problems. About the only
thing you can do is give it a try I guess and see what happens. Normally
a good radial or ground system will help decouple the antenna from the
feedline, and reduce rf problems in the shack. But being yours is fed in
the shack, that won't help you too much. And expect some bands to be
worse than others. MK
--
http://web.wt.net/~nm5k

1857. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:42:13 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A70E405.1A40@wt.net>
Source record: 171531

Dez wrote:
>
> Hi,
>
> I have a 33 feet vertical which I'm currently using as a 1/4 wave
> on 7 MHz. It's based fed with several buried radials of various lengths.
>
> I'd like to try the vertical on 14 MHz as a 1/2 wave, or 18 MHz as
> a 5/8 wave, but have no idea about how I can achieve a good 50 ohm match.
>
> Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
> wave.
>
> Am I right in thinking I need an LC network at the base of the vertical
> (feed point)?
>
> Any ideas?
>
> dez@cytanet.com.cy
>
> Dez

I'd use a gamma loop at the base. I think you would be able to match both bands with it. On 20m as a half wave, you would feed as a normal ringo. A single turn loop that is tapped for the best match. You also usually use a cap also. To match for 17m as a 5/8 wave, you need to resonate at 3/4 wave. So a series coil can be used as is normal, but I also think you could use the same single turn loop used for 20m on 17m. You would just tap in a different place, and not use a cap. When I had a 40m gp up, I also used it on 17m as a 5/8 GP. I used a 24 volt relay to bypass the loading coil for use on 40m. I used a normal series loading coil on that one. You can make the one turn loops out of copper tubing. The soft type used for refrigeration is the easiest to work with. One end of the loop is grounded to the base "mast", and the other end attached to the radiator. If you need a cap to get a better match, it goes from ground to radiator. The coax "hot" taps the coil for best swr. I'm guessing off the top of my head, but I'd say about a 18-20 inch loop for 20m. About 100-120 pf should be about right for a cap if needed. I make those from a length of coax. MK
--
http://web.wt.net/~nm5k

1858. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:50:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A70E5FC.7248@wt.net>
Source record: 171532

W4JLE wrote:
>
> Nonsense! A number of studies have been done firing weapons straight up and
> no such lethality was found.

Hummm, tell that to the people that have been killed right here in Houston city limits from people shooting up in the air during new years eve. Quite a few have been hit. Some killed. One was a young girl. I have a friend of mine that used to live about a mile or two away from a shooting range. One day he heard a round hit his house. Later he went outside and found a nice fat hole in the side of his chevy truck. Not a dent, a big hole. Likely a big bore rifle slug. It would have killed someone if they had been in the way. They put him in the newspaper and had a picture taken of the truck. The cops have been cracking down on the new years shooters and it seems to be slowing down a bit. Zero tolerance on that these days here. MK
--
http://web.wt.net/~nm5k

1859. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:57:51 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A70E7AF.274A@wt.net>
Source record: 171533

KA9MGC wrote:
>
> Thanks, Richard. I'm looking forward to installing this antenna. I was hoping
> it would work, and I didn't have to run the radials all over the yard. About
> the only fly in the ointment is the ac service ground is at the opposite end
> of the house from my radio. It's less than 50', the radials will cover that
> much distance, should be okay.
>
> 73,
> Jim
>
If your gear uses normal plugs with the ground pin, you don't need to
worry about that. As long as the ground wire is actually hooked up, and
most all will be unless a shoddy install, that will give you a good
enough safety ground. If you are using a 12v rig, you really don't need
to worry about it, except for the power supply, and it should have a
ground pin on the plug. MK
--
http://web.wt.net/~nm5k

1860. Re: All Band Antenna Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:57:56 UTC
From: k6mhe@arrl.net
Message-ID: <3a70e73b.13799623@news.mcn.org>
Source record: 171541

Steve,

If you get yourself a tee type tuner and place it is series with the matchbox you'll be able to tune 160 okay... A bit more knob twisting, but real hams twist knobs :-)

For the other bands just put the tee in the by-pass position.

73
Danny, K6MHE

On Fri, 26 Jan 2001 01:57:02 GMT, motorhomer <motorhomer@my-deja.com> wrote:

>Hi Ed,
>Your right, I should have made it more clear how I work on 160. The
>Matchbox will not tune that band and it is in pristine shape so I don't
>want to modify it. I did strap the two leads of the feedline and checked
>resonance and it is at 1.9 Mhz with a 3:1 match. I do need to find a
>tuner that will match at 160. I also am using an old LK800 Amp Supply
>amplifier occasionally which helps a lot on the other bands. It will
>also load on 1.8 but I have not used it there. Are there any tuners
>available that will load 160 with that kind of power or would a home
>brew 160 only type tuner be the ticket? Thanks
>
>Steve K9SL
>
>
>
>In article <3A706A68.30F14629@ists.dartmouth.edu>,
> "Edward A. Feustel" <efeustel@ists.dartmouth.edu> wrote:
>> What interests me is that you say you are feeding it on 160 meters
>with
>> a Johnson Matchbox which is (supposedly) for 80-10. What is the scoop?
>>
>> Ed, N5EI
>>
>> motorhomer wrote:
>> >
>> > Based upon the replies that I received in my original post "All Band
>> > Antenna", there did not seem to be any closure on whether or not
>> > the impedence readings mattered with the type of antenna that I am
>> > operating. As some of you may recall, I am trying to operate on all
>> > bands 160-10 meters (160 against ground) with a 136' long doublet
>fed
>> > with 450 ohm ladder line tuned with a Johnson Matchbox. The antenna

>is
>> > fed at the 25-30 foot level but the doublet turns and twists to
>match
>> > the contours of my house and city lot. At one end, the antenna is
>> > approximately 7 feet from ground. Therefore, I read the ARRL Antenna
>> > handbook cover to cover and found some pertinent comments. One is
>found
>> > in chapter 2 and reads in part "non-resonant antennas fed with
>open-wire
>> > transmission lines and antenna tuners radiate signals just as well
>as
>> > those using coaxial cable and resonant antennas, and can be used on
>> > multiple frequency bands". Based upon this, I can see no need to
>concern
>> > myself with the impedence readings of the antenna if it is fed with
>open
>> > wire or ladder line. Is this a correct assumption or am I missing
>> > something?
>> >
>> > Sent via Deja.com
>> > http://www.deja.com/
>>
>> --
>> Edward A. Feustel Research Associate
>> efeustel@ists.dartmouth.edu Institute for Security Technology
>Studies
>> phone - (603)646-0671 Dartmouth College, Hinman Box 6226
>> fax - (603)646-0660 Hanover, NH 03755
>>
>
>
>Sent via Deja.com
>http://www.deja.com/

1861. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 02:59:36 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <LOZwOnd28zFnzxl9lLJI7qu6fbBA@4ax.com>
Source record: 171534

"W4JLE" <Fred@w4jle.com> wrote:

>Nonsense! A number of studies have been done firing weapons straight up and
>no such lethality was found.
>
>Would I do it? Nope! But not for the reasons you sited. A study was done by
>the Army a number of years ago, where they fired weapons up into the air
>from protected bunkers and had placed sheep all around the area to determine
>the damage. With in a few minutes the folks firing the weapons were letting
>the falling bullets bounce off their helmets and a few caught them in their
>hands.

Hmm, I suppose if you shoot a bullet straight up, once it reaches its
peak height, it will lose all velocity, and then fall at
whatever-the-hell, Newtonian speed any object falls at, which isn't
going to be very fast, and since a bullet doesn't weight much, perhaps
it can fall on your head and there will be little consequence.

On the other hand, if a bullet is shot at a tree limb in a
semi-slanted trajectory, it may come down with some of the velocity
still behind it, and be lethel.

Did the Army really do the above test? I was in the Army Reserves, and
I don't recall us doing anything that silly :-)

Bob
k5qwg
>
>
>
>"David Sinclair" <k3ky@erols.spamnocom> wrote in message
>news:94qakf$k1b$1@bob.news.rcn.net...
>> Thanks for the best laugh of the week, Andrew. Had me rolling on the
>> floor, pretty much. Seriously, though, that is dangerous as heck, and I
>> think you really know that. Any good shooter, who could hit that limb,
>> wouldn't take the shot, because a miss could definitely kill someone.
>
>

1862. TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:04:24 UTC
From: "David J. Moge" <n1rzb@mailops.com>
Message-ID: <3a70e8ab@excalibur.gbmtech.net>
Source record: 171535
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In brief, I have a multi element TV antenna with a amplifier connecting to 4 televisions. The house lot is laid out in such a way that it's very hard to string antennas up with out having them in close proximity to the TV antenna. Cable is not an option. Satellite is possible but would like to keep regular TV antenna.

At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW 10 Watts) which my wife gave me. I put up a dipole to try it out and to my surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.

My wife hasn't stopped yelling at me sense. Every time I key the mike or try out CW the TV's go blank. I have tried a HI PASS filter but that doesn't do much good at all.
My HF rigs cause no problems at all. I do have a good RF ground

WHAT AM I DOING WRONG??? HELP!!!

Any comments and suggestions would be gratefully appreciated.

Thanks

1863. Re: Pride

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:12:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94qpvqnbk0@208.206.142.92>
Source record: 171536
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

K0HB wrote:
>

> "We are fellow travelers on a journey between two
> eternities, and it's a trip far too brief for me
> to be concerned about your speed at the Code of
> Morse."
>

Me too - so long as you have a code speed.

1864. Re: All Band Antenna Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:29:45 UTC
From: "David Michael Kelly"
Message-ID: <pbk17tkb97ti0dq94shr6q4poe2kpffilo@4ax.com>
Source record: 171537

On Tue, 23 Jan 2001 20:28:23 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>My 130ft dipole fed with 80-104ft of 450 ohm ladder-line doesn't even
>need an antenna tuner. It's described on my web page.

I am a new ham, my Tech +HF license just arrived and I am taking my
General exam tomorrow. Haven't bought my first rig yet but have been
researching antennas. Your tunerless dipole has me interested. I think
I understand how you construct it but won't be sure until till I
begin.<g> What has me stopped from even beginning is the specification
of the remote control relays and were one would find such to purchase.
Just looking around I find these but don't have a clue if they would
handle RF.
http://www.ozitronics.com/remote.html
http://www.rentron.com/project03.htm

Elmer me a little.<g>

TIA

--
david
avid@nospam@home.com <---remove nospam before emailing.

1865. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:30:14 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A70EF46.4D36D75B@IEEE.org>
Source record: 171539

Dez wrote:
> Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
> wave.

I have the same antenna fed with an SGC-230 autotuner and it works
well from 40m to 17m. It works fairly well on 75m.
--
http://www.mindspring.com/~w6rca

1866. Re: Glen Martin Tower & Hazer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:34:58 UTC
From: Dwain Mitchell <dwainmnd@worldnet.att.net>
Message-ID: <MPG.14da9e5382d269f4989684@netnews.worldnet.att.net>
Source record: 171538

In article <3a630ffd$0$1506$6daed22a@news.infinet.com>,
mark@nospam.microenh.com says...
> I'm planning a new tower installation for a new QTH. I'm intrigued the Glen
> Martin aluminum tower and Hazer package. I'm afraid to climb a tower (even
> with proper safety gear) and like the idea of working on the antenna from
> the ground. Fortunately, at the new QTH, I will have enough room (about 4
> acres) to put in a guyed tower.
>
> I'd appreciate any comments or experience with the Hazer.
>
> I guess another option would be to get the Hazer for a Rohn 45 or 55 tower.
> Comments?
>
> 73,
> Mark
>
>
>
I have a GM Hazer on my Rohn 25G tower and am very pleased
with the ease of working on the antenna. I was even able to
install a WARC upgrade and a 40 meter upgrade on my TA-33
Mosley without removing the beam from the tower. (It would
have been easier with it removed but I didn't have the
manpower or room at the time)I did have a couple of problems
with supplied hardware not fitting but it was replaced by Glen
Martin with no argument so I really couldn't complain except
for the delay waiting for the "postman".

The long and short of it is, I like mine very much! It keeps
me off the tower which I am happy about at my advancing age.

Good Luck.

1867. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:35:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A70F098.489021F7@IEEE.org>
Source record: 171540

Richard Clark wrote:
>
> On Thu, 25 Jan 2001 17:48:41 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Richard Clark wrote:
> >> There are no
> >> Modes to my knowledge that encompass this flexibility which is the
> >> downside of their advantage:
> > >
> > >I do believe that deep space probes use a variable baud rate digital
> > >system much superior to Morse code.
>
> C'Mon Cecil,
>
> What "Mode" might that be? Which band is it practiced on? What era
> are you speaking of? Is this from one of our Voyager spacecraft?

I was thinking of Voyager. Years ago, I read about the modulation
method and think I remember that bauds got longer as the distance
got longer.

> Is there anyone in this group, other than me, that has actually worked
> on building Spread Spectrum systems?

I was involved in the development of firmware for CDMA.
--
http://www.mindspring.com/~w6rca

1868. Im looking for 4El Qubex 5Band Quad

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:50:43 UTC
From: Jack <poster@gate.net>
Message-ID: <3A70F413.5402B712@gate.net>
Source record: 171542

Im in Florida
wb4roy

1869. Re: All Band Antenna Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:52:07 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A70F467.1B985F4A@IEEE.org>
Source record: 171545

David Michael Kelly wrote:
>
> On Tue, 23 Jan 2001 20:28:23 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >My 130ft dipole fed with 80-104ft of 450 ohm ladder-line doesn't even
> >need an antenna tuner. It's described on my web page.
>
> I am a new ham, my Tech +HF license just arrived and I am taking my
> General exam tomorrow. Haven't bought my first rig yet but have been
> researching antennas. Your tunerless dipole has me interested. I think
> I understand how you construct it but won't be sure until till I
> begin.<g> What has me stopped from even beginning is the specification
> of the remote control relays and were one would find such to purchase.
> Just looking around I find these but don't have a clue if they would
> handle RF.

I used P&B KUP-11D15-24 relays that I found at a surplus store for $2
each. They seemed to handle 100w just fine. My favorite RF relay is a
P&B MR11 but they haven't made those in many years.

One is likely to need one's rig during a power failure. Even though
one can run one's relays off of batteries, I didn't want to endure
the power drain. So now I use DPDT knife switches that I got at a
surplus store in Tucson. I have them mounted on a piece of plexiglas
in my hamshack window with the switches on the inside and the loops
on the outside. Two knife switches are ganged to select each loop.
It takes less time to switch the knife switches than it does to
tune an MFJ tuner and no power is required for any relays.

I have it in the back of my mind to design a bistable 4PDT RF relay
that will maintain the proper Z0 impedance and be switched by a pulse
but right now it is just pie in the sky. Anyone know of such a beast?
--
http://www.mindspring.com/~w6rca

1870. Re: Yaesu ATAS100 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 03:52:56 UTC
From: jason_hsu@my-deja.com
Message-ID: <94qsam$qf1$1@nnrp1.deja.com>
Source record: 171543

In article <EHZb6.800$TI5.172296@news.uswest.net>,
"Keith McQueen" <kb7m@arrl.net> wrote:
< The ATAS-100 covers 40m thru 70cm. It works well for a mobile
antenna, but for your application (in a condo) it will be lacking a
couterpoise. It REQUIRES a good RF ground to operate, and if the RF
ground is lacking, the antenna can be damaged by the stray RF.>

Gary:
I am in the process of investigating some of these issues. Some issues
I see:
1. You might want to do some experimenting before you commit your
money. You might want to borrow HF antennas (I am borrowing Hamsticks
from my club for this reason) and compare their performance to wire
antennas you can make yourself.
2. Consider a zigzag wires if your space is limited
(http://www.io.com/~n5fc/notebk_ant.htm). I will be running some tests
to see how well they compare to straight wires.
2. You can add wire radials to provide a ground plane. Of course, a
wire antenna (assuming it isn't a dipolem or other balanced antenna)
needs radials as well.
3. Horizontal dipoles should be at a height of at least around half a
wavelength in order to radiate mainly at the low angles needed for DX.
Since few hams have this much height available for 160m, 80m, and 40m,
vertical antennas are usually used on these lower frequency bands.
You'll have to experiment to see how well dipoles can work for you.
(Perhaps a vertical zigzag dipole would work. Perhaps not.)
4. If your experiments show that a Screwdriver antenna is your best
option, you should be aware that there are cheaper ($150-$200)
Screwdriver antennas for HF (most of which have 80m, unlike the ATAS-
100). Also, there are many antennas available for 2m/70cm.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

1871. Re: 80m noise and distortion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 04:02:08 UTC
From: rgawtry@timewave.com
Message-ID: <Xns9034E815Brgawtrytimewavecom@216.177.129.13>
Source record: 171544
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc

"Ed Hare, W1RFI" <w1rfi@arrl.net> wrote in
<qp2c6.1211$e5.2966693@news.ntplx.net>:

>http://www.arrl.org/members-only/prodrev/pdf/pr9602.pdf

Please note that the ANC-4 RF Noise Canceller, formerly produced by JPS, is
now made by Timewave Technology Inc, - http://www.timewave.com.

Thank you,
Randy Gawtry, K0CBH
Timewave Technoogy Inc,

1872. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 04:09:15 UTC
From: "Bill, W7TI" <w7ti@jps.net>
Message-ID: <bcs17t806k7nah7j1u7st7418qphrh6fjq@4ax.com>
Source record: 171546

On Thu, 25 Jan 2001 11:31:59 +0200, "Dez" <dez@cytanet.com.cy> wrote:

>Hi,
>I have a 33 feet vertical which I'm currently using as a 1/4 wave
>on 7 MHz. It's based fed with several buried radials of various lengths.
>I'd like to try the vertical on 14 MHz as a 1/2 wave, or 18 MHz as
>a 5/8 wave, but have no idea about how I can achieve a good 50 ohm match.
>Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
>wave.
>Am I right in thinking I need an LC network at the base of the vertical
>(feed point)?
>Any ideas?

Rather than tell you to put coil A here and cap B there, let me explain what needs to happen. There are often several ways to make it happen, but let's go over the basics first.

There are two things to do when you want to match a non-resonant antenna to your feedline. First, make it resonant. Second, match the resonant resistance to your feedline. These two principles apply to everything from mobile antennas to ground planes to yagis.

The first item: When an antenna is not resonant, it means the feedpoint does not "look" like a pure resistance to the feedline. There is reactance present which has the effect of increasing the total impedance the feedline sees. You need to get rid of the reactance, and the way to do it is to put another reactance in series with the antenna, of equal value but opposite sign. This means if your antenna looks electrically like a resistor with a capacitor in series with it, put a coil in the antenna to cancel the reactance of the coil, leaving only the resistance. This is often done with HF mobile antennas. The reactance cancelling coil can be inserted either right at the feedpoint or somewhere else in the antenna, but the value of the coil will be different when it's installed at different points. The idea is to cancel the capacitive reactance so the antenna looks like a pure resistance.

The second item: If you have canceled the reactance and the resistance is 50 ohms (or whatever your feedline is) you're done. Hook up the line and get on the air. More likely, however, it will be different, sometimes GREATLY different. There are a couple of ways to change the existing resistance to what you need. One is a transformer. There are several kinds of transformers that could be used, the most common being a transmission-line transformer wound on a ferrite or powdered iron toroid core. The other method is to use a L-network or some variation of it such as a T-network (two L-networks back to back).

At this point you may be thinking "geez, I don't want to bother with all this stuff, I just want to get on the air". Ok, been there, felt that way myself.

The point is, nobody can tell you what to connect where and instantly have it work. These few paragraphs should give you enough information to get started, but you need to read a good book on antenna theory - I recommend the ARRL's Antenna Handbook. Just remember there are always two things to be done to an antenna: Make it resonant by removing the reactance, and match the resulting resistance to your transmission line. There is no magic, just basic physics. And when you get it to work... what a great feeling! Good luck, and email me if I can help with a specific question.

73, Bill W7TI

1873. Re: Vert Pol Yagi Coax Routing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 04:25:31 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A70FC3B.266D38E5@oio.net>
Source record: 171547

Donald Campbell wrote:
>
> I just received the fiberglass mast section that I will use to mount my
> two meter 14 element vertically polarized yagi above my tri-bander. What
> is the best way to run the coax from the driven element. In the past I
> have run it along the boom and down the mast. Should I loop it out from
> the driven element perpendicular to the driven element down to the
> metallic mast? This would seem to be the best geometry for minimizing
> the coax's effect on the yagi's performance.
>
> Trying to do this right the first time.
>
> Thanks, Don W6QEY

Do it the same way as always, won't make any
difference. Run down the boom, down the mast,
make a rotation loop around the rotor, then to
the station.
'Doc

1874. Re: All Band Antenna Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 04:32:02 UTC
From: "David Michael Kelly"
Message-ID: <m5v17tcu6daugcj93ktqv6dfp1h1elfd80@4ax.com>
Source record: 171548

On Thu, 25 Jan 2001 21:52:07 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>So now I use DPDT knife switches that I got at a
>surplus store in Tucson. I have them mounted on a piece of plexiglas
>in my hamshack window with the switches on the inside and the loops
>on the outside. Two knife switches are ganged to select each loop.
>It takes less time to switch the knife switches than it does to
>tune an MFJ tuner and no power is required for any relays.

Now I will show my newbieness for sure. It doesn't matter that the
ladder line would obviously be coiled up outside your window. It's the
length that counts, not how it's deployed?

TIA
--
david
KD7LOP

1875. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 04:42:47 UTC
From: richardharrison@webtv.net
Message-ID: <14781-3A710047-96@storefull-111.iap.bryant.webtv.net>
Source record: 171550

Richard Clark wrote:
"What "Mode" might that be?"

It sure wouldn`t be Morse. You will recall that the baud rate is defined as the reciprocal of the shortest element in the code, be it the on or off duration.

Any code that has an element 3 times as long as another element requires three times the baud rate of a code which contained elements of equal duration, the same as those of the longer element.

Bandwith required for transmission is proportional to the baud rate.

Morse is inefficient by design.

Best regards, Richard Harrison, KB5WZI

1876. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 04:51:35 UTC
From: KG4FGN <kg4fgn@mindspring.com>
Message-ID: <94qvjq$uo4$1@slb1.atl.mindspring.net>
Source record: 171549

Just wanted to say thanks for all the ideas. By far the safest and cheapest idea is the wire saw. I had pretty much decided on this, but thought I'd ask folks who'd been there before. The "NRA" tip was cute, but I'm a lousy shot so I'll go the safe route....

Thanks again,

Robert / KG4FGN

"KG4FGN" <kg4fgn@mindspring.com> wrote in message
news:94mgnr$6am$1@slb0.atl.mindspring.net...
> Howdy,
>
> I just put up a new really tall antenna on top of my garage.The top of the
> antenna is brushing up against some limbs of a tree whose branches
overhang
> my garage. The branch itself is really high up, far too high for me to get
> with a ladder, even using one of those saws on a stick I've seen in the
> garden stores.
>
> Anyone have any ideas on how to trim a limb that is high up? I can't
afford
> one of those professional services, so it has to be an inexpensive do it
> yourself idea.
>
> Thanks,
>
> Robert / KG4FGN
>
>

1877. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 05:43:28 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94r2q0$fk1$0@208.206.142.92>
Source record: 171551

It seems that you might be able to understand that Morse as used in
radio isn't automatically useless as a communications mode just because
there are other more efficient methods.
I once owned a small airplane that I used strictly for recreation. I
could have used it for crosscountry travel, but chose to use more
convenient and more cost effective methods. That did nothing whatever to
reduce the transportation potential inherent in the small airplane.
So it is with radiotelegrphy. Which is obvious to all except those who
are determined to totally cast it out as a viable communications
resource.

Richard Harrison wrote:
>
> Jim, N2EY wrote:
> "Morse is neither "outdated" nor "obsolete" in ham radio."
>
> Morse requires special skill for hand and ear operation. For machine
> operation, Morse is an inefficient code. These downsides have eliminated
> most commercial use of Morse.
>
> This newsgroup is exchanging printed messages. Any mistakes are likely
> made by the correspondents and likely are not made by encoding or
> decoding. No Morse is involved.
>
> There are no Postal Telegraph and Western Union messengers in the
> streets on their bicycles anymore.
>
> Morse is obsolete in commerce.
>
> Should radio amateurs cling to the obsolete, or should they advance the
> new and promising? Which stirs the greater interest and utility, the
> future or the past?
>
> Morse is not an amateur radio attraction. Few feel compelled to get a
> radio license just to use Morse code.
>
> Emphasis should be on the new and exciting to perpetuate ham radio.
> Clinging to the past won`t do it.
>
> Best regards, Richard Harrison, KB5WZI

1878. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 05:50:32 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94r378$gi0$0@208.206.142.92>
Source record: 171552

Richard Harrison wrote:
>
> Bill, W0IYH wrote:
> "Fed gov et al can do what they want, I will do what I want.
> What would you think of that old fogey attitude?"
>
> More power to you!
>
> There are web sites extolling the virtues of vacuum-tube hi-fi. More
> power to them, too!
>
> But, progress is more exciting than monuments to the past.
>
> A world`s fair with exhibits of the latest and greatest along with
> visions of what may be the future draws more interest in a season than a
> museum. The past is always with us, but the future is fast becoming the
> past.
>
> A society focused on its past has inferior future prospects.

So who is focused? YOU. You are determinedly focused on making sure that Morse communications is seen by all who know nothing of it as being, today, totally useless as a communications mode. The fact that this is contrary to its 100 year history of solid performance you feel can be ignored.
It is crucial to your mission that no one learn to use it so that your predictions will be self fulfilling, since developed personal skill is primarily crucial to its functionality. Absence of this development by next generation Morse operators means there will be no more of them.

1879. Re: All Band Antenna Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 05:51:02 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A711046.C1645220@IEEE.org>
Source record: 171553

David Michael Kelly wrote:
> Now I will show my newbieness for sure. It doesn't matter that the
> ladder line would obviously be coiled up outside your window. It's the
> length that counts, not how it's deployed?

The coils are vertical and located about eight inches apart. There are five of them with lengths, 1ft, 2ft, 4ft, 8ft, and 8ft. All except the two 8ft loops are self supporting. The 8ft loops are tied up to cup hooks under the eave of my house using Dacron cord.

It is important that the loops of ladder-line be kept apart and NOT curled up together. You could curl coax up together, but not ladder-line. I've got some photos somewhere. I'll try to find them and post them on my web page.
--
http://www.mindspring.com/~w6rca

1880. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 06:50:34 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <63727t8o1j14hutrsiovp03tbfu9csvg44@4ax.com>
Source record: 171554
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 25 Jan 2001 22:04:24 -0500, "David J. Moge"
<n1rzb@mailops.com> wrote:

>In brief, I have a multi element TV antenna with a amplifier connecting to 4
>televisions.

Anybody using broadband antenna amplifiers are just asking for
trouble. If it has a frequency response something like 47 .. 860 MHz,
then there is no wonder that it is going to saturate :-).

Are you absolutely sure you need amplification for VHF channels ?
Wouldn't it be sufficient to put a UHF only amplifier directly after
the UHF antenna and just use a passive summing network to connect the
VHF antenna into the downlead ?

If this is not possible, but Band I is not needed (channels 2 .. 6 in
the USA), put a high pass filter around 150 MHz immediately in front
of the preamplifier.

If Band I channels are required, put a 50 MHz notch filter immediately
in front of the amplifier and make sure the amplifier has a good
metallic cabinet so that your transmitted signal does not go directly
into the amplifier.

Paul OH3LWR

1881. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 07:00:36 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <og9c6.9137$R5.458136@news1.frmt1.sfba.home.com>
Source record: 171555

Done that many times. Connect a 3 uH coil from the coax center conductor to the antenna. Connect a 50 pF variable capacitor from the antenna to ground. Adjust cap for best SWR at 14.2 MHz. Then tap down 1 turn on coil and retune cap. Keep tapping down on coil until SWR = 1:1. Be sure to use a high enough voltage capacitor, since the antenna impedance is around 1000 ohms. No radials are necessary, although they don't hurt anything.

Rick Karlquist N6RK

Dez <dez@cytanet.com.cy> wrote in message
news:94osih$l31$1@aristotelis.cytanet.com.cy...
> Hi,
>
> I have a 33 feet vertical which I'm currently using as a 1/4 wave
> on 7 MHz. It's based fed with several buried radials of various lengths.
>
> I'd like to try the vertical on 14 MHz as a 1/2 wave, or 18 MHz as
> a 5/8 wave, but have no idea about how I can achieve a good 50 ohm match.
>
> Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
> wave.
>
> Am I right in thinking I need an LC network at the base of the vertical
> (feed point)?
>
> Any ideas?
>
> dez@cytanet.com.cy
>
> Dez
>
>
>
>
>
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>

1882. Re: Tower Install advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 07:05:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <94r7ki$qv3$0@208.206.142.92>
Source record: 171556

CastleCra wrote:
>
> I was wondering what I can use to reinforce the mast, without adding too much
> weight. Any additional advice, or comments are welcome....
>

One common way to reinforce masting is to use another steel pipe of a
diameter that will just slide inside the mast, cut is slightly shorter
than the main mast, so that an inch or so space is left at each end and
then tackweld the inner tube to the outer mast in this small inside
space to hold it in place.

Dick

1883. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 07:25:21 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94r8p1$p7u$9@bashir.peak.org>
Source record: 171557

'Doc <w5lz@oio.net> wrote:

: Hoo boy, don't make that mistake about concrect! It
: is not a good idea to try passing high voltages/currents
: through concrete, the trapped water tends to expand to
: steam and turns the concrete to schrapnel. Have you
: ever welded on concrete and had it 'spald' around the
: work area? One reason why towers are not grounded
: through a concreter base...
: There should be no problem about laying ground radials
: on concrete as in this situation, though.
: 'Doc

I have read just the opposite, and that a good bunch of grounded reinforcemnt rods in the concrete work fine. It may have been in the PolyPhasor text on lightning grounding, but I do not recall for sure. The text stated that the "concrete exploding" was a myth.

--
Bill Nelson (billn@peak.org)

1884. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 10:52:37 UTC
From: Dez <dez@cytanet.com.cy>
Message-ID: <94rl39dtv1@aristotelis.cytanet.com.cy>
Source record: 171558

Thanks for some excellent suggestions guys.

Some of you have had 1st hand experience of using a 33 foot vertical
as a 1/2 wave on 14 MHz or 5/8 on 18 MHz.

I'm going to go outside now and play aerials.

Hope to see you on the bands.

73 Dez
ZC4DW, 5B4AGW, G0DEZ, ZD8DEZ

1885. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 11:08:36 UTC
From: n2ey@aol.com
Message-ID: <20010126060836.01651.00000441@nso-fp.aol.com>
Source record: 171559

In article <14781-3A710047-96@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>It sure wouldn`t be Morse. You will recall that the baud rate is defined
>as the reciprocal of the shortest element in the code, be it the on or
>off duration.

OK so far.
>
>Any code that has an element 3 times as long as another element requires
>three times the baud rate of a code which contained elements of equal
>duration, the same as those of the longer element.

That's only true if both codes are capable of sending the same amount of information in the same amount of time while one uses a baud rate three times that of the other. You have to compare apples to apples. Your example does not.

Go back to the "paris" example. 50 baud Morse would require 1 second to send the word "paris" - 60 wpm. 50 baud asynchronous ASCII would require 1.08 seconds to send the word "paris" - 55.55 wpm.

For the SAME baud rate, and thus the SAME bandwidth, Morse is slightly faster than asynchronous ASCII. Where's the inefficiency?
>
>Bandwith required for transmission is proportional to the baud rate.

In the above example, the bandwidth required for a given data rate is GREATER for asynchronous ASCII than for Morse.
>
>Morse is inefficient by design.

That's simply not true. Compare apples to apples. Look at the above example and show us where the "inefficiency" is.

In evaluating a code, what is really important is how much data can be sent per unit time in a given bandwith using a given modulation. That's what should be compared, not "baud rate".

73 de Jim, N2EY
>

1886. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 11:34:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94rna5gpj1@uranium.btinternet.com>
Source record: 171560

Dez, download program ENDFEED from website below. Needs only a few seconds.
Not zipped up. Run immediately.

Enter antenna height, conductor diameter, ground electrode system,
frequency.

The program will tell you component values of the L-match network, or
T-match network, or simple series-capacitor, or simple series-inductance,
for best match to 50 ohms.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Dez <dez@cytanet.com.cy> wrote in message
news:94osih$l31$1@aristotelis.cytanet.com.cy...
> Hi,
>
> I have a 33 feet vertical which I'm currently using as a 1/4 wave
> on 7 MHz. It's based fed with several buried radials of various lengths.
>
> I'd like to try the vertical on 14 MHz as a 1/2 wave, or 18 MHz as
> a 5/8 wave, but have no idea about how I can achieve a good 50 ohm match.
>
> Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
> wave.
>
> Am I right in thinking I need an LC network at the base of the vertical
> (feed point)?
>
> Any ideas?
>
> dez@cytanet.com.cy
>
> Dez
>
>
>
>
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>

1887. Re: Antenna Design Resources

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 11:42:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <94rnpm$i59$1@uranium.btinternet.com>
Source record: 171561

Charles, welcome back.

There's a selection of programs available by down-loading from the website
below. Download each in a few seconds. Not zipped up. Run immediately.

Tailored just for your needs.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Charles Mason <mcharles6249@qwest.net> wrote in message
news:3a70c922.22789960@news.uswest.net...
> Any good resources on the Internet for simple antenna designs
> (dipoles, long wires, etc.)?
> Thanks.
> I am just getting back into the hobby and need to bone up.
> Charles
> K7SEA
>

1888. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 12:30:35 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <05ec6.2860$Uo2.3387@newsfeed.slurp.net>
Source record: 171562
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> If Band I channels are required, put a 50 MHz notch filter
immediately
> in front of the amplifier .....

You can make a good inexpensive notch filter by placing a 1/4 wave (on your 6M operating frequency) long piece of coax, shorted on the far end, across the input to the amplifier.

1889. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 12:37:16 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a716f7d_1@news.cybertours.com>
Source record: 171563

(Snip)
> >
> If your gear uses normal plugs with the ground pin, you don't need to
> worry about that. As long as the ground wire is actually hooked up, and
(Snip)
There is a simple device sold at many Hardware and electircal outlets for a
few buck that will check ground integrity without having to take any face
plates off. just plugs in and lets you know.
73 dave kc1di

1890. Re: Is there a 4 meter ham band?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 13:34:33 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <94rud9$d77$1@www1.kis.keele.ac.uk>
Source record: 171565

foffe <setta@uio.com> wrote:
> The QRZ or Buckmaster online callsign lookup site has a
> 4 meter ham band listed in the interest profile section.
> I know there is 2m and 6m, but 4m???

Its a UK (and a few Euro countries) allocation around 70Mhz - 70.000 to 70.500Mhz here in the UK - probably as strange to people outside the UK in the same way 220Mhz is to non-US folk.

Leigh....

--

Leigh M. Preece Media and Communications Centre
Keele University. Staffs. UK. ST5 5BG
~~~~~~
Why do I need GPS? If I'm lost - I'm lost!
~~~~~~

1891. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 13:59:54 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <upfc6.9630$R5.514696@news1.frmt1.sfba.home.com>
Source record: 171564

Reg's program agreed with the experimental measurements I made of my 30 foot
2 inch diameter vertical on 20.

Rick Karlquist N6RK

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:94rna5gpj1@uranium.btinternet.com...
> Dez, download program ENDFEED from website below. Needs only a few
seconds.
> Not zipped up. Run immediately.
>
> Enter antenna height, conductor diameter, ground electrode system,
> frequency.
>
> The program will tell you component values of the L-match network, or
> T-match network, or simple series-capacitor, or simple series-inductance,
> for best match to 50 ohms.
> --
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Dez <dez@cytanet.com.cy> wrote in message
> news:94osih$l31$1@aristotelis.cytanet.com.cy...
> > Hi,
> >
> > I have a 33 feet vertical which I'm currently using as a 1/4 wave
> > on 7 MHz. It's based fed with several buried radials of various lengths.
> >
> > I'd like to try the vertical on 14 MHz as a 1/2 wave, or 18 MHz as
> > a 5/8 wave, but have no idea about how I can achieve a good 50 ohm
match.
> >
> > Can anyone offer any suggestions about matching either a 1/2 wave or 5/8
> > wave.
> >
> > Am I right in thinking I need an LC network at the base of the vertical
> > (feed point)?
> >
> > Any ideas?
> >
> > dez@cytanet.com.cy

> >
> > Dez
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1892. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 14:02:47 UTC
From: Mike <m.j.willis@rl.ac.uk>
Message-ID: <94s029$ico@newton.cc.rl.ac.uk>
Source record: 171567
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Bob Lewis <rlewis@staffnet.com> wrote in message
news:05ec6.2860$Uo2.3387@newsfeed.slurp.net...
> > If Band I channels are required, put a 50 MHz notch filter
> immediately
> > in front of the amplifier .....
>
> You can make a good inexpensive notch filter by placing a 1/4 wave (on
> your 6M operating frequency) long piece of coax, shorted on the far
> end, across the input to the amplifier.

What good will that do ? I thought a 1/4 wave translated a short to an open.

>
>
>

1893. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 14:05:05 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <t7310kkddipq8a@corp.supernews.com>
Source record: 171566

I recently had a similar project on a limb over my garage, and I hired a local tree outfit to come in with a "bucket truck' and trim it. Since I told them I was not in a hurry, they arranged it when they were already in the neighborhood: backed the truck in the driveway, jumped in the bucket, cut the limb, and drove away within 15 minutes.

-larry
K8UT
"KG4FGN" <kg4fgn@mindspring.com> wrote in message
news:94qvjq$uo4$1@slb1.atl.mindspring.net...
> Just wanted to say thanks for all the ideas. By far the safest and
cheapest
> idea is the wire saw. I had pretty much decided on this, but thought I'd
ask
> folks who'd been there before. The "NRA" tip was cute, but I'm a lousy
shot
> so I'll go the safe route....
>
> Thanks again,
>
> Robert / KG4FGN
>
>
>
> "KG4FGN" <kg4fgn@mindspring.com> wrote in message
> news:94mgnr$6am$1@slb0.atl.mindspring.net...
> > Howdy,
> >
> > I just put up a new really tall antenna on top of my garage.The top of
the
> > antenna is brushing up against some limbs of a tree whose branches
> overhang
> > my garage. The branch itself is really high up, far too high for me to
get
> > with a ladder, even using one of those saws on a stick I've seen in the
> > garden stores.
> >
> > Anyone have any ideas on how to trim a limb that is high up? I can't
> afford
> > one of those professional services, so it has to be an inexpensive do it
> > yourself idea.
> >
> > Thanks,
> >

> > Robert / KG4FGN
> >
> >
>
>

1894. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 14:22:00 UTC
From: Dan/W4NTI <w4nti@my-deja.com>
Message-ID: <94s15vmug1@nnrp1.deja.com>
Source record: 171568
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx

In article <3a70e8ab@excalibur.gbmtech.net>,
"David J. Moge" <n1rzb@netzero.nte> wrote:
my
With a antenna tuner I have a 1.3:1 SWR.
>
>
>
What is your SWR without the tuner?
All the suggestions I just read are good. Especially the Amplifier
part and the stub idea.

Try getting the swr nice and flat without a tuner.

There is NO REASON a tuner should be needed on a 1/2 wave coaxial fed
dipole. Unless your operating way off its frequency. And if you are,
that in itself will contribute to the TVI problem.

--
"Just tellin the truth, and they cain't stand it."

Sent via Deja.com
http://www.deja.com/

1895. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 14:36:22 UTC
From: k1bqt@aol.com
Message-ID: <20010126093622.07278.00001408@ng-fc1.aol.com>
Source record: 171469

Hi Robert--

If you don't want to saw the limb only to have it drop down on your roof, why not shoot a line over it with a bow and arrow, pull up a stout rope, attach the rope to your trailer hitch, and drive away (wihtout looking back)? Then use the wire saw to prune off the remaining ragged stub.

I'm sure a trained arborist would have a coniption at the prospect of doing such a rude thing to a living tree, and the author of "The Secret Life of Plants" would urge you to wear ear protection. But, I never would have gotten my 75 meter dipole where it is without resorting to such savagery!

PS: Even though I've done this (far from power lines and other breakable objects), I readily acknowledge it's a really hair-brained idea and assume no liability for the outcome.

Rick K1BQT

1896. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 14:44:09 UTC
From: richardharrison@webtv.net
Message-ID: <5181-3A718D39-15@storefull-117.iap.bryant.webtv.net>
Source record: 171470

Bill Nelson wrote:
"I have read just the opposite, and that a good bunch of grounded reinforcement rods in concrete work fine."

They work fine to produce a low resistance ground connection. These rebar ground connections are called "Ufers", in honor of Dr. Ufer who stopped static electric detonations in wartime powder magazines by using rebars for grounding.

Ground rods have a small surface area in contact with earth. This is because they may be oh so long, but they are still very small around.

A "Ufer" is the way to get a large area in contact with the earth. This is the equivalent of numerous parallel paths, and produces a low resistance.

The fly in the ointment is that ground around a "Ufer" may not be at all homogeneous. High conductivity may be concentrated in a small area. Lightning current will concentrate in this small area. If this happens in a small volume of concrete between the rebar and earth, expect an explosion. This won`t blow an above-ground powder magazine, so no problem. If this concrete is supporting a tower, there may be a problem.

Commercial practice is to connect each leg of a grounded radio tower to a substantial ground rod outside of the tower base and to use extremely low impedance straps or cables for these connections. This bypasses the tower base to prevent lightning from splitting the tower base open.

There is a story of a drunk staggering into a NYC bar and demanding another drink. The bartender says, "Man, you`re already drunk, and what`s that stupid contraption slung around your neck?" Drunk says, "It`s an elephant whistle, to keep `em away." Bartender says, "Man, you`re crazy. Ain`t no elephants in the streets of New York City!" Drunk says, "See, it works don`t it?"

Well, ground rods protecting tower bases may be the equivalent of elephant whistles, but in the hundreds of towers in my experience, we`ve never seen a base split by lightning, and all of these were bypassed to substantial grounds. The AM broadcast towers were bypassed to the radial ground systems which are better than ground rods.

Best regards, Richard Harrison, KB5WZI

1897. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 15:07:40 UTC
From: richardharrison@webtv.net
Message-ID: <5180-3A7192BC-53@storefull-117.iap.bryant.webtv.net>
Source record: 171471

Dick Carrol wrote:
"Absence of this development by next generation Morse operators means
there will be no more of them."

Egad! They don`t teach Latin in the high school anymore. Woe is me!

Best regards, Richard Harrison, KB5WZI

1898. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 15:22:04 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <tIPNbgAcYZc6EAV+@ifwtech.plus.net>
Source record: 171473

Rick Littlefield wrote:
>If you don't want to saw the limb only to have it drop down on your
>roof

Or on the antenna - get your priorities right!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1899. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 15:53:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A719D74.CEF4C604@IEEE.org>
Source record: 171472

N2EY wrote:
> For the SAME baud rate, and thus the SAME bandwidth, Morse is slightly faster
> than asynchronous ASCII. Where's the inefficiency?

FSK is as outdated as CW. Please tell us how OOK/Morse can be sent
within the same bandwidth as PSK ASCII for the same throughput. For
instance, PSK31 has higher throughput in a lower bandwidth than does
20wpm CW.
--
http://www.mindspring.com/~w6rca

1900. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 16:51:07 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn973anr.3m7.QSB@animas.frontier.net>
Source record: 171474
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 26 Jan 2001 07:30:35 -0500, Bob Lewis scribbled:
>> If Band I channels are required, put a 50 MHz notch filter
>immediately
>> in front of the amplifier .....
>
>You can make a good inexpensive notch filter by placing a 1/4 wave (on
>your 6M operating frequency) long piece of coax, shorted on the far
>end, across the input to the amplifier.

OPEN on the far end!

Best use a piece of 'large' coax. I've used 3/4" cable TV hardline.
It's notch is wide enough that you should cut it low in freq. to keep
from killing any TV2 signal. Cut it for 49 - maybe 48 mcs --- you
can always cut long coax shorter, but you can't cut short coax longer.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

1901. math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 16:57:31 UTC
From: carkenord@juno.com
Message-ID: <94sa9l$48$1@nnrp1.deja.com>
Source record: 171476

If I know forward power, and reflected power.....to and from an antenna system, what is the math formula to calculate SWR?

Lee Carkenord KA0FPJ

Sent via Deja.com
http://www.deja.com/

1902. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 17:03:14 UTC
From: rwclark@seanet.com
Message-ID: <3a71aca1.862692426@news.seanet.com>
Source record: 171475

On Thu, 25 Jan 2001 21:35:52 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>
>I was thinking of Voyager. Years ago, I read about the modulation
>method and think I remember that bauds got longer as the distance
>got longer.
>

Hi Cecil,

Sure that this wasn't doppler shift? ;-)

As I recall, Sputnik (CW) also exhibited elongation of wavelength as
it passed overhead. Frequency agile?

73's
Richard Clark, KB7QHC

1903. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 17:30:18 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a71b373.177689621@news.azstarnet.com>
Source record: 171477

On Fri, 26 Jan 2001 16:57:31 GMT, carkenord@juno.com wrote:

>If I know forward power, and reflected power.....to and from an
>antenna system, what is the math formula to calculate SWR?
>
> Lee Carkenord KA0FPJ
>
>
>Sent via Deja.com
>http://www.deja.com/

Calculate the reflection coefficient (rho) as:

rho = sqrt(Pref) / sqrt(Pfwd)

then SWR = (1 + rho) / (1 - rho)

N7WS

1904. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 17:30:42 UTC
From: richardharrison@webtv.net
Message-ID: <29239-3A71B442-21@storefull-118.iap.bryant.webtv.net>
Source record: 171480

Carkenord wrote:
"If I know forward power. and reflected power.....to and from an antenna system, what is the math formula to calculate SWR?"

VSWR = 1 + the square root of reflected power over the forward power, all divided by
1 - the square root of reflected power over the forward power.

If you write to Bird, they will send you a graph so you won`t have to calculate.

Best regards, Richard Harrison, KB5WZI

1905. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 17:32:48 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <4xic6.9880$7b2.671112@bgtnsc05-news.ops.worldnet.att.net>
Source record: 171478

SWR = [Sqrt(Pfwd) + Sqrt(Pref)] / [Sqrt(Pfwd) - Sqrt(Pref)]

Steve, VE9SRB

<carkenord@juno.com> wrote in message news:94sa9l$48$1@nnrp1.deja.com...
> If I know forward power, and reflected power.....to and from an
> antenna system, what is the math formula to calculate SWR?
>
> Lee Carkenord KA0FPJ
>
>
> Sent via Deja.com
> http://www.deja.com/

1906. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 17:39:07 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <63a37tcq80ho1indg6aerkfd693bdo1e8d@4ax.com>
Source record: 171479
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 26 Jan 2001 07:30:35 -0500, "Bob Lewis" <rlewis@staffnet.com>
wrote:

>You can make a good inexpensive notch filter by placing a 1/4 wave (on
>your 6M operating frequency) long piece of coax, shorted on the far
>end, across the input to the amplifier.

Make that 1/2 wave and you might see a notch :-) on that frequency
(and remembering to compensate for the velocity factor) if you are
using shorted stubs.

A 1/4 wave _open_ stub could also be used, but it is harder to tune.

1907. (no subject)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 17:52:49 UTC
From: carl domanico <carl.domanico@verizon.net>
Message-ID: <3A71B985.1CA5E1BE@verizon.net>
Source record: 171481

Wanted: Collins KWM2A Excellent to Mint Condition
Drake L-4B Linear Amplifer Excellent to Mint Condition

Carl
N2MFW

1908. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 18:06:41 UTC
From: n2ey@aol.com
Message-ID: <94seb9$3t4$1@nnrp1.deja.com>
Source record: 171482

In article <20010126060836.01651.00000441@nso-fp.aol.com>,
n2ey@aol.com (N2EY) wrote:
> In article <14781-3A710047-96@storefull-111.iap.bryant.webtv.net>,
> richardharrison@webtv.net (Richard Harrison) writes:
>
> >It sure wouldn`t be Morse. You will recall that the baud rate is
defined
> >as the reciprocal of the shortest element in the code, be it the on
or
> >off duration.
>
> OK so far.
> >
> >Any code that has an element 3 times as long as another element
requires
> >three times the baud rate of a code which contained elements of equal
> >duration, the same as those of the longer element.
>
> That's only true if both codes are capable of sending the same amount
of
> information in the same amount of time while one uses a baud rate
three times
> that of the other. You have to compare apples to apples. Your example
does not.
>
> Go back to the "paris" example. 50 baud Morse would require 1 second
to send
> the word "paris" - 60 wpm. 50 baud asynchronous ASCII would require
1.08
> seconds to send the word "paris" - 55.55 wpm.
>
> For the SAME baud rate, and thus the SAME bandwidth, Morse is
slightly faster
> than asynchronous ASCII. Where's the inefficiency?

The above sentence is incomplete. It should read:

"Using the SAME modulation method and the SAME baud rate, and thus the
SAME bandwidth, Morse is slightly faster than asynchronous ASCII.
Where's the inefficiency?"

This is clear from the context, but if viewed out of context it may be
unclear to some that the same modulation method is part of the equation.
> >
> >Bandwith required for transmission is proportional to the baud rate.

>
> In the above example, the bandwidth required for a given data rate is
GREATER
> for asynchronous ASCII than for Morse.

The above sentence should read:

"In the above example, the bandwidth required for a given data rate
using the same modulation method is GREATER for asynchronous ASCII than
for Morse."

Again, it's clear from the context but not clear if the sentence is
viewed in isolation.
> >
> >Morse is inefficient by design.
>
> That's simply not true. Compare apples to apples. Look at the above
example and
> show us where the "inefficiency" is.
>
> In evaluating a code, what is really important is how much data can
be sent per
> unit time in a given bandwith using a given modulation. That's what
should be
> compared, not "baud rate".

This last sentence sums it all up. It's the rebuttal to Richard's claim
of "inefficiency".

Sorry for any confusion.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1909. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:04:34 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A71CA42.AC9AF094@3n.net>
Source record: 171483

N2EY wrote:
>
> richardharrison@webtv.net (Richard Harrison) writes:

Without disagreeing with either, let me simply observe that efficiency has no bearing on whether Morse should or should not be required to get a license. The spectrum we enjoy is public property. Like a national forest, it has been set aside primarily for recreation and, as such, should serve as many people as possible.

I know people who take great pride in their ability to start a fire with flint and steel. They band together both to hone their skills in case of emergency and to compete against each other. However none of them I've ever met has suggested that the government should close off portions of the public's lands to folks who cannot start fires with flint and steel. Sadly, the reverse is true of many, tho not all who enjoy Morse. These selfish SOBs want the government to deny everyone who doesn't share their enthusiasm for an antique mode of communication the use of what is, after all, public property. Justify that one for me.
Respectfully
KA3DWW

1910. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:19:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A71CDDC.E426245D@IEEE.org>
Source record: 171485

Richard Clark wrote:
>
> On Thu, 25 Jan 2001 21:35:52 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >
> > >I was thinking of Voyager. Years ago, I read about the modulation
> > >method and think I remember that bauds got longer as the distance
> > >got longer.
> > >
> > Sure that this wasn't doppler shift? ;-)

I'm pretty sure they made each bit longer and integrated the signal
over a longer time period as the distance got longer and the signal
got weaker.
--
http://www.mindspring.com/~w6rca

1911. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:23:03 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A71CE97.925784C7@IEEE.org>
Source record: 171487

n2ey@aol.com wrote:
> This is clear from the context, but if viewed out of context it may be
> unclear to some that the same modulation method is part of the equation.

Who in their right mind would use OOK for ASCII? You'd better tell us
how PSK can be applied to Morse code so CW can catch up.
--
http://www.mindspring.com/~w6rca

1912. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:26:47 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <94sj0ocoi1@slb6.atl.mindspring.net>
Source record: 171484

Old Biker wrote in message <3A71CA42.AC9AF094@3n.net>...
>
>These selfish SOBs want the government to deny everyone who doesn't
>share their enthusiasm for an antique mode of communication the
>use of what is, after all, public property. Justify that one for
>me.
>Respectfully
>KA3DWW

And then you have the lazy SOBs who want the government to give them
everything! They have no concept of earning or justifying anything that
they want!

Respectfully
W4IHK

1913. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:30:01 UTC
From: rwclark@seanet.com
Message-ID: <3a71bd2f.866930810@news.seanet.com>
Source record: 171486

On Thu, 25 Jan 2001 22:42:47 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"What "Mode" might that be?"
>
>It sure wouldn`t be Morse.

That is already evident and given the number of responses to my side thread, this Mode remains unidentified. Hardly matters as it is obviously not practiced by Amateur Radio (and is probably considered inefficient by design).

>You will recall that the baud rate is defined
>as the reciprocal of the shortest element in the code, be it the on or
>off duration.

That is called the bit rate. Baud is defined by symbol length which includes such considerations as bit rate. There are several symbologies, but this does not negate the general observation.

>
>Any code that has an element 3 times as long as another element requires
>three times the baud rate of a code which contained elements of equal
>duration, the same as those of the longer element.
>
same problem

>Bandwith required for transmission is proportional to the baud rate.
>
same problem

>Morse is inefficient by design.
>
The same can be said for every technology that was designed yesterday. All Modes are inefficient to some degree and by design (this is truly a non-sequitar as designs always encompass their own failure to implement a future optimization).

>Best regards, Richard Harrison, KB5WZI

Hi Richard,

You are dead-on about the 3 times business, but defining Baud the way you do in a Mode based discussion is rather odd situation of getting the horse before the cart. The description you use would seem to derive from land based TTY where the discussion is confined to

base-band considerations. RTTY on the other hand is a Mode and as a Mode has modulation requirements that add to the bandwidth. To receive RTTY requires considerably more bandwidth to obtain a Mark than for a CW station to receive a key-down. So discussion of bandwidth in the efficiency argument shows that CW wins round 1.

As trivial as this first round is, it still contains information. The bit rates are wildly different of course, but this is still the flexibility that process's fail at where human intervention allows success.

In a perfect world CW loses all remaining rounds, true. In a perfect world no one would discuss efficiency in the first place. In this vale of tears, a less than perfect world, focusing arguments of efficiency at the level of mathematical purity to the inconsideration of the greater circuit leads to conflict. There will always be one contrived argument for either side that reveals the necessity for that Mode.

73's
Richard Clark, KB7QHC

1914. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:33:02 UTC
From: rwclark@seanet.com
Message-ID: <3a72d0cb.871950047@news.seanet.com>
Source record: 171488

On Fri, 26 Jan 2001 18:06:41 GMT, n2ey@aol.com wrote:

>This last sentence sums it all up. It's the rebuttal to Richard's claim
>of "inefficiency".
>
>Sorry for any confusion.
>
>73 de Jim, N2EY

Hi Jim,

I'm confused - which Richard? :-)

73's
Richard Clark, KB7QHC

1915. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:40:18 UTC
From: rwclark@seanet.com
Message-ID: <3a73d108.872011746@news.seanet.com>
Source record: 171489

On Fri, 26 Jan 2001 14:04:34 -0500, Old Biker <enfield@3n.net> wrote:

>N2EY wrote:
>>
>> richardharrison@webtv.net (Richard Harrison) writes:
>
>Without disagreeing with either, let me simply observe that
>efficiency has no bearing on whether Morse should or should not
>be required to get a license. The spectrum we enjoy is public
>property. Like a national forest, it has been set aside
>primarily for recreation and, as such, should serve as many
>people as possible.
>
>I know people who take great pride in their ability to start a
>fire with flint and steel. They band together both to hone their
>skills in case of emergency and to compete against each other.
>However none of them I've ever met has suggested that the
>government should close off portions of the public's lands to
>folks who cannot start fires with flint and steel. Sadly, the
>reverse is true of many, tho not all who enjoy Morse. These
>selfish SOBs want the government to deny everyone who doesn't
>share their enthusiasm for an antique mode of communication the
>use of what is, after all, public property. Justify that one for
>me.
>Respectfully
>KA3DWW

Hi OB,

Well maybe for the crafters of flint, but how about bow hunters and
gun hunters?

The Bow, an antique mode, is afterall inefficient by design. It can't
possibly compete with the modern technology of the bullet. And yet
the government allows a failed technology to dictate the season and
public lands' access for hunters. There must be some hue and cry that
I am not hearing from the gun hunters.

At least no gets hauled off to the hoosegow for practicing CW out of
band (and no one dies from a misplaced shot).

73's
Richard Clark, KB7QHC

1916. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:46:08 UTC
From: rwclark@seanet.com
Message-ID: <3a74d2bd.872448514@news.seanet.com>
Source record: 171490

On Fri, 26 Jan 2001 14:26:47 -0500, "Dean Craft"
<w4ihk@mindspring.com> wrote:

>
>Old Biker wrote in message <3A71CA42.AC9AF094@3n.net>...
>>
>>These selfish SOBs want the government to deny everyone who doesn't
>>share their enthusiasm for an antique mode of communication the
>>use of what is, after all, public property. Justify that one for
>>me.
>>Respectfully
>>KA3DWW
>
>And then you have the lazy SOBs who want the government to give them
>everything! They have no concept of earning or justifying anything that
>they want!
>
>Respectfully
>W4IHK
>
>

Hi OM,

I like your attitude. In old Sparta, if you did not serve in the
military, you did not vote. I did my service, but in this day and age
I find those who did not serve, they get to vote on my rights - talk
about SOBs (sick, lame, lazy or otherwise).

73's
Richard Clark, KB7QHC

1917. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 19:51:40 UTC
From: richardharrison@webtv.net
Message-ID: <11361-3A71D54C-50@storefull-116.iap.bryant.webtv.net>
Source record: 171491

N2EY wrote:
"In evaluating a code, what is really important is how much data can be sent per unit time in a given bandwidth using a given modulation."

To compare ASCII with Morse, or Telex with Morse, requires all of the information needed to frame and transmit the data appearing as often as it ordinarily does. Many of the instruction set characters needed don`t exist in Morse code. Morse would then require special character groupings to convey the instructions represented by a single teleprinter character. Morse goes down the efficiency tubes on that basis alone. Ask yourself: Why don`t machines use Morse if it is efficient?

The usual telegraph machines (Telex) use a standard 5-level Baudot code. Normal operation is at 60, 75, and 100 words per minute. The bit rates for these speeds are: 45, 57, and 75 bits per second.

7-level and 8-level ASCII codes often run at 100 words per minute, with a pulse rate of 110 bits per second.

Telex uses 120 Hz of bandwidth to convey 100 words per minute with either FM or AM carriers.
SSB could be used to shrink this bandwidth. ASCII needs 170 Hz of bandwidth for 100 words per minute.

But you can say much more in 100 words of ASCII than in 100 words of Morse because of all the 1-character instructions available in teleprinter code.

The inherent efficiency of teleprinter codes derives from their equal length code elements and their extended instruction sets.

Best regards, Richard Harrison, KB5WZI

1918. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 20:08:50 UTC
From: tom_bruhns@agilent.com
Message-ID: <94slga$b1o$1@nnrp1.deja.com>
Source record: 171492

Yet another way to view it: SWR = Vmax/Vmin, and that's
(|Vfwd|+|Vrefl|)/(|Vfwd|-|Vrefl|). Power is proportional to the square
of voltage, so take sqrt(power) to get a number proportional to voltage.
(There's a factor in there for the R0 of the line, but it cancels out in
the SWR ratio.) So... SWR = (sqrt(Pf)+sqrt(Pr))/(sqrt(Pf)-sqrt(Pr)).
Knowing the origins of the formulas makes it easier for me to remember
them or to re-derive things easily, rather than just trying to remember
a bunch of formulas.

Cheers,
Tom

In article <94sa9l$48$1@nnrp1.deja.com>,
carkenord@juno.com wrote:
> If I know forward power, and reflected power.......to and from an
> antenna system, what is the math formula to calculate SWR?
>
> Lee Carkenord KA0FPJ
>
> Sent via Deja.com
> http://www.deja.com/
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

1919. Re: End fed Zepp question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 20:09:09 UTC
From: n4zou@my-deja.com
Message-ID: <94slgt$b24$1@nnrp1.deja.com>
Source record: 171493

In article <93vd47ope1@nnrp1.deja.com>,
w4hij@my-deja.com wrote:
> I am considering putting up a multiband antenna for use on 80 meters
> and up. I know most of the design criteria ie. 135 feet in length, fed
> with twin lead (it's what I have on hand). I will use my AEA AT-300
> tuner to match it. The research I have done leads me to believe that a
> center fed configuration would be best but this may not be possible in
> my situation, so I am considering the "End fed Zepp". My question is
> where does the unused conductor of the twin lead go? Most diagrams I
> see show it being soldered, but to what? It appears to be soldered to
a
> very short length of wire on the other side of the end insulator. Is
> this correct? I also would assume that the lead attached to the
antenna
> itself would go to my tuner post labeled "end fed wire", correct? Tnx
> for any help I can get with these questions.
> 73,
> Michael
>
> Sent via Deja.com
> http://www.deja.com/
>
The end feed Zepp antenna is a single band antenna. only one side of
the feed line is connected to the 1/2 wave wire element, the other wire
in the feed line is left open. The feed line is used as a tuned feeder,
600 ohm open line works best but 450 ohm ladder line will also work as
long as you operate below 100 watts on the low bands. The feeder is
connected to the 4 to 1 BALUN in the antenna tuner. You can view a file
on The classic Zepp antenna for the month of Feb-2001 at
http://n4zou.homestead.com/files/project.htm . This file changes once a
month so around the end of Febuary it will change to a diffrent antenna
design so be sure and copy it to your files for later use. It's also
printer friendly so it's black on white page and should print on only
one sheet of paper. Good luck

Sent via Deja.com
http://www.deja.com/

1920. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 21:18:23 UTC
From: n2ey@aol.com
Message-ID: <94spikepc1@nnrp1.deja.com>
Source record: 171496

In article <3a72d0cb.871950047@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On Fri, 26 Jan 2001 18:06:41 GMT, n2ey@aol.com wrote:
>
> >This last sentence sums it all up. It's the rebuttal to Richard's
claim
> >of "inefficiency".
> >
> >Sorry for any confusion.
> >
> >73 de Jim, N2EY
>
> Hi Jim,
>
> I'm confused - which Richard? :-)

Ooops! Richard Harrison, I meant.

Of course we should first all agree on what measure of "efficiency"
should be used.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

1921. Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 21:25:18 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <2Xlc6.119196$ge4.41738553@news2.rdc2.tx.home.com>
Source record: 171494

Where can I get a whip antenna for 10m?

Or, how difficult would it be to make a short whip antenna for 10?

Pete, KA�TZK

1922. want to find Maxcon unit please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 21:28:23 UTC
From: Skipp <skipp@pilot.ucdavis.edu>
Message-ID: <94sq5nqll2@woodrow.ucdavis.edu>
Source record: 171495

Hello there,

I'm looking to find a Maxcon antenna interface unit. If you've got one
you want to sell or could work out some method for me to measure yours,
I'd really like to hear from you.

I know all about the QST review and what's really inside it. I just want
to measure it with some test equipment without hurting it... or pulling
the cover off. The information I aquire is always available to the public
free and will probably be placed on the amateur radio pages of the
http://sonic.ucdavis.edu server.

Drop me a note if you can help.

thanks
skipp@pilot.ucdavis.edu
http://sonic.ucdavis.edu
http://pilot.ucdavis.edu

1923. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 22:28:32 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <BRmc6.3295$Uo2.5462@newsfeed.slurp.net>
Source record: 171497
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> What good will that do ? I thought a 1/4 wave translated a short to
an open.
>
Ooops - I should have said open on the far end - that will cause a low
impedance at the amp input for the 6 meter frequency.

1924. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 22:59:24 UTC
From: rwclark@seanet.com
Message-ID: <3a71fb1c.882783735@news.seanet.com>
Source record: 171498

On Fri, 26 Jan 2001 13:51:40 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>7-level and 8-level ASCII codes often run at 100 words per minute, with
>a pulse rate of 110 bits per second.
>

Hi Richard,

Again, there are more to it than that (but not much more). How many start bits, stop bits? How long are the stop bits 1or 1.5 wide? How about parity? Many of the features you describe as being necessary to bring this efficiency are missing from your discussion and skews the numbers you present above.

Problem is that with these extra "framing" bits, especially the parity bit, they are another example of "inefficient by design." Parity has been long dismissed by the software crowd as an imaginary safety net that in reality is wholly useless. The framing bits are entirely unnecessary, but persist out of habit and inertia. Computers oversample these bits by an order of 16:1, efficiency AND speed was discarded long, long ago when synchronized transmissions of ASCII were replaced by the more inefficient (but less costly) async transmission. Consider Harvard BiPhase, NRZ or NRZI, much better (faster, efficient) at moving the same ASCII codes, but as rare as hen's teeth (costs more).

Efficiency is a moving target and the example you cite is moving backwards TOWARD CW and is being used as an example as more efficient by virtue of the efficiency discarded (see the contradiction?). In other words, ASCII is an argument against ASCII (and CW too, but the same brush strokes both with the same tar).

Efficiency is not a characteristic used to arbitrate the utility of these Modes. Efficiency transcends the fine grain focus of these discussions and lies in the greater service these Modes are placed in. Will CW work for a space probe? Nuts to that, a probe's budget is already in the 7 to 10 figures, the cost of a 6 figure Mode is hardly a show stopper. Goferit! Will SS work in 160M QSO? Nuts to that, the rig is a surplus 1953 AM transmitter and I ain't spendin' any more jack on that!

What cost efficiency?

73's
Richard Clark, KB7QHC

1925. Apartment Dwellers ... here is one for you ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-26 23:24:32 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <QGnc6.255850$hD4.61892920@news1.rdc1.mi.home.com>
Source record: 171499

Check out the multi-band bird feeder antenna ...

Good for 6m 144 and up.

www.members.home.net/n5wrx/mmbf1.jpg

www.members.home.net/n5wrx/mmbf2.jpg

K-Mart is selling these bird feeders for about $10.
The 6 meter coil on the Diamond Discone (D-130?) antenna fits into the pole socket of the bird feeder with just a little electrical tape for shim.
The holes thru the top for the whip are already there - no drilling required.

William Lee N5WRX

1926. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 00:03:12 UTC
From: k9sqg@aol.com
Message-ID: <20010126190312.14274.00000094@ng-mp1.aol.com>
Source record: 171500

Based on personal experience, concrete can in fact "explode". There was a lightning strike, to a tree I believe, at our church about six years ago. It removed the bark from part of a tree, near the ground, and split it as well. In both directions from the tree, there was an underground phone line. The curb on each side, above the phone line, appeared to have exploded along with some of the ashphalt. Where the strike originated I'm not sure.

73s,

Evan

1927. Re: Apartment Dwellers ... here is one for you ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 00:04:07 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <94t39inql1@nnrp1.deja.com>
Source record: 171502

The neighbors will think something is fishy when a bird lands on your
discone to feed and his feet start smoking!

In article <QGnc6.255850$hD4.61892920@news1.rdc1.mi.home.com>,
"William Lee" <n5wrx@home.com> wrote:
> Check out the multi-band bird feeder antenna ...
>
> Good for 6m 144 and up.
>
> www.members.home.net/n5wrx/mmbf1.jpg
>
> www.members.home.net/n5wrx/mmbf2.jpg
>
> K-Mart is selling these bird feeders for about $10.
> The 6 meter coil on the Diamond Discone (D-130?) antenna fits into
the pole
> socket of the bird feeder with just a little electrical tape for shim.
> The holes thru the top for the whip are already there - no drilling
> required.
>
> William Lee N5WRX
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

1928. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 00:06:31 UTC
From: k9sqg@aol.com
Message-ID: <20010126190631.14274.00000095@ng-mp1.aol.com>
Source record: 171501

Dez,

For a 5/8 wave vertical, you'll need a tapped inductor. One end to the antenna, one end to ground, and the "center" to the coax. You'll have to adjust both parts of the coil. The one end toward the antenna to get resonence where you want it, the end toward ground to get the impedance down close to 50 ohms.

For a 1/2 wave, the impedance will be very high and a different matching arrangement will be needed.

73s,

Evan

1929. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 00:30:51 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <980555726.28978.0.nnrp-13.9e98acde@news.demon.co.uk>
Source record: 171503
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>A 1/4 wave _open_ stub could also be used, but it is harder to tune.
>
Why ?
I would have thought that cutting coax stubs is as easy / hard for
1/2 wave as it is for a 1/4 wave !!

Martin

1930. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 00:35:09 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <980555727.28978.1.nnrp-13.9e98acde@news.demon.co.uk>
Source record: 171504
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx

>There is NO REASON a tuner should be needed on a 1/2 wave coaxial fed
>dipole. Unless your operating way off its frequency. And if you are,
>that in itself will contribute to the TVI problem.
>

Try feeding the dipole so that it has balanced RF current.
use a Balun or make a pawsee stub at the feed point
a Dipole if cut right is about 70 ohms so SWR 1:1.3 is about
OK with no tuner (the PA in the rig should handle this with out
shutting down)

73 Martin

1931. TVI 6 METERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 00:53:35 UTC
From: "David J. Moge" <n1rzb@mailops.com>
Message-ID: <3a72d6de@excalibur.gbmtech.net>
Source record: 171423

In brief, I have a multi element TV antenna with a amplifier connecting to 4 televisions. The house lot is laid out in such a way that it's very hard to string antennas up with out having them in close proximity to the TV antenna. Cable is not an option. Satellite is possible but would like to keep regular TV antenna.

At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW 10 Watts) which my wife gave me. I put up a dipole to try it out and to my surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.

My wife hasn't stopped yelling at me sense. Every time I key the mike or try out CW the TV's go blank. I have tried a HI PASS filter but that doesn't do much good at all.
My HF rigs cause no problems at all. I do have a good RF ground

WHAT AM I DOING WRONG??? HELP!!!

Any comments and suggestions would be gratefully appreciated.

Thanks
DAVE,N1RZB

1932. Re: New loop models

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 01:34:26 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <94t8j0pcb1@slb1.atl.mindspring.net>
Source record: 171505

Donaly:

Heh, heh... fractions of infinity...

Fun stuff...

Ever read Rudy Rucker's book on "infiinty"? Pick it up sometime and spend a Sunday afternoon pondering fractions of infinity.

Concepts like AlephNull, Dedikind Cuts, countable infinities, uncountable infinities, Cardinal numbers, sets of infinities, some of which are infinitely bigger than others, etc, mind boggling.

Rudy helps you to understand, how many points are there on the real line between zero and one. Answer is an infinity of points, exactly the same as the total number of numbers! What??? Now how many rational numbers [Numbers of the form integer/integer] are there on the real line between zero and one? Now how many irrational numbers [e.g pi or e etc...] are on the real line between zero and one.

Now what fraction is the infinite number of rational numbers on the real line between zero and one of the total infinite number of numbers between zero and one. Or are they equal, or... what???

Now back to antennas...

If there are an infinite number of "arbitrary" antennas, either invented or yet to be inventede, why then how many fractal antennas are there? And... more important...

What fraction are the fractal antennas of the totality of all arbitrary antennas? How many arbitrary antennas are "better" than fractal antennas?

Ponderosities....

Best,

-Peter K1PO

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:3A70400B.46EA@pacbell.net...
> Peter O. Brackett wrote:
> >
> (snip)
> > It is merely a methodology for exploring arbitrary designs
> > created by a set of fractal attractors. Nothing more nor less than a
> > fraction of the infinity of possible arbitrary antenna designs most of
which

> > are probably superior to those generated by fractal attractors.
> >
> > Finally, I hope, fractal electromagnetics has been put to rest.
> >
> > Amen, and Shalom,
> >
> > -Peter K1PO
> >
> > Best,
> >
> > -Peter K1PO
> >
>
> Hi, Peter,
> what is a fraction of an infinity? What do you get
> when you divide infinity by, say, five?
>
> 73
>
> Tom Donaly KA6RUH
>

1933. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 01:52:05 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <jn947tgeerv80170aledokc84r4s9ibrs3@4ax.com>
Source record: 171506
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sat, 27 Jan 2001 00:30:51 -0000, "Martin John Hallsworth"
<Martin@g1gyc.demon.co.uk> wrote:

>>A 1/4 wave _open_ stub could also be used, but it is harder to tune.

>Why ?

Sticking a needle through the shield and the centre conductor is a
reversible operation, cutting the coax is not a reversible operation.

1934. ham 4 potentiometer update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 02:18:29 UTC
From: George Cortez <k2jen@frontiernet.net>
Message-ID: <94tb78$n6c$1@node17.cwnet.frontiernet.net>
Source record: 171507
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap

Well It seems that the websites arent being updated....
Both Norms and rotor doc have pot's

To let everyone know......

George Cortez

1935. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 03:33:09 UTC
From: n2ey@aol.com
Message-ID: <20010126223309.26444.00001330@nso-fo.aol.com>
Source record: 171508

In article <3A706D16.606BC18F@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org> writes:

>n2ey@aol.com wrote:
>... some nasty things

Just the facts.

> that don't belong in r.r.a.antenna

It is interesting to note what you consider suitable and unsuitable for rraa.
>
>My reply has been routed to r.r.a.policy where it belongs.

Then why do you keep posting to this thread after saying you would not? Guess you "aren't serious" in rraa, either.

73 de Jim, N2EY

1936. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 03:33:10 UTC
From: n2ey@aol.com
Message-ID: <20010126223310.26444.00001331@nso-fo.aol.com>
Source record: 171509

In article <3A71CA42.AC9AF094@3n.net>, Old Biker <enfield@3n.net> writes:

>N2EY wrote:
>>
>> richardharrison@webtv.net (Richard Harrison) writes:
>
>Without disagreeing with either, let me simply observe that
>efficiency has no bearing on whether Morse should or should not
>be required to get a license.

Hello,

First off, let me say that the Morse/Baudot/ASCII discussion isn't about code tests at all. It's about the characteristics of various modes and codes, not what should or shouldn't be tested.

The whole test issue is a dead duck - a moot point - a done deal. The FCC announced well over a year ago that they were going to the absolute minimum code testing possible under the treaty, and that it was only the treaty that was keeping that much testing alive. The restructuring R&O makes this quite clear.

The FCC can't eliminate that last remnant of code testing until the treaty changes, and the treaty won't change before 2003 (the next meeting where it will be discussed). If the treaty stays, 5 wpm will stay, and if the treaty goes, FCC will drop code testing soon after.

But let's see what ya got anyway.

>The spectrum we enjoy is public
>property.

True - but it's also international public property, not just American property.

> Like a national forest, it has been set aside
>primarily for recreation and, as such, should serve as many
>people as possible.

Bad example. Neither ham radio nor the national parks, forests and wilderness areas exist solely for recreation. In fact, words like "hobby" and "recreation" do not appear in Part 97. The national park and forest systems serve a number of diverse purposes such as wilderness and wildlife preservation, research. education, resource recovery and many other things, not just recreation.

>I know people who take great pride in their ability to start a
>fire with flint and steel. They band together both to hone their
>skills in case of emergency and to compete against each other.
>However none of them I've ever met has suggested that the

>government should close off portions of the public's lands to
>folks who cannot start fires with flint and steel.

Another bad example. The flint-and-steel folks' activities do not affect, nor are they affected by, those who use matches. The same cannot be said of ham radio - every station on the air uses some spectrum and makes it unusable for others.

A better example is the way the various parts of the national parks and forests are set up for various activities. Some areas are easily accessible by road, others require an off-road vehicle, and many can only be reached on foot.

>Sadly, the
>reverse is true of many, tho not all who enjoy Morse. These
>selfish SOBs want the government to deny everyone who doesn't
>share their enthusiasm for an antique mode of communication the
>use of what is, after all, public property.

That's simply not true. All that is required is to pass a skills test. One is not required to use any mode after that.

> Justify that one for
>me.

How is it any different from the government's refusal to allow citizens to use motor vehicles in all areas of the national parks? By making some parts off limits to all but backpackers, the access of those who don't like to hike is restricted or eliminated from that public property.

In addition, consider the WRITTEN test. All hams must pass them, even if they have no interest in radio theory. They must pass tests on all sorts of stuff that they may have no interest in and may never use. Justify that one for me.

73 de Jim, N2EY

1937. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 04:05:35 UTC
From: richardharrison@webtv.net
Message-ID: <11329-3A72490F-132@storefull-112.iap.bryant.webtv.net>
Source record: 171510

Richard Clark wrote:
"Again there are more to it than that (but not much more)."

Yes, about 30 years ago I went through the whole exercise in designing a SCADA system. After examining all the codes we could think of (including Morse and ASCII) we used a binary code with BCH check bits attached. The word length was picked to be just long enough to contain the data we needed from the commonest points in the system. If we needed more from a site we made additional interrogations. Overall efficiency was very good, data was error free, and we had no miscues in control operations.

We had hundreds of remotes which might take 3 or 4 seconds each to poll for data. Many were reached by VHF radio, any of which had to key up and settle during its cycle. So running at 30 baud was fast enough. We could go through the whole roster in 10 or 15 minutes. We could do a demand scan of any point and issue a control order at any time. Bell discontinued its 30-baud tarrif not long after we started leasing thousands of miles of their lines. Our lawsuit failed. So we built our own microwave system to replace the Bell System service. That worked very well too.

Our lawsuit failed because the FCC sided with AT&T in declaring 30-baud telegraph circuits obsolete.

Best regards, Richard Harrison, KB5WZI

1938. Re: Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 04:29:41 UTC
From: lousherry@jps.net
Message-ID: <3A724EB0.2B34CCDF@jps.net>
Source record: 171511

Pete
Try radio shack. Either their standard CB antenna, mag mount , and cut
it down according to directions or One of their 108 inch whip antennas
and cut it.
Lou
kb6fft

Pete Holden wrote:

> Where can I get a whip antenna for 10m?
>
> Or, how difficult would it be to make a short whip antenna for 10?
>
> Pete, KAï¿½TZK

1939. Re: Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 04:34:12 UTC
From: lousherry@jps.net
Message-ID: <3A724FC2.5C790C73@jps.net>
Source record: 171512

Pete
Try radio shack. Either their standard CB antenna, mag mount , and cut
it down according to directions or One of their 108 inch whip antennas
and cut it.
Lou
kb6fft

Pete Holden wrote:

> Where can I get a whip antenna for 10m?
>
> Or, how difficult would it be to make a short whip antenna for 10?
>
> Pete, KAï¿½TZK

1940. Re: Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 04:36:08 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A725038.7FE74701@oio.net>
Source record: 171513

Pete,
You take a standard 102" whip, unsolder the ferule
at the bottom, cut the whip to length, then resolder
the ferule back on. I've found that to be the easiest
and 'best' way.
'Doc

1941. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 05:03:29 UTC
From: richardharrison@webtv.net
Message-ID: <20695-3A7256A1-64@storefull-113.iap.bryant.webtv.net>
Source record: 171514

Evan, K9SQG wrote:
"It (a lightning strike) removed the bark from part of a tree, near the ground, and split it as well."

Yes, it happens. Several years ago, I saw a blinding flash from where I am now sitting. It was instantly followed by a thunderous crashing sound. I stepped out to see what had happened. There was a tall steaming pine tree a couple of hundred yards away and it was a sight to see. The bolt had split the tree nearly from top to bottom and stripped it of much bark.

The same mechanism is involved, I believe, in blasting open trees and concrete. The contained moisture instantly creates irresistable steam pressure and does the damage.

I`ve also seen various chunks of concrete knocked loose from various structures by lightning. Good, well grounded, lightning rod systems can stop this damage. There must be a good ground system to harmlessly collect and distribute the excess energy and thus bypass the protected structure.

A radio tower may make a pretty good lightning rod. Ours were usually equipped with a lightning rod at the top to protect the flashing light beacon. It may also have diverted the strike away from an antenna at the tower top.

Best regards, Richard Harrison, KB5WZI

1942. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 05:53:07 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <94tno3ehv3@bashir.peak.org>
Source record: 171516

Richard Harrison <richardharrison@webtv.net> wrote:

: Well, ground rods protecting tower bases may be the equivalent of
: elephant whistles, but in the hundreds of towers in my experience, we`ve
: never seen a base split by lightning, and all of these were bypassed to
: substantial grounds. The AM broadcast towers were bypassed to the radial
: ground systems which are better than ground rods.

In my many years of experience with towers, both with and without tower ground rods outside the concrete - I have never seen a problem from a lighting strike. The Ufer ground without the external rods seems to work fine.

On the other hand, I also believe in playing it safe, and use ground rods driven into the ground just outside the concrete base that are bonded to the tower legs. They may not help - but they certainly will not do any harm. And the extra insurance is very cheap.

--
Bill Nelson (billn@peak.org)

1943. RE: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 06:14:01 UTC
From: Harry Harms <hrbe@dingoblue.net.au>
Message-ID: <3a72676c$0$16389$7f31c96c@news01.syd.optusnet.com.au>
Source record: 171515

Group,

To wind my own balun for exclusive use on 10m, should I use iron powder or ferrite cores?

I intend to use full legal power for Australia, 400 watts, so need a decent sized core.. 2 1/2 inches minimum.

Any help on what types of materials etc??

John Mclean
VK2KCE

1944. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 06:19:35 UTC
From: richardharrison@webtv.net
Message-ID: <20694-3A726877-136@storefull-113.iap.bryant.webtv.net>
Source record: 171517

It was the 30-baud tariff the FCC and AT&T agreed to eliminate. Both said 30-baud telegraph was obsolete. Although my company was leasing thousands of miles of telegraph circuits, we were minor users as compared with U.S. Government agencies. Some agencies discussed with us a possibility of joining us in our suit against AT&T, but in the end they opted out, leaving us alone. AT&T, to raise the pressure, more than doubled the rate we were being charged. We filed a complaint with the FCC. The FCC said AT&T could continue to collect the increased lease price but must deposit the increase in escrow for refund in case we prevailed in our FCC appeal. Checking the record, we found the FCC had made this escrow ruling many times, and not once in its long history had a coplainant ever got any of the escrow money back. Really, we began to see the hand writing on the wall.

Best regards, Richard Harrison, KB5WZI

1945. Linear loaded short dipole for 80/40

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 10:08:09 UTC
From: Paolo Odone <paolo@odone.it>
Message-ID: <d6xc6.33495$ew1.2532757@news.infostrada.it>
Source record: 171419

I am looking for info, web sites,theory etc. about linear loaded dipoles.
(I mean the same loading as in KLM XT34 beams).
ARRL Antenna Book is not so detailed on this subject.
Thanks.

Paolo i1odp

1946. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 12:08:38 UTC
From: Alan <tille1@ironbark.bendigo.latrobe.edu.au>
Message-ID: <3A72BA46.5B6AC32E@ironbark.bendigo.latrobe.edu.au>
Source record: 171461
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi

Cutting a stub to the correct length is like playing Russian roulette.
The alternative is to cut the stub shorter than the calculated length
either quarter or half wave and use a small trimmer capacitor. Use one on
the input to the Amp and one on the out put as well. My experience
suggest that most on the damage occurs in the TV set mixer.
you can locate a stub if necessary at the TV set as well. I have had a
good results with co ax and trimmer it is very easy tune. After a while
you can simply guess the length of coax and tune the trimmer.
Regards Alan
VK3ry

Martin John Hallsworth wrote:

> >A 1/4 wave _open_ stub could also be used, but it is harder to tune.
> >
> Why ?
> I would have thought that cutting coax stubs is as easy / hard for
> 1/2 wave as it is for a 1/4 wave !!
>
> Martin

1947. Re: 3D Polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 12:18:03 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <94ue5n$r09$1@slb6.atl.mindspring.net>
Source record: 171420

Thread:

Hey, I read the ComDesign article on 3D antennas, and... talk about obfuscation... that write up is almost as "tricky" as some of the machinactions of our "resident expert" on fractal electromagnetics.

It seems to me, after reading the ComDesign write up that what the Lucent folks are talking about is just "plain old beamforming" using signal processing behind a spatial diversity of antennas.

What is it that one of Shakespeare's characters said, " a rose by any other name...".

The only other possible interpertation might be the use of "circular polarization" in some manner, but their write up in ComDesign doesn't seem to be aligned with that concept.

Of course the article was written by a ComDesign "stringer" and not by the Lucent Bell Labs researchers, and so... as most "stringers" and reporters have a tendency to do, there might be some attempt at sensationalizations. And so I am hesitant to blame the Bell Labs researchers who are probably just a bunch of "straight" engineers and scientists. But on the other hand...

I wonder... is this a feeble attempt on the part of Lucent to shore up it's sinking stock price with hype and hyperbole by using a new name for something old, or...

What???

If you have followed the recent horror story of the nearly complete disintegration of Lucent's [NYSE: LU] stock market valuatio, loss of their CEO Richard McGinn in December, and loss of $$BB of sales to major competitors, I'd say it's about time they developed some "hype" to restore the LU employee's stock option positions, heh, heh.

Run a graph of the LU stock price over the last year and see for yourself.

I can just see the harried Lucent board or the new CEO saying to the "Bell Labs Innovations" guys, "why can't you announce something new?" And sending a ComDesign "stringer" down to the labs to interview them. And... presto... 3D antennas!

Anyone detect a "blip" on the LU stock price after the article? Any inside selling?

What???

A little "plain" talk about the 3D technology would be better than the
obfuscation in that ComDesign article.

-Peter K1PO

<richl@cyberdude.com> wrote in message
news:3A6E355C.26373B1F@cyberdude.com...
> try here
> Antenna looks in three dimensions
> http://www.commsdesign.com/story/OEG20010119S0020
>
> richl
> KB7YEB
>
> "Brian.Farrelly" wrote:
> >
> > VE9SRB wrote:
> > >
> > > "Brian.Farrelly" <Brian.Farrelly@nho.hydro.com> wrote in message
> > > news:3A6DC2A2.21933A00@nho.hydro.com...
> > > >
> > > >
> > > > There is a technical letter on this in Nature, 18 Jan 2001,
> > > > together with a less technical discussion. The idea is to
> > > > *use* the multipath scattering between the transmitter and
> > > > receiver rather than treat it as a problem. Because the
> > > > scattered signal comes in at an angle to the direct signal
> > > > it creates an electric field which is *along* the direct
> > > > path but still perpendicular to its own direction of travel.
> > > >
> > >
> > > In most mobile communications systems (i.e. cellular), the RF link is
> > > established through multipath reflections. In many cases, a Line Of
Sight
> > > (LOS) path does not even exist. (There is not much of an LOS path
between
> > > the US and the rest of the world for HF communications either) In
these
> > > cases, if the multipath signals did not exist, the communications link
could
> > > not be established. As a result of these numerous multipath
reflections,
> > > the total signal arriving at the receive antenna is comprised of
numerous
> > > individual signals with differing polarization sense and orientation
> > > (Polarization Distortion). I have not seen the Nature or the Science
News
> > > article, but this is a well known concept. I would be surprised if
this was
> > > the phenomenon that the Lucent engineers were describing.
> > >
> > > Steve, VE9SRB

> >
> > Steve,
> >
> > I am not a radio engineer so my summary may be oversimplified.
> >
> > I agree that a line of sight path need not exist and in
> > fact did not exist in the experimental setup they used.
> >
> > The point is that the multipath signals will come in from a
> > wide range of angles so that the polarization can have 6
> > independent directions rather than the two we are used to
> > thinking about (H and V). This is presumably what you
> > call 'polarisation distortion'.
> >
> > As I understood it one can unscramble the
> > multipath signals by signal processing of pilot tones
> > added to the signal channels and actually *use*
> > this polarization distortion to recover the
> > independent channels.
> >
> > Does this make sense?
> >
> > Perhaps someone else has read the articles and can
> > explain it better.
> >
> > Brian
> >
> > --
> > mailto:Brian.Farrelly@nho.hydro.com Norsk Hydro Research Centre
> > phone +47 55 99 68 74 (((Postboks 7190
> > fax +47 55 99 69 70 2oooS N-5020 Bergen
> > home +47 55 13 78 49 HYDRO Norway

1948. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 12:46:30 UTC
From: richardharrison@webtv.net
Message-ID: <19399-3A72C326-6@storefull-114.iap.bryant.webtv.net>
Source record: 171422

Bill Nelson wrote:
In my many years of experience wth towers, both with and without tower ground rods outside the concrete - I have never seem a problem from a lightning strike."

I could say the same thing, but the only towers I`ve erected without ground rods or radials were in Tierra del Fuego where lightning is unknown. I wouldn`t want to take a chance in Tampa, Florida.

Best regards, Richard Harrison, KB5WZI

1949. Re: Antenna Design Resources

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 12:57:04 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A72C5A0.2E22D6D7@dvol.com>
Source record: 171421

Charles Mason wrote:

> Any good resources on the Internet for simple antenna designs
> (dipoles, long wires, etc.)?
> Thanks.
> I am just getting back into the hobby and need to bone up.
> Charles
> K7SEA

Check http://www.ac6v.com/
>
w3rv

1950. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 15:00:28 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A72E28C.2D7B3A75@wgcr.org>
Source record: 171424

Richard Clark wrote:
> Well maybe for the crafters of flint, but how about bow hunters and
> gun hunters?

> The Bow, an antique mode, is afterall inefficient by design. It can't
> possibly compete with the modern technology of the bullet. And yet
> the government allows a failed technology to dictate the season and
> public lands' access for hunters. There must be some hue and cry that
> I am not hearing from the gun hunters.

Because demonstrating profiency with a bow is not required to get a
license to hunt with a gun.
--

1951. Re: Linear loaded short dipole for 80/40

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 15:59:52 UTC
From: k1bqt@aol.com
Message-ID: <20010127105952.06184.00001717@ng-ff1.aol.com>
Source record: 171425

Hi-Q loading coils--300 or better--work very well. So does dopping the ends. Combination of both work well, also.

Rick K1BQT

1952. Slanted screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 16:09:25 UTC
From: jason_hsu@my-deja.com
Message-ID: <94urrj$us0$1@nnrp1.deja.com>
Source record: 171426

I am considering buying a Screwdriver antenna for HF at my ground floor apartment.

Would it be possible to install a Screwdriver antenna at a slant if the 8 feet of clearance on the small patio outside isn't quite enough? Are there antenna mounts available that allow this? Would I be able to modify or build a mount to allow this? Can a Screwdriver antenna handle such a setup?

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

1953. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 17:20:41 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <94v16ncgt1@nnrp1.phx.gblx.net>
Source record: 171431

> > n2ey@aol.com wrote:
> > This is clear from the context, but if viewed out of context it may be
> > unclear to some that the same modulation method is part of the equation.

> Cecil <Cecil.A.Moore@IEEE.org> wrote:

> Who in their right mind would use OOK for ASCII? You'd better tell us
> how PSK can be applied to Morse code so CW can catch up.

OK... but first a comment. Most of the arguments in this thread about occupied bandwidth seem to be overlooking the very significant effect the keying waveform has on this. Much of the bandwidth conservation that the later modes such as PSK31 achieve is due to their use of a keying waveform that is precisely matched to the overall system transfer function (frequency AND amplitude AND phase response). In general, this results in what the old-timers would call "soft keying". With machine codes (ASCII, Baudot, Sitor, etc.), recovering the binary signal is easy with voltage level discriminators. And it would be with Morse as well, but it would require interposing a subsystem between the RF detector output and the operator. Otherwise, the keying would be too "soft" to allow the required mental decoding to take place at the necessary speed.

And now you can see how implementing an optimum Morse system would go. The binary keying waveform would have to be precisely machine-generated since any timing errors would lead to inter-symbol interference when passed through the system transfer function. So the OM would have to use a keyboard. The baseband keying waveform would be derived by passing the binary output through the transmit matched filter (typically Gaussian) and then would be applied to the phase and/or amplitude modulator. If amplitude modulation (amplitude-shift keying) is used, the modulator and all succeeding stages, including the final RF amplifier, would have to be linear. At the receive end, for optimum results, the receive matched filter should be in the IF strip. The receive detector would precisely translate the phase or amplitude variations back to a linear baseband signal. This baseband signal would be applied to the level discriminator which would "decide" the binary signal states. The binary signal would then be applied to the keying input of a code-practice oscillator to provide the on-off tone desired for copying by ear.

See, we CAN have Morse well into the 21st century!

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

1954. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 17:23:41 UTC
From: KC8JBO <roger_kc8jbo@my-deja.com>
Message-ID: <94v06o$1pj$1@nnrp1.deja.com>
Source record: 171427
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx

"David J. Moge" <n1rzb@mailops.com> wrote in message
news:3a72d6e4@excalibur.gbmtech.net...
> In brief, I have a multi element TV antenna with a amplifier
connecting to 4
> televisions. The house lot is laid out in such a way that it's very
hard to
> string antennas up with out having them in close proximity to the TV
> antenna. Cable is not an option. Satellite is possible but would like
to
> keep regular TV antenna.
>
> At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW
10
> Watts) which my wife gave me. I put up a dipole to try it out and to
my
> surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.
>
> My wife hasn't stopped yelling at me sense. Every time I key the mike
or try
> out CW the TV's go blank. I have tried a HI PASS filter but that
doesn't do
> much good at all.
> My HF rigs cause no problems at all. I do have a good RF ground
>
> WHAT AM I DOING WRONG??? HELP!!!
>
> Any comments and suggestions would be gratefully appreciated.
>
> Thanks
> DAVE, N1RZB

Dave, the 6 meter band's fundemental frequencies fall close to the
video portion of the television
signal. Plus, you're probably experiencing what is known as fundemental
overload. Your tv's are
acting like a receiver for your nearby 6 meter transmission. The tv's
don't have the proper
filtering to filter it outand reject that signal. The FCC sees Amateur
to non-amateur interference as not necessarily the fault of the
amateur. Usually, it's the fault of the manufacturer of the consumer
electronic device for not puttting in the proper filters and shields.
If there are no supurious emissions
from your station, then fundemental overload is the culprit. The ARRL

RFI book may give you some ideas on fixing the problem.
Did you try choke filters ont he tv(s)? That amplifier may be letting
in extra signals, too.
Good luck.

--
73 de Roger, KC8JBO
EM99 |ARRL|VE [ARRL & W5YI]|ARES |RACES
Yaesu FT-920 |Inverted Vee @ 40 ft.
Yaesu FT-90R

Sent via Deja.com
http://www.deja.com/

1955. To relax from TOS (F6HQL)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 18:05:42 UTC
From: maurice lamouroux <Mauricelamou@aol.com>
Message-ID: <2001127-182140-219137@foorum.com>
Source record: 171428

have a look to my site
http://perso.wanadoo.fr/maurice.lamouroux
Here you find more than 5000 digitized photographs of drawings and paintings

from everywhere and everytime a real pleasure to collect and to share

maurice F6HQL I stoped for a while to be QRV on CW .I probably resume soon !

Best 73 Maurice

User of http://www.foorum.com/. The best tools for usenet searching.

1956. FS: 2 Rhon towers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 18:13:30 UTC
From: n8wgm@aol.com
Message-ID: <20010127131330.21529.00000875@ng-mq1.aol.com>
Source record: 171429

For Sale: 8 ten foot sections of Rhon 55g tower with top bearing plate. $600.00
Never used.

Also---40 foot Rhon commercial grade tower---model not known. In 2 twenty foot
sections. $250.00

Located in Southeastern Ohio near Cambridge..

N8WGm
N8WGM

1957. HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 18:30:11 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <TsEc6.209$2t5.16192@newsread2.prod.itd.earthlink.net>
Source record: 171430

Can someone explain what's happening?

I am in an antenna restricted area (what's new), and have created a "fan" dipole like as shown in the link below... near the bottom of the page under "Multiband Dipoles",

http://www.arc.itb.ac.id/rf/arrlhbk/ch20/PracticalDipoleAntenna.htm

I cut and tuned dipoles for 10, 12, 15, 17, and 20 meters with number 14 copper wire. I then connected them all together at the feedpoint. (I was told by two "old timers" that this would be OK).

I feed it with RG-213 (70') and the center of the dipole is about 6' above the center of the roof. The ends of each dipole are then splayed out and tied down at various points along the roof.

Big mistake I guess, but the dipole is not externally grounded, only gets its ground through connection to the rig which is very well grounded with #6 copper wire to dual 6' grounding rods.

My TS-870s internal tuner will match each band (and very quickly... within about 2 seconds), but just for fun I tried an SWR meter on the back of the rig and found I have HORRIBLE SWR. It does not find low SWR anywhere on any of the bands.

Is the TS-870 actually finding the resonant dipole for the band or is the tuner just doing me a favor, and I am radiating 100 watts out but am QRP off the antenna with a few watts?

Thanks in advance for your serious help and even for your comments about me being a complete idiot.

Dennis - KF2XL

1958. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 18:42:32 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <pxRzOuQfU8sJUh+1GIioOX0Rq=UP@4ax.com>
Source record: 171433

On Sat, 27 Jan 2001 10:00:28 -0500, Lamar Owen <lamar.owen@wgcr.org>
wrote:

>Richard Clark wrote:
>> Well maybe for the crafters of flint, but how about bow hunters and
>> gun hunters?
>
>> The Bow, an antique mode, is afterall inefficient by design. It can't
>> possibly compete with the modern technology of the bullet. And yet
>> the government allows a failed technology to dictate the season and
>> public lands' access for hunters. There must be some hue and cry that
>> I am not hearing from the gun hunters.
>
>Because demonstrating profiency with a bow is not required to get a
>license to hunt with a gun.

Hi Lamar,

Ah! So long as gun hunters are not required to demonstrate profiency
with a bow; then they have no grief with the government's exclusion of
them from the field of hunt to favor their bowed friends.

Sounds equitable.

73's
Richard Clark, KB7QHC

1959. Re: test

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 18:44:37 UTC
From: rysiu <goldrys@poland.com>
Message-ID: <3A731715.34F3@poland.com>
Source record: 171518
Cross-posted to: rec.radio.amateur.antenna,test

```
Siming Li wrote:
>
> j
>
> On Sun, 14 Jan 2001, tommy wrote:
>
> > test
> >
>
> testtest2
> jhjhuj
```

1960. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 18:54:37 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A73196D.1C411BCD@dialpoint.net>
Source record: 171432

The internal antenna tuner is just matcning to whatever SWR on the line is. It does not 'know' what antenna is being used. You did not state what the swr is or if you tried looking up and down the band to see where the swr dropped the lowest. Antenna charts and formulars are only a good starting point for antennas near the ground. You normally install the antenna and check the swr at several points in the band and then adjust the length for the lowest swr at the frequency you most use or want. The lowest might be around 2 to 1 for an antenna near the ground.

A dipole antenna does not need a ground to work as far as the RF is concerned. There are many reasons to use a gound with a dipole, helps with TVI, safety incase of a short circuit, an so on.

"Dennis P. Stahr" wrote:
>
> Can someone explain what's happening?
>
> I am in an antenna restricted area (what's new), and have created a "fan"
> dipole like as shown in the link below... near the bottom of the page under
> "Multiband Dipoles",
>
> http://www.arc.itb.ac.id/rf/arrlhbk/ch20/PracticalDipoleAntenna.htm
>
> I cut and tuned dipoles for 10, 12, 15, 17, and 20 meters with number 14
> copper wire. I then connected them all together at the feedpoint. (I was
> told by two "old timers" that this would be OK).
>
> I feed it with RG-213 (70') and the center of the dipole is about 6' above
> the center of the roof. The ends of each dipole are then splayed out and
> tied down at various points along the roof.
>
> Big mistake I guess, but the dipole is not externally grounded, only gets
> its ground through connection to the rig which is very well grounded with #6
> copper wire to dual 6' grounding rods.
>
> My TS-870s internal tuner will match each band (and very quickly... within
> about 2 seconds), but just for fun I tried an SWR meter on the back of the
> rig and found I have HORRIBLE SWR. It does not find low SWR anywhere on any
> of the bands.
>
> Is the TS-870 actually finding the resonant dipole for the band or is the
> tuner just doing me a favor, and I am radiating 100 watts out but am QRP off
> the antenna with a few watts?
>

> Thanks in advance for your serious help and even for your comments about me
> being a complete idiot.
>
> Dennis - KF2XL

1961. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 19:09:10 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A731CD6.4EE868ED@IEEE.org>
Source record: 171434

"Dennis P. Stahr" wrote:
> Is the TS-870 actually finding the resonant dipole for the band or is the
> tuner just doing me a favor, and I am radiating 100 watts out but am QRP off
> the antenna with a few watts?

The dipole with the lowest impedance will accept the highest amount of
power. With any luck, that is the dipole nearest resonance.

You could choose one band and see if shortening (or lengthening) that
particular dipole will reduce your SWR. Almost no home-brewed antenna
works as designed without some fine-tuning.
--
http://www.mindspring.com/~w6rca

1962. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 20:07:07 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A732A6B.CB033937@oio.net>
Source record: 171435

Dennis,
You forgot one step, after connecting all the
seperate dipoles, you have to re-tune each dipole.
Each will affect the others, so you have to go
through that 'tuning' several times, probably.
The tuner in the radio will/should handle the
SWR with no problem, as you said. Without using
the internal tuner, your SWR would probably be all
over the place, just as the external meter shows,
thats normal if you haven't tuned all the dipoles
together.
Sounds like things are normal...
'Doc

1963. Re: Slanted screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 20:10:01 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A732B19.1F6070E6@oio.net>
Source record: 171436

jason,
You may be able to find such a mount, but I don't
rememebr seeing one of them. I'd try just mounting
the antenna 'normally' and see what happens. If it
itsn't to your liking, then try 'tilting' it.
'Doc

1964. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 20:20:24 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <c4Gc6.516$2t5.44348@newsread2.prod.itd.earthlink.net>
Source record: 171437

Most sincere thanks to you great people for all your help.

Concensus appears to be individual retuning. I can handle that. Will have to wait until the neighbors are working to "sneak" back to the roof. They can see it there, but would really draw attention if I was up there with them outside.

I'm just happy that it sounds like I may, at least, be on the right track, and that the initial concept is correct. By the way, the SWR with the meter was over 5:1, and, that was across the entire band, for each band. On 10m and 20m I got a small dip near the low ends, so maybe shortening is the way to go. I will try to get up there during work days next week.

I have seen the very professional posts of each of you guys before and I sure do appreciate the kind and quick responses.

Thanks again,
Dennis - KF2XL

1965. J-pole ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 20:29:51 UTC
From: Ken <klajr2@swbell.net>
Message-ID: <2eGc6.146$Yq5.69868@nnrp2.sbc.net>
Source record: 171438

Is there something I'm not catching on to about tuning one of these?
I built it to specs and moving the wires up and down the best swr I get is a
1:2.0 Shortened the main element as far as possible to 19 1/4" (started at
20 1/2) and still nothing better.
Any help would be appreciated.
Ken

1966. Re: J-pole ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 21:08:24 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <94vdci$9fg$1@iac5.navix.net>
Source record: 171439

There are 2 considerations, first resonance and then matching. Use a griddip meter at the antenna and adjust the length of the elements for resonance at your desired freq. Then it is time to use the swr bridge to adjust the matching by sliding your wires up and down.

A J-pole is nothing more than a 1/4 wave matching section feeding the radiating element. Which side are you adjusting for length? What side are you connecting the center of the coax to?

You should adjust the long side and connect the center of the coax to the long side.

"Ken" <klajr2@swbell.net> wrote in message
news:2eGc6.146$Yq5.69868@nnrp2.sbc.net...
> Is there something I'm not catching on to about tuning one of these?
> I built it to specs and moving the wires up and down the best swr I get is
a
> 1:2.0 Shortened the main element as far as possible to 19 1/4" (started at
> 20 1/2) and still nothing better.
> Any help would be appreciated.
> Ken
>
>

1967. Re: Linear loaded short dipole for 80/40

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 21:59:15 UTC
From: Central Scrutinizer <Zorak@SGC2C.com>
Message-ID: <TwHc6.19695$t3.4148540@typhoon.ne.mediaone.net>
Source record: 171440

Try www.cebik.com/radio.html . He has lots of info on wire antennas.
"Paolo Odone" <paolo@odone.it> wrote in message
news:d6xc6.33495$ew1.2532757@news.infostrada.it...
> I am looking for info, web sites,theory etc. about linear loaded dipoles.
> (I mean the same loading as in KLM XT34 beams).
> ARRL Antenna Book is not so detailed on this subject.
> Thanks.
>
> Paolo i1odp
>
>

1968. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 22:32:09 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A734C69.1EB0839E@wgcr.org>
Source record: 171441

Richard Clark wrote:
> Lamar Owen wrote:
> >Richard Clark wrote:
> >> The Bow, an antique mode, is afterall inefficient by design. It can't
> >> possibly compete with the modern technology of the bullet. And yet
> >> the government allows a failed technology to dictate the season and
> >> public lands' access for hunters.

> >Because demonstrating profiency with a bow is not required to get a
> >license to hunt with a gun.

> Ah! So long as gun hunters are not required to demonstrate profiency
> with a bow; then they have no grief with the government's exclusion of
> them from the field of hunt to favor their bowed friends.

> Sounds equitable.

Precisely.
--
Lamar Owen
WGCR Internet Radio
1 Peter 4:11

1969. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 22:44:14 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <5alc6.1912$IM.439220@news.uswest.net>
Source record: 171442

Hi Dennis,

Since you are feeding a balanced system [dipole] with an unbalanced feedline [coax] it is possible that the feedline has become an active component of the antenna. Before you go through the tedious task of tuning each dipole, I suggest decoupling the feedline by installing a 1:1 balun at the antenna feedpoint. Another possibility is that the antenna may be reacting with the house wiring under the roof. In this case, a repositioning or reorientation of the antenna may be required.

It's hard to imagine that every dipole in the array, even with each being slightly detuned by the proximity of the others, will produce a VSWR of 5:1 or greater - unless your length calculations were_way_off mark... hi

73, Chuck

Dennis P. Stahr <irfutures@earthlink.net> wrote in message news:c4Gc6.516$2t5.44348@newsread2.prod.itd.earthlink.net...
>
> Most sincere thanks to you great people for all your help.
>
> Concensus appears to be individual retuning. I can handle that. Will have
> to wait until the neighbors are working to "sneak" back to the roof. They
> can see it there, but would really draw attention if I was up there with
> them outside.
>
> I'm just happy that it sounds like I may, at least, be on the right track,
> and that the initial concept is correct. By the way, the SWR with the meter
> was over 5:1, and, that was across the entire band, for each band. On 10m
> and 20m I got a small dip near the low ends, so maybe shortening is the way
> to go. I will try to get up there during work days next week.
>
> I have seen the very professional posts of each of you guys before and I
> sure do appreciate the kind and quick responses.
>
> Thanks again,
> Dennis - KF2XL
>
>
>

1970. WTB: Dentron Super Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 22:56:32 UTC
From: aokd5fxt@cs.com
Message-ID: <20010127175632.21559.00001472@ng-fy1.news.cs.com>
Source record: 171443

Want to buy Dentron Super Tuner at a reasonable price. Pls email with details

Bill

1971. 70cm band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 23:04:00 UTC
From: aokd5fxt@cs.com
Message-ID: <20010127180400.21580.00001564@ng-fy1.news.cs.com>
Source record: 171444

Is a homebrew quad possible the 70 cm band? If so, what is a good website to review for dimensions? Pls email

bill

1972. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 23:33:07 UTC
From: n2ey@aol.com
Message-ID: <20010127183307.01651.00000528@nso-fp.aol.com>
Source record: 171446

In article <3A70531A.2CD0AD86@mwci.net>, "William E. Sabin" <sabinw@mwci.net>
writes:

>Richard Harrison wrote:
>
>> Jim, N2EY wrote:
>> "Morse is neither "outdated" nor "obsolete" in ham radio."
>>
>> Morse requires special skill for hand and ear operation. For machine
>> operation, Morse is an inefficient code. These downsides have eliminated
>> most commercial use of Morse.
>
>If something is fun, I want to do it. If it is not fun, I don't want to do
>it.
>
>For me, *personally*, CW is fun. SSB is fun. Staring at a computer screen
>and banging a keyboard to communicate on the Amateur Radio bands, for me
>*personally*, is not fun.
>
>I could not care less about the Eb/N0 or the BER advantages of this mode or
>that mode. I just want to do what I *personally* like to do.
>
>Fed gov et al can do what they want, I will do what I want.
>
>What would you think of that kind of old fogey attitude?
>
It sounds like the purest strain of common sense to me, Bill.

73 de Jim, N2EY

1973. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 23:33:08 UTC
From: n2ey@aol.com
Message-ID: <20010127183308.01651.00000529@nso-fp.aol.com>
Source record: 171447

In article <3a72c016.802137662@news.seanet.com>, rwclark@seanet.com (Richard Clark) writes:

>Is there anyone in this group, other than me, that has actually worked
>on building Spread Spectrum systems?

I'm application-engineering a couple of systems right now. They are being used to avoid the expense of running cable over a movable bridge. Interesting stuff.

> I will let you know right now I
>used an ARRL publication (of the same name) that provided considerable
>insight back when any discussion was as sparse as trees on the moon.

Amateurs first used SS in 1981 under an STA.
>
>Few know the genesis of SS and its antecedents being designed using
>player piano rolls to encode the frequency sequencers.

Did you ever meet the famous inventor?

>Tell me about
>"modern" techniques and superior digital systems. That same argument
>could've worked in the 50's, trotting it out in the 21st century is
>pretty lame. Why? because there is a world more than CW that is
>inefficient and yet they persist as well. If this is question of
>degree - then again that was answered 50 years ago to no obvious
>effect except for the space program, for special applications (cost)
>and for scads of bandwidth in the SHF (cost again).

Yup - plus another factor: security. The original reasons for SS were resistance to jamming and interception.
>
>Hence the argument seems to be that there are many more expensive
>modes than CW as if the dollar burden is proof of efficiency.
>
Exactly.

There is one thing about SS that is rarely if ever mentioned: antenna bandwidth. At UHF and above, it's not much of a concern. But at lower VHF and HF, it is a big problem for hams because most of us cannot put up log-periodics other broadband-yet-efficient antennas. The HF hams who would benefit the most from SS processing gain are those who can't put up decent HF antennas.

Resistive-loaded designs like the T2FD are one possibility - but they are neither small nor efficient.

73 de Jim, N2EY

1974. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 23:33:09 UTC
From: n2ey@aol.com
Message-ID: <20010127183309.01651.00000530@nso-fp.aol.com>
Source record: 171445

In article <5180-3A7192BC-53@storefull-117.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Egad! They don`t teach Latin in the high school anymore. Woe is me!

They teach Latin in the high schools around here. Also French, Spanish,
Italian, German, Japanese, Korean, and Mandarin (I think).

73 de Jim, N2EY

1975. Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-27 23:46:55 UTC
From: Jethro Jumbalaya Twain <qwasty@hotmail.com>
Message-ID: <94vmlejkg1@nnrp1.deja.com>
Source record: 171448
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

The article is about a replacement for Morse that's easier to learn.
It's a lot like Morse, just a different code.

http://www.eham.net/articles/1681

Sent via Deja.com
http://www.deja.com/

1976. tgm communications new web site address

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 00:00:21 UTC
From: James Davidson <ve3tpz@rac.ca>
Message-ID: <piJc6.133263$JT5.4928415@news20.bellglobal.com>
Source record: 171449

t.g.m. communcations for the hybrid quad web site has a new address due to techincal difficulites at the isp.

the new address is http://www3.sympatico.ca/tgmc/index.html

1977. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 00:01:46 UTC
From: kg4ggx@aol.com
Message-ID: <20010127190146.25794.00001496@ng-fd1.aol.com>
Source record: 171450

Hi Dennis
I have an antenna like this.Mine is 80 meters thru 10 meters.Four diploes to one feed point, and I do use a 1:1 balun at the feed point.The elements are only spaced apart a few inches.It was a little tricky tuning because one element affects the other.Most of them came out to be a little longer than standard diploe length.Start with the lowest band(longest element), then go to the next lowest band, when tuning.Once you get it tuned it should work great! Automatic band switching, just tune to the band you want to operate on, and go.
Good Luck!
73 Rob KG4GGX

1978. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 00:46:44 UTC
From: LA8AK@online.no
Message-ID: <3a736ae6.7179855@news.online.no>
Source record: 171451
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Sat, 27 Jan 2001 03:52:05 +0200, Paul Keinanen <keinanen@sci.fi>
wrote:

>>>A 1/4 wave _open_ stub could also be used, but it is harder to tune.
>>Why ?
>
>Sticking a needle through the shield and the centre conductor is a
>reversible operation, cutting the coax is not a reversible operation.
>
>
I made 5-6 equal TVI filters with two sets of tuned quarterwave lines
using up to 1cm pvc coated wires to adjust the end capacitance.
Notchdepth is 85dB on 144MHz, but they covered most of band III with
minimum attenuation. So I see no reason for this shouldn't work on 6m,
airspaced trimmers may be a good choice, but your suggestion using
needles to short is usually overlooked by amateurs

The note is published in Radcom April 1982 pp320, Technical topics,
"Double stub 144MHz TVI-notchfilter" - it is also found in Technical
topics scrapbook. see
https://secure.ws4.u-net.com/www.rsgb.org.uk/books/orderfrm.htm

73
Jan-Martin
LA8AK

1979. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 00:59:35 UTC
From: Peter Lemken <plemken@gmx.de>
Message-ID: <3A736EF7.9F581CBF@gmx.de>
Source record: 171452
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

Jethro Jumbalaya Twain wrote:
>
> The article is about a replacement for Morse that's easier to learn.
> It's a lot like Morse, just a different code.

Read my reply.

Warning: Not for the humor impaired.

Peter Lemken
DF5JT
Berlin

--
DeeeeeeeX'ing in the new Millenium. Scream for an hour and go
check the online logs to see if you gotta scream for an hour again
tomorrow nite. [KH2D in rec.radio.amateur.dx]

1980. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 01:10:58 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <6jKc6.7966$Tb.1617098@nntp1.onemain.com>
Source record: 171453
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

"Jethro Jumbalaya Twain" <qwasty@hotmail.com> wrote in message
news:94vmlejkg1@nnrp1.deja.com...
> The article is about a replacement for Morse that's easier to learn.
> It's a lot like Morse, just a different code.
>
> http://www.eham.net/articles/1681
>
>
> Sent via Deja.com
> http://www.deja.com/

Another bleater that feels he needs five newsgroups to make a point.

We all know Morse testing is going to disappear, we all know it will take
3-10 years to do so. So your problem is whether to study or moo.

Dick N&#65533;BK with apologies for the crosspost

1981. Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 01:40:54 UTC
From: foffe <setta@uio.com>
Message-ID: <3A7378A6.6D3B1C49@uio.com>
Source record: 171454

I want toget a combination 80/40 m dipole.
Any commercial ones out there?
I don't want traps.

How long would a 1/2 wave dipole be with a combo 80/40?

I think I only have about 125 feet to work with.

Do BALUNS cause a lot of loss?

1982. What if Long Wire Isn't Straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 02:09:38 UTC
From: Al Klayton <aklayton@pcisys.net>
Message-ID: <t7706fpa44ep7f@corp.supernews.com>
Source record: 171455

I have about 50 feet of wire hooked up to an RX 320 inside my house. Due to room size, layout, etc, the wire, which runs along the edge of the ceiling of two rooms , is in a large S shape (perhaps a 25ft S) rather then in a nice straight line as it would be if outside. What is the effect of not having the ant in a straight line?
Thanks,
Al

1983. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 02:36:40 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A738597.22D557E@earthlink.net>
Source record: 171456

"Dennis P. Stahr" wrote:

> Can someone explain what's happening?
>
> I am in an antenna restricted area (what's new), and have created a "fan"
> dipole like as shown in the link below... near the bottom of the page under
> "Multiband Dipoles",
>
> http://www.arc.itb.ac.id/rf/arrlhbk/ch20/PracticalDipoleAntenna.htm
>
> I cut and tuned dipoles for 10, 12, 15, 17, and 20 meters with number 14
> copper wire. I then connected them all together at the feedpoint. (I was
> told by two "old timers" that this would be OK).
>
> I feed it with RG-213 (70') and the center of the dipole is about 6' above
> the center of the roof. The ends of each dipole are then splayed out and
> tied down at various points along the roof.
>
> Big mistake I guess, but the dipole is not externally grounded, only gets
> its ground through connection to the rig which is very well grounded with #6
> copper wire to dual 6' grounding rods.
>
> My TS-870s internal tuner will match each band (and very quickly... within
> about 2 seconds), but just for fun I tried an SWR meter on the back of the
> rig and found I have HORRIBLE SWR. It does not find low SWR anywhere on any
> of the bands.
>
> Is the TS-870 actually finding the resonant dipole for the band or is the
> tuner just doing me a favor, and I am radiating 100 watts out but am QRP off
> the antenna with a few watts?
>
> Thanks in advance for your serious help and even for your comments about me
> being a complete idiot.
>
> Dennis - KF2XL

Hello Dennis I am sorry to hear of your problem but I will not go into the
neighbor issue,
I will try to help you get to enjoy your radio and as you get acquainted with
your radio hopefully
your neighbor problem will resolve itself.

First off paralleling dipoles more than maybe 2 bands where you can orientate the
dipoles at 90 degree angles or close to it is doing nothing except asking for problems.
The dipoles will detune each other and unless you want to adjust each element per each band and frequency and then go back and forth and walk them all in.
Then if you manage to walk everything in to the portion of the bands you want expect narrow bandwidth due to the interaction of the other elements.
Just forget the multiple dipole issue and throw the whole thing in the garbage!

The problem is to get the power to the antenna so it will be able to radiate and neither low SWR or resonance is needed or sometimes even desirable.

A J Operator of 35 ohms with a Z of 50 ohms will cause a 2 to 1 swr and the loss of the feedline
is increased by the square root of the SWR, therefore if the swr is 10 to 1 the extra loss will be
3.16 times that of a 1 to 1 swr.

70 feet of RG-213 at 14 mhz should have a loss of .55 db, the 10 to 1 swr will increase the
loss to 2.18 db. If the antenna itself has the 10 to 1 swr the radio will see a swr of about 6.2
and the 2.18 db loss will amount to about 40% leaving a shade over 60 watts to the antenna.
The loss will of course increase with frequency.

You under normal conditions would not ground your dipole as it is balanced and independent
from ground, neither do you need or want a balun at the antenna.

Now the way around your problem your 70 feet of RG-213 will lose .44 db perfectly matched
and a 70 foot length of 450 ohm ladder or similar under a swr of 15 to 1 under the conditions you
could expect from your installation, low driving Z maybe 30 ohms and a J Operator of 100 or more
ohms giving a swr of 15 to 1 has lower loss then your RG-213 when perfectly matched.

What you may want to do is get some ladder line, 16 gauge stranded is fine run what you can
as much in the clear as you can try to have both sides balanced to avoid RFI and TVI
run that to a balun either 1 to 1 or 4 to 1 homemade or store brought you may want to try to
pick up a old center balun and hook the feedline to the output and the coax to the output
and even with the extra loss of the balun the system will have less loss than anything you will as a
practical nature be able to use. Just make sure the that the antenna is more than a quarter
wave and hopefully closer to a half wave at the lowest frequency you wish to

transmit on and let it fly. 16 gauge insulated wire is fine as a matter of course I would use
insulated wire to keep it from arcing to something dry and try to use a flat top as
using a inverted Vee on harmonics will raise the radiation pattern to the point you
might talk to passing airplanes but little else.

Just because you are using a cable of a specific impedance doesn't mean that is the
impedance at the input of the line and unless you have a swr of 1 to 1 or next to
it I guarantee you will not have the same impedance down the line unless it is a

electrical 1/2 wave a technique used to match antennas. If your house and lot is such that
you can get a 30 foot flat top, the antenna will work 14 to 30 mhz and be of some use
on 10 mhz.

You may want to have 1 or 2 sections of ladder line of 5 to 10 feet with alligator clips on all
conductors should you have a problem loading on a perticular band or subband.
This extra length should shift the input impedance to where your radio will be able to
find a match should the tuner start hunting.

Without folding your antenna back on itself 50 to 60 feet will be great from 7 mhz up.

Your radio was not finding the resonate point resonance is J=0 and there is nothing
magic or holy about it, as far as SWR my meter took a walk years ago and I might

have a total of 5 feet of coax used as interconnects and that's it.
If you have a question feel free to ask

Stephen H Dobak WB3AMG
shdobak@earthlink.net
sdobak@yahoo.com

1984. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 03:15:11 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9502rv$44p$3@bashir.peak.org>
Source record: 171458

Richard Clark wrote:
:
: The Bow, an antique mode, is afterall inefficient by design. It can't
: possibly compete with the modern technology of the bullet. And yet
: the government allows a failed technology to dictate the season and
: public lands' access for hunters. There must be some hue and cry that
: I am not hearing from the gun hunters.

Ah, but the bow and arrow can be quite efficient in energy transfer, in the range of 90% or so. I don't know if the efficiency of a firearm is as good.

--
Bill Nelson (billn@peak.org)

1985. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 03:15:54 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A738ECB.4E23DC88@earthlink.net>
Source record: 171457

foffe wrote:

> I want toget a combination 80/40 m dipole.
> Any commercial ones out there?
> I don't want traps.
>
> How long would a 1/2 wave dipole be with a combo 80/40?
>
> I think I only have about 125 feet to work with.
>
> Do BALUNS cause a lot of loss?

Do you actually have a valid Amateur license and if so what class do
you have,
What happened to the tests?

A half wave dipole is 468/F 120 feet for 3.9 MHZ and 130 feet for
3.6 MHZ

A half wave at 7.15 MHZ is 65 feet 6 inches . Cut the wire in the
middle and
connect each side to opposite sides of a insulator. Skin your cable
and connect
1 of the 2 feedline conductors to each of the elements.

Depending on where you want to operate at parallel the dipoles and you
can run
one as a inverted Vee and the other as a flat top or if they are in
the same plane
try to maintain a 90 degree spacing between the dipoles.
I do not like traps either but you cannot cover both bands with 1 set
of elements
unless you are using ladder line and a tuner.

A properly designed and built balun has very low loss as long as the
core is not driven into saturation
but there is no reason whatever to use a center balun for a dipole in
the HF range.

Stephen H Dobak WB3AMG
shdobak@earthlink.net
sdobak@yahoo.com

1986. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 03:34:38 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95040e$44p$4@bashir.peak.org>
Source record: 171460

"Dennis P. Stahr" wrote:

: Big mistake I guess, but the dipole is not externally grounded, only gets
: its ground through connection to the rig which is very well grounded with #6
: copper wire to dual 6' grounding rods.

That is as it should be. Dipoles are not grounded, except through the one
side being attached to the coax shield.
:
: My TS-870s internal tuner will match each band (and very quickly... within
: about 2 seconds), but just for fun I tried an SWR meter on the back of the
: rig and found I have HORRIBLE SWR. It does not find low SWR anywhere on any
: of the bands.

I have run three dipoles without having much of a problem with interaction.
Running a bunch of them could cause real pains - and I seem to recall that
the bandwidth of each dipole is also decreased when you parallel dipoles.

The bad SWR may not be due to the tuning of the dipoles. You may be getting
rf currents on the outside of the coax - which means that the coax is then
acting as part of the antenna - so it would affect the actual system SWR.

To eliminate the currents, use a current balun at the feedpoint of the antenna.
Several possibilities exist, such as a coax coil (add to transmission line
loss), commercial or homemade current balun, or using a bunch of ferrite cores
on the coax.

:> Is the TS-870 actually finding the resonant dipole for the band or is the
:> tuner just doing me a favor, and I am radiating 100 watts out but am QRP off
:> the antenna with a few watts?

A high SWR does not necessarily mean that you are only radiating a small
fraction of the power. There are additional losses due to SWR, but they
depend on the coax losses you get even with a perfectly matched system.

--
Bill Nelson (billn@peak.org)

1987. Re: J-pole ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 03:43:18 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9504gm$44p$5@bashir.peak.org>
Source record: 171459

Ken <klajr2@swbell.net> wrote:
: Is there something I'm not catching on to about tuning one of these?
: I built it to specs and moving the wires up and down the best swr I get is a
: 1:2.0 Shortened the main element as far as possible to 19 1/4" (started at
: 20 1/2) and still nothing better.

I assume you mean 2.0:1? The large number is always listed first, or by
itself.

Adjust the main element so that the SWR is the lowest at your center
frequency. If the SWR is still too high, then it means that the feedpoint
impedance is not 50 ohms (see below for another possibility). The
feedpoint impedance is affected by the height the antenna is mounted
above ground - you may need to change the height, especially if it is
less than about 1/2 wavelength above ground.

Another possibility is currents on the outside of the coax. See my post
to a different thread for a brief discussion.

--
Bill Nelson (billn@peak.org)

1988. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 03:51:39 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95050b$44p$6@bashir.peak.org>
Source record: 171462

foffe <setta@uio.com> wrote:
: I want toget a combination 80/40 m dipole.
: Any commercial ones out there?
: I don't want traps.

This is a problem, as the feedpoint impedance is going to be high
on even multiples of the fundamental frequency. This is the case
for 80/40 or 40/20. That means you need to use open wire and a
balanced antenna tuner.

: How long would a 1/2 wave dipole be with a combo 80/40?

: I think I only have about 125 feet to work with.

The formula for a halfwave(in feet) is 492/f(in MHz)

: Do BALUNS cause a lot of loss?

Not inherently.

--
Bill Nelson (billn@peak.org)

1989. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 03:53:59 UTC
From: richardharrison@webtv.net
Message-ID: <18148-3A7397D7-11@storefull-111.iap.bryant.webtv.net>
Source record: 171463

Jethro Jumbalaya Twain`s attachment says:
"---CW exchanges can be made with QRM as little as 100Hz away or even closer. Try that with any digital mode..."

Obviously, the relative strengths of desired and undesired signals would determine the feasibility of receiving the desired signal.

Also, the ability of the filters to produce a "single signal" from the morass is crucial.

Simple old fashioned digital modes do pretty well. They can automatically produce perfect copy at 100 words per minute with 18 or 26 channels all running equal strength signals spaced at 170 Hz or 120 Hz, and all operating at the same time.

Spacings and bandwidth of 120 Hz are normal for using the 5-level Baudot code in the space of a voice channel (about 3.3 KHz) while running 100 WPM.

Spacings and bandwidth of 170 Hz are normal for using ASCII in a voice channel at 100 WPM.

A normal voice channel accommodates 26 Baudot channels or 18 ASCII channels at 100 WPM in all channels simultaneously. The Baudot or ASCII channels of this frequency division multiplex are usually FSK modulated. Two tones are used . The first signifies a "mark" condition. The second signifies a "space" condition. Encoding is done by switching between the two tones assigned to a teleprinter channel. Rarely, a channel user will encode by simple on/off tone channel switching. The same bandwidth works for either FSK or on/off coding. FSK is equivalent to FM. On/off is an abrupt form of AM. Performance of FM is usually better than AM, even used for telegraph channels.

With the excellent filters available and normally used with these ancient FSK modems, the performance is good too.

Best regards, Richard Harrison, KB5WZI

1990. Re: What if Long Wire Isn't Straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 04:33:17 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A73A10D.2F5A3088@oio.net>
Source record: 171464

Al Klayton wrote:
>
> I have about 50 feet of wire hooked up to an RX 320 inside my house. Due to
> room size, layout, etc, the wire, which runs along the edge of the ceiling
> of two rooms , is in a large S shape (perhaps a 25ft S) rather then in a
> nice straight line as it would be if outside. What is the effect of not
> having the ant in a straight line?
> Thanks,
> Al

Al,
There will be some affect from it not being straight,
but probably not as much as you may think. There would
be a much greater affect if you kept the same shape, but
moved it outside.
'Doc

1991. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 04:37:56 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A73A224.972D8F4C@oio.net>
Source record: 171465

foffe wrote:
>
> I want toget a combination 80/40 m dipole.
> Any commercial ones out there?
> I don't want traps.
>
> How long would a 1/2 wave dipole be with a combo 80/40?
>
> I think I only have about 125 feet to work with.
>
> Do BALUNS cause a lot of loss?

F0FFE,
If your speaking about two dipoles in one, with a
common feed point, you figure length just like you were
making a single dipole for that band. So, an 80 meter
dipole will be about 120-130 feet. You may be able to
'squeeze' one into 125 feet.
A balun ~shouldn't~ cause a lot of loss. On the
lower bands, they also can be more trouble than they
are worth though. If it's rated at an adequate power
level, it should work for you fine.
'Doc

1992. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 05:19:17 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <950a4l$f58$0@208.207.71.166>
Source record: 171466

Bill Nelson wrote:
>
> 'Doc <w5lz@oio.net> wrote:
>
> : Hoo boy, don't make that mistake about concrect! It
> : is not a good idea to try passing high voltages/currents
> : through concrete, the trapped water tends to expand to
> : steam and turns the concrete to schrapnel. Have you
> : ever welded on concrete and had it 'spald' around the
> : work area? One reason why towers are not grounded
> : through a concreter base...
> : There should be no problem about laying ground radials
> : on concrete as in this situation, though.
> : 'Doc
>
> I have read just the opposite, and that a good bunch of grounded
> reinforcemnt rods in the concrete work fine. It may have been in
> the PolyPhasor text on lightning grounding, but I do not recall
> for sure. The text stated that the "concrete exploding" was a
> myth.

Concrete can explode with lightning strikes. I've seen it on a number of occasions. Several times when it struck a concrete highway. Once when it struck a 50 ft radio tower at a highway weight scale station, jumped from the tower to the house wiring, exited through the electronic scale to the scale platform then into the concrete approach apron where it blew a sizeable chunk of the concrete out of the apron. On another occasion it struck the highway in front of the identical scalehouse across the four lane highway and blasted a chunk of conctete out of the highway slab.
If you see a strange series of potholes in a limited area on a concrete highway in lightning country you can almost assume it is the result of lightning which followed the reinforcing rod. I know of at least four places in this region where that has happened. One was fairly extensive, The moisture content of the concrete surely has a lot to do with how easily it blows. If it's wet it would be a lower impedence current path thus both more likely to be an attractive path and also to vaporize the water in the concrete, causing a steam explosion.

Dick

1993. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 05:29:23 UTC
From: k6mhe@arrl.net
Message-ID: <3a73adf8.14146477@news.mcn.org>
Source record: 171371

On Sun, 28 Jan 2001 03:15:54 GMT, Stephen Dobak
<shdobak@earthlink.net> wrote:

>[snip]
>
>A properly designed and built balun has very low loss as long as the
>core is not driven into saturation
>but there is no reason whatever to use a center balun for a dipole in
>the HF range.
>
>
>
> Stephen H Dobak WB3AMG
> shdobak@earthlink.net
> sdobak@yahoo.com

Oh, common mode current doesn't exist at HF?

That's sure news to me.

Danny, K6MHE

1994. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 05:31:42 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A73AEBE.2FD27D68@IEEE.org>
Source record: 171467

"Dennis P. Stahr" wrote:
> On 10m
> and 20m I got a small dip near the low ends, so maybe shortening is the way
> to go.

Odds are that the proximity of the roof is increasing the velocity
factor of the wires making them too long. Taking SWR readings at
the top and bottom of the bands might yield that information and
if you have or can borrow an antenna analyzer like the MFJ-259B,
it will make your trimming job much, much easier.
--
http://www.mindspring.com/~w6rca

1995. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 05:45:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A73B214.9B7083C5@IEEE.org>
Source record: 171468

foffe wrote:
>
> I want toget a combination 80/40 m dipole.
> Any commercial ones out there?
> I don't want traps.
>
> How long would a 1/2 wave dipole be with a combo 80/40?
> I think I only have about 125 feet to work with.

Check out the All-HF-Band-CF-Antenna on my Delphi web page.
With a 450 ohm ladder-line length of 88ft, it is resonant
on 4.0MHz and 7.3MHz and a couple of higher bands.

> Do BALUNS cause a lot of loss?

Properly designed and applied baluns are near lossless. I
recommend the Amidon AB240-125 balun kit for $9 wrapped
as a 1:1 current balun.
--
http://www.mindspring.com/~w6rca

1996. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 05:47:37 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A73B279.4DE80F6A@IEEE.org>
Source record: 171369

Bill Nelson wrote:
> This is a problem, as the feedpoint impedance is going to be high
> on even multiples of the fundamental frequency. This is the case
> for 80/40 or 40/20. That means you need to use open wire and a
> balanced antenna tuner.

I forgot to mention in my other posting that a G5RV is resonant on
80m and 40m plus 20m and 12m.
--
http://www.mindspring.com/~w6rca

1997. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 05:51:14 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A73B352.1D112958@IEEE.org>
Source record: 171370

Bill Nelson wrote:
> Ah, but the bow and arrow can be quite efficient in energy transfer, in
> the range of 90% or so. I don't know if the efficiency of a firearm is
> as good.

All that matters is if it is efficient enough to get the job done. :-)
--
http://www.mindspring.com/~w6rca

1998. Re: 80m noise and distortion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 07:34:47 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A73CB93.1D4ADAB7@rchrd.com>
Source record: 171372

Would the fact that he is using a vertical antenna mean that its
picking up noise in all directions, especially because most noise is
vertically polarized?

Would he do better with a beam antenna on a rotor? (Ignoring for the moment
the impossibility of doing so in his case, being on the ground floor).
What about pointing that hamstick at 45 degrees, or fully horizontal?

A newbie myself, I'm trying to deal with similar issues on 6m. My vertical
is useless.

```
--
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
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1999. Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 07:48:07 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A73CEB3.8134C705@rchrd.com>
Source record: 171373

I'm a newbie and am starting to put together a home station for 40-6m dx.

I've been told that two problems with vertical (base) antennas on HF are:

1. You receive omnidirectional noise, and since most noise is vertically polarized the QRM received is much greater than with a directional beam antenna.

2. You transmit a vertically polarized signal, so only vertical antennas can receive you well. Likewise, you receive vertically polarized signals better than horizontally polarized signals. i.e., verticals can only talk to verticals.

Both seem plausible but how true are they? I thought I'd ask the experts.

```
--
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
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```

2000. Re: What if Long Wire Isn't Straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 09:59:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <950qj0$ss0$1@plutonium.btinternet.com>
Source record: 171374

Al, the S shape will have a neglible effect compared with the difference (1 or 2 S-units) between an indoor and outdoor antenna.

The S will just cause a small change in tuner setting of which you will be quite unaware because you are unable to do a 'before and after' test. The same will occur whether or not the antenna is indoors or out.

Regards, Reg, G4FGQ

==========
Al Klayton <aklayton@pcisys.net> wrote in message news:t7706fpa44ep7f@corp.supernews.com...
> I have about 50 feet of wire hooked up to an RX 320 inside my house. Due to
> room size, layout, etc, the wire, which runs along the edge of the ceiling
> of two rooms , is in a large S shape (perhaps a 25ft S) rather then in a
> nice straight line as it would be if outside. What is the effect of not
> having the ant in a straight line?
> Thanks,
> Al
>

2001. Re: 70cm band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 10:16:39 UTC
From: "Kai-Uwe Hoefs, DL1AH" <dl1ah@agcw.de>
Message-ID: <950rgo$m70$1@ac1.ewetel.de>
Source record: 171375

AO KD5FXT <aokd5fxt@cs.com> schrieb in im Newsbeitrag:
20010127180400.21580.00001564@ng-fy1.news.cs.com...
> Is a homebrew quad possible the 70 cm band? If so, what is a good website
to
> review for dimensions? Pls email
>
> bill

I built a so-called 'quagi', a combination of quad and yagi, for 70cm. Runs well and originates from an american ham. Found dimensions in a german antennabook. Will scan the page and give some hints if you like.

73, Kai
DL1AH nr Hamburg

2002. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 10:22:21 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <gbs77tork22eg63ueea1lst6qbj074miiq@4ax.com>
Source record: 171376

On Sun, 28 Jan 2001 07:48:07 GMT, Richard Friedman <rchrd@rchrd.com> wrote:

>I've been told that two problems with vertical (base) antennas on HF are:
>
> 1. You receive omnidirectional noise, and since most noise is vertically
> polarized the QRM received is much greater than with a directional beam
> antenna.
This is true, although the difference depends on your local area. I've lived in a dozen different QTHs, mostly urban, and I have noticed the difference. It isn't huge, but it's there.

>
> 2. You transmit a vertically polarized signal, so only vertical antennas
> can receive you well. Likewise, you receive vertically polarized
> signals better than horizontally polarized signals. i.e., verticals
> can only talk to verticals.
Cross-polarization is only a problem for groundwave signals. Once the signal is reflected off the ionosphere, polarization is lost and either horizontal or vertical antennas receive the signal equally well. If you intend to do much groundwave, go with a vertical. Horizontally polarized signals do not propagate well via groundwave. That's why verticals are "noisier".

73, Bill W7TI

2003. Re: counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 10:58:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <950tvb$7qr$1@plutonium.btinternet.com>
Source record: 171377

A counterpoise is a length of wire which, with the antenna wire length,
resonates the whole system to the frequency of interest.

If the counterpoise is as remote from ground as the antenna there is zero
loss due to the counterpoise. It is part of the radiator.

A single buried rod or plate is the most lossy ground connection imaginable
unless the soil is saturated with water.

The lowest loss ground is a set of radials so densely packed as to
constitute a copper sheet 1/2-wavelength or more in diameter.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Jim <inagaddadavida@webtv.net> wrote in message
news:27453-3A5002EF-91@storefull-115.iap.bryant.webtv.net...
> ok, ignore the snake for now. someone take me to school on making an
> artificial ground or a counterpoise. does it have any relationship in
> size or length to the antenna element? is one wire all thats needed or
> is several wires laid out like radials more effective? what can be
> expected of the effectiveness of this scheme as compared to a good earth
> ground rod? and what is the comparison of a random wire with a
> counterpoise as compared to an equal amount of wire in a balanced format
> such as a dipole?
>

2004. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 11:31:08 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <OjqjFAA8LAd6Ewah@g3ohx.demon.co.uk>
Source record: 171380
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <jn947tgeerv80170aledokc84r4s9ibrs3@4ax.com>, Paul Keinanen <keinanen@sci.fi> writes
>On Sat, 27 Jan 2001 00:30:51 -0000, "Martin John Hallsworth" ><Martin@g1gyc.demon.co.uk> wrote:
>
>
>>>A 1/4 wave _open_ stub could also be used, but it is harder to tune.
>
>>Why ?
>
>Sticking a needle through the shield and the centre conductor is a
>reversible operation, cutting the coax is not a reversible operation.
>
>
Let us assume that the interference is really being caused by your very strong 50MHz signal getting into the antenna amplifier via the input connection (I'm sure that this will be the main cause, but it may not be the only problem). However, what you essentially want is lots of attenuation 50 - 52MHz, and as little as possible elsewhere. However....

Using coaxial stubs CAN be very effective, but there are several serious problems with simply adding a simple o/c quarterwave or s/c halfwave stub across the input of the wideband amplifier. These include:
1. The width of the notch will be so wide (even with the lowest-loss coax you can find) that you will also kill the TV low-band (Ch2 - 55.25MHz - will, of course be the worst affected).
2. As well as having a notch on 50MHz, here will be notches at odd multiples of 50MHz (if quarterwave) and all multiples (if halfwave). This may make a bit of a mess of several other TV channels.

The obvious solution to the width problem is to make the notch narrower. With stubs, you can do this by cascading similar stubs, each separated by a quarterwave of coax. This will also greatly increase the depth of the notch. A single stub will give you a notch of 25 to 30dB, and two stubs will increase this to nearly 60dB (I doubt if you'll need anything like this). However, this will not change the 'harmonic suck' effect (although these sucks will also be narrower).

You cannot eliminate the multiple harmonic sucks, but you can move them around so that they do not fall on those frequencies which you want to receive. You can do this (for example) by adding capacitors or inductors in the appropriate places (I won't go into this here).

You will probably be better off with a circuit using only capacitors and inductors. However, there will need to be more to it than the simple equivalent of a single coax stub. I have a typical circuit in mind, but you would have to calculate the values or do some 'jiggling' to values obtained by means of 'inspired guesswork'!

Having said all this, I'm sure that you are not the only one having trouble with 6m hitting TV (antenna amplifier or not). I wouldn't be surprised if there are several off-the-shelf filters which are purpose-made, and don't cost too much. If not, let me know - I'll move to the USA and set up in business!

73,
Ian.

2005. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 11:40:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9510dc$pv2$1@neptunium.btinternet.com>
Source record: 171378

Paul wrote -
> All of this is good and nice but I
> suggest that the inquisitor buy an ARRL handbook. It doesn't matter
> what year. These questions are answered in every one!
==========
Hi Paul,

Suppose the inquisitor cannot find a bookshop which sells ARRL publications.
He may live in North Korea, Cuba, Iraq or at the South Pole.

And it would be wrong to assume he is wealthy enough to purchase such
publications.

But in any case, what makes you think the answers in ARRL handbooks are the
correct ones. Are you a qualified auditor ?

Reg

2006. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 11:49:11 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9510u6$2pv$1@uranium.btinternet.com>
Source record: 171379

Somebody said about velocity factors -

> > For metal antennas, that number must be reduced
> > by a certain percentage because of the difference in the speed of light
in free
> > space VS metal. For a wire antenna, the reduction is about 5%.
=======================
What a load of old-wives' poppycock !

Reg.

2007. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 12:11:07 UTC
From: mikeblake <mrblake@NYETSPAMSKI.touch88.com.au>
Message-ID: <3a74020e$1@usenet.per.paradox.net.au>
Source record: 171382

Are YOU a qualified auditor ??

--
Rheilly Phoull
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:9510u6$2pv$1@uranium.btinternet.com...
> Somebody said about velocity factors -
>
> > > For metal antennas, that number must be reduced
> > > by a certain percentage because of the difference in the speed of
light
> in free
> > > space VS metal. For a wire antenna, the reduction is about 5%.
> ======================
> What a load of old-wives' poppycock !
> ---
> Reg.
>
>

2008. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 12:16:55 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <X4Uc6.62070$YQ.13026935@typhoon.southeast.rr.com>
Source record: 171383

You need to adjust the length of each dipole for the best swr on its band
and let the tuner do the rest. Yes, the rig will radiate on the dipole with
the best match. I've used a three band vertical designed by W6SAI this way.

Good luck,

Bill, W4WNT

Dennis P. Stahr <irfutures@earthlink.net> wrote in message
news:TsEc6.209$2t5.16192@newsread2.prod.itd.earthlink.net...
> Can someone explain what's happening?
>
> I am in an antenna restricted area (what's new), and have created a "fan"
> dipole like as shown in the link below... near the bottom of the page
under
> "Multiband Dipoles",
>
> http://www.arc.itb.ac.id/rf/arrlhbk/ch20/PracticalDipoleAntenna.htm
>
> I cut and tuned dipoles for 10, 12, 15, 17, and 20 meters with number 14
> copper wire. I then connected them all together at the feedpoint. (I was
> told by two "old timers" that this would be OK).
>
> I feed it with RG-213 (70') and the center of the dipole is about 6' above
> the center of the roof. The ends of each dipole are then splayed out and
> tied down at various points along the roof.
>
> Big mistake I guess, but the dipole is not externally grounded, only gets
> its ground through connection to the rig which is very well grounded with
#6
> copper wire to dual 6' grounding rods.
>
> My TS-870s internal tuner will match each band (and very quickly... within
> about 2 seconds), but just for fun I tried an SWR meter on the back of the
> rig and found I have HORRIBLE SWR. It does not find low SWR anywhere on
any
> of the bands.
>
> Is the TS-870 actually finding the resonant dipole for the band or is the
> tuner just doing me a favor, and I am radiating 100 watts out but am QRP
off
> the antenna with a few watts?
>
> Thanks in advance for your serious help and even for your comments about
me

> being a complete idiot.
>
> Dennis - KF2XL
>
>

2009. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 12:32:39 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A741167.DBD071D0@dialpoint.net>
Source record: 171381

In the US the ARRL handbook should be required in every shack. It would save many questions. I have not seen it but think that in England there is a book that is equivilent to the handbook.

As with any book there can be some wrong information. The handbook has been publisned for many years and most of the articals are the same from year to year and if there were many mistakes I am sure they were called to the attention of the ARRL. Micorsoft had an error in the calculator of windows 3.1 and millions of copies were sold and the error carried over to win 3.11 and they knew it. YOu could substract 3.1 from 3.11 and would not get .o1 but you get o. Same for other numbers. There is lots of wrong info in the news groups also.

Many public libraries have a copy of the handbook.

Reg Edwards wrote:
>
> Paul wrote -
> > All of this is good and nice but I
> > suggest that the inquisitor buy an ARRL handbook. It doesn't matter
> > what year. These questions are answered in every one!
> ======================
> Hi Paul,
>
> Suppose the inquisitor cannot find a bookshop which sells ARRL publications.
> He may live in North Korea, Cuba, Iraq or at the South Pole.
>
> And it would be wrong to assume he is wealthy enough to purchase such
> publications.
>
> But in any case, what makes you think the answers in ARRL handbooks are the
> correct ones. Are you a qualified auditor ?
> ---
> Reg

2010. Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 12:42:12 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <951434$k7f$1@nnrp1.deja.com>
Source record: 171384

I am trying to tune my 136' doublet fed with ladder line on 10-160 meter bands. On 160 I need to strap the feedline and work it against ground, I am using a Johnson Matchbox on 10-80. Can anyone advise me on whether it would work to just install an antenna switch after the radio that switches in one tuner or the other and connect the ladder line from the antenna to the output of both tuners? Or would you need to disconnect the ladder line to the antenna tuner that is not in use? Also would I need to install another antenna switch to strap the leads of the ladder line together? Has anyone installed a setup like this that can be easily switched without disconnecting wires on the back of the units? I tried running two tuners in series to tune up 160 on the recommendation of somebody and that does not work.
K9SL

Sent via Deja.com
http://www.deja.com/

2011. Re: Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 13:19:34 UTC
From: k9sqg@aol.com
Message-ID: <20010128081934.25121.00001619@ng-mm1.aol.com>
Source record: 171385

Connecting the two tuners to the feedline would be a problem. There would be an interaction between the tuners and this is not recommended. The problem you are experiencing is due to the fact that the Johnson Matchbox does not have sufficient range to handle the impedance transformation on all bands. If you MUST use two tuners, you should really switch the inputs to and outputs from the tuners.

I would recommend making a double balanced tuner so that you would use use one tuner and it would work on all bands.

However, I'm not sure what types of antennas you desire to use. The doublet could be used on all bands, as a doublet, with the double balanced tuner. When you short the leads together, like you have been on 160, the antenna is operating more like a top loaded vertical. So the tuner arrangement you use depends on what type of antenna you want to use.

Without knowing your intentions, it isn't possible to offer more detail.

73s,

Evan

2012. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 14:01:23 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9519ohkqi1@neptunium.btinternet.com>
Source record: 171387

Paul said -

> I don't have a book handy but I do remember that there are certain
> things to keep in mind with a 5/8 wave antenna. You can't just hook up
> a piece of metal (cut to length) to the center of your coax and expect
> it to work. I think that all 5/8 waves need a loading coil to match a
> coax. Someone else might expand on this point
==========

I don't have a book handy either but I have to disagree.

If you hook up a piece of metal (cut to length) to the center of your coax it will work quite well with little loss. The trouble with the "learned" authors and technical editors of magazine articles is their propensity for forgetting entirely about orders of magnitude. Their primary concern is with the magazine's circulation figures.

Let's take 5/8-wavelength vertical for 14.15 MHz in conjunction with an adequate ground system of 8 or 16 radials buried in average soil. Antenna height is 42 feet. Assume 14 gauge wire for the antenna.

The feedpoint input impedance is approx 137 - j487 ohms.

If a match to a 50 ohms coaxial line is considered to be of consequence (it depends on line length and its attenuation) then by connecting a 5.5 microhenry coil between the bottom of the vertical antenna and the coax the line will be terminated with a resistance of 137 ohms. This will still leave an SWR = 2.7 : 1 on the line.

If a coil just by itself is considered unsatisfactory then to match exactly to a 50-ohm line there is a choice of two L-networks :-

15pF across the antenna feedpoint with 3.4 uH in series with the coaxial inner.

Or, 2.2 uH across the antenna feedpoint with 37 pF in series with the coaxial inner.

Whether either of these arrangements is adopted or not, the radiating efficiency of the antenna + ground will be about 85 percent equivalent to a loss of 1/9th of an S-unit which no-one will ever notice.

Reg, G4FGQ

2013. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 14:16:43 UTC
From: n2ey@aol.com
Message-ID: <20010128091643.10105.00000903@nso-bh.aol.com>
Source record: 171386

In article <3A7378A6.6D3B1C49@uio.com>, foffe <setta@uio.com> writes:

>I want toget a combination 80/40 m dipole.
>Any commercial ones out there?

A few, but you pay a lot for what you get.

>I don't want traps.

Why not?
>
>How long would a 1/2 wave dipole be with a combo 80/40?

Depends on how it is made. My homebrew trap 80-40 dipoles are less than 110
feet long, feed with coax, are dirt cheap to build and outperform G5RVs on 80
and 40.
>
>I think I only have about 125 feet to work with.

Depending on what part of the 80 meter band you want to cut the dipole for,
that could be a problem.
>
>Do BALUNS cause a lot of loss?
>
Depends on the design and how they are used.

73 de Jim, N2EY

2014. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 14:39:39 UTC
From: kk4bh1@cs.comnospam
Message-ID: <20010128093939.25583.00001507@ng-cj1.news.cs.com>
Source record: 171388

>Subject: Help? 80/40 dipole??
>From: foffe setta@uio.com
>Date: 1/27/01 5:40 PM Pacific Standard Time
>Message-id: <3A7378A6.6D3B1C49@uio.com>
>
>I want toget a combination 80/40 m dipole.
>Any commercial ones out there?
>I don't want traps.
>
>How long would a 1/2 wave dipole be with a combo 80/40?
>
>
>I think I only have about 125 feet to work with.
>
>Do BALUNS cause a lot of loss?
>

You said you didn't want traps but I'll pass this info on to you just in case everything else doesn't work out.

Send a SASE to: Jack Lindauer, WA6EFM
18881 Brymer Court
Northridge, CA 91326
(818) 831-0515

He manufactures "traps" for a 80/40 meter dipole. The overall length of the antenna is 77 feet. He claims a < 2:1 SWR over the entire 40 meter band and a 100khz tunable segment of 80 meters. Their cost is $19.00 + $4.00 S&H.

73
Ken
KK4BH

2015. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 15:06:40 UTC
From: klocko@toad.net
Message-ID: <951cht$q40$1@nnrp1.deja.com>
Source record: 171389

In article <3A7378A6.6D3B1C49@uio.com>,
foffe <setta@uio.com> wrote:
> I want toget a combination 80/40 m dipole.
> Any commercial ones out there?
> I don't want traps.
>
> How long would a 1/2 wave dipole be with a combo 80/40?
>
> I think I only have about 125 feet to work with.
>
> Do BALUNS cause a lot of loss?
>
Put up a 100' dipole, feed it with ladder line, and use a tuner. The antenna will be slightly longer than a half-wave on 40m, slightly shorter than a half-wave on 80m. The impedance on either band should not be extremely high, so your tuner should be able to find a match. You also might be able to tune it on the higher bands. If you run coax from inside the house to the outside, add a W2DU balun at the point where the coax transitions to ladder line. No pruning, no traps, no exact lengths of transmission line, no balun loss, no fussing. It does require a tuner, but then again, so does a G5RV. 73,
Bill N3WK

Sent via Deja.com
http://www.deja.com/

2016. Re: Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 15:09:20 UTC
From: k6mhe@arrl.net
Message-ID: <3a7434be.857731@news.mcn.org>
Source record: 171392

I am using a dual tuner setup here. I have placed a tee type tuner in series with my Matchbox. On most bands I keep the tee tuner in the "bypass" position but on 160 and some of the WARC bands flip it into service.

I first tune the Matchbox for the best match I can get with the tee bypassed then bring the tee on line and tweak it to finish the job. Works just fine for me...

A little more knob twisting, but as I've said before real hams twist knobs.

73
Danny, K6MHE

On Sun, 28 Jan 2001 12:42:12 GMT, motorhomer <motorhomer@my-deja.com> wrote:

>I am trying to tune my 136' doublet fed with ladder line on 10-160 meter
>bands. On 160 I need to strap the feedline and work it against ground, I
>am using a Johnson Matchbox on 10-80. Can anyone advise me on whether it
>would work to just install an antenna switch after the radio that
>switches in one tuner or the other and connect the ladder line from the
>antenna to the output of both tuners? Or would you need to disconnect
>the ladder line to the antenna tuner that is not in use? Also would I
>need to install another antenna switch to strap the leads of the ladder
>line together? Has anyone installed a setup like this that can be easily
>switched without disconnecting wires on the back of the units? I tried
>running two tuners in series to tune up 160 on the recommendation of
>somebody and that does not work.
>K9SL
>
>
>
>Sent via Deja.com
>http://www.deja.com/

2017. Re: Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 15:20:52 UTC
From: k6mhe@arrl.net
Message-ID: <3a753695.1328739@news.mcn.org>
Source record: 171393

On 28 Jan 2001 13:19:34 GMT, k9sqg@aol.com (K9SQG) wrote:

>Connecting the two tuners to the feedline would be a problem. There would be
>an interaction between the tuners and this is not recommended.

Why?

>The problem you
>are experiencing is due to the fact that the Johnson Matchbox does not have
>sufficient range to handle the impedance transformation on all bands. If you
>MUST use two tuners, you should really switch the inputs to and outputs from
>the tuners.

Huh? what does "to and" mean?
>
>I would recommend making a double balanced tuner so that you would use use one
>tuner and it would work on all bands.

I have used a double balanced tuner that you described and have found
the Matchbox/Tee combination to be better for common mode current
suppression.

Actually you may wish to consider it somewhat like a Tee tuner with a
tunable balun on the output...

[snip]

73
Danny, K6MHE

2018. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 15:35:59 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A743C5F.258F@wt.net>
Source record: 171390

Richard Friedman wrote:
>
> I'm a newbie and am starting to put together a home station for 40-6m dx.
>
> I've been told that two problems with vertical (base) antennas on HF are:
>
> 1. You receive omnidirectional noise, and since most noise is vertically
> polarized the QRM received is much greater than with a directional beam
> antenna.

This problem is very overstated. If the noise in the direction of the pointed beam is strong, it may well "show" more noise than the vertical. You hear noise on nearly all antennas that are worth a hoot. If they pick up little noise, they probably pick up little signal either. You can see more apparent noise on a vertical at times, but doesn't mean a whole lot if the signal is also stronger. I've run both verticals and dipoles on 40m at the same time. I've never had any real problems with noise. If a vertical picks up 1 s unit more noise than the dipole, but receives the desired signal 2 s units better, the noise doesn't really mean much.
>
> 2. You transmit a vertically polarized signal, so only vertical antennas
> can receive you well. Likewise, you receive vertically polarized
> signals better than horizontally polarized signals. i.e., verticals
> can only talk to verticals.

Not so. By the time the signal has bounced, skewed, refracted, and ping ponged off the ionosphere, the polarity to the other guy 100's of miles away doesn't mean too much. Only when working local line of sight operation doesn the polarity difference mean much. Usually about a 20 db attenuation or so. With sky wave, it's quite possible for a vertical to hear another vertical better then it would hear a horizontal antenna, but that doesn't mean the horizontal antenna is useless. It will still likely do ok also. It could even win under some conditions if it has more gain. MK

--
http://web.wt.net/~nm5k

2019. Re: J-pole ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 15:42:50 UTC
From: klocko@toad.net
Message-ID: <951elprik1@nnrp1.deja.com>
Source record: 171391

In article <2eGc6.146$Yq5.69868@nnrp2.sbc.net>,
"Ken" <klajr2@swbell.net> wrote:
> Is there something I'm not catching on to about tuning one of these?
> I built it to specs and moving the wires up and down the best swr I
get is a
> 1:2.0 Shortened the main element as far as possible to 19 1/4"
(started at
> 20 1/2) and still nothing better.
> Any help would be appreciated.

Ken,
I once had trouble tuning one of these things. What I found easiest was to keep the main element at a fixed length, adjust (prune) the length of the open end of the quarter-wave section, and move the wires up or down for minimum SWR. Eventually, I was able to get down to about 1.3 to 1 and quit there. What I found was that the main element does not have to be one half-wave in length, and the transmission line section does not have to be a quarter wavelength. When you put these two together, along with the coax center/shield, all the sections & wires couple together in a complicated fashion.

I might add that the above J-pole was constructed using copper pipe. I tried a cookbook design for a ladder-line J-pole, and was unsuccesful after fussing with the pruning for several hours. I finally gave up, speculating that the ladder line I used may have had a different velocity factor than the one used in the cookbook design. In any event, tuning one of these babies is not a straightforward affair. 73,
Bill N3WK

Sent via Deja.com
http://www.deja.com/

2020. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 16:10:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A744491.64B13338@IEEE.org>
Source record: 171394

Reg Edwards wrote:
>
> Somebody said about velocity factors -
>
> > > For metal antennas, that number must be reduced
> > > by a certain percentage because of the difference in the speed of light
> in free
> > > space VS metal. For a wire antenna, the reduction is about 5%.
> ======================
> What a load of old-wives' poppycock !

Then why do we use 468/f instead of 492/f for a half wave dipole?
--
http://www.mindspring.com/~w6rca

2021. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:17:39 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A745433.6A8ADFF@IEEE.org>
Source record: 171397

Richard Ferch wrote:
> End effects. For a 3/2-wave dipole, use 468/f + 2*492/f

Why doesn't that work for insulated wire?
--
http://www.mindspring.com/~w6rca

2022. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:17:44 UTC
From: Ed Cregger <ecregger@earthlink.net>
Message-ID: <YuYc6.3268$2t5.293747@newsread2.prod.itd.earthlink.net>
Source record: 171395
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

So where did you mention antennas?
--
Ed Cregger
ecregger@earthlink.net

"Jethro Jumbalaya Twain" <qwasty@hotmail.com> wrote in
message news:94vmlejkg1@nnrp1.deja.com...
> The article is about a replacement for Morse that's easier
to learn.
> It's a lot like Morse, just a different code.
>
> http://www.eham.net/articles/1681
>
>
> Sent via Deja.com
> http://www.deja.com/
>

2023. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:22:17 UTC
From: Richard Ferch <ve3iay@storm.ca>
Message-ID: <951kje$j8l$1@news.storm.ca>
Source record: 171396

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A744491.64B13338@IEEE.org...
> Reg Edwards wrote:
> >
> > Somebody said about velocity factors -
> >
> > > > For metal antennas, that number must be reduced
> > > > by a certain percentage because of the difference in the speed of
light
> > in free
> > > > space VS metal. For a wire antenna, the reduction is about 5%.
> > ======================
> > What a load of old-wives' poppycock !
>
> Then why do we use 468/f instead of 492/f for a half wave dipole?
> --

End effects. For a 3/2-wave dipole, use 468/f + 2*492/f

Ref: chapter 2 of the ARRL Antenna Handbook, 13th ed.

2024. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:24:31 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <jBYc6.26627$ek.4062030@news02.optonline.net>
Source record: 171398

Richard,

40 through 6 M is a lot of spectrum to cover. At the low end of the range polarization won't matter a whole lot on transmit since things will get pretty well scrambled by the time they get to the other end. At the high end of that range you may see some polarization effects. It all depends on how you define "DX".

At the higher frequency end of the range you probably will be using beam antennas. Generally for DX you polarize horizontally. There are an enormous number of arguments one way and another about this. The most convincing ones to me is that the mechanics of the antenna generally work out better if it's horizontal.

For a lot of years the ssb crowd has gone with horizontal polarization and the FM guys have used vertical. If you want your antenna system to also work for local contacts you may have to work both polarizations into your plans.

Hope this helps.

Bob Camp
KB8TQ

2025. BABY BOOMER QUAD - Mini Quad Release date set.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:31:28 UTC
From: Antenna <stopthespam@attcanada.net>
Message-ID: <EIYc6.7528$Oe.35111@tor-nn1.netcom.ca>
Source record: 171399

The official release date for the BABY BOOMER QUAD has been set for February 2, 2001.

For complete details, please check out.

www.degendesigns.com

'73

Guenther
info@degendesigns.com

2026. BABY BOOMER QUAD - Mini Quad Release date set.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:32:00 UTC
From: Antenna <stopthespam@attcanada.net>
Message-ID: <FIYc6.7529$Oe.35111@tor-nn1.netcom.ca>
Source record: 171400

The official release date for the BABY BOOMER QUAD has been set for February 2, 2001.

For complete details, please check out.

www.degendesigns.com

'73

Guenther
info@degendesigns.com

2027. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:34:20 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3a745833$0$7163$1dc6e903@news.corecomm.net>
Source record: 171401

I guess the lesson to be taken from this message is not to be around
highway truck scales during a thunder storm.

Dave

Dick Carroll wrote:
>
> Bill Nelson wrote:
> >
> > 'Doc <w5lz@oio.net> wrote:
> >
> > : Hoo boy, don't make that mistake about concrect! It
> > : is not a good idea to try passing high voltages/currents
> > : through concrete, the trapped water tends to expand to
> > : steam and turns the concrete to schrapnel. Have you
> > : ever welded on concrete and had it 'spald' around the
> > : work area? One reason why towers are not grounded
> > : through a concreter base...
> > : There should be no problem about laying ground radials
> > : on concrete as in this situation, though.
> > : 'Doc
> >
> > I have read just the opposite, and that a good bunch of grounded
> > reinforcemnt rods in the concrete work fine. It may have been in
> > the PolyPhasor text on lightning grounding, but I do not recall
> > for sure. The text stated that the "concrete exploding" was a
> > myth.
>
> Concrete can explode with lightning strikes. I've seen it on a number
> of occasions. Several times when it struck a concrete highway. Once when
> it struck a 50 ft radio tower at a highway weight scale station, jumped
> from the tower to the house wiring, exited through the electronic scale
> to the scale platform then into the concrete approach apron where it
> blew a sizeable chunk of the concrete out of the apron. On another
> occasion it struck the highway in front of the identical scalehouse
> across the four lane highway and blasted a chunk of conctete out of the
> highway slab.
> If you see a strange series of potholes in a limited area on a concrete
> highway in lightning country you can almost assume it is the result of
> lightning which followed the reinforcing rod. I know of at least four
> places in this region where that has happened. One was fairly extensive,
> The moisture content of the concrete surely has a lot to do with how
> easily it blows. If it's wet it would be a lower impedence current path
> thus both more likely to be an attractive path and also to vaporize the
> water in the concrete, causing a steam explosion.

>
> Dick

2028. Re: J-pole ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:38:02 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <_NYc6.10924$V22.2321791@news4.rdc1.on.home.com>
Source record: 171402

<klocko@toad.net> wrote in message news:951elprik1@nnrp1.deja.com...
> In article <2eGc6.146$Yq5.69868@nnrp2.sbc.net>,
> "Ken" <klajr2@swbell.net> wrote:
> > Is there something I'm not catching on to about tuning one of these?
> > I built it to specs and moving the wires up and down the best swr I
> get is a
> > 1:2.0 Shortened the main element as far as possible to 19 1/4"
> (started at
> > 20 1/2) and still nothing better.
> > Any help would be appreciated.
>
>
> Ken,
> I once had trouble tuning one of these things. What I found easiest was
> to keep the main element at a fixed length, adjust (prune) the length of
> the open end of the quarter-wave section, and move the wires up or down
> for minimum SWR. Eventually, I was able to get down to about 1.3 to 1
> and quit there. What I found was that the main element does not have to
> be one half-wave in length, and the transmission line section does not
> have to be a quarter wavelength. When you put these two together, along
> with the coax center/shield, all the sections & wires couple together in
> a complicated fashion.
>
> I might add that the above J-pole was constructed using copper pipe. I
> tried a cookbook design for a ladder-line J-pole, and was unsuccesful
> after fussing with the pruning for several hours. I finally gave up,
> speculating that the ladder line I used may have had a different
> velocity factor than the one used in the cookbook design. In any event,
> tuning one of these babies is not a straightforward affair. 73,
> Bill N3WK
>

Another good J-Pole to build is the Arrow dual band J-Pole. I have built them and they are easy to adjust because if you follow the directions you will not have to screw around with it. Low SWR and extremely heavy duty design. I have seen the plans posted here by Allen before.

73
Barry

2029. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 17:47:36 UTC
From: who? <glennt@ibm.net>
Message-ID: <3a745d66_2@news1.prserv.net>
Source record: 171403
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dave -

Traditionally, 6m has been the best way to get the "Worked all channel 2's" award. Various low and high pass filters, even (maybe especially) those that are effective on HF tend to be ineffective on 6m. The main problem is that 6m sits right in the middle of what would've been TV channel 1. TV sets tend to have RF front ends that are very poor in terms of strong adjacent channel signal performance. Also, TV's are usually poorly shielded (how many 15KHz harmonics can you count?) so 6m will be picked up by the power wiring and the TV circuitry itself!

What to do? I can't say what if anything will work for you, but here are a few things to try. I'm assuming that your 6m rig is clean, so my suggestions all apply to the TV system. 6m harmonics should not be much of an issue even if present because they impact only one VHF TV channel (11 I think). The basic goal here is to reduce the 6m signal strength at the TV's, TV amp and TV antenna.

1. Move your 6m dipole as far from the TV antenna as possible. The dipole is physically small (10' or so long), so this ought to be easy to do.

2. Keep the 6m and TV ant cables as far apart as possible. You say that you get an SWR of 1.3:1 WITH a tuner? Better to adjust the 6m dipole so that you have a low SWR *WITHOUT* the tuner, assuming that you're feeding the dipole with coax. If this turns out to be the problem, a "current choke" balun at the dipole may also help. If you're feeding the dipole with twinlead, you need to be more careful about what is near the twinlead's path from the antenna to your radio. In either case, the idea is to prevent the 6m antenna feedline from radiating.

3. Orient the 6m dipole so that the TV antenna is directly off the end of the dipole. Putting the TV antenna in an antenna null is the simplest way to reduce the 6m signal level at the TV antenna.

4. Choke/filter the AC power lines feeding the TV amplifier and the TVs. Radio Shack (and others) sell a ferrite core for this. I think they're fairly inexpensive - $3 for 3 or so...

5. Build quarterwave stubs tuned to 6m and install them at the antenna inputs to the TV amp and the TVs. This will selectively reduce the 6m signal level to the amp/TVs. It's possible that the only one you'll really need is on the TV amp - assuming that it's the only box being overloaded. If channel 11 is used in your area, the stub may also affect it. If so, the stub may not be a good idea. (BTW, the halfwave stub

suggested elsewhere would also affect the 2nd harmonic of 6m. Lucky for you, 100MHz is not a TV channel. Unlucky if you're using the same antenna for FM broadcast!)

Good luck. Enjoy 6m!

73 de Glenn wb6w

2030. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 18:00:43 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A745E4A.3243C6D4@rchrd.com>
Source record: 171404

Great answers! Thanks for the advice. My original thinking was to get a vertical like the MFJ 1796, which covers 6 bands 40-2m, and would fit nicely on my roof. It looks like that may in fact be the right way to start.

Then, if I can't get the coverage I want on 10m and 6m, to get a separate beam antenna. I am concerned about local QRM, especially on 6m, because I do live in an big urban area.

Thanks for the help

-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
-=

2031. Re: Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 18:06:28 UTC
From: who? <glennt@ibm.net>
Message-ID: <3a7461d3_3@news1.prserv.net>
Source record: 171405

I've done the same as Dan on occasion. What's going on (I think) is
that the "tee" is transforming the antenna impedence from whatever
it is to some intermediant impedence. The matchbox then transforms
the intermedient impedence the rest of the way to 50 ohms. What Dan
has is a single matching network that is the composite of the tee and
the matchbox. It's more complicated to adjust but not so much that
it can't be done. On 160m, presumably the coax between the tee and
the matchbox is short enough that it's not really a transmission line...

The only issue I see is that one or both tuners are operating at other
than their design impedences and so may not have appropriate spacing
for higher voltages (possible arcing) of insufficent wiresize for
higher currents (higher resistive losses).

73 de Glenn

Dan Richardson wrote in message <3a7434be.857731@news.mcn.org>...
>I am using a dual tuner setup here. I have placed a tee type tuner in
>series with my Matchbox. On most bands I keep the tee tuner in the
>"bypass" position but on 160 and some of the WARC bands flip it into
>service.
>
>I first tune the Matchbox for the best match I can get with the tee
>bypassed then bring the tee on line and tweak it to finish the job.
>Works just fine for me...
>
>A little more knob twisting, but as I've said before real hams twist
>knobs.
>
>73
>Danny, K6MHE

2032. trap antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 18:25:11 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3a746407$0$35015$2c3edae7@news.voyager.net>
Source record: 171406

i am looking at constructing a 30/17 and 12 meter trap sloper or dipole
does anyone have any info on trap design for this antenna. i would
perfer to use coax cable for the capacitors in the trap design. any info
would be greatly appreciated
73 ken w8ob

2033. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 18:45:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <951pc7htt1@nntp9.atl.mindspring.net>
Source record: 171407
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

CW Antennas are just fine...

CW does have some relationship to antennas. Cannot antennas be optimized for use in the CW band segments, so...

I'd like to see designs for CW optimized yagi's and such...

-Peter

"Ed Cregger" <ecregger@earthlink.net> wrote in message news:YuYc6.3268$2t5.293747@newsread2.prod.itd.earthlink.net...
> So where did you mention antennas?
> --
> Ed Cregger
> ecregger@earthlink.net
>
> "Jethro Jumbalaya Twain" <qwasty@hotmail.com> wrote in
> message news:94vmlejkg1@nnrp1.deja.com...
> > The article is about a replacement for Morse that's easier
> to learn.
> > It's a lot like Morse, just a different code.
> >
> > http://www.eham.net/articles/1681
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/
> >
>
>

2034. Re: Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 18:51:28 UTC
From: k6mhe@arrl.net
Message-ID: <3a746831.1188080@news.mcn.org>
Source record: 171410

On Sun, 28 Jan 2001 10:06:28 -0800, "who?" <glennt@ibm.net> wrote:

>
>I've done the same as Dan on occasion. What's going on (I think) is
>that the "tee" is transforming the antenna impedence from whatever
>it is to some intermediant impedence. The matchbox then transforms
>the intermedient impedence the rest of the way to 50 ohms. What Dan
>has is a single matching network that is the composite of the tee and
>the matchbox. It's more complicated to adjust but not so much that
>it can't be done. On 160m, presumably the coax between the tee and
>the matchbox is short enough that it's not really a transmission line...
>
>The only issue I see is that one or both tuners are operating at other
>than their design impedences and so may not have appropriate spacing
>for higher voltages (possible arcing) of insufficent wiresize for
>higher currents (higher resistive losses).
>
>73 de Glenn
>
>
Glen,

You are correct, It is just a two stage tuning arrangement. However,
tuners such as these (one the other or both) do not have a fixed
designed impedance rather they tune a range of impedances.

Additionally, the coax between the tuners is indeed a transmission
line.

The system works fine.

73
Danny, K6MHE

2035. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 19:11:39 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A746EEB.CDD37EAA@oio.net>
Source record: 171408

Richard,
1. Vertical antennas are 'noisy'. If there's any 'noise', you'll
probably hear it. This ones correct.

2. There is a difference in signal level when polarization isn't
the same, at least before a signal is reflected once. After
one 'bounce' polarization doesn't make a lot of difference
because it 'changes'. I wouldn't worry too much about what
the polarization it.

(non-expert)
'Doc

2036. Re: Using two tuners to get on 160?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 19:15:15 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A746FC3.6851FA8E@oio.net>
Source record: 171409

motorhomer,
The easiest way to switch ladder-line is to use a
knife-switch. Put it 'after' the tuners.
'Doc

2037. Re: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 21:05:55 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7489B3.125A1495@oio.net>
Source record: 171411

Harry Harms wrote:
>
> Group,
>
> To wind my own balun for exclusive use on 10m, should I use iron powder or
> ferrite cores?
>
> I intend to use full legal power for Australia, 400 watts, so need a decent
> sized core.. 2 1/2 inches minimum.
>
> Any help on what types of materials etc??
>
> John Mclean
> VK2KCE

Harry (or John),
Use ferrite. I don't remember the mixture properties, but
Amidon would be happy to send you a catalogue (or maybe it's on
their webb site?).
'Doc

2038. Re: Apartment Dwellers ... here is one for you ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 21:09:53 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A748AA1.D78FE72E@oio.net>
Source record: 171412

William,
!! Dam !! Why didn't I think of that! I love it!
'Doc

2039. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 22:09:13 UTC
From: richardharrison@webtv.net
Message-ID: <12220-3A749889-49@storefull-116.iap.bryant.webtv.net>
Source record: 171413

Cecil, W6RCA wrote:
"All that matters is if it is efficient enough to get the job done."

True. For all I know, the archer`s shaft may move mass more efficiently than the gunman`s bullet.

The question is, does it beat the competition? Survivors are those best adapted to their environments. You wouldn`t want to bring a bow and arrows to a gunfight in most circumstances. American Indians who tried that usually lost, with a few notable exceptions, of course.

Best regards, Richard Harrison, KB5WZI

2040. Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-28 23:02:38 UTC
From: jason_hsu@my-deja.com
Message-ID: <9528eagcs1@nnrp1.deja.com>
Source record: 171414
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Some of the questions I have include:
1. Can I use one if I only have 8 feet of clearance on the small patio (8 feet wide, 8 feet tall, 6 feet wide) outside my sliding door? Is it possible to mount the antenna at a slant? I want to hear about any creative solutions from you.
2. What type of mount/tripod would be appropriate? (I don't have a railing.)
3. How quickly can I assemble and disassemble the antenna? (For stealth and security reasons, I need to remove the antenna when I am not operating.)
4. Which versions (original DK-3, ElectraSlide, etc.) of the Screwdriver are most appropriate for me? What advantages do the more expensive versions have over the original? Can some versions (like the D&K KH-600 HF MOBILE ANTENNA) really operate on 160m?

SOME BACKGROUND:
I am seriously considering a Screwdriver antenna for operating HF from my ground floor apartment (no big trees or bushes close enough to conceal wires and keep them out of the way of people or dogs passing by). A mobile antenna would be less cumbersome to work with than a big wire antenna. The Screwdriver seems to be the best antenna for me.

I have had modest success with Hamsticks I am borrowing, but I know that Screwdrivers are more efficient. Also, Screwdrivers are multi-band and are easier to tune (due to the automatic tuning aspect). Has anyone used a Screwdriver antenna for non-mobile operation?

I was considering a Texas Bugcatcher, but I am not sure about the quality of the version from Texas Radio Products, and the version from GLA Systems is too expensive. Screwdriver antennas are almost as efficient, and several versions sell for near or below $200.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

2041. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 00:15:41 UTC
From: Richard Ferch <ve3iay@storm.ca>
Message-ID: <952cns$o7i$1@news.storm.ca>
Source record: 171415

"Cecil" <Cecil.A.Moore@IEEE.org> wrote:
> Richard Ferch wrote:
> > End effects. For a 3/2-wave dipole, use 468/f + 2*492/f
>
> Why doesn't that work for insulated wire?
> --
> http://www.mindspring.com/~w6rca

Because the insulated wire may have a velocity factor appreciably different from 1, depending on the dielectric constant and thickness of the insulation.

2042. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 00:29:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <952dfc$6hq$1@uranium.btinternet.com>
Source record: 171416

Let's have a vote on it.

Hands up all those who think the velocity of em waves in metals is 5%
different from the velocity in free space.

Reg.
==========
mikeblake wrote
> Are YOU a qualified auditor ??
> --
> Rheilly Phoull
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:9510u6$2pv$1@uranium.btinternet.com...
> > Somebody said about velocity factors -
> >
> > > > For metal antennas, that number must be reduced
> > > > by a certain percentage because of the difference in the > > > >
speed of light in free space VS metal. For a wire
> > > > antenna, the reduction is about 5%.
> > ==========
> > What a load of old-wives' poppycock !
> > ---
> > Reg.
> >
> >
>
>

2043. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 00:45:31 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A74BD2B.18D2898A@hiwaay.net>
Source record: 171417

While we are voting- lets settle the "flat earth" question, too.

The 5% figure many people use to apply to correct the length of an antenna is supposed to be an end effect, and was said to have been determined by measuring the resonant frequency of a dipole in the alley behind the ARRL station. I have seen it applied as an "end effect", ie, on multi-wavelength antennas, applied only once, to the total length.

"for what it's worth"-Your milage may vary"- "put this in your pipe and smoke it" - "why?" -"etc"

Comment, Reg?
Bill-W4BSG

Reg Edwards wrote:
>
> Let's have a vote on it.
>
> Hands up all those who think the velocity of em waves in metals is 5%
> different from the velocity in free space.
> ----
> Reg.
> ==========
> mikeblake wrote
> > Are YOU a qualified auditor ??
> > --
> > Rheilly Phoull
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:9510u6$2pv$1@uranium.btinternet.com...
> > > Somebody said about velocity factors -
> > >
> > > > > > For metal antennas, that number must be reduced
> > > > > > by a certain percentage because of the difference in the > > > >
> speed of light in free space VS metal. For a wire
> > > > > > antenna, the reduction is about 5%.
> > > > ==========
> > > What a load of old-wives' poppycock !
> > > ---
> > > Reg.
> > >
> > >
> >
> >

2044. Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 00:54:02 UTC
From: VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com>
Message-ID: <3a74bfa3@grissom>
Source record: 171418
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Hi all and thanks for reading my post

I have been out of AR for 14 months (due to an accident not loss of interest) and am now looking to get back into it.

I am looking at building a lot of my own gear this time around and one project is an antenna rotator. Although I have searched high and low on the internet, I can not find anyone that has built a rotator system from scratch. I have found a direction indicator but that's all.

Has anyone built or know of an article that describes building an antenna rotator? If so could you please point me in the right direction or send me a scanned article, but please email me direct after you have removed the SPAMJAM.

--
Don't forget to remove the SPAM.JAM

73
Adam VK4LAJ
E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
WWW: - http://www.loaded-dog.com
Brisbane Australia
CQ Zone 29/ 30
Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
Maiden Head: - QG62mi
Height ASL: - 52m

My wife says I never listen to her...
at least that's what I think she said?

2045. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 01:26:35 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a75d123.0@oracle.zianet.com>
Source record: 171271
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

I agree with Ed. This isn't the ng for code discussions.

Ed, W5EJ

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:951pc7htt1@nntp9.atl.mindspring.net...
> CW Antennas are just fine...
>
> CW does have some relationship to antennas. Cannot antennas be optimized
for
> use in the CW band segments, so...
>
> I'd like to see designs for CW optimized yagi's and such...
>
> -Peter
>
> "Ed Cregger" <ecregger@earthlink.net> wrote in message
> news:YuYc6.3268$2t5.293747@newsread2.prod.itd.earthlink.net...
> > So where did you mention antennas?
> > --
> > Ed Cregger
> > ecregger@earthlink.net
> >
> > "Jethro Jumbalaya Twain" <qwasty@hotmail.com> wrote in
> > message news:94vmlejkg1@nnrp1.deja.com...
> > > The article is about a replacement for Morse that's easier
> > to learn.
> > > It's a lot like Morse, just a different code.
> > >
> > > http://www.eham.net/articles/1681
> > >
> > >
> > > Sent via Deja.com
> > > http://www.deja.com/
> > >
> >
> >
>
>

2046. Re: trap antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 01:33:25 UTC
From: n2ey@aol.com
Message-ID: <20010128203325.22631.00001422@nso-fz.aol.com>
Source record: 171319

In article <3a746407$0$35015$2c3edae7@news.voyager.net>, kenneth m cubilo
<kce@freeway.net> writes:

>i am looking at constructing a 30/17 and 12 meter trap sloper or dipole
>does anyone have any info on trap design for this antenna. i would
>perfer to use coax cable for the capacitors in the trap design. any info
>would be greatly appreciated

Just go to:

http://www.nucleus.com/~field/

and download Coaxtrap.

It's a Windows based program that lets you design N4UU style coax cable traps
for practically any HF frequency, coax and pipe diameter. Sure wish I'd had it
when I was making mine!

73 de Jim, N2EY

2047. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 02:25:54 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <BtN0OjkzwUbwpAV8hUHVVCRB0X5Y@4ax.com>
Source record: 171320

jason_hsu@my-deja.com wrote:

>Some of the questions I have include:
>1. Can I use one if I only have 8 feet of clearance on the small patio
>(8 feet wide, 8 feet tall, 6 feet wide) outside my sliding door? Is it
>possible to mount the antenna at a slant? I want to hear about any
>creative solutions from you.
>2. What type of mount/tripod would be appropriate? (I don't have a
>railing.)

Look at High Sierra -- http://www.hsantennas.com//index.html They have
a number of mounts for deck use or portable operation. They might have
answers to all your questions...

I believe Lew McCoy mentioned he ran a High Sierra against a metal
roof with good results...

You'll probably need a counterpoise, but that'll just be a long piece
of wire you can run through your apartment...

Bob
k5qwg

>3. How quickly can I assemble and disassemble the antenna? (For
>stealth and security reasons, I need to remove the antenna when I am
>not operating.)
>4. Which versions (original DK-3, ElectraSlide, etc.) of the
>Screwdriver are most appropriate for me? What advantages do the more
>expensive versions have over the original? Can some versions (like the
>D&K KH-600 HF MOBILE ANTENNA) really operate on 160m?
>
>SOME BACKGROUND:
>I am seriously considering a Screwdriver antenna for operating HF from
>my ground floor apartment (no big trees or bushes close enough to
>conceal wires and keep them out of the way of people or dogs passing
>by). A mobile antenna would be less cumbersome to work with than a big
>wire antenna. The Screwdriver seems to be the best antenna for me.
>
>I have had modest success with Hamsticks I am borrowing, but I know
>that Screwdrivers are more efficient. Also, Screwdrivers are multi-
>band and are easier to tune (due to the automatic tuning aspect). Has
>anyone used a Screwdriver antenna for non-mobile operation?
>
>I was considering a Texas Bugcatcher, but I am not sure about the
>quality of the version from Texas Radio Products, and the version from
>GLA Systems is too expensive. Screwdriver antennas are almost as

>efficient, and several versions sell for near or below $200.

2048. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 02:31:28 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <NtV0OqxylR8bpRhIbFlUDAxW+yil@4ax.com>
Source record: 171321

Bob Miller <bamiller@texas.net> wrote:

p.s. ...

You can also put a Screwdriver on your car, and run a piece of coax
out to your car from your apartment... assuming you park close enough
to the apartment... that might be better than anything you can set up
in your residence...

You really need to move :-)

2049. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 02:48:24 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A74DA2E.7F05835D@bellatlantic.net>
Source record: 171322

Glenn,

Your last question (in a string of questions) to William was:
"Can you lower yourself to my level and try and
help me out William or do I need to read a book instead?"

William's answer was: "nope."

Where is the problem?? (Other than your demeaning inclusion
of the phrase "can you lower yourself to my level")

Why don't you, as a General class licensee, have enough basic
understanding of antennas to know that you aren't missing anything -
that the original poster needs to learn the fundamentals? Why didn't
you answer his question, rather than engaging in an unprovoked
attack on William? There was nothing rude about William's post,
your attack was uncalled for, and you owe him an apology.

Glenn wrote:

> Your ability to project yourself is magnificent.
>
> You start trouble and then whine?
>
> Why not answer what I first asked you after your rude reply to a response
> NOT DIRECTED TO YOU?
>
> Again....
>
> The gentleman said "I would love to have a multi-band but space will not
> permit so I have to say single band. Resonant for say 3750 or 7100".
> Regardless of your explanation of dipole construction, transformers and such
> I don't see how any of these impact having room for a 80 meter antenna but
> not having room for the exact same length 80/40 meter antenna. How will
> getting "a copy nof tha ARRL antenna book and" studying up resolve why you
> can have room for an eighty meter single band antenna but not for an eighty
> and 40 meter multiband antenna that is the exact same length?
>
> If you can't answer this then don't reply William.
>
> Glenn
>
> "William F. Hagen" <whagen@inreach.com> wrote in message
> news:3A620ADC.27808834@inreach.com...
> > Its funny how guys like this can usually do nothing but sling insults,
> > they are all the same. I guess when all else fails nothing beats a

> > personal attack.
> > Once again, this kind of thing never helps anything or anybody. It
> > doesnt bother me any but I do pity you, whether you like it or not.
> > And yes, please do ignore me, it will certainly make my life better and
> > I bet a lot of other people would feel the same way.
> > 73's to you
> > William F. Hagen
> > kc6ufe
> >
> > Glenn wrote:
> > >
> > > I didn't think you could back what you said. I'll remember to ignore you
> in
> > > the future William. Now run off and play on 14.313 with your other
> friends.
> > > Your reason for frequenting a group to share information is baffling.
> > >
> > > Glenn - KB7PKC
> > >
> > > "William F. Hagen" <whagen@inreach.com> wrote in message
> > > news:3A61F212.6BA80514@inreach.com...
> > > > nope.
> > > >
> > > > Glenn wrote:
> > > > >
> > > > > William,
> > > > >
> > > > > The gentleman said "I would love to have a multi-band but space will
> not
> > > > > permit so I have to say single band. Resonant for say 3750 or 7100".
> > > > > Regardless of your explanation of dipole construction, transformers
> and
> > > such
> > > > > I don't see how any of these impact having room for a 80 meter
> antenna
> > > but
> > > > > not having room for the exact same length 80/40 meter antenna. How
> will
> > > > > getting "a copy nof tha ARRL antenna book and" studying up resolve
> why
> > > you
> > > > > can have room for an eighty meter single band antenna but not for an
> > > eighty
> > > > > and 40 meter multiband antenna that is the exact same length? Is it
> > > mirrors?
> > > > > Reflections off the snow? Can you lower yourself to my level and try
> and
> > > > > help me out William or do I need to read a book instead?
> > > > >
> > > > > HUH?

> > > > >
> > > > > Glenn - KB7PKC
> > > > >
> > > > > "William F. Hagen" <whagen@inreach.com> wrote in message
> > > > > news:3A615104.23916943@inreach.com...
> > > > > > you are missing the help for the gentleman's request.
> > > > > > Lots of ways to make a dipole, full length, or trap shortened,
> even a
> > > > > > coil in the center.
> > > > > > Typically a dipole is fed with coax and a balun, matching the
> > > impedances
> > > > > > either with the coax or the balun being a transformer as well such
> as
> > > > > > 4:1, 9:1 etc. also, parallel line is used, typically 300 ohm, or
> 450
> > > > > > ohm, and matched with a transformer etc. Some dont match, and use
> a
> > > > > > tuner at the shack to compensate.
> > > > > > A good suggestion is to get a copy nof tha ARRL antenna book and
> study
> > > > > > up.
> > > > > >
> > > > > >
> > > > > > Glenn wrote:
> > > > > >
> > > > > > > I'm confused. My multi-band fan dipole covering 80/40/20 takes
> the
> > > same
> > > > > > > space as a 80 meter single band. I have to be missing something
> > > here!
> > > > > > >
> > > > > > > Glenn - KB7PKC
> > > > > > >
> > > > > > > "VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
> > > > > > > news:VD986.61131$JT5.1847684@news20.bellglobal.com...
> > > > > > > >
> > > > > > > > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > > > > > > > news:3A60E228.C162C28D@eznec.com...
> > > > > > > > > Resonant (half wavelength) or nonresonant? Single or
> multiband?
> > > > > > > > >
> > > > > > > > >
> > > > > > > > > Personally I would love to have a multi-band but space will
> not
> > > permit
> > > > > > > > > so
> > > > > > > > > I
> > > > > > > > > have to say single band. Resonant for say 3750 or 7100. I
> can
> > > make

> > > > > as
> > > > > > > > many
> > > > > > > > > as I need but am a little confused as far as feeding them.
> > > > > > > > >
> > > > > > > > >

2050. attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 03:26:21 UTC
From: testudine@aol.com
Message-ID: <20010128222621.21059.00001836@ng-mq1.aol.com>
Source record: 171323

Howdy! Im looking for antenna ideas that can be set up in an attic. must cover HF. Commercial antennas are appreciated. must be in $300 dollar budget. homebrew ideas ok too.

2051. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 03:30:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <952o2o$4sp$1@slb3.atl.mindspring.net>
Source record: 171324

Reg:

Without checking the books, here's my vote.

I believe that the speed of em in (on) metalic conductors is very much closer to the speed in vacuo than the 5% variance, in fact the difference should be almost imeasureable, however the speed of em radiation in (through) dielectrics is substantially slower.

So that, if transmission lines or antennas have dielectric insulation such as found in coax or on window ladder line, then the em waves on or over those "insulated" conductors will travel slower than in vacuo.

That's why the velocity factor of coax is substantially less than 1.00.

Is this right?

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:952dfc$6hq$1@uranium.btinternet.com...
> Let's have a vote on it.
>
> Hands up all those who think the velocity of em waves in metals is 5%
> different from the velocity in free space.
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> Reg.
> ==========
> mikeblake wrote
> > Are YOU a qualified auditor ??
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> > Rheilly Phoull
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:9510u6$2pv$1@uranium.btinternet.com...
> > > Somebody said about velocity factors -
> > >
> > > > > > For metal antennas, that number must be reduced
> > > > > > by a certain percentage because of the difference in the > > > >
> speed of light in free space VS metal. For a wire
> > > > > > antenna, the reduction is about 5%.
> > > > ==========
> > > What a load of old-wives' poppycock !
> > > ---
> > > Reg.
> > >
> > >

> >
> >
>
>

2052. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 03:40:39 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74E5F9.73983843@earthlink.net>
Source record: 171325

Dan Richardson wrote:

> On Sun, 28 Jan 2001 03:15:54 GMT, Stephen Dobak
> <shdobak@earthlink.net> wrote:
>
> >[snip]
> >
> >A properly designed and built balun has very low loss as long as the
> >core is not driven into saturation
> >but there is no reason whatever to use a center balun for a dipole in
> >the HF range.
> >
> >
> >
> > Stephen H Dobak WB3AMG
> > shdobak@earthlink.net
> > sdobak@yahoo.com
>
> Oh, common mode current doesn't exist at HF?
>
> That's sure news to me.
>
> Danny, K6MHE

What exactly are you referring to as "common mode" and why is it necessary
to use a balun??
There is absolutely no need to use a balun at HF unless you are concerned
about upsetting a directional pattern
and of HF few antennas would be directional enough to care.

If you are running a beam, directly feeding a yagi with coax you can coil
a few loops of the coax to choke off any
currents on the outside of the shield.

Now can you tell me how many path(s) exist is a piece of coax feeding an
antenna???

Steve WB3AMG

2053. Re: 80m noise and distortion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 03:49:00 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74E744.CEC91ED3@earthlink.net>
Source record: 171326

Richard Friedman wrote:

```
> Would the fact that he is using a vertical antenna mean that its
> picking up noise in all directions, especially because most noise is
> vertically polarized?
>
> Would he do better with a beam antenna on a rotor? (Ignoring for the moment
> the impossibility of doing so in his case, being on the ground floor).
> What about pointing that hamstick at 45 degrees, or fully horizontal?
>
> A newbie myself, I'm trying to deal with similar issues on 6m. My vertical
> is useless.
>
> --
> -=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
> | Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
> | ï¿½ Information Architect, Technical Communications, Sun Microsystems |
> | ï¿½ Instructor, Univ California Berkeley Extension |
> -=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=

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A second antenna used for receive would be a possible answer, A small magnetically shielded loop that
could be rotated to null interference while staying relatively non directional to skywave signals.

Steve WB3AMG

2054. Re: attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:06:57 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A74EAE5.40ADC953@home.com>
Source record: 171327

Take a look at the Alpha Delta antennas. The DX-EE covers 10 to 40 meters, and they have others that cover 80 meters as well. They have a web page.

Testudine wrote:

> Howdy! Im looking for antenna ideas that can be set up in an attic. must cover
> HF. Commercial antennas are appreciated. must be in $300 dollar budget.
> homebrew ideas ok too.

2055. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:13:14 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74ED9D.9A3DFF62@earthlink.net>
Source record: 171328

Richard Friedman wrote:

> I'm a newbie and am starting to put together a home station for 40-6m dx.
>
> I've been told that two problems with vertical (base) antennas on HF are:
>
> 1. You receive omnidirectional noise, and since most noise is vertically
> polarized the QRM received is much greater than with a directional beam
> antenna.

> ----------

Most noise is vertically polarized

>
>
> 2. You transmit a vertically polarized signal, so only vertical antennas
> can receive you well. Likewise, you receive vertically polarized
> signals better than horizontally polarized signals. i.e., verticals can
> only talk to verticals.
> ----------
> ----------

Most skywave is horizontal polarized, On V/Uhf you can
exceed 23 db loss using cross polarization
On HF it is a different story.

>

>
>
> Both seem plausible but how true are they? I thought I'd ask the experts.

Efficiency is a sore point needing a good ground to work against (1/4 wave)
If the vertical exceeds 5/8 wave high angle will result rendering the vertical
useless for much serious also if you wish to talk local within a few hundred
miles look elsewhere verticals have little high angle radiation, just what you
need for short skip on 1.8 to 7 mhz. You may talk to your buddy 100 miles
away every day on 80 and half way across the world once or twice a year unless
you are a low band DXer and have the resources to install the vertical systems
needed and no a 23 foot all band will not do.

Anything covering 40-6 meters is a compromise and I would be dubious
of it, a combination of 2 or 3 antenna's specialized to your needs would be a
better choice if you are a serious DXer!

>

Steve WB3AMG

>
>
> --
> -=
> | Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
> | ï¿½ Information Architect, Technical Communications, Sun Microsystems |
> | ï¿½ Instructor, Univ California Berkeley Extension |
> -=

2056. Re: What if Long Wire Isn't Straight?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:22:29 UTC
From: Al Klayton <aklayton@pcisys.net>
Message-ID: <t79s9fa35nmv5b@corp.supernews.com>
Source record: 171330

Thanks to all who have responded to this question.
Al
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:950qj0$ss0$1@plutonium.btinternet.com...
> Al, the S shape will have a neglible effect compared with the difference
(1
> or 2 S-units) between an indoor and outdoor antenna.
>
> The S will just cause a small change in tuner setting of which you will be
> quite unaware because you are unable to do a 'before and after' test. The
> same will occur whether or not the antenna is indoors or out.
>
> Regards, Reg, G4FGQ
>
> ==========
> Al Klayton <aklayton@pcisys.net> wrote in message
> news:t7706fpa44ep7f@corp.supernews.com...
> > I have about 50 feet of wire hooked up to an RX 320 inside my house. Due
> to
> > room size, layout, etc, the wire, which runs along the edge of the
ceiling
> > of two rooms , is in a large S shape (perhaps a 25ft S) rather then
in
> a
> > nice straight line as it would be if outside. What is the effect of not
> > having the ant in a straight line?
> > Thanks,
> > Al
> >
>
>

2057. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:24:21 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74F039.5C2DDEDE@earthlink.net>
Source record: 171329

Reg Edwards wrote:

> Somebody said about velocity factors -
>
> > > For metal antennas, that number must be reduced
> > > by a certain percentage because of the difference in the speed of light
> in free
> > > space VS metal. For a wire antenna, the reduction is about 5%.
> ========================
> What a load of old-wives' poppycock !
> ---
> Reg.

Are there antenna's other than metal?? and yes there is a velocity factor and
that is why traveling wave antennas
start lousing gain after an optimal length, The received wave is not in phase
with the wave being propagated
down the antenna and gain starts to decrease.

Open wire feeders may have a velocity factors of 97% ladder line maybe 88% coax
may run from 83 to 60%

Steve WB3AMG

2058. Re: attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:28:26 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <Kj6d6.17736$49.2225638@news1.rdc2.pa.home.com>
Source record: 171331

A description of my attic coaxial-cable trap dipole for 80/40/30/20/15/10
meters is at:

http://www.nerc.com/~jdegood/coaxtrap

73,

John NU3E

"Testudine" <testudine@aol.com> wrote in message
news:20010128222621.21059.00001836@ng-mq1.aol.com...
> Howdy! Im looking for antenna ideas that can be set up in an attic. must
cover
> HF. Commercial antennas are appreciated. must be in $300 dollar budget.
> homebrew ideas ok too.

2059. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:29:31 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74F16F.E538C02C@earthlink.net>
Source record: 171332

Reg Edwards wrote:

> Paul wrote -
> > All of this is good and nice but I
> > suggest that the inquisitor buy an ARRL handbook. It doesn't matter
> > what year. These questions are answered in every one!
> ====================
> Hi Paul,
>
> Suppose the inquisitor cannot find a bookshop which sells ARRL publications.
> He may live in North Korea, Cuba, Iraq or at the South Pole.
>
> And it would be wrong to assume he is wealthy enough to purchase such
> publications.
>
> But in any case, what makes you think the answers in ARRL handbooks are the
> correct ones. Are you a qualified auditor ?
> ---
> Reg

If he can afford a radio not to mention a computer and maintain an ISP I am sure
he can afford a handbook, I brought box load's of handbooks and manuals off
E-Bay

Steve WB3AMG

2060. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:32:43 UTC
From: k6mhe@arrl.net
Message-ID: <3a74f241.20161262@news.mcn.org>
Source record: 171336

On Mon, 29 Jan 2001 03:40:39 GMT, Stephen Dobak
<shdobak@earthlink.net> wrote:

>
>
>Dan Richardson wrote:
>
>> On Sun, 28 Jan 2001 03:15:54 GMT, Stephen Dobak
>> <shdobak@earthlink.net> wrote:
>>
>> >[snip]
>> >
>> >A properly designed and built balun has very low loss as long as the
>> >core is not driven into saturation
>> >but there is no reason whatever to use a center balun for a dipole in
>> >the HF range.
>> >
>> >
>> >
>> > Stephen H Dobak WB3AMG
>> > shdobak@earthlink.net
>> > sdobak@yahoo.com
>>
>> Oh, common mode current doesn't exist at HF?
>>
>> That's sure news to me.
>>
>> Danny, K6MHE
>
>--

>
>What exactly are you referring to as "common mode" and why is it necessary
>to use a balun??
>There is absolutely no need to use a balun at HF unless you are concerned
>about upsetting a directional pattern
>and of HF few antennas would be directional enough to care.
>
>If you are running a beam, directly feeding a yagi with coax you can coil
>a few loops of the coax to choke off any
>currents on the outside of the shield.
>
>Now can you tell me how many path(s) exist is a piece of coax feeding an
>antenna???

>
>
> Steve WB3AMG

There are three paths.

The term I used was "common mode current". That's the name given to
the unwanted current flowing on the outside of the coax's shield.
Besides effecting antenna patterns it can also cause in increase in
RFI problems and other things such as hot microphones and the like.

It is considered good engineering practice to include some form of
choke/balun on *any* antenna system using a coaxial feedline. It can't
hurt and will only help.

Danny, K6MHE

2061. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:39:26 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74F3C5.4360D793@earthlink.net>
Source record: 171333

Cecil wrote:

> Reg Edwards wrote:
> >
> > Somebody said about velocity factors -
> >
> > > > For metal antennas, that number must be reduced
> > > > by a certain percentage because of the difference in the speed of light
> > in free
> > > > space VS metal. For a wire antenna, the reduction is about 5%.
> > ========================
> > What a load of old-wives' poppycock !
>
> Then why do we use 468/f instead of 492/f for a half wave dipole?
> --
> http://www.mindspring.com/~w6rca

End effect

Steve WB3AMG

2062. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 04:41:37 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A74F448.8B4D3FE4@earthlink.net>
Source record: 171334

Cecil wrote:

> Richard Ferch wrote:
> > End effects. For a 3/2-wave dipole, use 468/f + 2*492/f
>
> Why doesn't that work for insulated wire?
> --
> http://www.mindspring.com/~w6rca

It Does, but you have to account for the velocity factor for the
insulated wire

Steve WB3AMG

2063. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 05:11:47 UTC
From: Murray Lang <muzzle@iexpress.net.au>
Message-ID: <i_6d6.4$aD6.759@wa.nnrp.telstra.net>
Source record: 171335
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

I remember my Grandfather (who's callsign I now have) using a car
differential near the base of his tower, with a shaft coming through the
shack window attached to a truck's steering wheel. Direction was indicated
by a dial on the wall next to the window driven via a pulley on the steering
shaft. This impressed me greatly as a young child though I guess it's
probably not what you had in mind (c:

Regards
Murray - VK6HL

VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com> wrote in message
news:3a74bfa3@grissom...
> Hi all and thanks for reading my post
>
> I have been out of AR for 14 months (due to an accident not loss of
> interest) and am now looking to get back into it.
>
> I am looking at building a lot of my own gear this time around and one
> project is an antenna rotator. Although I have searched high and low on
the
> internet, I can not find anyone that has built a rotator system from
> scratch. I have found a direction indicator but that's all.
>
> Has anyone built or know of an article that describes building an antenna
> rotator? If so could you please point me in the right direction or send me
a
> scanned article, but please email me direct after you have removed the
> SPAMJAM.
>
> --
> Don't forget to remove the SPAM.JAM
>
> 73
> Adam VK4LAJ
> E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
> WWW: - http://www.loaded-dog.com
> Brisbane Australia
> CQ Zone 29/ 30
> Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
> Maiden Head: - QG62mi
> Height ASL: - 52m
>
> My wife says I never listen to her...
> at least that's what I think she said?

>
>

2064. ground screen vs. radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 05:37:48 UTC
From: Darrell <upson@my-deja.com>
Message-ID: <952vjc$25p$1@nnrp1.deja.com>
Source record: 171338

Does anyone have any experience or knowledge of vertical antenna efficiency comparing a solid ground screen, like hardware cloth or chicken screen, to using radials? Seems it might be cheaper and easier than laying out 120 copper wire radials.

Sent via Deja.com
http://www.deja.com/

2065. Bilal Isotron experiences ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 05:41:21 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <5o7d6.129774$ge4.47001140@news2.rdc2.tx.home.com>
Source record: 171337

I've been looking at the Bilal Isotron 20m antenna for travelling. For 20m and higher these things aren't even loops -- more compact than that. Apparently no radials are needed and some hams have said that they work well even close to the ground.

If you've had any experience with them please let me know how well they work. I'll probably run it off a QRP rig.

Thanks, Pete KATZK

2066. Re: ground screen vs. radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 06:03:33 UTC
From: "Bob M." <kcxxxxxx@snet.net>
Message-ID: <AI7d6.25381$OD.9633678@typhoon.snet.net>
Source record: 171339

The ARRL Antenna Handbook goes into this in quite some detail. Basically, with individual radials, you reach a point of diminishing returns at far less than 120. They also mentioned that the ground screen would cost more and be an overkill since it would basically cover the same area but with a much denser pattern due to the closeness of the 'weave', so to speak.

120 radials are used by broadcasters who also use a ground screen very close to the base of the antenna for a radius of several yards. Amateurs can get away with a far simpler system, like 32. Experiments indicate that as few as 4 for each band are enough to get good ground conductivity. I ran 12 wires across my back yard, cut them all at the base of the antenna, and used a hose clamp to connect them all to the mast of an HF9V. I got very good results according to an MFJ269 antenna analyzer.

Hope this helps.

Anti-Spam feature: DO NOT HIT REPLY !
Address all replies to: k c single at snet dot net
by removing the spaces and inserting the
correct punctuation for a standard address.

==========

Darrell <upson@my-deja.com> wrote in message
news:952vjc$25p$1@nnrp1.deja.com...
> Does anyone have any experience or knowledge of vertical antenna
> efficiency comparing a solid ground screen, like hardware cloth or
> chicken screen, to using radials? Seems it might be cheaper and easier
> than laying out 120 copper wire radials.
>
>
> Sent via Deja.com
> http://www.deja.com/

2067. Re: ground screen vs. radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 08:06:53 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A75249D.7A67F7EB@oio.net>
Source record: 171340

Darrell,
I don't have personal experience with both screen and
wire radials, but know someone who does. He seems to think
that wire radials are cheaper than using screen, but both
do about the same thing. He had a lot less than 120 radials,
something like 30 if I remember correctly. Also used 4 strips
of fencing (same as 8 from the center) and they worked okay.
If you already have some fencing, and had to buy the wire,
it would probably work out the same as far as effort and $$
went. If you have to buy the fencing, the wire is definitely
cheaper. Burying the stuff is something else, especially the
fencing!
'Doc

2068. Re: Bilal Isotron experiences ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 08:10:48 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A752588.AEB6194C@oio.net>
Source record: 171341

Pete,
I've had the 10 meter Isotron, and it works
comparably with a 1/4 wave groundplane. It wasn't
the easiest antenna to tune, and the higher it is
the better. For a 'make-do' antenna I'd say it
should work well enough till you can get up a 'real-
live' antenna, or for use in limited space areas.
For QRP, I think you'd be wasting your time, but
if that's all you can do, then why not.
'Doc

2069. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 08:19:56 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <3A7527AC.B8624040@dvol.com>
Source record: 171342

Cecil wrote:

> . . . .
> if you have or can borrow an antenna analyzer like the MFJ-259B,
> it will make your trimming job much, much easier.
>

>
. . . Biggest bang for the buck in ham radio . . whatta great tool.
>
w3rv

2070. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 08:21:13 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7527F9.AA2D9EF4@oio.net>
Source record: 171343
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

jason,
1. Yes, probably, to both questions. Just have to try it
and see.
2. Your imagination is your only limit. How about a large
flower pot, fill it with concrete with a pipe standing up
in the center of it. Mount the screwdriver on a pipe that
would fit into the one in the pot. Paint the concrete
green and leave it on the patio. (tell them your plant died)
3. Beats me, just depends on how much you practice (LOL).
4. I think 'which' antenna you choose would be more a matter
of how much you want to pay for it. The 'High-Searas'(s) are
nice, but I don't think they're worth the cost. Up to you...
4A. 160 meter operation is going to depend on the length of the
'whip' you use, and if you use a capacitive hat. It's
certainly possible.

'Doc

2071. Jaybeam 6 el. QUAD

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 10:27:40 UTC
From: Herr&#65533;n <andoni.herran@terra.es>
Message-ID: <wAbd6.20987$6m6.672377@telenews.teleline.es>
Source record: 171344

Hi,
I&#65533;m looking for information about the Jaybeam 6 el. quad for 144 mhz. I have one of this and I&#65533;m thinking about stacking 2 or 4, but the mounting-manual didn&#65533;t say the dBs or stacking distance...nobody can help me?.
Please, sorry my bad english.
73 de EA2AJX. I&#65533;aki.
E-mail: ea2ajx@terra.es or ea2ajx@mixmail.com

2072. European quads?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 10:40:30 UTC
From: Herr&#65533;n <andoni.herran@terra.es>
Message-ID: <yMbd6.21056$6m6.675922@telenews.teleline.es>
Source record: 171345

Hi,
Nobody knows a European quad antenna maker?. This is because all makers that
I know are Americans...and the shiping is equal to the price of the antenna,
this is, I&#65533;ll pay twice the antenna&#65533;s price.
Thanks in advance.

73 de EA2AJX. I&#65533;aki
E-mail: ea2ajx@terra.es or ea2ajx@mixmail.com

2073. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 11:11:59 UTC
From: Gordon Hudson <usenet@hostroute.com>
Message-ID: <953j2t$fru89$1@ID-36920.news.dfncis.de>
Source record: 171346
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Murray Lang <muzzle@iexpress.net.au> wrote in message
news:i_6d6.4$aD6.759@wa.nnrp.telstra.net...
> I remember my Grandfather (who's callsign I now have) using a car
> differential near the base of his tower, with a shaft coming through the
> shack window attached to a truck's steering wheel. Direction was indicated
> by a dial on the wall next to the window driven via a pulley on the
steering
> shaft. This impressed me greatly as a young child though I guess it's
> probably not what you had in mind (c:

Yes
I had a friend in the Ukraine who used a geared motor attached to the back
axle of a Lada to turn his beam.
It could have turned the whole block of flats.

I used to use a heavy duty stepper motor to turn a VHF beam in my attic
(weight taken off motor by suspending antenna from a string, but I have not
seen any stepper motors that would be up to the job for a long time.

Gordon

http://www.myqth.com/ Free web hosting

2074. Re: RF Ground Coupling - It works!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 14:45:29 UTC
From: iguest@my-deja.com
Message-ID: <953vm7qbq1@nnrp1.deja.com>
Source record: 171347

In article <3A6F77FD.BA75E163@oio.net>,
'Doc <w5lz@oio.net> wrote:
> Iestyn,
> Never heard of anyone doing it before. Try it
> and let us know what happens.
> 'Doc
>

Just an FYI - I added the plate to the back side of the glass and hooked up a small gnd wire to the plate. The SWR changed radically. Before, I had cut about 2 inches off of the whip to try to get a resonable SWR on all 40 channels (CH 1 was 1.5:1 and CH 4 was 2+:1) - And that was with the whip at it's shortest. With the plate installed the SWR on CH 1 is now 1.4:1 and CH 40 is 1.2:1. (Kind of the opposite), and now the whip is fully extended! I think I could have used an extra 1/4" or 1/2" of whip. Pitty I cut it. - Live and learn.

Regards.

Iestyn

Sent via Deja.com
http://www.deja.com/

2075. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 14:59:48 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Ezfd6.12227$7b2.894633@bgtnsc05-news.ops.worldnet.att.net>
Source record: 171348

"Richard Friedman" <rchrd@rchrd.com> wrote in message
news:3A73CEB3.8134C705@rchrd.com...
> I'm a newbie and am starting to put together a home station for 40-6m dx.
>
> I've been told that two problems with vertical (base) antennas on HF are:
>
> 1. You receive omnidirectional noise, and since most noise is
vertically
> polarized the QRM received is much greater than with a directional
beam
> antenna.
>
> <snip>

Richard:

The myth here is that noise is "vertically" polarized. It is not. Natural noise is considered to be randomly polarized.

In HF communications, there are several significant sources of natural noise (I will leave man-made noise out of this discussion): atmospheric noise, cosmic background (galactic) noise and ground noise. The amount of natural noise an antenna introduces into the communications link is more a function of the antenna's radiation pattern than its polarization. An antenna introduces noise into the communications link simply as a function of how much noise it "sees". Noise sources are defined in terms of temperature (degs Kelvin) and the amount of noise introduced by an antenna is defined as the antenna noise temperature. The relative noise temperature of the noise sources mentioned earlier varies with frequency but ground noise is considered to have a noise temperature of 290 K - 320 K, atmospheric noise is considered to have a temperature of 10^6 K - 10^8 K(at HF), and galactic noise is considered to have a noise temperature of 10^5 K - 10^8 K (at HF).

From this, it is clear that an antenna with a radiation pattern that "sees" more of the sky, will introduce more noise than an antenna with a radiation pattern that "sees" less of the sky. If a vertical antenna introduces more noise than a horizontal antenna of the same efficiency and gain (in the direction of the signal source), it is solely a result of the fact that the vertical must "see" more sky noise (it is not a polarization issue). Antenna efficiency is important because two antennas with the same pattern will introduce different levels of noise if their efficiencies are different. Antenna gain (in the direction of the signal) is also important because it affects the signal to noise ratio at the antenna. For example, consider two horizontal antennas - one a dipole, the other a directional beam. If both antennas have the same efficiency and see the sky equally as

a percentage of their total radiation pattern, then they will both have the exact same noise figure and introduce the same level of noise into the link. However, the beam will provide a better signal to noise ratio (and sound less noisy) because it picks up more signal.

Sorry for the long winded answer but I thought I would clear up the assumption that noise is vertically polarized.

Steve, VE9SRB

2076. 5/8-wave broadcast band fm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 15:06:32 UTC
From: dornbos@aol.combatspam
Message-ID: <20010129100632.28583.00000666@ng-co1.aol.com>
Source record: 171349

Hi gang
has anyone ever made a 5/8-wave broadcast band fm antenna (88-108 Mhz) for mobile use? It seems like it would be advantageous even though the frequency spectrum is quite wide (20Mhz on roughly a 100Mhz center). Any thoughts on this would be appreciated such as:
would you be better off designing the 5/8 for the middle, hi-end or lo-end of the band? ....how could the impedence matching be accomplished? .... at what angle should the maximum pickup be?
thanks
Doug
To e-mail me, remove the batspam from my e-mail address.
Can't find that rare record, cd, or tape? Try http://dornbos.gemm.com

2077. Re: Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 15:25:28 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A758B68.167EB0E7@rupert.tds-az.lmco.com>
Source record: 171350

Pete Holden wrote:
>
> Where can I get a whip antenna for 10m?
>
> Or, how difficult would it be to make a short whip antenna for 10?
>
> Pete, KAï¿½TZK

The other posts recommended the 108" or 102" RS whip antennas,
but something shorter is also available. I used a RS antenna that
was only about 36". It comes with a loading coil in magnetic
base mount. It's made for CB but adjusts easily for 10 Meters.
I used it mobile, from Phoenix, for many years and had a
lot of good luck. Running my HTX-100 in the high or low
power mode I was able to easily work the mid-west and east
coast. This, of course, is very dependent on the state of
10 Meters at any given time, but a short antenna does work.

As for building one, take a look in the ARRL handbook. There
is always a section on mobile communications and information
on building mobile whip antennas.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

2078. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 15:35:49 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A758DD5.D1F48968@IEEE.org>
Source record: 171351

Richard Ferch wrote:
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote:
> > Why doesn't that work for insulated wire?
>
> Because the insulated wire may have a velocity factor appreciably different
> from 1, depending on the dielectric constant and thickness of the
> insulation.

Yep, all my antennas use insulated wire and do indeed exhibit a VF
less than 1.0.
--
http://www.mindspring.com/~w6rca

2079. Best antenna software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 15:41:07 UTC
From: cajo1@my-deja.com
Message-ID: <9542uh$t67$1@nnrp1.deja.com>
Source record: 171352

Have tryed the demos for EZNEC 3.0 ;NEC-WIN plus+ and NEC4WIN95.

My modelling gives different results.Do they use differnt algoritms?

What to use some,other programs? Or i have to find out the

limitations for eatch program?

Regards from CAY in SWEDEN.

Sent via Deja.com
http://www.deja.com/

2080. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 15:55:33 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <Vngd6.3364$mA1.304721@bgtnsc06-news.ops.worldnet.att.net>
Source record: 171353

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:9510u6$2pv$1@uranium.btinternet.com...
> Somebody said about velocity factors -
>
> > > For metal antennas, that number must be reduced
> > > by a certain percentage because of the difference in the speed of
light
> in free
> > > space VS metal. For a wire antenna, the reduction is about 5%.
> ========================
> What a load of old-wives' poppycock !
> ---
> Reg.
>
>

A thin linear dipole will be resonant at a length of 3 - 5% less than the
1/2-wave length because of the "end effect". Wire diameter will change this
% value. The 1/2 wave dipole is a resonant antenna not a traveling wave
antenna. The "velocity factor" or phase velocity are not relevant for
resonant antennas.

Steve, VE9SRB

2081. Re: Computer generated RFI..please help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 16:29:34 UTC
From: neilmbarrowman <neilmbarrowman@ntlworld.com>
Message-ID: <3A759A6D.B0D5EFF9@ntlworld.com>
Source record: 171355

VE3TMT wrote:

> I don't know what else to try. I am using a surge suppressor with EMI/RFI
> filters built in, I even took apart the computers power supply and install
> .01's across the AC to ground. Still no help. The HF rig picks up the
> noise as soon as the 'puter is turned on, and when the drives read or write,
> it is picked up as well. Even as I type I can hear the tones changing on
> the HF. Am I missing something???

I have had the same problems--but ok now! suggest you have done great job so
far---keeping rfi out of the mains. M y problems include pc. hanging up whn
txing
more than 40/50 watts cw or ssb. no problems psk or rtty--those at much lowe
power. i think that you will star to get results using ferrite rings or split
clamps-Ihave ferritedevices TDKNF-CO9" DIGITAL NOISE ABSORBERS.fitted to various

position on my pc set up .(im looking at a label on one of the tdk clamps and i
cannot tell if it reads nf c---oh--9 or nf c--zero9. places fitted in my pc
arrangement
1--cable to monitor<very important> 2----cable to key board. 3--cable to
mouse.
id hate to be accused of "teaching my grand ma how to suck eggs---old scottish
saying but you will cure rfi quicker by suppressing it at scource.
Genuinly trying to help 73 gm0ltq

2082. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 16:32:52 UTC
From: "Bill Turner, W7TI" <w7ti@jps.net>
Message-ID: <nl5b7tgl1harevcpgp7ss08lfituuusva8@4ax.com>
Source record: 171354

On Mon, 29 Jan 2001 14:59:48 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

>The myth here is that noise is "vertically" polarized. It is not. Natural
>noise is considered to be randomly polarized.

Your statement is correct but misleading because it is incomplete. Both natural and man-made noise are randomly polarized AT THE POINT OF ORIGIN, but horizontally polarized noise is rapidly attenuated by traveling over the earth (groundwave) while vertically polarized noise is not. Thus, verticals appear to be "noisier" because they pick up the (un-attenuated) vertically polarized noise. Horizontally polarized antennas respond primarily to the (attenuated) horizontally polarized noise and therefore appear "quieter". It really has nothing to due with the antenna itself, just how much noise energy reaches them.

For skywave noise, there is little difference between the two antennas.

Absorption of horizontally polarized signals is the reason AM broadcast stations invariably use vertical polarization. They WANT groundwave coverage and horizontal polarization would be ineffective.

73, Bill W7TI

2083. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 17:19:21 UTC
From: richardharrison@webtv.net
Message-ID: <15223-3A75A619-14@storefull-114.iap.bryant.webtv.net>
Source record: 171359

Richard Friedman wrote:
He had been told vertical antennas have two problems.

Omnidirectionality does not discriminate against noise, which is mostly vertically polarized.

And, vertical antennas can only talk to other vertical antennas.

There is some truth in the above. Directional antennas improve signal over noise by directionality. Most noise seems vertically polarized, but could be horizontally polarized. It depends on the source.

Vertical antennas talk well to horizontal antennas via the ionosphere, or via wave tilt caused by ground loss under a horizontal wire, or by whatever else may scramble polarization. But, ideally, similar antennas on both ends of a sky-wave circuit may produce the best results. They have complimentary characteristics. What`s best for one is best for the other (forgetting noise and considering only signal).

I have erected many shortwave broadcast curtain arrays. All used horizontal polarization which is standard for the business. B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission Fundamentals" has this to say about that:
"The radiating elements may be either vertically or horizontally polarized, but horizontal polarization usually seems preferred because of its involving less absorption at earth reflection than is the case with vertical polarization."

Over ocean water, conditions are different. But, I`ve never seen a shortwave curtain array over the ocean. I`ve seen many in various SW broadcast plants around the world (all horizontal), but someone reported a vertical with a corner reflector used for SW broadcast somewhere near Dallas. This is the proverbial exception.

Best regards, Richard Harrison, KB5WZI

2084. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 17:28:24 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <YKhd6.3481$mA1.308775@bgtnsc06-news.ops.worldnet.att.net>
Source record: 171356

"Bill Turner, W7TI" <w7ti@jps.net> wrote in message
news:nl5b7tgl1harevcpgp7ss08lfituuusva8@4ax.com...
> On Mon, 29 Jan 2001 14:59:48 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:
>
> >The myth here is that noise is "vertically" polarized. It is not.
Natural
> >noise is considered to be randomly polarized.
>
> ____
>
> Your statement is correct but misleading because it is incomplete. Both
natural
> and man-made noise are randomly polarized AT THE POINT OF ORIGIN, but
> horizontally polarized noise is rapidly attenuated by traveling over the
earth
> (groundwave) while vertically polarized noise is not. Thus, verticals
appear to
> be "noisier" because they pick up the (un-attenuated) vertically polarized
> noise. Horizontally polarized antennas respond primarily to the
(attenuated)
> horizontally polarized noise and therefore appear "quieter". It really
has
> nothing to due with the antenna itself, just how much noise energy reaches
them.
>
> For skywave noise, there is little difference between the two antennas.
>
> Absorption of horizontally polarized signals is the reason AM broadcast
stations
> invariably use vertical polarization. They WANT groundwave coverage and
> horizontal polarization would be ineffective.
>
> 73, Bill W7TI

Hi Bill,

Your last paragraph on AM transmission is certainly correct but it is a solution to a slightly different problem than considering natural noise sources and antenna noise temperature.

In all cases, the level of total noise seen by an antenna has everything to do with the antenna. Specifically, it is a direct function of the antenna's radiation pattern and the antenna efficiency. All antennas respond to noise as a direct function of their pattern shape and the total contribution of

noise from all noise sources they see.

In HF communications, the significant source of noise is skywave or atmospheric noise. The portion of skywave noise propagating along the earth horizon will experience more attenuation from atmospheric absorption and ground losses than other skywave noise. Additionally, the noise contribution from the earth horizon path represents only a very small portion of the antenna's overall pattern and it is likely that this noise component will be over-shadowed by the remaining skywave contributions.

73,
Steve, VE9SRB

2085. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 17:32:35 UTC
From: M1nn0w <1c3d0g@att.net>
Message-ID: <TOhd6.12312$7b2.902433@bgtnsc05-news.ops.worldnet.att.net>
Source record: 171357

The other night I performed the following and it worked OK. I took a 49 inch whip and attached a coil made of 10 turns #12 wire which were wound round a pencil. I stretched it out to approximately 2 inches. I moved the center of the coax one turn at a time away from the antenna till I saw a 1:1 SWR. Using this contraption on my desktop with my barefoot Icom IC2 A/T I was able to work a repeater 40 air miles away with some slight noise. I did not ground either the coil or the outside sleeve of the coax. I will continue to experiment maybe grounding first one then the other of these leads to see if it makes any big changes.

2086. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 17:33:18 UTC
From: n2ey@aol.com
Message-ID: <9549gu$3k6$1@nnrp1.deja.com>
Source record: 171358

In article <11361-3A71D54C-50@storefull-116.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> N2EY wrote:
> "In evaluating a code, what is really important is how much data can
be
> sent per unit time in a given bandwidth using a given modulation."
>
> To compare ASCII with Morse, or Telex with Morse, requires all of the
> information needed to frame and transmit the data appearing as often
as
> it ordinarily does.

OK. ASCII and Baudot need start-stop bits. Morse doesn't.

>Many of the instruction set characters needed don`t
> exist in Morse code.

They also don't exist in Baudot.

> Morse would then require special character
> groupings to convey the instructions represented by a single
teleprinter
> character.

There are a large number of Morse characters that are not generally
used. Characters like parentheses and quotation marks do exist for
Morse. Only the exclamation point is absent (!)

> Morse goes down the efficiency tubes on that basis alone.

Sorry, you haven't made your "efficiency" case at all.

> Ask
> yourself: Why don`t machines use Morse if it is efficient?

Several reasons:

1) Mechanical simplicity - When the first teleprinters were designed,
the code used was tailored to simplify the mechanical design of the
teleprinter. That's why Baudot has only upper case letters.
2) Security - using Morse would have meant that operators could read
the teleprinter messages without a teleprinter.
3) Standardization
>
> The usual telegraph machines (Telex) use a standard 5-level Baudot
code.
> Normal operation is at 60, 75, and 100 words per minute. The bit rates

> for these speeds are: 45, 57, and 75 bits per second.

OK - let's look at that for a moment.

The standard Baudot code used in teleprinters has a start bit, five data bits, and a stop bit. No parity or other error-detection or -correction features. At 60 wpm, the start and data bits are 22 milliseconds long and the stop bit is 31 milliseconds long - so each letter or number requires 163 milliseconds. Using the "PARIS" test, we find that it takes 978 milliseconds to send PARIS once, so the speed is just about 61 wpm.

Now compare this to Morse with an identical dit length of 22 milliseconds. The word "PARIS" takes 1100 milliseconds to send in Morse, so we get about 55 wpm. Baudot is therefore a little faster than Morse, by the Paris test. But only by a few percent.

But there's more to it! Baudot does not have separate codes for letters and "figures" - there are special shift characters required. To send something like the callsign N2EY in Baudot requires SIX characters, not four (it would be sent as "N [figs] 2 [ltrs] E Y" in Baudot). Also, extra characters like carriage returns and line feeds are needed in Baudot teleprinter operation.

In RTTY radio use by hams, it was common to send control characters twice to be sure they weren't dropped, so the receiving station didn't print garble. One quickly got used to hitting CR, LF, FIGS and LTRS twice "just in case". Any speed advantage of Baudot vs. Morse was lost in such practices, but it was better than wasting paper because a LTRS was dropped. (We used to run a Model 19 at the college station - ah, the smell of hot machine oil in a small radio room on a spring morning....)
>
> 7-level and 8-level ASCII codes often run at 100 words per minute,
with
> a pulse rate of 110 bits per second.

And they use more bits to send the same data as Morse.
>
> Telex uses 120 Hz of bandwidth to convey 100 words per minute with
> either FM or AM carriers.

How do you get those numbers? For FSK, the shift must be known. For OOK, the keying waveform must be known.

> SSB could be used to shrink this bandwidth.

How? There is no such thing as "SSB FSK".

> ASCII needs 170 Hz of
> bandwidth for 100 words per minute.

And as we have shown, Morse would beat that slightly.
>

> But you can say much more in 100 words of ASCII than in 100 words of
> Morse because of all the 1-character instructions available in
> teleprinter code.

True to a limited extent - IF you used those characters. In plain
language, the advantage is lost.
>
> The inherent efficiency of teleprinter codes derives from their equal
> length code elements and their extended instruction sets.

You still haven't defined "efficiency".

And note this: PSK31 beats both ASCII and Baudot FSK by sending 50 wpm
in 31.5 Hz. Part of this is the use of PSK instead of OOK or FSK. But a
BIG part of PSK31's advantage comes from the fact that it uses a
Hoffmann (sp?) coding - the most frequently-used characters are the
shortest ones, and the less-common ones are longer. Just like Morse.
The inefficient ASCII is translated into the PSK31 code for
transmission and translated back after reception.

The inventor says he got the idea from his knowledge of Morse.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2087. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 17:47:29 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <R0id6.3510$mA1.309652@bgtnsc06-news.ops.worldnet.att.net>
Source record: 171360

Stephen:

What exactly are you trying to say here?

73,
Steve, VE9SRB

"Stephen Dobak" <shdobak@earthlink.net> wrote in message
news:3A74F039.5C2DDEDE@earthlink.net...
and yes there is a velocity factor and that is why traveling wave antennas
start lousing gain after an optimal length, The received wave is not in phase with the wave being propagated
down the antenna and gain starts to decrease.

Steve WB3AMG

2088. Re: antenna length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 18:03:57 UTC
From: richardharrison@webtv.net
Message-ID: <25473-3A75B08D-22@storefull-112.iap.bryant.webtv.net>
Source record: 171362

Steve, VE9SRB wrote:
"The "velocity factor" or phase velocity are not relevant for resonant antennas."

The 3 to 5% reduction in physical length of a resonant wire is as steve says "end-effect", mostly. The voltage tends to double at the open-crcuit wire ends as it would at the far end of an open-circuit transmission line (Ferranti effect). The incident and reflected voltages are in phase and add. This is not magic. The current is interrupted and its energy is transferred temporarily to the voltage wave. Higher voltage causes a larger capacitive effect. (Remember the "Miller effect" in an amplifier stage?)

That`s not all that`s like a transmission line in a resonant antenna. Terman says that current distribution on a fine wire reonant atenna is nearly the same as on a transmission line. I believe that relates to propagation velocity too. But the the impedance and admittance values of the antenna are quite different from a transmission line, usually. So, the velocity of the wave won`t usually be slowed by very much on an antenna. The phase lag won`t be much greater than in free space along the wire.

Best regards, Richard Harrison, KB5WZI

2089. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 18:08:37 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A75B1A5.7BD4@wt.net>
Source record: 171361

M1nn0w wrote:
>
> The other night I performed the following and it worked OK. I took a 49
> inch whip and attached a coil made of 10 turns #12 wire which were wound
> round a pencil. I stretched it out to approximately 2 inches. I moved the
> center of the coax one turn at a time away from the antenna till I saw a 1:1
> SWR. Using this contraption on my desktop with my barefoot Icom IC2 A/T I
> was able to work a repeater 40 air miles away with some slight noise. I did
> not ground either the coil or the outside sleeve of the coax. I will
> continue to experiment maybe grounding first one then the other of these
> leads to see if it makes any big changes.

You can run them either way, grounded base coil that is tapped, or an
ungrounded series coil. There are advantages to both, depending on what
you are wanting to do. An ungrounded coil can be used on other bands.
Say a 10m 5/8 gp with a series coil can usually give a decent match on
30m as a 1/4 GP. With the grounded coil, this won't work. But if you are
in a heavy lightning area, a grounded coil could be a good idea. It
places the antenna at ground potential, much like using a grounded
driven element on yagi. But overall, I prefer them ungrounded so I can
use on other bands. MK
--
http://web.wt.net/~nm5k

2090. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 18:29:02 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A75B66E.486B529C@3n.net>
Source record: 171363

Dean Craft wrote:
>
> And then you have the lazy SOBs who want the government to give them
> everything! They have no concept of earning or justifying anything that
> they want!

But Dean, there is nothing to "earn". The spectrum is already
ours (ie, public property) so the government isn't *giving*
anybody anything they don't already own. We must all accept
restrictions, for safety and to maximize use of this public
property, just a we accept restrictions on which lane to drive
in but there is no reason to "earn" what we already own. We
accept driving tests to prove we can operate a car on public
roads with reasonable safety, not to "earn" the right to drive.
So I ask again, how can one justify requiring the people who own
the spectrum to learn an archaic mode of communication (Morse)
in order to use an entirely different mode (Voice). It might be
reasonable to argue that some parts of the spectrum should be
set aside for Morse on the basis of the numbers of people who'd
benefit, and to require proficiency before using those bands,
but the current and previous schemes are indefensable.

My 2ï¿½
KA3DWW

2091. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 18:35:44 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A75B800.CB324109@3n.net>
Source record: 171364

Richard Clark wrote:
>
> The Bow, an antique mode, is afterall inefficient by design. It can't
> possibly compete with the modern technology of the bullet. And yet
> the government allows a failed technology to dictate the season and
> public lands' access for hunters. ...

We're talking apples and oranges. I have no problem with bow hunters having a special bow-only season, nor with folks who enjoy code having unique code only parts of the spectrum. My objection is, and always has been, requiring people with no interest in code to learn it anyway. That's akin to requiring those who hunt with guns to demonstrate skill with bow and arrow before being allowed to hun with a rifle.

KA3DWW

2092. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 18:40:22 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A75B916.74582172@3n.net>
Source record: 171365

N2EY wrote:
>
> ....the Morse/Baudot/ASCII discussion isn't about code
> tests at all. It's about the characteristics of various modes ...

Then I apologize for butting in; the subject line implies the
opposite.
sorry
KA3DWW

2093. Re: 70cm band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 18:55:40 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A75BCAC.E45B1CDA@3n.net>
Source record: 171366

AO KD5FXT wrote:
>
> Is a homebrew quad possible the 70 cm band? If so, what is a good website to
> review for dimensions? Pls email
>
> bill

Yes. I made a 4-element one and used it for a while. got the
dimensions from a magazine article (approx 1/4 wave to a side).
Used 1/4 inch OD plumbing copper tubing for elements and scraps
of plastic water pipe for the boom and supports.

KA3DWW

2094. Re: 5/8 or 1/2 wave vertical suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 19:15:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A75C136.B7E731E6@eznec.com>
Source record: 171270

Some amount of current flows from the center conductor of the coax to the antenna. An equal and opposite current flows on the inside of the coax shield. If you leave the coax open circuited at the antenna, the current from the inside of the shield "spills over" the shield at the open end and flows down along the outside. So the outside of the coax shield becomes the other half of the antenna. This will sometimes work, depending on the length and orientation of the coax, but it can be hard to duplicate. If you're running much power, it can also aggravate interference problems if the coax is routed close to other wiring. You can verify that it's happening by watching the SWR as you coil, move, or grab the coax. This is also one of those cases where the SWR mysteriously changes as you change the feedline length (because you're also changing the antenna length).

Roy Lewallen, W7EL

M1nn0w wrote:
>
> The other night I performed the following and it worked OK. I took a 49
> inch whip and attached a coil made of 10 turns #12 wire which were wound
> round a pencil. I stretched it out to approximately 2 inches. I moved the
> center of the coax one turn at a time away from the antenna till I saw a 1:1
> SWR. Using this contraption on my desktop with my barefoot Icom IC2 A/T I
> was able to work a repeater 40 air miles away with some slight noise. I did
> not ground either the coil or the outside sleeve of the coax. I will
> continue to experiment maybe grounding first one then the other of these
> leads to see if it makes any big changes.

2095. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 19:23:18 UTC
From: rwclark@seanet.com
Message-ID: <3a75ba97.1128410218@news.seanet.com>
Source record: 171367

On Mon, 29 Jan 2001 17:33:18 GMT, n2ey@aol.com wrote:

>
>How do you get those numbers? For FSK, the shift must be known. For
>OOK, the keying waveform must be known.
>
>> SSB could be used to shrink this bandwidth.
>
>How? There is no such thing as "SSB FSK".
>

Hi Jim,

Beg to differ, OM (both of you). FSK is sideband. Receive tuning is offset to the center of the shift, but the principle modulation is something like +1.7 Khz +/- some frequency around that (I think I saw the figure 400 Hz?). It's been a long time since I've taught RTTY fundamentals. Most receivers of that era (early 70's) introduce the offset to the tuned frequency just like the offset for CW. This is simply to fit the off-center sidebands into the IF filter range.

If I recall correctly, you can send FSK on either side of the suppressed carrier. I was teaching the operation and troubleshooting of the Collins AN/URC-32 and the choice of wrong sideband could lead to some interesting TTY operation with what appeared to be good signal levels and waveform shapes (I think the converter was an URC-17c, at least that is the nomenclature that comes to mind through that fog of the distant past). This of course was a troubleshooting problem for the Lab portion of instruction. The student was expected to note the polarity of the signal during the Mark condition.

73's
Richard Clark, KB7QHC

2096. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 19:27:47 UTC
From: rwclark@seanet.com
Message-ID: <3a77c3e5.1130792022@news.seanet.com>
Source record: 171368

On 27 Jan 2001 23:33:08 GMT, n2ey@aol.com (N2EY) wrote:

>>Few know the genesis of SS and its antecedents being designed using
>>player piano rolls to encode the frequency sequencers.
>
>Did you ever meet the famous inventor?
>

Hi Jim,

Heddy Lamar? Unfortunately not. :-(That would've been a blast back
when she did movies in Austria :-)

73's
Richard Clark, KB7QHC

2097. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 20:07:05 UTC
From: rwclark@seanet.com
Message-ID: <3a75cd3e.1133185835@news.seanet.com>
Source record: 171269

On Mon, 29 Jan 2001 13:35:44 -0500, Old Biker <enfield@3n.net> wrote:

>Richard Clark wrote:
>>
>> The Bow, an antique mode, is afterall inefficient by design. It can't
>> possibly compete with the modern technology of the bullet. And yet
>> the government allows a failed technology to dictate the season and
>> public lands' access for hunters. ...
>
>We're talking apples and oranges. I have no problem with bow
>hunters having a special bow-only season, nor with folks who
>enjoy code having unique code only parts of the spectrum. My
>objection is, and always has been, requiring people with no
>interest in code to learn it anyway. That's akin to requiring
>those who hunt with guns to demonstrate skill with bow and arrow
>before being allowed to hun with a rifle.
>
>KA3DWW

Hi OM,

This was responded to in exactly the manner you object:

>Richard Clark wrote:
>> Lamar Owen wrote:
>> >Richard Clark wrote:
>> >> The Bow, an antique mode, is afterall inefficient by design. It can't
>> >> possibly compete with the modern technology of the bullet. And yet
>> >> the government allows a failed technology to dictate the season and
>> >> public lands' access for hunters.
>
>> >Because demonstrating profiency with a bow is not required to get a
>> >license to hunt with a gun.
>
>> Ah! So long as gun hunters are not required to demonstrate profiency
>> with a bow; then they have no grief with the government's exclusion of
>> them from the field of hunt to favor their bowed friends.
>
>> Sounds equitable.
>
>Precisely.
>--
>Lamar Owen
>WGCR Internet Radio
>1 Peter 4:11

2098. Re: European quads?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 20:19:19 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <954jl6$r7r$1@news.kabelfoon.nl>
Source record: 171272

Herr�n <andoni.herran@terra.es> schreef in berichtnieuws
yMbd6.21056$6m6.675922@telenews.teleline.es...
> Hi,
> Nobody knows a European quad antenna maker?. This is because all makers
that
> I know are Americans...and the shiping is equal to the price of the
antenna,
> this is, I�ll pay twice the antenna�s price.
> Thanks in advance.
>
> 73 de EA2AJX. I�aki
> E-mail: ea2ajx@terra.es or ea2ajx@mixmail.com

Hi I�aki,

Here is a Dutch Quad manufacturar.

http://www.gbanttow.nl/index.html

Goodluck!
'73, Adam

2099. Quement SWB-3 swr/power meter query??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 20:44:16 UTC
From: carkenord@juno.com
Message-ID: <954kmuepq1@nnrp1.deja.com>
Source record: 171275

I have this neat little swr/power meter......it appears sturdy and very well made.

Made by Quement, model number is SWB-3.

It appears to function.....yet for the life of me, I cannot figure out how to use it.

Is there anyone out there who has this exact device, that can tell me how to use it?

Lee Carkenord

Sent via Deja.com
http://www.deja.com/

2100. Re: Bilal Isotron experiences ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 20:48:32 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <AGkd6.131433$ge4.47945015@news2.rdc2.tx.home.com>
Source record: 171274

Thanks for your input, Doc. The reason for my question is that I'm looking for antenna ideas for my RV (Indeed, I posted a question on here some weeks ago).

I have a 1/4 wave groundplane that I use at home and am very satisfied with it. In fact, just for fun I cranked down my power to 3 watts on my IC756 this weekend to see how I might do. Much to MY amazement (although not the dedicated QRP fans I'm sure) I had three very nice QSO's each about 1000 miles from here. But, admittedly, it's base is up at about 27 feet and has five 1/4 wave radials. I can't get the height or the radials on my camper. Nor do I want something sticking up 16 feet or so.

My original thought was that I'd put up whatever antenna I had when I made camp and take it down for travel. But the 20m Isotron seems so small and simple I might just be able to leave it up.

As for the rig, I'm thinking of getting the new FT-817 to carry in my pack as well as use in the RV. Of course, on the trail I'll most likely use a dipole hung between branches.

Pete, KATZK

2101. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 20:52:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A75D810.FED7561@IEEE.org>
Source record: 171277

n2ey@aol.com wrote:
> How? There is no such thing as "SSB FSK".

My SCS PTC2e generates tones which are modulated with the transceiver
in the SSB mode for sending FSK, PSK, and CW.
--
http://www.mindspring.com/~w6rca

2102. Re: attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 20:59:02 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <qQkd6.131463$ge4.47950564@news2.rdc2.tx.home.com>
Source record: 171276

Before you go too far with it, you might try a wire Yagi. I made such an antenna for 10m some time ago by just stapling the wire elements to the trusses in my attic. Obviously I can't rotate it, but it might give you an idea of how one will work. Mine works fine, BUT it does seem to pick up a lot more noise than my other (outside) antennas -- from the house wiring, I assume.

Pete, KA�TZK

2103. Re: Do I need grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 21:14:08 UTC
From: JRW <johnrwells@hotmail.com>
Message-ID: <C5ld6.4063$jn6.61812@news2-hme0>
Source record: 171278

Thanks Bill.

John
"Bill, W7TI" <w7ti@jps.net> wrote in message
news:eg1s6tgfmf12odrq0tsh7hls26akofe3ft@4ax.com...
> On Tue, 23 Jan 2001 21:55:35 -0000, "JRW" <johnrwells@hotmail.com> wrote:
>
> >I've just got my txer and other things for my station. I read that the
tx
> >and atu need grounding. Is it alright to use the water pipes (assuming
> >they're metal all the way to ground)?
>
> ____
>
> For the purpose of preventing electrical shock, a grounded AC outlet is
all that
> is necessary. Just be sure there is continuity all the way from the
cabinet of
> your rig and atu to the round plug on the AC cord.
>
> For purposes of transmitting, the only ground, if any, should be at the
antenna,
> not at the rig. Trying to create an antenna ground in the shack will
usually
> cause the shack to be full of RF when you transmit (surprise!).
>
> If you have a specific question, please ask.
>
> Bill, W7TI

2104. GAP Super "C"???????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 21:34:42 UTC
From: Timmins <n3ddy@yahoo.com>
Message-ID: <gmld6.6271$Uo2.20679@newsfeed.slurp.net>
Source record: 171279

On the GAP antennas website, www.gapantenna.com/superc.htm there is a experimental antenna called the GAP Super C, that looks for all the world like a bunch of chain link fence, assembled into an Interesting looking creation. HAs anyone else seen that? Could anyone offer a guess as to what bands it would cover???

Bill, N3DDY

2105. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 21:52:35 UTC
From: n2ey@aol.com
Message-ID: <954omvisq1@nnrp1.deja.com>
Source record: 171280

In article <3A75B916.74582172@3n.net>,
Old Biker <enfield@3n.net> wrote:
> N2EY wrote:
> >
> > ....the Morse/Baudot/ASCII discussion isn't about code
> > tests at all. It's about the characteristics of various modes ...
>
> Then I apologize for butting in; the subject line implies the
> opposite.
> sorry
> KA3DWW
>
No problem! Nothing to apologize for, really. I hope I didn't sound
like I was criticizing the subject change.

My point was just that the whole code-test thing has become a moot
point since the restructuring.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2106. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 21:54:24 UTC
From: n2ey@aol.com
Message-ID: <954oqcius1@nnrp1.deja.com>
Source record: 171281

In article <3a77c3e5.1130792022@news.seanet.com>,
rwclark@seanet.com (Richard Clark) wrote:
> On 27 Jan 2001 23:33:08 GMT, n2ey@aol.com (N2EY) wrote:
>
> >>Few know the genesis of SS and its antecedents being designed using
> >>player piano rolls to encode the frequency sequencers.
> >
> >Did you ever meet the famous inventor?
> >
>
> Hi Jim,
>
> Heddy Lamar?

Exactly!

> Unfortunately not. :-(That would've been a blast back
> when she did movies in Austria :-)

Would have been ecstatic, huh? ;-)

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2107. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 21:59:28 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <kHld6.33$2Y.16757@nntp2.onemain.com>
Source record: 171282
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.antenna

"Ed Juge/NM" <ed_juge@zianet.com> wrote in message
news:3a75d123.0@oracle.zianet.com...
> I agree with Ed. This isn't the ng for code discussions.
>
> Ed, W5EJ
>

Just which of the four groups you posted to is the inappropriate one?

Dick N&#65533;BK

2108. Re: 5/8-wave broadcast band fm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 22:04:46 UTC
From: dornbos@my-deja.com
Message-ID: <954pdnjhb1@nnrp1.deja.com>
Source record: 171283

I looked at this later in the day and realized that I had never
mentioned that I intend to use this for receiving ONLY. I know it
doesn't change the theory but I just wanted to reasure everyone that I'm
not intending to broadcast on the commercial broadcast band.
Doug
In article <20010129100632.28583.00000666@ng-co1.aol.com>,
dornbos@aol.combatspam (Dornbos) wrote:
> Hi gang
> has anyone ever made a 5/8-wave broadcast band fm antenna (88-108 Mhz)
for
> mobile use? It seems like it would be advantageous even though the
frequency
> spectrum is quite wide (20Mhz on roughly a 100Mhz center). Any
thoughts on this
> would be appreciated such as:
> would you be better off designing the 5/8 for the middle, hi-end or
lo-end of
> the band? ....how could the impedence matching be accomplished? ....
at what
> angle should the maximum pickup be?
> thanks
> Doug
> To e-mail me, remove the batspam from my e-mail address.
> Can't find that rare record, cd, or tape? Try http://dornbos.gemm.com
>
>

--
to reply to this message, remove the batspam and reply to
dornbos@aol.combatspam

Sent via Deja.com
http://www.deja.com/

2109. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 22:16:25 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.g7xu9w1.pminews@ca.news.verio.net>
Source record: 171284
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Sun, 28 Jan 2001 18:26:35 -0700, Ed Juge/NM wrote:

>I agree with Ed. This isn't the ng for code discussions.

Depends on where "this" is. I'm reading it and posting this
reply in rec.radio.amateur.policy which IS "the place".

It's too bad that the message headers don't indicate which
group the message being replied to was read from.

(This will be my last crosspost to the other groups about CW,
though.)

--
73 de Phil Kane - K2ASP

2110. Re: Best antenna software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-29 23:00:45 UTC
From: k6mhe@arrl.net
Message-ID: <3a75f4db.1361028@news.mcn.org>
Source record: 171285

I use both EZNEC and NEC-Win Plus+. Both use the NEC2 engine. On identical antennas I have found them to be in very close agreement - usually varying no more one hundredth of a dB or so...

If you are getting a wide variance I suspect your trouble may be elsewhere.

NEC4WIN uses the MININEC engine and can give different results compared to EZNEC or NEC-Win Plus+

Danny, K6MHE

On Mon, 29 Jan 2001 15:41:07 GMT, cajo1@my-deja.com wrote:

>
>
>
> Have tryed the demos for EZNEC 3.0 ;NEC-WIN plus+ and NEC4WIN95.
>
> My modelling gives different results.Do they use differnt algoritms?
>
> What to use some,other programs? Or i have to find out the
>
> limitations for eatch program?
>
> Regards from CAY in SWEDEN.
>
>
>Sent via Deja.com
>http://www.deja.com/

2111. Re: Best antenna software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 00:29:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A760AE7.15C41D59@eznec.com>
Source record: 171288

Sorry, the original message didn't get through. Let me elaborate a little on what Danny said.

I've occasionally had reports of different answers from two different NEC-2 based programs or two different MININEC based programs. In virtually every case, the difference occurs in a situation where a very small change in the antenna can cause a very large change in results. A common case is in looking at the impedance of an antenna near antiresonance (like a full wavelength dipole or half wavelength monopole). A very small difference in source placement can cause a pretty radical change in reported impedance for these antennas. Some programs do automatic segmentation, resulting in small differences in source placement from one program to another unless the segmentation is manually forced to be identical. This is enough to cause noticeable differences in results in some antennas. Even small differences in the order of calculation, the precision of internal variables, and so forth can show up under these circumstances. But for the vast majority of antennas, programs with the same calculating engine will, as Danny says, produce virtually identical results.

MININEC and NEC-2 results can differ quite a bit because of fundamental differences in the calculating engines. MININEC, for example, assumes that the ground is perfect when doing impedance and current calculations. (EZNEC can be made to do this also by specifying the MININEC-type ground model, but it can also be prevented from making this substitution.) This causes MININEC to give increasingly wrong answers as a horizontal antenna is made lower and lower over ground. MININEC also can give pretty dramatically wrong answers for close spaced parallel wires, and significantly wrong patterns for quads and other antennas with parasitic elements containing wires connected at an angle. MININEC also has a known "frequency offset" problem where long Yagis will show the correct pattern at a frequency a bit offset from the frequency where the pattern actually occurs. On the other hand, NEC-2 doesn't do well with small loops, creates a small error when wires of different diameter connect (which can cause significant pattern errors if in a parasitic element), and is very sensitive to source placement and to segmentation of close spaced wires. So while you can expect NEC-2 programs to agree with each other and MININEC programs to agree with each other (except sometimes when very small changes in the antenna make very large changes in results), NEC-2 and MININEC can more easily disagree with each other. As Danny said, NEC4WIN would be the odd man out in comparing the three programs mentioned in the original posting.

None of these programs is perfect, and each has significant limitations and peculiarities. Successful modeling depends on knowing what these

are. You can find more information about NEC-2 limitations in the EZNEC manual (which is also included with the demo version) and in the excellent series by L.B. Cebik, W4RNL presently running in QST. MININEC's limitations are described in "MININEC - The Other Edge of The Sword" in February 1991 QST.

Roy Lewallen, W7EL

Dan Richardson wrote:
>
> I use both EZNEC and NEC-Win Plus+. Both use the NEC2 engine. On
> identical antennas I have found them to be in very close agreement -
> usually varying no more one hundredth of a dB or so...
>
> If you are getting a wide variance I suspect your trouble may be
> elsewhere.
>
> NEC4WIN uses the MININEC engine and can give different results
> compared to EZNEC or NEC-Win Plus+
>
> Danny, K6MHE
>
> On Mon, 29 Jan 2001 15:41:07 GMT, cajo1@my-deja.com wrote:
>
> >
> >
> >
> > Have tryed the demos for EZNEC 3.0 ;NEC-WIN plus+ and NEC4WIN95.
> >
> > My modelling gives different results.Do they use differnt algoritms?
> >
> > What to use some,other programs? Or i have to find out the
> >
> > limitations for eatch program?
> >
> > Regards from CAY in SWEDEN.
> >
> >
> >Sent via Deja.com
> >http://www.deja.com/

2112. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 00:30:55 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <nm2c7tgamcvfgc5g70sj6ut67iqvgpuvr3@4ax.com>
Source record: 171286

On Mon, 29 Jan 2001 17:28:24 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:

>In HF communications, the significant source of noise is skywave or
>atmospheric noise.

This is too broad a statement. Ask anyone who lives in an urban/industrial area what his most significant source of noise is. For him, verticals ARE "noisier".

73, Bill W7TI

2113. FYI: New Ham Radio History On Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 00:32:52 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A760BB3.14453BC1@ix.netcom.com>
Source record: 171287

At URL:
http://ac6v.com/history.htm
Includes some history on antenna development as well.
Comments and contributions welcome

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

2114. Building a Windom or OCFD info please...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 01:40:13 UTC
From: Mike <KA1DRZQRM@worldnet.att.net>
Message-ID: <1Yod6.17364$cN.933097@bgtnsc07-news.ops.worldnet.att.net>
Source record: 171289

I am considering building a Windom or an Off Center Fed Dipole. I am looking to see if anybody has any practical experience with these or can reccomend a source of information. I hare read the Windom/OCFD articles in the current edition of the ARRL Antenna Book and the OCFD section in ARRL's More Wire Antenna Classics-Vol2. I am planning on cutting it for the 160 meter band primarily for use there and on 75 phone. I should be able to hang the feed point height of 40 to 45' or so, and maintain a decent flat top configuration with reasonable sag.

I am interested on advice on feeding the OFCD. It appears many feed it with coax through a 4:1 Balun which provides a better match- sometimes a 1:1 swr point, but a 6:1 (sometimes used on commercial models) give a wider bandwidth but not always a 1:1 spot. Another version the appears circa 1950's is to feed it with twin-lead through a 4:1 balun. Could feeding it with a specific length of twin lead or window/ladder enhance vertical radiation?- Similar to how the Radiator section of coax on the Carolina Windom radiates vertically.

I saw a design in the first volume of ARRL Wire Antenna Classics where the builder fed a 40 meter OCFD with ladder line in odd multiple of 1/4 wave (allowing for velocity factor) to get it to load on the odd harmonic of 15 meters as well as the normal (for windom-like arrays) even harmonics. He simply had to change from the 4:1 balun to a 1:1 balun to use it on 15 meters. I am not looking to pick up even harmonic bands, but would be interested if the addition of a resonant length of window/ladder line could enhane vertical radiation on 160 or 75 (or any other band as a bonus).

Any advice, instructions, or suggestions appreciated. Please post here or Email direct. Remove the QRM from my address to email directly.

73,
Mike
KA1DRZ

2115. Re: 5/8-wave broadcast band fm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 01:59:15 UTC
From: richardharrison@webtv.net
Message-ID: <18719-3A761FF3-66@storefull-111.iap.bryant.webtv.net>
Source record: 171290

Dornbos wrote:
"Has anyone ever made a 5/9wave broadcast band fm antenna (88-108 MHz)
for mobile use?"

Millions have been made and used. They were primarialy made for AM reception but used for FM as well. Telescopic car antennas were the norm until a couple of decades or so ago. In those times, happiness was a 100-incher, often called a "long-ranger".

At 100 MHz, the wavelength is 3 meters. A 1/4-wave whip is 75 cm or 29.5 inches (with no reduction for end effects). 5/8-wave is 74 inches. 1/2-wave is 59 inches. So, with plenty of long rangers manufactured which extended to 100 inches and collapsed to a small fraction of that, there has been no shortage of possible ready-made 5/8-wave antennas for FM reception.

You could also trim a 102-inch CB whip to 74 inches for a 5/8-wave FM whip. If you wanted to suppress the secondary lobes that start to appear at 5/8-wave, you could further trim the whip by an additional 3 or 4 inches to compensate for the end effect.

Best regards, Richard Harrison, KB5WZI

2116. Re: GAP Super "C"???????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 02:26:12 UTC
From: kk7ho@aol.communicate
Message-ID: <20010129212612.06380.00002028@ng-cl1.aol.com>
Source record: 171291

It looks like an animal cage...????

2117. Re: GAP Super "C"???????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 02:41:49 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A7629ED.F0990447@hiwaay.net>
Source record: 171292

This has been on there for a long time. It is apparently the GAP version
of the CFA. I see there is a patent number associated with it. However,
everyone knows that a patent number only means you spent lots of bucks,
and says nothing about how it works.
Since this has been on there a long time, but GAP has made no noises
about it yet, I really wonder if they remember it is there. I wonder
what a query about it would get?

Bill-W4BSG

Timmins wrote:
>
> On the GAP antennas website, www.gapantenna.com/superc.htm there is a
> experimental antenna called the GAP Super C, that looks for all the world
> like a bunch of chain link fence, assembled into an Interesting looking
> creation. HAs anyone else seen that? Could anyone offer a guess as to what
> bands it would cover???
>
> Bill, N3DDY

2118. Any thought/comments on the CCD (Constant Current Distribution) dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:01:32 UTC
From: kk7ho@aol.communicate
Message-ID: <20010129220132.06380.00002035@ng-cl1.aol.com>
Source record: 171293

Thinking about putting one up. Anyone have any experience, comments, maybe warnings about this antenna?? Thanks, Tim.....KK7HO

2119. Re: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:04:57 UTC
From: kk7ho@aol.communicate
Message-ID: <20010129220457.06380.00002037@ng-cl1.aol.com>
Source record: 171294

http://www.amidoncorp.com

http://www.micrometals.com/

>Harry Harms wrote:
>>
>> Group,
>>
>> To wind my own balun for exclusive use on 10m, should I use iron powder or
>> ferrite cores?
>>
>> I intend to use full legal power for Australia, 400 watts, so need a decent
>> sized core.. 2 1/2 inches minimum.
>>
>> Any help on what types of materials etc??
>>
>> John Mclean
>> VK2KCE
>
>Harry (or John),
> Use ferrite. I don't remember the mixture properties, but
>Amidon would be happy to send you a catalogue (or maybe it's on
>their webb site?).
> 'Doc
>
>
>
>
>
>

2120. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:16:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <955bmj$3ga$0@208.207.71.178>
Source record: 171295

"David G. Nagel" wrote:
>
> I guess the lesson to be taken from this message is not to be around
> highway truck scales during a thunder storm.
>

Good plan. This one happened to be built on the highest spot in the
county, and was a virtual lightning magnet. I was the guy they called to
clean up after the strike had fried the radios and speech amps.
Dick

2121. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:33:00 UTC
From: ccom2@socket.net
Message-ID: <3a763592.17415904@news.socket.net>
Source record: 171296

Take this no code kills somewhere else.

IT DOE NOT BELONG HERE ! ! ! ! ! !

2122. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:40:23 UTC
From: n2ey@aol.com
Message-ID: <20010129224023.02009.00001357@nso-ma.aol.com>
Source record: 171298

In article <3a75ba97.1128410218@news.seanet.com>, rwclark@seanet.com (Richard Clark) writes:

>On Mon, 29 Jan 2001 17:33:18 GMT, n2ey@aol.com wrote:
>
>>
>>How do you get those numbers? For FSK, the shift must be known. For
>>OOK, the keying waveform must be known.
>>
>>> SSB could be used to shrink this bandwidth.
>>
>>How? There is no such thing as "SSB FSK".
>>
>
>Hi Jim,
>
>Beg to differ, OM (both of you). FSK is sideband.

Hello Richard,

No, FSK is a form of FM, which is a form of "angle" modulation. As on-off keying (OOK) is to AM, FSK is to FM. More below.

> Receive tuning is
>offset to the center of the shift, but the principle modulation is
>something like +1.7 Khz +/- some frequency around that (I think I saw
>the figure 400 Hz?). It's been a long time since I've taught RTTY
>fundamentals. Most receivers of that era (early 70's) introduce the
>offset to the tuned frequency just like the offset for CW. This is
>simply to fit the off-center sidebands into the IF filter range.
>
>If I recall correctly, you can send FSK on either side of the
>suppressed carrier. I was teaching the operation and troubleshooting
>of the Collins AN/URC-32 and the choice of wrong sideband could lead
>to some interesting TTY operation with what appeared to be good signal
>levels and waveform shapes (I think the converter was an URC-17c, at
>least that is the nomenclature that comes to mind through that fog of
>the distant past). This of course was a troubleshooting problem for
>the Lab portion of instruction. The student was expected to note the
>polarity of the signal during the Mark condition.

Sorry if I wasn't clear in my previous post - I let brevity supersede clarity. I'll have another go:

Frequency shift keying is just that - the frequency of the transmitted wave is shifted by the keying signal. ASCII, Baudot, Morse, and lots of other codes can

be sent by FSK. The simplest way to generate it is to build a continuous wave transmitter (one that puts out a carrier of constant amplitude) and shift the frequency of one of the oscillators in the transmitter.

But that's not the only way to generate an FSK signal. An SSB voice transmitter has the property that if you put a single constant-amplitude sine-wave audio tone into its audio input, the RF output is a single sine-wave RF carrier. If you shift the frequency of the single constant-amplitude sine-wave audio tone going into the transmitter, the RF output will shift in frequency only. So another way of generating an FSK RF signal is to generate an FSK audio signal and feed it into an SSB transmitter. At the receive end, the same principle can be used - the SSB receiver will convert the FSK RF to FSK audio.

If the SSB transmitter has sufficient unwanted-sideband and carrier rejection, the FSK signal so generated will be indistinguishable from one generated by a "true" FSK transmitter. The bandwidths, sidebands, and waveshapes will be exactly the same.

But Mr. Harrison claimed:

"SSB could be used to shrink this bandwidth."

That's simply not true. An FSK signal of a given bit rate and shift will have the same minimum required bandwidth regardless of how it is generated.

If one takes an FSK audio signal and feeds it into an AM transmitter, the result will be TWO FSK signals, one with inverted mark-space relationships, plus a carrier. The bandwidth required will be much greater, of course. The figure of 170 Hz for 100 wpm ASCII is for a single FSK signal, not a pair of them plus carrier.

My point was that there is no magic way to make an FSK signal narrower than the bandwidth required by the shift and bit rate.

Here are two formulas for bandwidth. These are the bandwidths necessary to send the signal without distortion. "bauds" in the following discussion is the number of code elements (mark or space) per second.

--

OOK (on off telegraphy): Bandwidth = bauds x keyshape factor

(keyshape factor is determined by the rise and fall times, and is typically 3 to 5. 3 is "soft" keying and 5 is "hard" keying.)

For Morse, speed in bauds = wpm/1.2

Example: 60 wpm OOK Morse (50 bauds) with keying softness of 3 has a necessary bandwidth of 150 Hz.

--
FSK (frequency shift telegraphy): Bandwidth = bauds + (shift x keying factor)

The keying factor is typically 1.2 for ASCII or Baudot

Example: 60 wpm FSK Baudot (45.45 bauds) with 170 Hz shift has a necessary bandwidth of 249.45 Hz (250 Hz)

--

Source: 1988 ARRL Handbook, Chapter 9. Checked against Reference Data for Radio Engineers.

You can make FSK many different ways, but you cannot make it narrower than the above formula predicts for a given shift and bauds.

73 de Jim, N2EY

2123. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:40:24 UTC
From: n2ey@aol.com
Message-ID: <20010129224024.02009.00001358@nso-ma.aol.com>
Source record: 171297

In article <3A75B66E.486B529C@3n.net>, Old Biker <enfield@3n.net> writes:

>Dean Craft wrote:
>>
>> And then you have the lazy SOBs who want the government to give them
>> everything! They have no concept of earning or justifying anything that
>> they want!
>
>But Dean, there is nothing to "earn". The spectrum is already
>ours (ie, public property) so the government isn't *giving*
>anybody anything they don't already own.

The trouble is that the amount of the spectrum each of us can claim to "own" is extremely small. What is "earned" by getting the license is private access to public property. It's like getting a permit to have a party in the park. The park belongs to everybody, but everybody can't use it at once.

>We must all accept
>restrictions, for safety and to maximize use of this public
>property, just a we accept restrictions on which lane to drive
>in but there is no reason to "earn" what we already own. We
>accept driving tests to prove we can operate a car on public
>roads with reasonable safety, not to "earn" the right to drive.

The purpose of the tests for a driver's license are to show that one is qualified to use the public property (the roads).

>So I ask again, how can one justify requiring the people who own
>the spectrum to learn an archaic mode of communication (Morse)
>in order to use an entirely different mode (Voice).

Voice is older and therefore more "archaic" than Morse! ;-)

The main reason, acording to the FCC, is "We signed the treaty, and the treaty requires it". There are lots of other reasons, but that's the only one the FCC cares about any more.

>It might be
>reasonable to argue that some parts of the spectrum should be
>set aside for Morse on the basis of the numbers of people who'd
>benefit, and to require proficiency before using those bands,
>but the current and previous schemes are indefensable.

I and many others had to learn all sorts of stuff about modes and bands we've never used just to get access to HF bands where we could operate Morse. Why?

How about this: We should move away from the current structure of licensing in which more knowledge and skill gets you more spectrum, but not more modes or power (in general). For example, under the current scheme, a General class ham can use 3526 kHz but not 3524 kHz. How is the latter frequency substantially different than the former? It's in the Extra subband, that's all.

We should move TO a system of licenses-by-mode. Divide the bands up into subbands based on the mode used, and require testing of knowledge and skill in those areas. Morse, digital, analog phone/image would be the three most logical divisions. Each would have its own written and skills tests, along with a common "core" test on things everybody needs to know (safety and some of the regs).

Only problem is that the FCC wants simplicity.

73 de Jim, N2EY

2124. Re: Morse Code replacement? Bigtime flame war article!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 03:57:53 UTC
From: Ed Cregger <ecregger@earthlink.net>
Message-ID: <5Zqd6.400$kP3.52271@newsread2.prod.itd.earthlink.net>
Source record: 171299

Crossposting should be made impossible. There is absolutely
no reason why anyone needs to post the same message to more
than one newsgroup at a time. It appears that the
founders/designers of the internet really goofed on this
one.

Naturally, I'm reading the antennas newsgroup. I have better
things to do with my time and limited vision than to be
concerned about some bozo abusing the internet by loading
the address field with multiple addresses.

This is my last post on the topic.
--
Ed Cregger
ecregger@earthlink.net

"Phil Kane" <Phil.Kane@nospam.spam> wrote in message
news:cuvyxnansvbet.g7xu9w1.pminews@ca.news.verio.net...
> On Sun, 28 Jan 2001 18:26:35 -0700, Ed Juge/NM wrote:
>
> >I agree with Ed. This isn't the ng for code discussions.
>
> Depends on where "this" is. I'm reading it and posting
this
> reply in rec.radio.amateur.policy which IS "the place".
>
> It's too bad that the message headers don't indicate
which
> group the message being replied to was read from.
>
> (This will be my last crosspost to the other groups
about CW,
> though.)
>
> --
> 73 de Phil Kane - K2ASP
>
>
>
>
>

2125. Which 2 meter vertical for a fixed station?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 04:04:15 UTC
From: "Scott M. Whiddon" <scotwhid@twave.net>
Message-ID: <33rd6.58383$Df2.4725709@news3.aus1.giganews.com>
Source record: 171300

I've been pouring over ham catalogs and am impressed by the myriad of 2 meter fixed station verticals on the market. The Cushcraft, Hustler, and Diamond products seem to be mentioned frequently. Is one of these clearly a superior product? Is there another that you would recommend over these? (Specific model?) Is there one you would avoid?
All comments are appreciated!

73's

2126. Re: Help? 80/40 dipole??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 04:23:04 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <955fj8rsv3@bashir.peak.org>
Source record: 171302

Stephen Dobak <shdobak@earthlink.net> wrote:

: What exactly are you referring to as "common mode" and why is it necessary
: to use a balun??
: There is absolutely no need to use a balun at HF unless you are concerned
: about upsetting a directional pattern
: and of HF few antennas would be directional enough to care.

There are two ways that you can get currents on the outside of the coax,
even when feeding a balanced load. The first is leakage of current from
the inside of the coax shield to the outside. The second is coupling of
rf radiated by the antenna to the coax shield.

If you have rf currents on the outside of the coax, then the coax is
acting as part of the antenna system. This may, or may not, be desired.

--
Bill Nelson (billn@peak.org)

2127. Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 04:34:41 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <sprd6.112$2Y.112922@nntp2.onemain.com>
Source record: 171301

I spend many hours as a young teenager drooling on equiment
there.....are they still in Business?

Pat

WB7FFI

2128. Re: Ground radials and an end fed antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 04:36:37 UTC
From: richardharrison@webtv.net
Message-ID: <25473-3A7644D5-49@storefull-112.iap.bryant.webtv.net>
Source record: 171303

Dick Carroll wrote:
"This happened to be built on the highest spot in the county, and was a
virtual lightning magnet."

Yes, just like all my microwave stations!

Best regards, Richard Harrison, KB5WZI

2129. Re: Which 2 meter vertical for a fixed station?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 04:48:26 UTC
From: k6mhe@arrl.net
Message-ID: <3a764755.22478311@news.mcn.org>
Source record: 171305

While you're at it check out Austin...

No BS in their specs can't say that for the others

Danny

On Tue, 30 Jan 2001 04:04:15 GMT, "Scott M. Whiddon"
<scotwhid@twave.net> wrote:

>I've been pouring over ham catalogs and am impressed by the myriad of 2
>meter fixed station verticals on the market. The Cushcraft, Hustler, and
>Diamond products seem to be mentioned frequently. Is one of these clearly a
>superior product? Is there another that you would recommend over these?
>(Specific model?) Is there one you would avoid?
>All comments are appreciated!
>
>73's
>
>
>
>
>

2130. Re: Any thought/comments on the CCD (Constant Current Distribution) dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 05:09:07 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A764C73.6E1807B@oio.net>
Source record: 171304

Tim,
The CCD antenna is a good performer. It does have it's
'draw-backs'
though. It is long (full wave length), it's not the cheapest antenna
with all the mica capacitors needed, and it takes a fairly long time
to
build. It also needs a tuner to operate correctly. You will need as
many insulators as you have capacitors. Depending on the insulators,
dragging it over a tree limb may not be the easiest thing to do.
All that being said, I think it's a great antenna. If you make one
for the lowest band you use, it can be used on any band higher than
that,
and it works well. The 'shape' of the CCD antenna isn't too critical
at all. As long as you don't double it back on it's self, you can
zig-
zag it all over the place. It isn't height sensitive either. Of
course
it works better the higher you get it, but it will also work laying on
the
ground. It isn't an antenna you 'throw' up in a single afternoon, but
I
think it's well worth the trouble.
'Doc

2131. Re: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 05:32:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A765208.C7CFCB9B@IEEE.org>
Source record: 171307

Harry Harms wrote:
>
> Group,
>
> To wind my own balun for exclusive use on 10m, should I use iron powder or
> ferrite cores?
>
> I intend to use full legal power for Australia, 400 watts, so need a decent
> sized core.. 2 1/2 inches minimum.
>
> Any help on what types of materials etc??

Iron Powder Material #6 (yellow) would be good for 10m. T225-6
Ferrite Material #67 would be good for 10m. FT240-67
--
http://www.mindspring.com/~w6rca

2132. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 05:42:36 UTC
From: k3ky@erols.spamnocom
Message-ID: <955k8cmoq1@bob.news.rcn.net>
Source record: 171306

Who said anything about shooting straight up? Furthermore, what person who happens to be a good enough shot to get the job done would stand directly below a big branch and shoot it off? Hmmm, perhaps, on second thought, if they were that careless to use the gun method they might also be stupid enough to stand under the branch.
I would not pretend to be at all expert about firearms, but I do know enough about them to have a healthy respect. Much depends on the specific firearm, the type and caliber of the ammo, and the amount of powder that propels it. If fired parallel to the earth's surface, the round will soon strike the ground (at a pretty high velocity). It would first travel many hundreds of yards. If the barrel is even slightly elevated, that round may travel for many miles before that happens. In fact, I believe it goes the farthest when fired at about 45 degrees. When it gets back near ground level it may have little more force than a tossed pebble (but not likely in most cases); it would likely have enough unspent velocity that it would easily kill humans and animals. I'm glad that you would not, personally, consider doing this. That's potentially one less sad story we'll see on the 6 o'clock news. So you physicists and ballistics experts out there check me on the minor details, but as far as I know, a bullet fired up in the air at an angle is extremely dangerous to others, and in other than a wartime scenario, anyone who would do that is either irresponsible or an idiot or both.
Just my 2 cents worth- YMMV (har)

In article <94qcch$fb8$1@iac5.navix.net>
"W4JLE" <Fred@w4jle.com> wrote:

> Nonsense! A number of studies have been done firing weapons straight up and
> no such lethality was found.
>
> Would I do it? Nope! But not for the reasons you sited. A study was done by
> the Army a number of years ago, where they fired weapons up into the air
> from protected bunkers and had placed sheep all around the area to determine
> the damage. With in a few minutes the folks firing the weapons were letting
> the falling bullets bounce off their helmets and a few caught them in their
> hands.
>
>
>
> "David Sinclair" <k3ky@erols.spamnocom> wrote in message
> news:94qakf$k1b$1@bob.news.rcn.net...
>> Thanks for the best laugh of the week, Andrew. Had me rolling on the
>> floor, pretty much. Seriously, though, that is dangerous as heck, and I
>> think you really know that. Any good shooter, who could hit that limb,
>> wouldn't take the shot, because a miss could definitely kill someone.
>
>

2133. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 05:43:11 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A76546F.F93ECEEB@IEEE.org>
Source record: 171308

N2EY wrote:
>
> >On Mon, 29 Jan 2001 17:33:18 GMT, n2ey@aol.com wrote:
> >>There is no such thing as "SSB FSK".

> So another way of generating an FSK RF signal is to generate an FSK audio signal
> and feed it into an SSB transmitter.

Seems you have just described "SSB FSK". :-)
--
http://www.mindspring.com/~w6rca

2134. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 06:01:40 UTC
From: richardharrison@webtv.net
Message-ID: <15223-3A7658C4-54@storefull-114.iap.bryant.webtv.net>
Source record: 171309

Jim, N2EY wrote:
"An FSK signal of a given bit rate and shift will have the same minimum required bandwidth regardless of how it is generated."

Both AM and FM generate pairs of sidebands of equal amplitude and displacement around a central carrier frequency. Thus the sidebands on one side of the carrier frequency are redundant. They can be regenerated from our knowledge of the construction of the original signal which produces the single sideband, if such a reconstruction were necessary. Elimination of one of the spectra of sidebands before transmission reduces the bandwidth transmitted.

SSB may not be involved in any or all of today`s incredible modems. I haven`t checked into the tricks used for many years. The last time I looked, more and more amplitude levels were being encoded to shrink the transmitted bandwidth. But, already, modems were way beyond the bit speeds predicted as maxima by the classical theories. In many modems all maner of modulations were being combined to advance bit rates.

I meant to say that the electrical smoke signal had been vastly improved upon.

Best regards, Richard Harrison, KB5WZI

2135. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 06:14:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A765BC3.7701FC@IEEE.org>
Source record: 171310

Richard Harrison wrote:
> I meant to say that the electrical smoke signal had been vastly improved
> upon.

Real Hamsï¿½ use 16-DPSK. :-)
--
http://www.mindspring.com/~w6rca

2136. Wanted info on sony AN-Lp1

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 07:26:55 UTC
From: mwin11 <mwin11@hotmail.com>
Message-ID: <31ud6.45571$lh.2793532@typhoon.mn.mediaone.net>
Source record: 171311
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Does any one have this antenna made by sony the AN-lp1?
If you do have one what do you think of it? is it werth the $90
Thanks e-mail me at
mwin11@hotmail.com

2137. IC-910

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 08:36:16 UTC
From: kb9qng@itol.com
Message-ID: <3A767D00.C0CBF406@itol.com>
Source record: 171273

Has anybody got the IC-910 yet if so what do you think of it?????

John

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

2138. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 08:46:01 UTC
From: vk4laj@my-deja.com
Message-ID: <955v08iof1@nnrp1.deja.com>
Source record: 171313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

No but close.

But I guess if I used an electric motor to drive the differential it could be feasible.... but wouldn't the twisting moment on the shaft going up the tower be horendous (about 11m)?

Adam VK4LAJ

In article <i_6d6.4$aD6.759@wa.nnrp.telstra.net>,
"Murray Lang" <muzzle@iexpress.net.au> wrote:
> I remember my Grandfather (who's callsign I now have) using a car
> differential near the base of his tower, with a shaft coming through the
> shack window attached to a truck's steering wheel. Direction was indicated
> by a dial on the wall next to the window driven via a pulley on the steering
> shaft. This impressed me greatly as a young child though I guess it's
> probably not what you had in mind (c:
>
> Regards
> Murray - VK6HL
>
> VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com> wrote in message
> news:3a74bfa3@grissom...
> > Hi all and thanks for reading my post
> >
> > I have been out of AR for 14 months (due to an accident not loss of
> > interest) and am now looking to get back into it.
> >
> > I am looking at building a lot of my own gear this time around and one
> > project is an antenna rotator. Although I have searched high and low on
> the
> > internet, I can not find anyone that has built a rotator system from
> > scratch. I have found a direction indicator but that's all.
> >
> > Has anyone built or know of an article that describes building an antenna
> > rotator? If so could you please point me in the right direction or send me
> a
> > scanned article, but please email me direct after you have removed

the
> > SPAMJAM.
> >
> > --
> > Don't forget to remove the SPAM.JAM
> >
> > 73
> > Adam VK4LAJ
> > E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
> > WWW: - http://www.loaded-dog.com
> > Brisbane Australia
> > CQ Zone 29/ 30
> > Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
> > Maiden Head: - QG62mi
> > Height ASL: - 52m
> >
> > My wife says I never listen to her...
> > at least that's what I think she said?
> >
> >
>
>

Sent via Deja.com
http://www.deja.com/

2139. Re: Wanted info on sony AN-Lp1

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 08:47:09 UTC
From: katekebo <katekebo@yahoo.com>
Message-ID: <3A767F8D.11BCF920@yahoo.com>
Source record: 171312
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

I don't have one, but have a look here
http://www.rnw.nl/realradio/lp1.html
Also Passport to Worldband Radio speaks well of this antenna.

mwin11 wrote:

> Does any one have this antenna made by sony the AN-lp1?
> If you do have one what do you think of it? is it werth the $90
> Thanks e-mail me at
> mwin11@hotmail.com

2140. Re: Quement SWB-3 swr/power meter query??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 10:38:54 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a7699be_2@news.cybertours.com>
Source record: 171314

HI
I have an SWB 2 don't know what the differences might be between the 2 & 3
but on the Swb 2 you just set the forward power on the left hand meter to
fullscale and read swr on the right hand meter it's quite simple.
hope this is of help.
73 Dave

<carkenord@juno.com> wrote in message news:954kmuepq1@nnrp1.deja.com...
> I have this neat little swr/power meter......it appears sturdy and very
> well made.
>
> Made by Quement, model number is SWB-3.
>
> It appears to function.....yet for the life of me, I cannot figure out
> how to use it.
>
> Is there anyone out there who has this exact device, that can tell me
> how to use it?
>
> Lee Carkenord
>
>
> Sent via Deja.com
> http://www.deja.com/

2141. Re: Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 11:38:42 UTC
From: ser@soapbox.tch.org
Message-ID: <956942$aa8$1@cartero.kjsl.com>
Source record: 171315

In article <sprd6.112$2Y.112922@nntp2.onemain.com>,
John P. Franklin <jpfrankl@teleport.com> wrote:
> I spend many hours as a young teenager drooling on equiment
>there.....are they still in Business?
>

Afraid not...

Frank I beleive was his name, and the store pretty much died with
him.

--
Steve Rubin <ser@tch.org> http://www.tch.org/~ser

2142. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 13:28:08 UTC
From: VE9SRB <srbest@worldnet.att.net>
Message-ID: <ljzd6.18188$cN.984473@bgtnsc07-news.ops.worldnet.att.net>
Source record: 171316

"Bill Turner" <w7ti@jps.net> wrote in message
news:nm2c7tgamcvfgc5g70sj6ut67iqvgpuvr3@4ax.com...
> On Mon, 29 Jan 2001 17:28:24 GMT, "VE9SRB" <srbest@worldnet.att.net>
wrote:
>
> >In HF communications, the significant source of noise is skywave or
> >atmospheric noise.
>
> ----------
>
> This is too broad a statement. Ask anyone who lives in an
urban/industrial area
> what his most significant source of noise is. For him, verticals ARE
"noisier".
>
> 73, Bill W7TI

Hi Bill:

You are correct, it is perhaps too broad a statement. I was referring to natural noise more so than man-made noise, which many times can be much more significant. The reason I chose not to reference man-made noise is that many times it can be a very localized problem, sometimes unique to an individual setup.

Thanks,

73,
Steve VE9SRB

2143. Re: Bilal Isotron experiences ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 13:32:58 UTC
From: yardleyite@aol.com
Message-ID: <20010130083258.28901.00000516@ng-ff1.aol.com>
Source record: 171317

Pete,
I've used the 80 meter version and was dissapointed with it. It would put out a descent signal but I could not hear with it that well. I was using 100 watts at the time. Maybe it was because I had the antenna mounted about 10 feet off the roof of my townhouse at the time. I eventually gave it to a friend of mine who owned a townhouse. He installed it in his attic and also runs 100 watts. he was very dissapointed with it's performance and took it down. If you're runnung QRP from a camper I'd think you would be better off with a "Hamstick". Besides, they're less expensive than the Isotron or Bilal antenna.
73 de Joe Cro N3IBX

2144. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 13:34:51 UTC
From: n2ey@aol.com
Message-ID: <20010130083451.14870.00001367@nso-fr.aol.com>
Source record: 171318

In article <3A706C68.691289AD@wgcr.org>, Lamar Owen <lamar.owen@wgcr.org>
writes:

>N2EY wrote:
>> In article <3A6F533D.9B230C15@wgcr.org>, Lamar Owen <lamar.owen@wgcr.org>
>> writes:
>
>> >> > When the great majority of radio services
>> >> > drop a mode, that is the defining characteristic of being outdated.
>> >> Nonsense. If that's true, then SSB, RTTY, AM and a host of other modes
>> >> are "outdated" too.
>> >They are still used.
>> Yep - ALL of them.
>
>CW is not used for anything other than an ID on the majority of radio
>services.

True - but we're not talking about other radio services, we're talking about
ham radio, where Morse is widely used

>Hey, that's a _good_ use of CW, though.

One of many good uses.
>
>> >But, you miss the point -- you're not tested on
>> >being able to _copy_ SSB, AM, or RTTY as you are with CW
>
>> Because no special skill is required to "copy" 'phone modes, there's no
>test.
>> "Copying" RTTY requires that you be able to read - that's tested by the
>written
>> exam. Can an illiterate person get a ham license? I don't think so.
>
>Automatic CW 'modems' are also available

They are encoder/decoder, not modems.

> -- you can then copy CW by
>simply reading.

The encoder/decoder is doing the "copying", in that case.

>It just remains to make them more reliable due to
>poorly sent code. But, then again, poorly sent ASCII or Baudot would be
>the same.

Not just "poorly sent" code, but noise and interference.
>
>> >(knowledge of
>> >how the mode works, of which we are tested for the others, and knowing
>> >how to copy the mode are two different things) -- you're tested on how
>> >the mode works.
>
>> AND on ability to "copy" it.
>
>No one is tested on how to recognize RTTY by ear, now are they?

Nope - because RTTY isn't done that way.

> Is
>difficult SSB copy presented (phase shifting and other ionospheric
>artifiacts can make copy difficult)? Nope.

The Morse presented in the tests is not distorted or otherwise hard to copy. The test is similar to requiring someone to bang out two bars of "Chopsticks" or "Heart and Soul" on a piano before they can call themselves a musician.

>In fact, someone who is deaf is able to get a license -- the capability
>of copying SSB is definitely not tested then. Whether they are able to
>transmit SSB (and, using computerized voice recognition software,
>perhaps, they can receive it) is not limited, even if they can't copy
>it.

True - and blind people can use legally use SSTV.

>> >CW is outdated.
>
>> Why do you say that? Have you ever actually LISTENED to the HF ham bands?
>
>The Amateur HF bands are a small minority of 'the great majority of
>radio services' listed above.

HF is considered to be 3-30 MHz. Of those 27 MHz, US hams have access to 3.55 MHz - a little over 13%

>Sure, hams use CW -- but hams also use
>outdated FM equipment on 2 meters, too, that no one else can use.

Think about WHY they use it.

> The
>reason for amateurs' existence is spelled out in the rules -- which
>paragraph does CW Morse meet these days?

Well, let's see:

Morse permits more hams to use simple equipment they built themselves than would be possible if it did not exist. This promotes technical knowledge and development, which is one of the reasons for the ARS.

Morse helps bridge language barriers. I'm not saying it's a language in itself, but it does help eliminate the problems of accents and limited knowledge of foreign languages. Other modes do this too, but they are far less common and often out of the reach of developing countries.International good will.

Morse is widely used in traffic nets and other public service uses.

Morse helps build operating skills. Not just the ability to send and receive Morse, but how to listen, how to say things briefly, standard procedures, etc.
>
>Yes, I have listened to the amateur HF bands. Do you take me for a
>newbie?

I know how old you are but not how experienced. When I read anti-Morse statements like the ones in this thread I wonder how much HF ham radio the writers of them have actually experienced.
>
>> > Almost as outdated as spark.
>
>> Not at all. Do you know when spark disappeared from the ham bands, and why?
>
>The why is due to occupied bandwidth.

Not really. The why is due to the fact that for the same number of dollars spent, a "CW" (tube) transmitter would be heard much farther away, even if the power was much lower.

> The when was a very long time ago
>(around 1924).

Right. Hams abandoned it because tube rigs cost less for better results. It was outlawed for US hams in 1927 - long after nobody used it anymore.

It was outlawed for emergency maritime use in 1966.

> The then new 'CW' method of sending code was much more
>efficient, both in power and in occupied spectrum.

True - but "CW" wasn't new. It dated all the way back to 1906 or earlier. What changed was that tubes became cheaper, more reliable and more available. Plus things like Alexanderson alternators were not practical above LF.
>
>But you did know that I placed that clause in there as a troll, right?
>:-)

Sure.
>
>If persued on technical merits alone, CW would be dead now, due to modes
>such as PSK31 and MFSK16, which are more efficient and more capable than
>CW Morse (or Vail, if you want to go there) code.

That depends on how the "technical merits" are weighted. Are bicycles obsolete or outdated?
>
>But ham radio has never been only about technical merit.

Agreed!!
>
>> > -- protected subbands are good, though.
>
>> Agreed! In fact, how about this: Divide each HF band into 3 subbands, by
>mode:
>> Morse only, digital, analog voice/image. 35/15/50% is about right. To use
>the
>> Morse-only subbands, you have to pass a Morse test and a written test. All
>else
>> requires only a written test.
>
>I would go a little larger on the digital -- reference the recent PSK31
>interest.

The digital folks keep saying how spectrum efficient they are. If so, why do they need so much of the band?

>And with automatic CW 'modems' (such as the contest keyers
>many use), a test would really be superfluous -- but I wouldn't make it
>a sticky point.

If someone wants to use Morse, is a 5 or 10 wpm test any sort of problem? I don't think so.

>30-20-50, maybe?

There's a lot more Morse than digital on the HF ham bands.

>Or 33-33-34, even?

That would mean less room for 'phone than there is now.
>
>> Something for everybody.
>
>Right -- something for everybody. No one forced to learn a mode they
>won't use. Exactly my point.

Then how do you justify forcing me to learn about SSB, and FM and TV and VHF/UHF and lots of other stuff when all I wanted to do was work Morse on 40 meters? You shoulda seen the old writtens.
>--
73 de Jim, N2EY

2145. Re: Yaesu ATAS100 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 13:46:04 UTC
From: kg4fet@aol.combadspam
Message-ID: <20010130084604.28078.00001870@ng-mg1.aol.com>
Source record: 171219

>Does anyone have experiance with the Yaesu ATAS100 antenna. It looks
>to be a version of the screwdriver. I am planning to buy a Yaesu
>FT-847 soon and this antenna is listed as an accessory. It's supposed
>to cover 160 meters to 440 mhz. That's asking a -lot- from one
>antenna. It's supposed to auto tune too I believe. If it works like
>a screwdriver and becomes resonent on each band then it won't need an
>antenna tunner right? I live in a condo and am thinking of cutting a
>small hole in the ceiling of a closet and poking the antenna up into
>the attic. I am not allowed any outdoor antennas at all. I've heard
>nothing but good things about the screwdriver antennas but the ones
>I've seen info on only cover 80 to 10 meters.
>Any information greatly appreciated. Thanks Gary N9ZSV
>
>Gary Pewitt N9ZSV
>414 355 8147
>
>
>
Gary,
The ATAS 100 covers 40mtrs-70cm. I have used one mobile and found it to be a great antenna for what it is. It will tune by itself with no tuner with the FT 847 and the FT 100. There is a Ground Plane or counterpoise kit for it for just such a situation as yours. If you do decide to go this route I would string some extra counterpoises in the attic. the average screwdriver is over 10ft long fully extended and the ATAS is only 59 inches extended (excellent for a tight attic).
73 and best of luck
de KG4FET Sandor Proud FT 100 OWNER

2146. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 13:48:26 UTC
From: JW <jdwalton@home.com>
Message-ID: <3A76EFE2.724782B5@home.com>
Source record: 171220
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

There is a rec.radio.antenna newsgroup.

Also try to do a google search under "prop pitch motor" -- these were often used.

Jack
exWA8PZL

VK4LAJ wrote:

> Hi all and thanks for reading my post
>
> I have been out of AR for 14 months (due to an accident not loss of
> interest) and am now looking to get back into it.
>
> I am looking at building a lot of my own gear this time around and one
> project is an antenna rotator. Although I have searched high and low on the
> internet, I can not find anyone that has built a rotator system from
> scratch. I have found a direction indicator but that's all.
>
> Has anyone built or know of an article that describes building an antenna
> rotator? If so could you please point me in the right direction or send me a
> scanned article, but please email me direct after you have removed the
> SPAMJAM.
>
> --
> Don't forget to remove the SPAM.JAM
>
> 73
> Adam VK4LAJ
> E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
> WWW: - http://www.loaded-dog.com
> Brisbane Australia
> CQ Zone 29/ 30
> Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
> Maiden Head: - QG62mi
> Height ASL: - 52m
>
> My wife says I never listen to her...
> at least that's what I think she said?

2147. Re: Bilal Isotron experiences ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 13:57:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A76C843.B3B1DB0A@IEEE.org>
Source record: 171221

Yardleyite wrote:
> I've used the 80 meter version and was dissapointed with it. It would
> put out a descent signal but I could not hear with it that well.

The 80m Isotron signal is certainly a "descent" into poor
performance. :-)
--
http://www.mindspring.com/~w6rca

2148. Joe Carr has passed away

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 14:39:52 UTC
From: none <bbb@hotmail.com>
Message-ID: <3A76D238.717ACA67@hotmail.com>
Source record: 171241
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

I recently read, in QST I think, that Joe Carr also recently
passed away.......

Andy W4OAH

2149. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 14:46:43 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <ntAd6.265660$hD4.64090349@news1.rdc1.mi.home.com>
Source record: 171222

I did use a .22 rifle to shoot off limbs of a tree.
(Ruger 10-22)
It would take about 50 rounds to cut off a 1" branch.
This was out in the country.
Dont even think about trying this in the city!

William Lee

2150. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 14:51:56 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <gyAd6.265668$hD4.64092048@news1.rdc1.mi.home.com>
Source record: 171224

Why should I be required to study Math, Psychology, and English, to get a college degree in Fine Arts?
I dont hear anyone bitching and wanting to change that!

"Lamar Owen" <lamar.owen@wgcr.org> wrote in message news:3A72E28C.2D7B3A75@wgcr.org...
> Richard Clark wrote:
> > Well maybe for the crafters of flint, but how about bow hunters and
> > gun hunters?
>
> > The Bow, an antique mode, is afterall inefficient by design. It can't
> > possibly compete with the modern technology of the bullet. And yet
> > the government allows a failed technology to dictate the season and
> > public lands' access for hunters. There must be some hue and cry that
> > I am not hearing from the gun hunters.
>
> Because demonstrating profiency with a bow is not required to get a
> license to hunt with a gun.
> --

2151. Re: HELP please - Mess of a Dipole setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 14:56:04 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <8CAd6.265673$hD4.64093414@news1.rdc1.mi.home.com>
Source record: 171225

Re-tune all the wires starting with the longest (20m) and working back to
the shortest (10m)
You are getting interaction that must be tuned out.
Hang in there as it is a long process but your antenna will tune and work
like it should with no tuner required on any of the bands.

"Dennis P. Stahr" <irfutures@earthlink.net> wrote in message
news:TsEc6.209$2t5.16192@newsread2.prod.itd.earthlink.net...
> Can someone explain what's happening?
>
> I am in an antenna restricted area (what's new), and have created a "fan"
> dipole like as shown in the link below... near the bottom of the page
under
> "Multiband Dipoles",
>
> http://www.arc.itb.ac.id/rf/arrlhbk/ch20/PracticalDipoleAntenna.htm
>
> I cut and tuned dipoles for 10, 12, 15, 17, and 20 meters with number 14
> copper wire. I then connected them all together at the feedpoint. (I was
> told by two "old timers" that this would be OK).
>
> I feed it with RG-213 (70') and the center of the dipole is about 6' above
> the center of the roof. The ends of each dipole are then splayed out and
> tied down at various points along the roof.
>
> Big mistake I guess, but the dipole is not externally grounded, only gets
> its ground through connection to the rig which is very well grounded with
#6
> copper wire to dual 6' grounding rods.
>
> My TS-870s internal tuner will match each band (and very quickly... within
> about 2 seconds), but just for fun I tried an SWR meter on the back of the
> rig and found I have HORRIBLE SWR. It does not find low SWR anywhere on
any
> of the bands.
>
> Is the TS-870 actually finding the resonant dipole for the band or is the
> tuner just doing me a favor, and I am radiating 100 watts out but am QRP
off
> the antenna with a few watts?
>
> Thanks in advance for your serious help and even for your comments about
me
> being a complete idiot.

>
> Dennis - KF2XL
>
>

2152. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 15:35:55 UTC
From: richardharrison@webtv.net
Message-ID: <5648-3A76DF5B-2@storefull-111.iap.bryant.webtv.net>
Source record: 171227

No one is tested on how to copy RTTY by ear, now are they?

N2EY replied: "Nope - because RTTY isn`t done that way."

How ironic! Sam Morse aimed to develop a machine to receive his code. When machines were developed such as Telex and Teletype, many of the amateur manual operators, just like John Henry, "The Steel Drivin` Man" insisted on clinging to their manual methods.

The hobby is "amateur radio", not "amateur Morse".

Morse is no longer needed to practice radio and hasn`t been since the invention of the continuously variable modulator.

Morse is an archaic relic. It is not needed to enjoy radio, and Morse is not used professionally in radio. Testing for Morse ability is inane.

Best regards, Richard Harrison, KB5WZI

2153. Re: Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 15:52:49 UTC
From: Mark Kenward <ae8844@wayne.edu>
Message-ID: <3A76E351.689B03E1@wayne.edu>
Source record: 171223

Would it not be "easier' to use a file and cut the whip at the top until
you got the length you wanted?

'Doc wrote:

> Pete,
> You take a standard 102" whip, unsolder the ferule
> at the bottom, cut the whip to length, then resolder
> the ferule back on. I've found that to be the easiest
> and 'best' way.
> 'Doc

2154. Re: Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 16:10:45 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <956pge$1dlh$1@nntp1.ba.best.com>
Source record: 171229

Hi Pat -

I haven't been there for a year or so; but the last time
I was there, the retail showroom had been closed down.
They did have a smallish-looking parts counter, and
component distribution business, still operating in the
old building.

73, Ed W6LOL

"John P. Franklin" <jpfrankl@teleport.com> wrote in message
news:sprd6.112$2Y.112922@nntp2.onemain.com...
> I spend many hours as a young teenager drooling on equiment
> there.....are they still in Business?
>
> Pat
>
> WB7FFI
>
>

2155. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 16:12:26 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A76E7EA.F8C3D122@IEEE.org>
Source record: 171230

William Lee wrote:
> Why should I be required to study Math, Psychology, and English, to get a
> college degree in Fine Arts?
> I dont hear anyone bitching and wanting to change that!

Those are degree graduation requirements, not prerequisites
for *entrance* into college. Too many hams consider their
license to be some sort of graduation certificate when it
is merely a ticket to gain *entrance* into ham radio.
--
http://www.mindspring.com/~w6rca

2156. Re: Any thought/comments on the CCD (Constant Current Distribution) dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 16:13:09 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A76E815.4650463E@oio.net>
Source record: 171228

Murray,
I can't remember which one, but one of the 'Antenna Compendium'
books from ARRL had a very good write-up about them.
'Doc

2157. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 16:15:56 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A76E8BC.100CE2A8@wgcr.org>
Source record: 171231

N2EY wrote:
> In article <3A706C68.691289AD@wgcr.org>, Lamar Owen <lamar.owen@wgcr.org>
> writes:
> >Automatic CW 'modems' are also available
>
> They are encoder/decoder, not modems.

It's an ASK modem, actually. Codec/modem -- same effect. Just the
keying method is different -- FSK, PSK, or ASK. High-speed
trellis-coded QPSK modems use ASK as well as PSK.

> > -- you can then copy CW by
> >simply reading.
> The encoder/decoder is doing the "copying", in that case.

Not really. You are copying the text, just like you are copying RTTY
after the modem.

> >The Amateur HF bands are a small minority of 'the great majority of
> >radio services' listed above.

> HF is considered to be 3-30 MHz. Of those 27 MHz, US hams have access to 3.55
> MHz - a little over 13%

A small minority, IOW.

> >Sure, hams use CW -- but hams also use
> >outdated FM equipment on 2 meters, too, that no one else can use.

> Think about WHY they use it.

Occupied bandwidth -- the equipment is cheap now because commercial
interests, due to regulations, cannot use it.

> > The
> >reason for amateurs' existence is spelled out in the rules -- which
> >paragraph does CW Morse meet these days?

> Morse permits more hams to use simple equipment they built themselves than
> would be possible if it did not exist. This promotes technical knowledge and
> development, which is one of the reasons for the ARS.

AM DSB-FC is simpler for the receiver. The transmitter for AM
double-sideband full carrier is almost as simple as a CW transmitter --
especially with plate modulation in a transformerless setup (high
voltage carbon mics can even be used -- been there, done that).

Of course, AM DSB-FC has other problems CW doesn't have. CW actually is
ASK (Amplitude Shift Keying), if you look at it closely.

And there is a sort of AM revival occuring, with surplus broadcast band
transmitters showing up in top band.

> Morse helps bridge language barriers. I'm not saying it's a language in itself,
> but it does help eliminate the problems of accents and limited knowledge of
> foreign languages. Other modes do this too, but they are far less common and
> often out of the reach of developing countries.International good will.

Any digital code can do the same -- Morse is not unique in this regard.

> Morse is widely used in traffic nets and other public service uses.

Only on the ham bands. The ARS also exists to train communicators in
case they are needed on other bands and in other services, where Morse
is gone.

> Morse helps build operating skills. Not just the ability to send and receive
> Morse, but how to listen, how to say things briefly, standard procedures, etc.

There are more ways to build all these things than just Morse.

> >Yes, I have listened to the amateur HF bands. Do you take me for a
> >newbie?

> I know how old you are but not how experienced. When I read anti-Morse
> statements like the ones in this thread I wonder how much HF ham radio the
> writers of them have actually experienced.

I am experienced enough, listening-wise. Not all those who have CW
experience grow to like or enjoy the mode.

> >> > Almost as outdated as spark.
> >> Not at all. Do you know when spark disappeared from the ham bands, and why?
> >The why is due to occupied bandwidth.

> Not really. The why is due to the fact that for the same number of dollars
> spent, a "CW" (tube) transmitter would be heard much farther away, even if the
> power was much lower.

Because occupied bandwidth was smaller, the power density was higher,
even with lower total power.

> That depends on how the "technical merits" are weighted. Are
> bicycles obsolete or outdated?

High-wheelers are obsolete. Mountain bikes are a fun hobby -- but you
don't use them on the freeway. And, in fact, bicycling is illegal on
some roads, for safety.

> The digital folks keep saying how spectrum efficient they are. If so, why do
> they need so much of the band?

The same can be said of CW.

> If someone wants to use Morse, is a 5 or 10 wpm test any sort of problem? I
> don't think so.

_If_ they want to use it.

> >30-20-50, maybe?
>
> There's a lot more Morse than digital on the HF ham bands.
>
> >Or 33-33-34, even?

> That would mean less room for 'phone than there is now.

Yes, it would.

> Then how do you justify forcing me to learn about SSB, and FM and TV and
> VHF/UHF and lots of other stuff when all I wanted to do was work Morse on 40
> meters? You shoulda seen the old writtens.

I have. But learning about _how_ the mode works is completely
different. But, it's a moot point.

2158. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:01:55 UTC
From: richardharrison@webtv.net
Message-ID: <5646-3A76F383-46@storefull-111.iap.bryant.webtv.net>
Source record: 171233

William Lee wrote:
"Why should I be required to study Math, Psychology, and English to get a college degree in Fine Arts?

The B.F.A. degree is a credential that you`ve satisfied more than the vocational knowledge needed to paint, play an instrument, or whatever. It is not a license to practice anything. Enjoy your degree for the aggrandizement it gives.

Licenses are typically issued to deny access of inept non-license-holders to positions where their practice may likely result in the death or serious injury of someone. Licenses are usually issued on demonstration of knowledge and skills needed to avoid mishaps. A fishing license is an exception. It only shows you`ve paid a fee. Ham licenses could logically be in the same category as fishing licenses.

Radio has progressed to the point of popular familiarity. Safety of life no longer requires such tight regulation as in the early days. The captain and flight attendents will tell you if and when it is safe to use your electronic devices. Tight licensing requirements are counterproductive.

The FCC found itself in the position of issuing credetials (the commercial operator license) mainly for the benefit of the employers of radio technicians. It was evidence of some knowledge and skill. It wasn`t really needed to protect safety. So, they`ve mostly discontinued the practice.

The FCC has heard all the arguments made about ham licensing when they were eliminating most commercial licensing. They now have the experience of commercial deregulation, and it wasn`t dire at all.

Best regards, Richard Harrison, KB5WZI

2159. Re: Any thought/comments on the CCD (Constant Current Distribution) dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:17:33 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A76F72D.1F3A@wt.net>
Source record: 171232

KK7HO wrote:
>
> Thinking about putting one up. Anyone have any experience, comments, maybe
> warnings about this antenna?? Thanks, Tim.....KK7HO

Overall, I think a waste of capacitors and time needed to solder all the
connections. I've worked quite a few over the years that used these, and
although most seemed to like them, I never could really see why. They
sure didn't seem to radiate any better than a regular dipole. Maybe
worse...To each his own I guess...Myself, I wouldn't bother with all
that work. MK
--
http://web.wt.net/~nm5k

2160. Re: Bilal Isotron experiences ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:23:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A76F898.69C2@wt.net>
Source record: 171234

Pete Holden wrote:
Of course, on the trail I'll most likely use a dipole hung between
branches.
>
> Pete, KAï¿½TZK

One of the easiest and best performing of the "portable antennas" I
think. Chunk wire over a tree limb and go. MK

--
http://web.wt.net/~nm5k

2161. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:27:53 UTC
From: n2ey@aol.com
Message-ID: <956ti9cga1@nnrp1.deja.com>
Source record: 171237

In article <15223-3A7658C4-54@storefull-114.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Jim, N2EY wrote:
> "An FSK signal of a given bit rate and shift will have the same
minimum
> required bandwidth regardless of how it is generated."
>
> Both AM and FM generate pairs of sidebands of equal amplitude and
> displacement around a central carrier frequency.

If you are talking about conventional voice modulation, yes.

> Thus the sidebands on
> one side of the carrier frequency are redundant.

In AM, this is true. In fact, in AM the carrier isn't really needed,
either. And there's just one pair of sidebands unless the signal is
overmodulated.

In FM, the story is quite different. Depending on the modulation index,
the carrier may completely disappear. There are several pairs of
sidebands, not just one pair, and the energy in them depends on a bunch
of factors.

You cannot just run an FM or FSK signal through a filter and lop off
half the sidebands and wind up with a usable, nondistorted signal like
you can with AM.

In FSK as typically used for ham radio, there is no "center frequency".
Instead, there are mark and space frequencies, and the carrier wiggles
back and forth between them. The necessary bandwidth is as given in my
earlier posts.

> They can be regenerated
> from our knowledge of the construction of the original signal which
> produces the single sideband, if such a reconstruction were necessary.
> Elimination of one of the spectra of sidebands before transmission
> reduces the bandwidth transmitted.

On AM, yes. Not on FM. FSK is just a form of FM.
>
> SSB may not be involved in any or all of today`s incredible modems. I
> haven`t checked into the tricks used for many years. The last time I
> looked, more and more amplitude levels were being encoded to shrink
the
> transmitted bandwidth.

Modern modems use multiple carriers, phase shift keying, and some ofher tricks. For "landwire" use, they work because the telecom companies pay attention to things like not having phase distortion or selective fading. The modem design is tailored to the known qualities of the telephone lines.

And even with the tricks, many lines that are perfectly fine for voice comms are useless for 56K modems. Some even fail at 28.8k

> But, already, modems were way beyond the bit
> speeds predicted as maxima by the classical theories.

Nope. The theories are correct. The modems do not violate them.

> In many modems all
> maner of modulations were being combined to advance bit rates.

Exactly! And the virtues of the classical modulations are sacrificed. For example, FM is highly immune to impulse noise. Using a combination of AM and FM gives a higher speed than FM alone, at the price of much lower noise immunity.

What works on phone lines will not necessarily work on the air. If PSK is so good, why isn't it used for moonbounce?
>
> I meant to say that the electrical smoke signal had been vastly improved
> upon.

There are lots more tools in the toolbox. That doesn't mean the old tools are useless.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2162. Re: Any thought/comments on the CCD (Constant Current Distribution) dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:30:39 UTC
From: Murray Neece <RadioRanch@qth.com>
Message-ID: <3A76FA3F.52C02C68@qth.com>
Source record: 171226
Body handling: Binary attachment payload not displayed: RadioRanch.vcf

Where could i find info on this CCD ? THanks Murray K5MDM

KK7HO wrote:

> Thinking about putting one up. Anyone have any experience, comments, maybe
> warnings about this antenna?? Thanks, Tim.....KK7HO

[One or more binary attachments are retained only in the source text.]

2163. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:36:18 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A76FB92.6A55@wt.net>
Source record: 171235

Bill Turner wrote:
>
> On Mon, 29 Jan 2001 17:28:24 GMT, "VE9SRB" <srbest@worldnet.att.net> wrote:
>
> >In HF communications, the significant source of noise is skywave or
> >atmospheric noise.
>
> ----------
>
> This is too broad a statement. Ask anyone who lives in an urban/industrial area
> what his most significant source of noise is. For him, verticals ARE "noisier".
>
> 73, Bill W7TI

Hummmm, I'm in a urban area here. "Houston". I've never had any real
problems with noise when using verticals.
If I get noise on a vertical, I usually will on the dipoles also. I
notice that the dreaded "power line noise" doesn't really seem to favor
one over the other. It usually nails both. I've seen many cases where
the noise floor would be higher on my 40m GP than on the dipole at the
same height, but the desired signals would be higher also. So it didn't
matter. Say if I work 1500 miles away. Dipole shows S3 noise, maybe the
GP might show S4. Did it matter? Heck no...The GP would receive the
desired signal 2 s units louder than the dipole would. So if the signal
using the dipole was S7 or 4 s units over the noise, the GP would be S9
or 5 s units over the GP's S 4 noise. Even with the apparent higher
noise level, I'd still rather be on the GP for that distance any day
over the dipole. These numbers used are pretty much actual results to CA
from Houston on 40m at night. Many times I found the GP to actually be
pretty darned quiet under good local cdx. MK
--
http://web.wt.net/~nm5k

2164. antenna frustration

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:39:43 UTC
From: Impulse <aav77@hotmail.com>
Message-ID: <956u8vast1@news.tudelft.nl>
Source record: 171236

Hello there,

What are you remarks on the huge amount of mobile antennas om roofs etc..
I need your remarks for an artical I'm writing. Are they ugly? Why? What can
we do to make them look better? Do you like them? Why? Every comment is
welcome.

Greetings,

Arno

2165. Re: W6SAI, Bill Orr has passed away:report

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 17:44:10 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A76FD6A.69637AD2@mwci.net>
Source record: 171238
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

Radiomatt wrote:

> A prolific writer on ham radio, and author of MANY books and articles. (From an
> EMail received today, not yet confirmed by me)

It is confirmed. Bill Orr was an outstanding Radio Amateur and a fine gentleman.

Bill W0IYH

2166. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 18:00:16 UTC
From: n2ey@aol.com
Message-ID: <956vf9$eb8$1@nnrp1.deja.com>
Source record: 171239

In article <5648-3A76DF5B-2@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> No one is tested on how to copy RTTY by ear, now are they?
>
> N2EY replied: "Nope - because RTTY isn`t done that way."
>
> How ironic! Sam Morse aimed to develop a machine to receive his code.

His original machines made a wavy line on a strip of paper. Human operators translated the wavy line into letters and numbers. He never built a working printing telegraph.

Optical telegraphs existed long before Morse - he perfected the electrical telegraph.

> When machines were developed such as Telex and Teletype, many of the
> amateur manual operators, just like John Henry, "The Steel Drivin`
Man"
> insisted on clinging to their manual methods.

You ever drive steel? I have. Rail spikes, too. Machines cannot do it all.

When steamboats were developed, many boaters "insisted on clinging" to sail. Bicycles are still used extensively, despite the fact that motorcycles and cars have existed for almost a century. Some people even play their own music, sew their own clothes and cook their own food, despite techncially excellent and inexpensive alternatives.

Some of us even design and build our own ham gear.

There is value in simplicity, in doing for oneself, and in developing skills even if they have no "professional" use (meaning one doesn't get paid for them). There is value in doing a thing well for its own sake.
>
> The hobby is "amateur radio", not "amateur Morse".

Agreed! Morse is a big part of amateur radio. So is SSB, FM, and lots of other things.
>
> Morse is no longer needed to practice radio and hasn`t been since the
> invention of the continuously variable modulator.

Agreed. Knowledge of how a radio works isn't needed, either, and hasn't been since the development of manufactured receivers and transmitters.
>
> Morse is an archaic relic.

Why do you disparage the mode so? Would you say that to a cyclist or the sailboater?

> It is not needed to enjoy radio,

But many find it enjoyable in radio.

> and Morse is not used professionally in radio.

Yes, it is. The use is very limited, but it is still used in some applications.

But why does what the "professionals" do matter to us "amateurs"? The "professional" aviation folks have all but given up on piston-engine airplanes - does that mean amateur pilots must stop enjoying them?

The "professionals" have abandoned the whole idea of "radio operator", too. Does that mean "amateur radio operators" should no longer exist, either? I hope not.

> Testing for Morse ability is inane.

Whoa - who is talking about TESTING?

I keep trying to explain this, but folks just don't seem to get it. The whole testing thing is a dead duck - a moot point - a done deal. FCC has already reduced Morse testing to the bare minimum possible under the treaty, and won't reduce/eliminate further until the treaty goes. What you or I think or say about testing Morse doesn't matter - the FCC won't eliminate it with S25.5 as it is now, and they sure as heck won't increase it. They reduced it as much as possible to eliminate as much of their own admin work as they could, despite all sorts of arguments and recommendations by a majority of interested parties. Democracy counts for very little with them on this issue. It's clear that they will dump Morse testing as soon as the treaty changes, but not before.

All modes have their good and bad points. But from what I read here and a few other places it's clear that some folks aren't satisfied with the end of Morse testing - they want the end of Morse USE. They want to tell us Morse ops what we should like, and why. Well, just call me Edgar Friendly, or Number Six, because I like to pound the brass, copy the signal myself, and be a radio operator. Even if that makes me "obsolete".

Be well.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

fan of "Demolition Man", "the prisoner" and the Twilight Zone episode "The Obsolete Man"

Sent via Deja.com
http://www.deja.com/

2167. Beware of defective RG-213 from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 18:12:22 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <auDd6.213$QI5.18117@newsread2.prod.itd.earthlink.net>
Source record: 171240
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Just wanted to warn everyone about some bad coax being distributed by Radio Works. The cable in question is their "RG-213 Plus", and according to their catalog "features an improved braid and even better quality, non-contaminating jacket". When I notified them of the defects in the original cable shipment, they promptly shipped out a replacement length and issued a UPS pickup for the original cable. After foolishly installing connectors on the new cable, I inspected a few feet of it and found it to possess the same defects as the first batch. If you've purchased any of this stuff recently, I suggest you look it over carefully before using it. The info printed on the cable jacket is: "IEWL 4062 213/u Type"

Here's what I found in my cable:

1. While paying out the cable, I encountered a roughness in the outer jacket that felt as if the cable had been scraped. A closer inspection revealed a poorly closed seam running the length of the cable, where the jacket ends had been fused together. The rough spots, in places, were actually small rough holes. One of the holes was large enough I could actually see the copper braid.

2. In a couple of places, there was a "lump" in the cable, up to an inch or so in length. I've opened up such cable sections in the past to find that the braid had been folded back over itself at that point. Usually, braid damage accompanies such a defect (torn strands, etc.).

In addition, while soldering on the connectors I noted that one of the braid sections (multiple strands of wire) was considerably oxidized. Hard to believe that the manufacturer would go ahead and make cable with such material. The oxidized section was not present in the first cable shipment I received.

K8AC

2168. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 18:35:04 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A770958.C56B298@IEEE.org>
Source record: 171242

Mark Keith wrote:
> Dipole shows S3 noise, maybe the
> GP might show S4. Did it matter? Heck no...The GP would receive the
> desired signal 2 s units louder than the dipole would.

My 1/4WL 40m vertical with eight radials is consistently 2-3 S-units
down from my horizontal dipole on signals and consistently has 2-3
S-units more noise. I was extremely disappointed.
--
http://www.mindspring.com/~w6rca

2169. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 18:55:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A770E05.3854A1D9@eznec.com>
Source record: 171245

Can you explain why "40% of the power is burned up in ground losses due to lack of radials" with a half wave vertical? This isn't consistent with either the theory I'm familiar with or the results shown by modeling programs.

Here's what I see as equalizing the quarter and half wave verticals: The half wave vertical would have a 1.6 dB gain over a quarter wave vertical if both were over perfect ground. The gain is accomplished by concentrating the signal at the horizon. Over perfect ground, the half wave's pattern is narrower, with a higher proportion of the energy at low angles. But except for salt water, real ground bears very little resemblance to perfect ground. And when a vertically polarized signal reflects from real dirt ground at low angles, most of the power is dissipated as heat. The result is that the low angle radiation disappears. But the half wave vertical concentrates a higher proportion of its total field at these very angles, so a higher proportion of the total radiated power is lost. This tends to equalize the antennas. On the other hand, the quarter wavelength antenna will usually have lower efficiency due to ground loss resistance, giving the half wave antenna an edge in this regard. Both these factors depend on the ground conductivity, so either antenna might be very slightly better than the other in an individual installation. But if the quarter wave antenna has a decent ground system, you're not likely to see a spectacular difference.

Roy Lewallen, W7EL

Richard Karlquist wrote:
>
> Sometimes the half wave vertical without radials is criticized because of
> high ground loss away from the base.
> (Everyone agrees the loses due to ground current at the feed point are
> negligible because of the high
> driving point impedance). What seems to be overlooked by most people is
> that a half wave vertical over perfect
> ground has 2 dB of gain over a quarter wave radial over perfect ground.
> This means that even if 40% of the power is burned up
> in ground losses due to lack of radials, this 2 dB of pattern gain makes it
> come out even with respect to the quarter wave vertical.
> Thus in practice (and I have measured this experimentally), the half wave
> vertical with no radials is as good
> as a quarter wave vertical with a pretty decent set of radials.
>
> Rick Karlquist N6RK

2170. UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 19:00:38 UTC
From: Jim Lill <jpl@vectorbd.com>
Message-ID: <95730g$ht0$1@nnrp1.deja.com>
Source record: 171244

I live very close to the local TV xmitters. I'd like to use a simple bowtie dipole to cover 21-59. I cannot find the info on how to get the angle correct. I'm pretty sure that you can get darn close to 300 ohm Z feed and that can connect to a simple balun/coax etc. I would have thought that the angle would be a snap to find, NOT! Obviously the length is non-critical by comparison.

TIA

-Jim
WA2ZKD

Sent via Deja.com
http://www.deja.com/

2171. Re: W6SAI, Bill Orr has passed away:report

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 19:00:58 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <NA93OrUosI77VwC=M=p+ffKqfooG@4ax.com>
Source record: 171243

"William E. Sabin" <sabinw@mwci.net> wrote:

>
>
>Radiomatt wrote:
>
>> A prolific writer on ham radio, and author of MANY books and articles. (From an
>> EMail received today, not yet confirmed by me)
>
>It is confirmed. Bill Orr was an outstanding Radio Amateur and a fine gentleman.
>
>Bill W0IYH
>

Back in '58 or '59, I built a little 5 watt AM transmitter for 6 meters, according to Mister Orr's
instructions. I also modified an ARC-5 receiver for home use, according to an article he wrote. He
will be missed.

Bob
k5qwg

2172. Re: European quads?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 20:38:38 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A77264B.F97D5920@cybatek.fsnet.co.uk>
Source record: 171246

Take a look at : http://www.chelcom.co.uk

They make Quads, standard build or to order ...

I have two Chelcom antennas, they are well built too ...

Hope you find what you want ...

MikeT ...
M0AWS

"Herrï¿½n" wrote:

> Hi,
> Nobody knows a European quad antenna maker?. This is because all makers that
> I know are Americans...and the shiping is equal to the price of the antenna,
> this is, Iï¿½ll pay twice the antennaï¿½s price.
> Thanks in advance.
>
> 73 de EA2AJX. Iï¿½aki
> E-mail: ea2ajx@terra.es or ea2ajx@mixmail.com

2173. Re: W6SAI, Bill Orr has passed away:report

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 22:10:47 UTC
From: Michael Black <blackm00@Gloria.CAM.ORG>
Message-ID: <Pine.LNX.4.10.10101301701440.30552-100000@Gloria.CAM.ORG>
Source record: 171247
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

On Tue, 30 Jan 2001, William E. Sabin wrote:

>
>
> Radiomatt wrote:
>
> > A prolific writer on ham radio, and author of MANY books and articles. (From an
> > EMail received today, not yet confirmed by me)
>
> It is confirmed. Bill Orr was an outstanding Radio Amateur and a fine gentleman.
>
> Bill W0IYH
>
The news is on the arrl webiste, http://www.arrl.org I don't often visit
that site, but I was wanting to know the price of "200 meters and Down"
yesterday, and checked the news while I was there. His death was last
week, I think the 24th. I was a little surprise that I didn't read
it in the newsgroups first, because that is how I've heard of the passing
of various important hams over the past few years.

I got a 19th edition of Bill's Radio Handbook for Christmas in 1972,
me being 13 years old and licensed for six months. I had an ARRL
Handbook at the time, but I didn't have many books about electronics
or radio. Somehow having a hardcover handbook was a big event. ALmost
thirty years later, that edition beats out the other two I've bought
since. And while I used and abused it as a kid, it's still in pretty
good shape.

Michael VE2BVW

2174. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 22:56:29 UTC
From: richardharrison@webtv.net
Message-ID: <2349-3A77469D-10@storefull-115.iap.bryant.webtv.net>
Source record: 171249

Jim, WA2ZKD wrote:
"I`d like to use a simple bowtie dipole to cover 21-59.

Well the bowtie is a type of biconical antenna. Arnold B. Bailey has these in "TV and Other Receiving Antennas".

He makes each side of his conical dipole from (6) 22-inch long 1/4-inch dia. rods.

Separation of the apexes is 2 inches.

They are fanned out to an angle of 60 degrees.

Bandwidth is about 200%.

Design frequency is 200 MHz. For 600 MHz, use rods about 7 inches long.

The 200 MHz rods are flared into a circle about 23 inches in diameter, so that the structure of a side projects almost as an equilateral triangle.

This is a "full-wave" dipole. 1/2-wave dipoles of similar design work but have just a fraction of the bandwidth.

104-ohm balanced transmission line is recommended. You can probably get away with other more available feedlines.

Best regards, Richard Harrison, KB5WZI

2175. Modelling High Frequency Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 23:02:25 UTC
From: Paul C Elliott <pc.elliott@btinternet.com>
Message-ID: <kqMK9gABg0d6Ew+U@btinternet.com>
Source record: 171248

Is it possible (sensible) to model microwave horns, dishes etc. using
NEC based programs. I know NEC has a surface patch facility but its only
available in the more expensive commercial packages, or the original
text only version and is it useful for this type of application anyway.
I've tried wire frame models with limited success.
Is there a limit to the MOM type techniques at higher frequencies
perhaps giving way to ray type analyses?
Has anyone any suggestions for software to use in this area.

Regards,
Paul

Paul Elliott (G0TXL) Email g0txl@btinternet.com

2176. Re: Modelling High Frequency Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-30 23:50:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A775355.515C66EE@eznec.com>
Source record: 171250

NEC patches are useful only for enclosed objects like boxes, and not for such things as horns or dishes. The reason is that the current on an unconnected patch edge is forced to zero, while on a real conductive plate the current flows over the edge. Wire grid models do a better job of imitating flat surfaces, but they also have their shortcomings. They're not as opaque to fields as a real metal plate would be, and they can be tedious to construct. People modeling dishes are frequently interested in sidelobe levels, which can be sensitive to surface shape and roughness. It wouldn't be practical to create a wire grid which is adequately exact in shape to give an accurate result for such things as sidelobes. So all in all, I don't think NEC based programs are very useful for these kinds of antenna structures.

There's no frequency limit to NEC programs or any other MOM programs I know of. Frequency is simply a scaling factor.

Roy Lewallen, W7EL

Paul C Elliott wrote:
>
> Is it possible (sensible) to model microwave horns, dishes etc. using
> NEC based programs. I know NEC has a surface patch facility but its only
> available in the more expensive commercial packages, or the original
> text only version and is it useful for this type of application anyway.
> I've tried wire frame models with limited success.
> Is there a limit to the MOM type techniques at higher frequencies
> perhaps giving way to ray type analyses?
> Has anyone any suggestions for software to use in this area.
>
> Regards,
> Paul
> --
> Paul Elliott (G0TXL) Email g0txl@btinternet.com
>

2177. Antenna opinions needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 01:09:18 UTC
From: rdalton1 <rdalton1@postoffice.swbell.net>
Message-ID: <cBJd6.106$tE3.86617@nnrp2.sbc.net>
Source record: 171251

Trying to figure out a way to use a swan 250 in an apartment I will have to use a counterpoise,any antenna ideas are appreciated .Thanks

2178. FS - MFJ -986 Roller Inductor Tuner.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 01:13:37 UTC
From: kk4tl@aol.com
Message-ID: <20010130201337.07337.00003529@ng-fi1.aol.com>
Source record: 171252

MFJ-986 "Differential T" roller inductor tuner for sale. Very nice shape.
Copy of manual included. $190.00 shipped CONUS.

Details at: http://www.mfjenterprises.com/tuners/mfj986.html

Email direct if interested. KK4TL@AOL.COM

2179. Re: Modelling High Frequency Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 01:21:29 UTC
From: k6mhe@arrl.net
Message-ID: <3a77684a.6228415@news.mcn.org>
Source record: 171255

Roy,

You bring up a question I have... Using the equal area rule when
modeling a .... say a horn... How good is it?

Danny, K6MHE

On Tue, 30 Jan 2001 15:50:45 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>NEC patches are useful only for enclosed objects like boxes, and not for
>such things as horns or dishes. The reason is that the current on an
>unconnected patch edge is forced to zero, while on a real conductive
>plate the current flows over the edge. Wire grid models do a better job
>of imitating flat surfaces, but they also have their shortcomings.
>They're not as opaque to fields as a real metal plate would be, and they
>can be tedious to construct. People modeling dishes are frequently
>interested in sidelobe levels, which can be sensitive to surface shape
>and roughness. It wouldn't be practical to create a wire grid which is
>adequately exact in shape to give an accurate result for such things as
>sidelobes. So all in all, I don't think NEC based programs are very
>useful for these kinds of antenna structures.
>
>There's no frequency limit to NEC programs or any other MOM programs I
>know of. Frequency is simply a scaling factor.
>
>Roy Lewallen, W7EL
>
>Paul C Elliott wrote:
>>
>> Is it possible (sensible) to model microwave horns, dishes etc. using
>> NEC based programs. I know NEC has a surface patch facility but its only
>> available in the more expensive commercial packages, or the original
>> text only version and is it useful for this type of application anyway.
>> I've tried wire frame models with limited success.
>> Is there a limit to the MOM type techniques at higher frequencies
>> perhaps giving way to ray type analyses?
>> Has anyone any suggestions for software to use in this area.
>>
>> Regards,
>> Paul
>> --
>> Paul Elliott (G0TXL) Email g0txl@btinternet.com
>>

2180. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 01:23:20 UTC
From: richardharrison@webtv.net
Message-ID: <5646-3A776908-79@storefull-111.iap.bryant.webtv.net>
Source record: 171253

I wrote:
"104-ohm balanced transmission line is recommended."

I should have pointed out that two 50-ohm coax lines can be used to connect the conical dipole. Connect to the conical dipole using only the center conductors of the two coaxes. The two shields can be joined together. A good match should be obtained at the resonant frequency of the antenna.

Best regards, Richard Harrison, KB5WZI

2181. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 02:05:43 UTC
From: Murray Lang <muzzle@iexpress.net.au>
Message-ID: <SrKd6.1$b%6.1280@wa.nnrp.telstra.net>
Source record: 171254
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

I don't think the differential bought much gear reduction.
I wonder if an old automobile gearbox would give appropriate reduction with one of the gears? Hmmm... must be a better way.

Murray

<vk4laj@my-deja.com> wrote in message news:955v08iof1@nnrp1.deja.com...
> No but close.
>
> But I guess if I used an electric motor to drive the differential it
> could be feasible.... but wouldn't the twisting moment on the shaft
> going up the tower be horendous (about 11m)?
>
> Adam VK4LAJ
>
> In article <i_6d6.4$aD6.759@wa.nnrp.telstra.net>,
> "Murray Lang" <muzzle@iexpress.net.au> wrote:
> > I remember my Grandfather (who's callsign I now have) using a car
> > differential near the base of his tower, with a shaft coming through
> the
> > shack window attached to a truck's steering wheel. Direction was
> indicated
> > by a dial on the wall next to the window driven via a pulley on the
> steering
> > shaft. This impressed me greatly as a young child though I guess it's
> > probably not what you had in mind (c:
> >
> > Regards
> > Murray - VK6HL
> >
> > VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com> wrote in message
> > news:3a74bfa3@grissom...
> > > Hi all and thanks for reading my post
> > >
> > > I have been out of AR for 14 months (due to an accident not loss of
> > > interest) and am now looking to get back into it.
> > >
> > > I am looking at building a lot of my own gear this time around and
> one
> > > project is an antenna rotator. Although I have searched high and
> low on
> > the
> > > internet, I can not find anyone that has built a rotator system from
> > > scratch. I have found a direction indicator but that's all.

> > >
> > > Has anyone built or know of an article that describes building an
> antenna
> > > rotator? If so could you please point me in the right direction or
> send me
> > a
> > > scanned article, but please email me direct after you have removed
> the
> > > SPAMJAM.
> > >
> > > --
> > > Don't forget to remove the SPAM.JAM
> > >
> > > 73
> > > Adam VK4LAJ
> > > E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
> > > WWW: - http://www.loaded-dog.com
> > > Brisbane Australia
> > > CQ Zone 29/ 30
> > > Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
> > > Maiden Head: - QG62mi
> > > Height ASL: - 52m
> > >
> > > My wife says I never listen to her...
> > > at least that's what I think she said?
> > >
> > >
> >
> >
>
>
> Sent via Deja.com
> http://www.deja.com/

2182. Re: Wanted info on sony AN-Lp1

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 02:22:55 UTC
From: Brian Denley <bdenley@mediaone.net>
Message-ID: <3GKd6.6952$KO3.2518351@typhoon.ne.mediaone.net>
Source record: 171256
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

It's easily the best low cost active antenna available. The AN-LP1 includes a unique folding loop antenna, a case with battery compartment, preselector and long crank wind leads (one for the radio and one for the antenna loop) as well as assorted gadgets such as a filter and hardware for connection to a wide variety of receivers. I use my AN-LP1 with a Sony portable (SW55) so it just plugs into the antenna jack. Read the reviews of this antenna in Passport to Worldband Radio. BTW the 2001 edition contains reviews of all the active antennas worth considering.

--
Brian Denley
http://people.ne.mediaone.net/bdenley/index.html

"mwin11" <mwin11@hotmail.com> wrote in message
news:31ud6.45571$lh.2793532@typhoon.mn.mediaone.net...
> Does any one have this antenna made by sony the AN-lp1?
> If you do have one what do you think of it? is it werth the $90
> Thanks e-mail me at
> mwin11@hotmail.com
>
>

2183. Re: Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 02:49:11 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <rYKd6.1937$2Y.275841@nntp2.onemain.com>
Source record: 171257

> 73, Ed W6LOL
>

Thanks ED, sorry to hear of the "demise" of that place. There were some real helpful and friendly people in there, one who comes to mind is W6CCW. I don't remember his name but I remember his friendly attitude, and his laugh.

73, Pat WB7FFI

2184. Re: Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 03:03:23 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <957vnu$2vf1$1@nntp1.ba.best.com>
Source record: 171259

I agree that it's sad, Pat. I REALLY hate to
see the "real" stores go down, and wall-to-wall
chain stores prevail. But that's the world we
live in, I guess.

73, Ed

"John P. Franklin" <jpfrankl@teleport.com> wrote in message
news:rYKd6.1937$2Y.275841@nntp2.onemain.com...
>
>
> > 73, Ed W6LOL
> >
>
> Thanks ED, sorry to hear of the "demise" of that place. There were some
> real helpful and friendly people in there, one who comes to mind is W6CCW.
I
> don't remember his name but I remember his friendly attitude, and his
laugh.
>
> 73, Pat WB7FFI
>
>

2185. Re: W6SAI, Bill Orr has passed away:report

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 03:09:47 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t7f0gaac878ke5@corp.supernews.com>
Source record: 171258
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

It was also confirmed by a close friend of mine who lives a couple of doors down from Bill Orr. He saw the ambulance, commotion, etc., and confirmed he passed away. Said he was a great guy.

Greg, N6GK

"William E. Sabin" <sabinw@mwci.net> wrote in message news:3A76FD6A.69637AD2@mwci.net...
>
>
> Radiomatt wrote:
>
> > A prolific writer on ham radio, and author of MANY books and articles. (From an
> > EMail received today, not yet confirmed by me)
>
> It is confirmed. Bill Orr was an outstanding Radio Amateur and a fine gentleman.
>
> Bill W0IYH
>
>

2186. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 03:17:02 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <OsLd6.33339$R5.1601560@news1.frmt1.sfba.home.com>
Source record: 171260

Another poster (whose name I forget) made the statement about 40% of the power is
burned up. I completely agree with you; I think we are trying to say the same thing.
The half wave vertical's pattern gain makes up (approximately) for ground losses away
from the base, so in practice, a half wave with no ground radials is as good as a quarter
wave with a lot of radials. I found that adding radials 4 wavelengths long to the half
wave vertical allows it to realize the ~2 dB gain over the quarter wave. This study
has been posted on my web site www.karlquist.com for several years. The bottom
line is build whichever is easier for you as the performance is about the same.

Rick Karlquist N6RK

Roy Lewallen <w7el@eznec.com> wrote in message
news:3A770E05.3854A1D9@eznec.com...
> Can you explain why "40% of the power is burned up in ground losses due
> to lack of radials" with a half wave vertical? This isn't consistent
> with either the theory I'm familiar with or the results shown by
> modeling programs.
>
> Here's what I see as equalizing the quarter and half wave verticals: The
> half wave vertical would have a 1.6 dB gain over a quarter wave vertical
> if both were over perfect ground. The gain is accomplished by
> concentrating the signal at the horizon. Over perfect ground, the half
> wave's pattern is narrower, with a higher proportion of the energy at
> low angles. But except for salt water, real ground bears very little
> resemblance to perfect ground. And when a vertically polarized signal
> reflects from real dirt ground at low angles, most of the power is
> dissipated as heat. The result is that the low angle radiation
> disappears. But the half wave vertical concentrates a higher proportion
> of its total field at these very angles, so a higher proportion of the
> total radiated power is lost. This tends to equalize the antennas. On
> the other hand, the quarter wavelength antenna will usually have lower
> efficiency due to ground loss resistance, giving the half wave antenna
> an edge in this regard. Both these factors depend on the ground
> conductivity, so either antenna might be very slightly better than the
> other in an individual installation. But if the quarter wave antenna has
> a decent ground system, you're not likely to see a spectacular
> difference.

>
> Roy Lewallen, W7EL
>
> Richard Karlquist wrote:
> >
> > Sometimes the half wave vertical without radials is criticized because
of
> > high ground loss away from the base.
> > (Everyone agrees the loses due to ground current at the feed point are
> > negligible because of the high
> > driving point impedance). What seems to be overlooked by most people is
> > that a half wave vertical over perfect
> > ground has 2 dB of gain over a quarter wave radial over perfect ground.
> > This means that even if 40% of the power is burned up
> > in ground losses due to lack of radials, this 2 dB of pattern gain makes
it
> > come out even with respect to the quarter wave vertical.
> > Thus in practice (and I have measured this experimentally), the half
wave
> > vertical with no radials is as good
> > as a quarter wave vertical with a pretty decent set of radials.
> >
> > Rick Karlquist N6RK

2187. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 04:28:26 UTC
From: richardharrison@webtv.net
Message-ID: <2349-3A77946A-16@storefull-115.iap.bryant.webtv.net>
Source record: 171262

Jim, N2EY wrote:
The whole testing thing is a dead duck - a moot point - a done deal. The FCC has already reduced Morse testing to the bare minimum possible under the treaty,---."

Moot means arguable or doubtful. This thread has confirmed that code/nocode is "moot".

Why do I think the treaty story is just another story to postpone the inevitable? Because it fits so well with all the tooth and nail resistance to change the hardheads have demonstrated for half a century.

I`m not familiar with the international agreement which is supposed to prevent further relaxation of Morse testing. I expect it`s been grossly misrepresented to mislead the gullible. Many treaties direct conduct with no provisions of penalties for treaty violations. It must be that way when there is no mechanism for enforcement. It is that way for European poultry production and nuclear test bans. A lot of countries including the U.S.A. stick to a treaty as long as it seems to serve their interests and then freely deviate when the perceived interest is for violation.

I`d wager there is no need for the U.S.A. to require a 5 WPM code test by any international agreement. There may be an agreement for some very unspecific testing for code operators on some parts of the radio spectrum. But, they are probably without meaning, penalty, or method of enforcement.

The U.S. could today say no more code tests from this day on in this country and nothing could or would be done about it anywhere.

Best regards, Richard Harrison, KB5WZI

2188. Re: Beware of defective RG-213 from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 04:38:10 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3A7796DB.56BA331D@pobox.com>
Source record: 171261
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Uh oh, I just ordered 100ft from them..

2189. How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 04:50:25 UTC
From: k7jy@aol.com
Message-ID: <20010130235025.13701.00001953@ng-ci1.aol.com>
Source record: 171263

I know this may sound funny, but does anyone out there know how trees grow? If i leave an antenna wire up in a big spruce tree (over a horizontal branch) at 100 feet up, in five years or so will it be at 105 feet or any higher at all? I know that these trees grow in girth at their bases, but do they "telescope upwards" or do they just grow vertically from the top? Many thanks for any informed responses. 73, de John, K7JY, Seattle.

2190. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 05:02:54 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A779C7E.8278993C@bwcc.com>
Source record: 171264

K7jy wrote:
> I know this may sound funny, but does anyone out there know how trees grow? If
> i leave an antenna wire up in a big spruce tree (over a horizontal branch) at
> 100 feet up, in five years or so will it be at 105 feet or any higher at all?
No, the horizontal branch's center will always be at the same elevation.
The branch will increase in diameter above and below.

There is a survey blaze mark made on a tree on my farm perhaps 100 years ago. Though the tree got much taller, the mark remained at nominally the same height.

Trees grow taller mainly by extending at the very top.

2191. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 05:03:25 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <9586nb$2slc$1@news.kabelfoon.nl>
Source record: 171265

John,

That is an interesting question. As far as I know trees grow from the top and in the lower parts they get thicker and thicker. Look for example how a plant grows. Of course it depends on the age of the tree. Branches can change shape and direction. The leaves grow towards the light. That's also how the branch chooses it's growing direction.

That's all I can say about it. Maybe you should place your question in a newsgroup for biological subjects as well or check the library for books about this subject.

'73, Adam

K7jy <k7jy@aol.com> schreef in berichtnieuws
20010130235025.13701.00001953@ng-ci1.aol.com...
> I know this may sound funny, but does anyone out there know how trees grow? If
> i leave an antenna wire up in a big spruce tree (over a horizontal branch) at
> 100 feet up, in five years or so will it be at 105 feet or any higher at all? I
> know that these trees grow in girth at their bases, but do they "telescope
> upwards" or do they just grow vertically from the top? Many thanks for any
> informed responses. 73, de John, K7JY, Seattle.

2192. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 05:18:27 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A77A023.6292@wt.net>
Source record: 171266

Cecil wrote:
>
> Mark Keith wrote:
> > Dipole shows S3 noise, maybe the
> > GP might show S4. Did it matter? Heck no...The GP would receive the
> > desired signal 2 s units louder than the dipole would.
>
> My 1/4WL 40m vertical with eight radials is consistently 2-3 S-units
> down from my horizontal dipole on signals and consistently has 2-3
> S-units more noise. I was extremely disappointed.
> --
> http://www.mindspring.com/~w6rca

How high is it? I forgot...Seems yours was too low for 8 radials to work well wasn't it? Like 10 ft or so? Mine was 36 ft high at the base with 4 sloping radials. Same height as my test dipole. How does the height of your test dipole compare with your vertical? I've got a funny feeling it's higher. MK
--
http://web.wt.net/~nm5k

2193. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 05:24:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A77A18C.1331157B@eznec.com>
Source record: 171170

It'll stay at the same height. But the branch and/or trunk will grow around your wire, so before long you won't be able to get it back down. Trees grow from the top, and they also increase diameter. They don't grow from the bottom and push things up. Too bad -- the sequoia in my back yard was 8 feet tall when I moved here, and it's around 70 feet now. Every few years I have to climb it if I want to take advantage of its increasing height. (I put a pulley on a long screw eye. Eventually the tree grows over the screw eye as its diameter increases. I don't shoot a wire or rope over the top, since I want to be able to get it back down for modification or to try different antennas.)

Roy Lewallen, W7EL

K7jy wrote:
>
> I know this may sound funny, but does anyone out there know how trees grow? If
> i leave an antenna wire up in a big spruce tree (over a horizontal branch) at
> 100 feet up, in five years or so will it be at 105 feet or any higher at all? I
> know that these trees grow in girth at their bases, but do they "telescope
> upwards" or do they just grow vertically from the top? Many thanks for any
> informed responses. 73, de John, K7JY, Seattle.

2194. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 05:27:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A77A24C.6A1D@wt.net>
Source record: 171267

Jim Lill wrote:
>
> I live very close to the local TV xmitters. I'd like to use a simple
> bowtie dipole to cover 21-59. I cannot find the info on how to get the
> angle correct. I'm pretty sure that you can get darn close to 300 ohm Z
> feed and that can connect to a simple balun/coax etc. I would have
> thought that the angle would be a snap to find, NOT! Obviously the
> length is non-critical by comparison.
>
> TIA
>
> -Jim
> WA2ZKD
>
> Sent via Deja.com
> http://www.deja.com/

I'd probably do it like in the old days. Just make the loop and hook directly to the tv ant terminals. The size etc not all that critical. You could use stiff wire and hook each end to the 300 ohm uhf terminals and form a loop about 5-6 inches dia and would work ok I think. About a foot or so of wire should be plenty. You probably can still buy these antennas ready to go. Maybe at radio shack. They would be better as they swivel and can be turned. MK
--
http://web.wt.net/~nm5k

2195. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 05:47:33 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A77A6F5.8031B945@IEEE.org>
Source record: 171268

Mark Keith wrote:
> How high is it? I forgot...Seems yours was too low for 8 radials to work
> well wasn't it? Like 10 ft or so? Mine was 36 ft high at the base with 4
> sloping radials. Same height as my test dipole. How does the height of
> your test dipole compare with your vertical? I've got a funny feeling
> it's higher. MK

My dipole is 40ft high and is a full-wave on 40m. My 33ft 40m vertical
is ground mounted with 8 buried radials. However, I have never seen
the vertical beat the dipole even off the ends of the dipole. :-(
--
http://www.mindspring.com/~w6rca

2196. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 06:11:12 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <958ajp$9sc$1@slb6.atl.mindspring.net>
Source record: 171169

Richard Harrison wrote in message
>
>
>snip<
>
>
The U.S. could today say no more code tests from this day on in this country and nothing could or would be done about it anywhere.

Best regards, Richard Harrison, KB5WZI

But that is not the way things are done in a civilized, rule based society. The rules are in place. Whether you are familiar with the treaty or not, is not relevant. Whether the rules could be ignored without consequence is also not relevant. The treaty will no doubt be modified and many expect fully that the CW requirement will go away completely. Until the treaty is modified; however, it is not very responsible of you to be advocating disregard for it.

You don't seem to grasp the fact that you have won the battle Richard. Are you so filled with anger about the past CW requirements that it is blinding you to current reality? Take advantage of the new rules Richard; there is no more 20 wpm requirement; nor 12 wpm; go get your Extra. No need to hang around at Tech Plus. With the technical knowledge that you like to lay on us daily, all you have to do is ask for the Extra and it is yours! You have won! Pull yourself out of this bitter; angry mood related to CW and all of us old time hams that did it our way. You can now do it your way! Go for it!

Dean Craft -- W4IHK

2197. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 07:59:11 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A77C5CF.5B5A@wt.net>
Source record: 171171

Cecil wrote:
>
> Mark Keith wrote:
> > How high is it? I forgot...Seems yours was too low for 8 radials to work
> > well wasn't it? Like 10 ft or so? Mine was 36 ft high at the base with 4
> > sloping radials. Same height as my test dipole. How does the height of
> > your test dipole compare with your vertical? I've got a funny feeling
> > it's higher. MK
>
> My dipole is 40ft high and is a full-wave on 40m. My 33ft 40m vertical
> is ground mounted with 8 buried radials. However, I have never seen
> the vertical beat the dipole even off the ends of the dipole. :-(
> --
> http://www.mindspring.com/~w6rca

Sure , not ground mounted with only 8 radials. I tried the same thing at first, but with 32 radials. Mine "ground mounted" didn't beat my dipole either. But my elevated one sure did. Bigtime. My GP at 36 ft with 4 radials was about equal to a ground mount with 60 radials. Quite a difference between 8 and 60. Even with 32 radials I wasn't impressed with the ground mount. But elevating a 1/4 wl was like turning on a switch.Try your antenna at 35-40 ft and see what happens. I bet you change your tune. :) My GP never lost to the dipole over 1500 miles away. Not even once that I can think of. If I was working CA. and switched from my GP to the dipole, it was like reducing my power from 1000w to 100w to them. Of course, when I used that antenna I did run a full KW usually, so I tended to brown the food over there most nights. The combo of the GP and a KW was a killer on 40m late at night. I'd be over S 9+ usually overseas. Unless I switched to the dipole that is. Then I'd drop to S 6-7 or something like that. From the USA to dx, only the guys with directional arrays "IE bobtail curtains, etc" or yagis could beat me. One of these days I'm going to phase two of them. That oughta be a hoot. :/ MK
--
http://web.wt.net/~nm5k

2198. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 08:04:34 UTC
From: vk4laj@my-deja.com
Message-ID: <958gugpeu1@nnrp1.deja.com>
Source record: 171172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Murray I have been thinking about what you said regarding the
differential and also note what you said below

Perhaps the gearbox and shaft drive off a motorcycle would be the order
of the day.... I haven't investigated this but I see no reason why it
couldnt work after all if those gearboxes can handle 75+hp they should
handle an antenna, their compact size has to be a plus too.

73 Adam
VK4LAJ

In article <SrKd6.1$b%6.1280@wa.nnrp.telstra.net>,
"Murray Lang" <muzzle@iexpress.net.au> wrote:
> I don't think the differential bought much gear reduction.
> I wonder if an old automobile gearbox would give appropriate
reduction with
> one of the gears? Hmmm... must be a better way.
>
> Murray

Sent via Deja.com
http://www.deja.com/

2199. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 08:49:54 UTC
From: Murray Lang <muzzle@iexpress.net.au>
Message-ID: <LmQd6.1$L67.122@wa.nnrp.telstra.net>
Source record: 171173
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

I'd be interested to know how it all works out for you.

Murray

<vk4laj@my-deja.com> wrote in message news:958gugpeu1@nnrp1.deja.com...
> Murray I have been thinking about what you said regarding the
> differential and also note what you said below
>
> Perhaps the gearbox and shaft drive off a motorcycle would be the order
> of the day.... I haven't investigated this but I see no reason why it
> couldnt work after all if those gearboxes can handle 75+hp they should
> handle an antenna, their compact size has to be a plus too.
>
> 73 Adam
> VK4LAJ
>
> In article <SrKd6.1$b%6.1280@wa.nnrp.telstra.net>,
> "Murray Lang" <muzzle@iexpress.net.au> wrote:
> > I don't think the differential bought much gear reduction.
> > I wonder if an old automobile gearbox would give appropriate
> reduction with
> > one of the gears? Hmmm... must be a better way.
> >
> > Murray
>
>
> Sent via Deja.com
> http://www.deja.com/

2200. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 09:25:21 UTC
From: Harold Johnson <w4zcb@ispchannel.com>
Message-ID: <5SQd6.81696$HE2.7637343@news1.onlynews.com>
Source record: 171174

> I know this may sound funny, but does anyone out there know how trees grow? If
> i leave an antenna wire up in a big spruce tree (over a horizontal branch) at
> 100 feet up, in five years or so will it be at 105 feet or any higher at all? I
> know that these trees grow in girth at their bases, but do they "telescope
> upwards" or do they just grow vertically from the top? Many thanks for any
> informed responses. 73, de John, K7JY, Seattle.

Your antenna will still be 100 feet high, the tree top will be about 20 feet taller however.

W4ZCB

2201. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 11:28:39 UTC
From: Nigel Hewitt <no.spam.please.systems@seikisystems.co.uk>
Message-ID: <TJSd6.6436$Q94.151195@monolith.news.easynet.net>
Source record: 171175
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

"VK4LAJ" wrote
> I am looking at building a lot of my own gear this time around and one
> project is an antenna rotator. Although I have searched high and low on the
> internet, I can not find anyone that has built a rotator system from
> scratch. I have found a direction indicator but that's all.

I did this with an old windscreen wiper motor.

I had a bearing in the roof pitch and dropped
the aerial pole into the roof so I could run
things in the dry.

The motor already has a big step down so it
drove a little pulley with a big pulley on
the bottom of the pole made out of three bits
of chipboard bolted together.

It was gloriously Heath Robinson but worked
a dream for five years till I moved.

I had a 360 degree pot (I've not seen them
recently) driving a panel meter calibrated
in NSEW.

nigelH
G8JFT

2202. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 13:41:57 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <FCUd6.268732$hD4.64802799@news1.rdc1.mi.home.com>
Source record: 171176

Think about what you are saying man!
Are you Bill Clinton's "Word Twister" advisor?

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A76E7EA.F8C3D122@IEEE.org...
> William Lee wrote:
> > Why should I be required to study Math, Psychology, and English, to get
a
> > college degree in Fine Arts?
> > I dont hear anyone bitching and wanting to change that!
>
> Those are degree graduation requirements, not prerequisites
> for *entrance* into college. Too many hams consider their
> license to be some sort of graduation certificate when it
> is merely a ticket to gain *entrance* into ham radio.
> --
> http://www.mindspring.com/~w6rca

2203. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 13:56:07 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <XPUd6.268735$hD4.64807815@news1.rdc1.mi.home.com>
Source record: 171177

Your argument makes a bit more sense than some of the others, Richard!
However there are Many licenses that only require a fee to be paid and I
don't think that matters one hoot.
I and many of my ham buddies do not like or use code.
But we wanted to be hams so we learned it because it was a requirement.
Just like some of those stupid, useless, courses I took to get a diploma.
It was not easy.
It required a lot of WORK and EFFORT on my part to achieve.
I was willing to put forth the effort because I wanted it and felt it was
worth the effort.
Now all one needs to do is learn 5wpm.
Is Ham radio not worth even that effort anymore?

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:5646-3A76F383-46@storefull-111.iap.bryant.webtv.net...
> William Lee wrote:
> "Why should I be required to study Math, Psychology, and English to get
> a college degree in Fine Arts?
>
> The B.F.A. degree is a credential that you`ve satisfied more than the
> vocational knowledge needed to paint, play an instrument, or whatever.
> It is not a license to practice anything. Enjoy your degree for the
> aggrandizement it gives.
>
> Licenses are typically issued to deny access of inept
> non-license-holders to positions where their practice may likely result
> in the death or serious injury of someone. Licenses are usually issued
> on demonstration of knowledge and skills needed to avoid mishaps. A
> fishing license is an exception. It only shows you`ve paid a fee. Ham
> licenses could logically be in the same category as fishing licenses.
>
> Radio has progressed to the point of popular familiarity. Safety of life
> no longer requires such tight regulation as in the early days. The
> captain and flight attendents will tell you if and when it is safe to
> use your electronic devices. Tight licensing requirements are
> counterproductive.
>
> The FCC found itself in the position of issuing credetials (the
> commercial operator license) mainly for the benefit of the employers of
> radio technicians. It was evidence of some knowledge and skill. It
> wasn`t really needed to protect safety. So, they`ve mostly discontinued
> the practice.
>
> The FCC has heard all the arguments made about ham licensing when they

> were eliminating most commercial licensing. They now have the experience
> of commercial deregulation, and it wasn`t dire at all.
>
> Best regards, Richard Harrison, KB5WZI
>

2204. Re: Make /buy whip ant for 10m?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 14:01:08 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <EUUd6.268736$hD4.64809482@news1.rdc1.mi.home.com>
Source record: 171178

A lot of those 102 inch whips have a setscrew at the bottom ferule that
makes this easier to do.

"Mark Kenward" <ae8844@wayne.edu> wrote in message
news:3A76E351.689B03E1@wayne.edu...
> Would it not be "easier' to use a file and cut the whip at the top until
> you got the length you wanted?
>
> 'Doc wrote:
>
> > Pete,
> > You take a standard 102" whip, unsolder the ferule
> > at the bottom, cut the whip to length, then resolder
> > the ferule back on. I've found that to be the easiest
> > and 'best' way.
> > 'Doc
>

2205. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 14:09:59 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <X0Vd6.268738$hD4.64812605@news1.rdc1.mi.home.com>
Source record: 171179

But Mark .... most all who use a vertical antenna mount it at or close to groung level or on the bumper of their car. City dwellers dont have a lot of room to string out wire dipoles. That is why most of them choose a vertical to start with. Not everyone can install a 40m GP at a heigth of 36 feet. it requires to much real estate and support structure to fit a city lot.

"Mark Keith" <nm5k@wt.net> wrote in message news:3A77C5CF.5B5A@wt.net...
> Cecil wrote:
> >
> > Mark Keith wrote:
> > > How high is it? I forgot...Seems yours was too low for 8 radials to
work
> > > well wasn't it? Like 10 ft or so? Mine was 36 ft high at the base with
4
> > > sloping radials. Same height as my test dipole. How does the height of
> > > your test dipole compare with your vertical? I've got a funny feeling
> > > it's higher. MK
> >
> > My dipole is 40ft high and is a full-wave on 40m. My 33ft 40m vertical
> > is ground mounted with 8 buried radials. However, I have never seen
> > the vertical beat the dipole even off the ends of the dipole. :-(
> > --
> > http://www.mindspring.com/~w6rca
>
> Sure , not ground mounted with only 8 radials. I tried the same thing at
> first, but with 32 radials. Mine "ground mounted" didn't beat my dipole
> either. But my elevated one sure did. Bigtime. My GP at 36 ft with 4
> radials was about equal to a ground mount with 60 radials. Quite a
> difference between 8 and 60. Even with 32 radials I wasn't impressed
> with the ground mount. But elevating a 1/4 wl was like turning on a
> switch.Try your antenna at 35-40 ft and see what happens. I bet you
> change your tune. :) My GP never lost to the dipole over 1500 miles
> away. Not even once that I can think of. If I was working CA. and
> switched from my GP to the dipole, it was like reducing my power from
> 1000w to 100w to them. Of course, when I used that antenna I did run a
> full KW usually, so I tended to brown the food over there most nights.
> The combo of the GP and a KW was a killer on 40m late at night. I'd be
> over S 9+ usually overseas. Unless I switched to the dipole that is.
> Then I'd drop to S 6-7 or something like that. From the USA to dx, only
> the guys with directional arrays "IE bobtail curtains, etc" or yagis
> could beat me. One of these days I'm going to phase two of them. That
> oughta be a hoot. :/ MK
> --
> http://web.wt.net/~nm5k

2206. Re: TVI 6 METERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 14:19:37 UTC
From: Kevin J Wren <ktwren@earthlink.net>
Message-ID: <3A781F73.1449BBF1@earthlink.net>
Source record: 171180

Change the pre-amp on the mast to a narow banded one which has decent band pass filtering. It sounds as if you are overloading the distribution amplifier which in turn is giving the TV's grief.

Kevin j Wren

"David J. Moge" wrote:

> In brief, I have a multi element TV antenna with a amplifier connecting to 4
> televisions. The house lot is laid out in such a way that it's very hard to
> string antennas up with out having them in close proximity to the TV
> antenna. Cable is not an option. Satellite is possible but would like to
> keep regular TV antenna.
>
> At Christmas I found a Six Meter rig under the tree.(MFJ 9406 SSB/CW 10
> Watts) which my wife gave me. I put up a dipole to try it out and to my
> surprise it works quite well. With a antenna tuner I have a 1.3:1 SWR.
>
> My wife hasn't stopped yelling at me sense. Every time I key the mike or try
> out CW the TV's go blank. I have tried a HI PASS filter but that doesn't do
> much good at all.
> My HF rigs cause no problems at all. I do have a good RF ground
>
> WHAT AM I DOING WRONG??? HELP!!!
>
> Any comments and suggestions would be gratefully appreciated.
>
> Thanks
> DAVE,N1RZB

2207. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 14:27:23 UTC
From: richardharrison@webtv.net
Message-ID: <28288-3A7820CB-15@storefull-117.iap.bryant.webtv.net>
Source record: 171181

Dean Craft, W4IHK wrote:
"Until the treaty is modified, however, it is not very responsible of you to be advocating disregard for it."

Coders have perpetrated injustice for no-coders for most of the last 87 years! They`ve done it through tyrannical organization. No-coders had no organization.

It`s now obvious that the coders` position is indefensible. So, what is their reaction? Obstruct and delay.

No-coders want all mandatory code ended here and now. No more delays!

Best regards, Richard Harrison, KB5WZI

2208. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 14:44:28 UTC
From: richardharrison@webtv.net
Message-ID: <28290-3A7824CC-1@storefull-117.iap.bryant.webtv.net>
Source record: 171183

Mark Keith wrote:
"You probably can still buy these antennas (UHF loops) ready to go.
Maybe at Radio Shack."

I second Mark`s suggestion. Your stations are near and an antenna at the back of your TV set is accessible to adjust for best picture.

Best regards, Richard Harrison, KB5WZI

2209. Source for wavelength explaination.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 14:46:35 UTC
From: Jeff Farrar <jeff@farrar.com>
Message-ID: <fzVd6.22076$49.3267598@news1.rdc2.pa.home.com>
Source record: 171182

Where on the internet could I find out information on the different characteristics of antenna wavelengths? I am looking to install a mobile 2M antenna and am trying to figure out what style of antenna to get. From the little I've gathered a 1/4 wave needs a great ground plane has little gain but its pattern is more vertical which might help out traveling in valleys. 5/8 has a higher gain buts its pattern is more horizontal. 1/2 does not need a ground plane. I would really like to understand this a little better.

THANKS

2210. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 15:36:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7830F6.A0F27104@IEEE.org>
Source record: 171185

William Lee wrote:
> Think about what you are saying man!

I've been a ham for 50 years and have concluded that what a ham does *after* he gets an amateur radio license is magnitudes more important than what he does in order to obtain an amateur radio license.
--
http://www.mindspring.com/~w6rca

2211. Skeleton slot info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 15:39:43 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <TmWd6.12431$YT3.312694@news6-win.server.ntlworld.com>
Source record: 171184

Last week someone posted on here requesting HF skeleton slot info and I said that I would scan an article and email it to them. Well I have cleaned out my newsgroups and lost thier details, so if you want the article please email me as I now have it scanned and ready.

Jon M0BQQ

2212. 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 17:23:01 UTC
From: wehowell@aol.com
Message-ID: <20010131122301.10361.00000020@ng-cu1.aol.com>
Source record: 171186

I have a '90 Ford Ranger pickup that I mant to operate with a mobile rig on 40/20 meters (ICOM 706 MKII with auto tuner), however, the RFI is too great. The chief offender is the fuel pump which is buried in the plastic fuel tank. Has anyone had any experience with this. To bypass the fuel pump power line to ground (anywhere close to the exit point) will require that I drop the fuel tank. I am not ready to do that unless I have some indication that it would improve the situation.

All information I have is that Ford does not have a TSB on the subject.

I have tried nominal fixes such as rerouting the antenna cable; this has some effect but not significant. The antenna is mounted on the driver's side rear.

With the feed line diconnected at the antenna the noise is slightly reduced; disconnected at the output of the antenna tuner the noise is completely gone - so the noise is getting in through the feed and antenna.

Thanks for any suggestions
WB4UYA
wehowell@aol.com

2213. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 18:07:44 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <959k8n$3ja$1@news.tribune.com>
Source record: 171190

Grasses grow from the bottom and telescope up.
That is why you can mow your lawn and have it keep growing. Grass evolved to survive being eaten by grazing animals. Corn is the largest grass I am familiar with.
KA9CAR

K7jy <k7jy@aol.com> wrote in message news:20010130235025.13701.00001953@ng-ci1.aol.com...
> I know this may sound funny, but does anyone out there know how trees grow? If
> i leave an antenna wire up in a big spruce tree (over a horizontal branch) at
> 100 feet up, in five years or so will it be at 105 feet or any higher at all? I
> know that these trees grow in girth at their bases, but do they "telescope
> upwards" or do they just grow vertically from the top? Many thanks for any
> informed responses. 73, de John, K7JY, Seattle.

2214. Vargarda VHF aerials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 18:11:30 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <959kf3$4rs$2@news8.svr.pol.co.uk>
Source record: 171187

Any comments please

2215. Re: Vargarda VHF aerials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 18:14:03 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <wkQKgrBrXFe6EAkv@ifwtech.plus.net>
Source record: 171188

Keith wrote:
>Any comments please
>
Built like a Volvo.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2216. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 18:14:52 UTC
From: n2ey@aol.com
Message-ID: <959kmiohk1@nnrp1.deja.com>
Source record: 171189

In article <3A76E8BC.100CE2A8@wgcr.org>,
Lamar Owen <lamar.owen@wgcr.org> wrote:
> N2EY wrote:
> > In article <3A706C68.691289AD@wgcr.org>, Lamar Owen
<lamar.owen@wgcr.org>
> > writes:
> > >Automatic CW 'modems' are also available
> > >
> > They are encoder/decoder, not modems.
>
> It's an ASK modem, actually. Codec/modem -- same effect. Just the
> keying method is different -- FSK, PSK, or ASK. High-speed
> trellis-coded QPSK modems use ASK as well as PSK.

I disagree - modems are not encoder/decoders, they're
modulator/demodulators. A ham rig is a form of "RF modem". But let's
not play word games - whatever we call 'em, there are devices that will
turn received Morse into text and vice versa.
>
> > > -- you can then copy CW by
> > >simply reading.
> > The encoder/decoder is doing the "copying", in that case.
>
> Not really. You are copying the text, just like you are copying RTTY
> after the modem.

Reading is not the same thing as copying.
>
> > >The Amateur HF bands are a small minority of 'the great majority of
> > >radio services' listed above.
>
> > HF is considered to be 3-30 MHz. Of those 27 MHz, US hams have
access to 3.55
> > MHz - a little over 13%
>
> A small minority, IOW.

I wouldn't call 13% "small"
>
> > >Sure, hams use CW -- but hams also use
> > >outdated FM equipment on 2 meters, too, that no one else can use.
>
> > Think about WHY they use it.
>
> Occupied bandwidth -- the equipment is cheap now because commercial

> interests, due to regulations, cannot use it.

The most important reason hams use analog FM on VHF/UHF is that nobody has come up with and SOLD an alternative that does the same or better job for hams. (By "SOLD" I mean "publicized and promoted to the amateur population").
>
> > > The
> > >reason for amateurs' existence is spelled out in the rules -- which
> > >paragraph does CW Morse meet these days?
>
> > Morse permits more hams to use simple equipment they built themselves than
> > would be possible if it did not exist. This promotes technical knowledge and
> > development, which is one of the reasons for the ARS.
>
> AM DSB-FC is simpler for the receiver.

Not for HF.

The simplest practical amateur HF/MF receiver is a regenerative detector/audio amp design. Such a receiver is usable for Morse, AM and even SSB (if carefully built) with no additional equipment.

Another simple design is the direct-conversion receiver, which overcomes many of the regenerative's shortcomings. Direct conversion sets are actually BETTER for Morse and SSB than they are for AM.

> The transmitter for AM
> double-sideband full carrier is almost as simple as a CW transmitter --
> especially with plate modulation in a transformerless setup (high
> voltage carbon mics can even be used -- been there, done that).

Do you think such a design is really practical today? I don't.

On the other hand, many thousands of hams are on the air using simple Morse HF gear and working the world with it. It is a "first step" that is a big benefit of the mode.
>
> Of course, AM DSB-FC has other problems CW doesn't have.

Yup. The ~17 dB S/N disadvantage of AM is one.

> CW actually is
> ASK (Amplitude Shift Keying), if you look at it closely.

Of course. OOK is just AM taken to the limit. FSK is FM taken to the limit.
>
> And there is a sort of AM revival occuring, with surplus broadcast band

> transmitters showing up in top band.

Been going on for over a decade - and it's not just old BC transmitters or 160 meters. Old AM rigs that used to be considered "junk" are now highly prized and sought after.
>
> > Morse helps bridge language barriers. I'm not saying it's a language in itself,
> > but it does help eliminate the problems of accents and limited knowledge of
> > foreign languages. Other modes do this too, but they are far less common and
> > often out of the reach of developing countries.International good will.
>
> Any digital code can do the same -- Morse is not unique in this regard.

As I wrote: "Other modes do this too, but they are far less common and often out of the reach of developing countries."
>
> > Morse is widely used in traffic nets and other public service uses.
>
> Only on the ham bands.

That's what matters. We're talking about ham radio, not some other service.

> The ARS also exists to train communicators in
> case they are needed on other bands and in other services, where Morse
> is gone.

Yup - but how many communicators do those services need anymore? It's not just the code which is gone from other services, it's the whole idea of a "radio operator" that they are trying to phase out. The shipping outfits like Exxon and Zapata pushed for the end of mandatory maritime Morse because they wanted to get rid of the OPERATOR.
>
> > Morse helps build operating skills. Not just the ability to send and receive
> > Morse, but how to listen, how to say things briefly, standard procedures, etc.
>
> There are more ways to build all these things than just Morse.

Of course! But the question was about which of the Part 97 bases and purposes Morse supports. The existence of alternatives does not diminish the importance and contribution of Morse to the ARS.
>
> > >Yes, I have listened to the amateur HF bands. Do you take me for a
> > >newbie?
>

> > I know how old you are but not how experienced. When I read anti-
Morse
> > statements like the ones in this thread I wonder how much HF ham
radio the
> > writers of them have actually experienced.
>
> I am experienced enough, listening-wise.

How much is that?

> Not all those who have CW
> experience grow to like or enjoy the mode.

Agreed - and the same can be said of any mode. What is your Morse
OPERATING experience?
>
> > >> > Almost as outdated as spark.
> > >> Not at all. Do you know when spark disappeared from the ham
bands, and why?
> > >The why is due to occupied bandwidth.
>
> > Not really. The why is due to the fact that for the same number of
dollars
> > spent, a "CW" (tube) transmitter would be heard much farther away,
even if the
> > power was much lower.
>
> Because occupied bandwidth was smaller, the power density was higher,
> even with lower total power.

That's part of it - but the main push was "miles per dollar".
>
> > That depends on how the "technical merits" are weighted. Are
> > bicycles obsolete or outdated?
>
> High-wheelers are obsolete.

Not to those who use them.

> Mountain bikes are a fun hobby

What about road bikes?

> -- but you
> don't use them on the freeway. And, in fact, bicycling is illegal on
> some roads, for safety.

Exactly. And there are bike paths and lanes where motor vehicles are
banned.

In other words, the emergence of new technology did NOT "obsolete" the
old technology.
>

> > The digital folks keep saying how spectrum efficient they are. If
so, why do
> > they need so much of the band?
>
> The same can be said of CW.

There is far more Morse on amateur HF than all digital modes combined.
>
> > If someone wants to use Morse, is a 5 or 10 wpm test any sort of
problem? I
> > don't think so.
>
> _If_ they want to use it.

Such a test would ONLY be for access to the Morse-only subbands. Like a
bike riding test before you can get on the bike path.
>
> > >30-20-50, maybe?
> >
> > There's a lot more Morse than digital on the HF ham bands.
> >
> > >Or 33-33-34, even?
>
> > That would mean less room for 'phone than there is now.
>
> Yes, it would.

Doubtful such a move would get very far.
>
> > Then how do you justify forcing me to learn about SSB, and FM and
TV and
> > VHF/UHF and lots of other stuff when all I wanted to do was work
Morse on 40
> > meters? You shoulda seen the old writtens.
>
> I have.

Where? They were secret. I took them.

> But learning about _how_ the mode works is completely
> different.

The concept of "why do I have to learn this if I'm not interested in
using it?" is exactly the same. That's the important point.

> But, it's a moot point.

Yup. FCC has spoken, and it's very doubtful their direction will be
changed.

73 de Jim, N2EY
--
FISTS #4360

BIT #0001

Sent via Deja.com
http://www.deja.com/

2217. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 18:28:05 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC806E953EB@www.premiersi.com>
Source record: 171191

This has always been a problem with late-model Fords. I've heard numerous people say replacing the pump does nothing to help the problem. About all you can do is ground, ground and ground some more to try to minimize it. That, or rip out the OEM pump and put in a different one in-line.

"WEHowell" <wehowell@aol.com> wrote in message news:20010131122301.10361.00000020@ng-cu1.aol.com...
> I have a '90 Ford Ranger pickup that I mant to operate with a mobile rig on
> 40/20 meters (ICOM 706 MKII with auto tuner), however, the RFI is too great.
> The chief offender is the fuel pump which is buried in the plastic fuel tank.
> Has anyone had any experience with this. To bypass the fuel pump power line to
> ground (anywhere close to the exit point) will require that I drop the fuel
> tank. I am not ready to do that unless I have some indication that it would
> improve the situation.
>
> All information I have is that Ford does not have a TSB on the subject.
>
> I have tried nominal fixes such as rerouting the antenna cable; this has some
> effect but not significant. The antenna is mounted on the driver's side rear.
>
> With the feed line diconnected at the antenna the noise is slightly reduced;
> disconnected at the output of the antenna tuner the noise is completely gone -
> so the noise is getting in through the feed and antenna.
>
> Thanks for any suggestions
> WB4UYA
> wehowell@aol.com

2218. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 18:33:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A785A84.B39C6242@IEEE.org>
Source record: 171192

WEHowell wrote:
> Thanks for any suggestions

Get a GMC. :-)
--
http://www.mindspring.com/~w6rca

2219. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 19:07:26 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a786d04.0@oracle.zianet.com>
Source record: 171196

The fuel pump is a likely candidate. You can hear that noise when you first turn the ignition key to the on (NOT start) position. The pump will run for two seconds.

Ford has some tech notes on killing the pump noise but it really is only partly effective. I suspect it could be very expensive on an out-of-warranty vehicle. The pump on my old '94 was inside the tank.

You'll find a very good article on "Ford Noise Problems Revisited" on page 6 of the Feb, 2001 Worldradio magazine.

Good luck... Ed, W5EJ

"WEHowell" <wehowell@aol.com> wrote in message news:20010131122301.10361.00000020@ng-cu1.aol.com...
> I have a '90 Ford Ranger pickup that I mant to operate with a mobile rig on
> 40/20 meters (ICOM 706 MKII with auto tuner), however, the RFI is too great.
> The chief offender is the fuel pump which is buried in the plastic fuel tank.
> Has anyone had any experience with this. To bypass the fuel pump power line to
> ground (anywhere close to the exit point) will require that I drop the fuel
> tank. I am not ready to do that unless I have some indication that it would
> improve the situation.
>
> All information I have is that Ford does not have a TSB on the subject.
>
> I have tried nominal fixes such as rerouting the antenna cable; this has some
> effect but not significant. The antenna is mounted on the driver's side rear.
>
> With the feed line diconnected at the antenna the noise is slightly reduced;
> disconnected at the output of the antenna tuner the noise is completely gone -
> so the noise is getting in through the feed and antenna.
>
> Thanks for any suggestions
> WB4UYA
> wehowell@aol.com

2220. Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 19:12:33 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <BsZd6.140017$ge4.51323780@news2.rdc2.tx.home.com>
Source record: 171193

I have an Icom IC756. The spectrum scope shows the activity on the band across selectable ranges from 25 kHz to 200 kHz.

Sometimes I will get static that shows up as a sawtooth pattern lasting for several seconds, then disappearing and reappearing. In fact, if I quickly jump to another ham band, the sawtooth will be there also.

Now here's the weird part. Presumably each tooth on the "saw" represents a transmitted frequency. But, if I quickly change the scope's range, the "teeth" don't get close together or farther apart. So, when the range is 25 kHz the teeth appear to be about 1 kHz apart. But when the range is 200 kHz the teeth seem to be maybe 7 kHz apart.

Any ideas?

Thanks, Pete KATZK

2221. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 19:16:51 UTC
From: rwclark@seanet.com
Message-ID: <3a78645b.77600313@news.seanet.com>
Source record: 171194

On Wed, 31 Jan 2001 12:07:44 -0600, "KA9CAR" <nospam@nospam.usa>
wrote:

>Grasses grow from the bottom and telescope up.
>That is why you can mow your lawn and have it keep growing. Grass evolved
>to survive being eaten by grazing animals. Corn is the largest grass I am
>familiar with.
>KA9CAR
>

Hi OM,

You don't have any bamboo growing nearby I take it. It will grow up
to a foot a day.

73's
Richard Clark, KB7QHC

2222. Re: Morse decoders (No-code kills)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 19:42:42 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A786AB1.77D0F1C1@3n.net>
Source record: 171195

n2ey@aol.com wrote:
>
> ...lets not play word games - whatever we call 'em, there are devices
> that will turn received Morse into text and vice versa.

I hope they receive a whole lot better than the one I bought 10
years ago. It worked perfectly on machine-generated Morse but
very poorly in actual practice. I'd hoped to use it to "back up"
my own skills and thus improve them but found I spent more time
trying to figure out the garbage it was displaying than trying
to copy code myself so I quit using it. I suspect that most hams
have much poorer fists than they'd like to admit; that a good
ear and skilled mind can gloss over their mistakes but older
machines like mine cannot. How about the new PC sound-card SW??
tnx
KA3DWW

2223. Re: Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 20:05:12 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <FjsjCEA4$Ge6EwjW@pickmere.demon.co.uk>
Source record: 171207

In article <BsZd6.140017$ge4.51323780@news2.rdc2.tx.home.com>, Pete
Holden <peholden@home.com> writes
>I have an Icom IC756. The spectrum scope shows the activity on the band
>across selectable ranges from 25 kHz to 200 kHz.
>
>Sometimes I will get static that shows up as a sawtooth pattern lasting for
>several seconds, then disappearing and reappearing. In fact, if I quickly
>jump to another ham band, the sawtooth will be there also.
>
>Now here's the weird part. Presumably each tooth on the "saw" represents a
>transmitted frequency. But, if I quickly change the scope's range, the
>"teeth" don't get close together or farther apart. So, when the range is 25
>kHz the teeth appear to be about 1 kHz apart. But when the range is 200 kHz
>the teeth seem to be maybe 7 kHz apart.
>
>Any ideas?

Possibly the Rx scans relatively slowly and there is some form of
storage in the system. So the same interference appears on two bands and
also the 'size' stays the same.

Mike
--
M.J.Powell

2224. Re: Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 20:22:40 UTC
From: rwclark@seanet.com
Message-ID: <3a78729a.81247838@news.seanet.com>
Source record: 171197

On Wed, 31 Jan 2001 19:12:33 GMT, "Pete Holden" <peholden@home.com>
wrote:

>I have an Icom IC756. The spectrum scope shows the activity on the band
>across selectable ranges from 25 kHz to 200 kHz.
>
>Sometimes I will get static that shows up as a sawtooth pattern lasting for
>several seconds, then disappearing and reappearing. In fact, if I quickly
>jump to another ham band, the sawtooth will be there also.
>
>Now here's the weird part. Presumably each tooth on the "saw" represents a
>transmitted frequency. But, if I quickly change the scope's range, the
>"teeth" don't get close together or farther apart. So, when the range is 25
>kHz the teeth appear to be about 1 kHz apart. But when the range is 200 kHz
>the teeth seem to be maybe 7 kHz apart.
>
>Any ideas?
>
>Thanks, Pete KAï¿½TZK
>
>

Hi Pete,

You have sampling (Nyquist) error that is causing the spectrum to
fold. The first indication is in your description of "saw" shaped
products (perhaps for a time based measure, but not a frequency based
one). You need to slow the sweep speed and reduce the frequency
spread that is being swept for an accurate representation.

73's
Richard Clark, KB7QHC

2225. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 20:25:50 UTC
From: richardharrison@webtv.net
Message-ID: <19672-3A7874CE-16@storefull-118.iap.bryant.webtv.net>
Source record: 171198

Jim N2EY wrote:
" - modems are not encoder / decoders, they are modulators / demodulators."

Then, there is the "null modem", and there is the "codec" which codes and decodes.

Jim also wrote:
"Reading is not the same thing as copying."

How about "Fax" or "Xerox"? Or, how about:
"Hello London? Do you copy? How do you read me?'

Saw a PBS broadcast last night about the "Star Dust" a British passenger plane that crashed in the Andes between Mendoza, Argentina and Santiago, Chile in 1947. I`ve flown that route a few times so I watched.

The plane reappeared after being hidden in the snow for about 50 years. The glacier finally moved low enough, carrying the wreckage with it, to expose the wreckage.

Evidence now is that the plane was flying above the overcast which completely covered the mountains. (Been there, done that, and can say it is hard to keep your cigarette lit above 20,000 feet when the cabin isn`t pressurized, and you sure feel compelled to smoke if you are addicted in that situation.) The pilot found no "hueco" (hole) in the overcast, it seems, but he had been flying so long that he must have been sure that he had cleared the moutains and was dscending to Santiago. He had no way of knowing that he had been facing a headwind of about 100 MPH. He crashed in the fog on the Argentine side of the Andes.

He only had CW contact, and shortly before the crash he made only one transmission. In Morse he sent "STENDEC", repeated 3 times. That combined with complete disappearance of the plane lead to speculation of an "alien abduction". Nobody it seems has a clue as to what that transmission might mean. They have tried recomposing the dits and dahs to see if other letters might make more sense. The operator was English and is supposed to have been using the English language. I don`t have a clue.

More about the story is posted on the PBS website.

Best regards, Richard Harrison, KB5WZI

2226. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 21:18:32 UTC
From: accrider3@aol.comnojunque
Message-ID: <20010131161832.23531.00000063@ng-bj1.aol.com>
Source record: 171199

This could be done with a stoker gearbox from an old coal furnace
73 de Dale
KG4KZG

2227. Re: Vargarda VHF aerials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 21:23:49 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <959vn4$1v8$1@newsg2.svr.pol.co.uk>
Source record: 171200

Ian,Have you ever tried any,the aerials that is ?. Who sell them in the UK
?.Thanks.
Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
news:wkQKgrBrXFe6EAkv@ifwtech.plus.net...
> Keith wrote:
> >Any comments please
> >
> Built like a Volvo.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

2228. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 21:33:52 UTC
From: Jim Lill <jpl@vectorbd.com>
Message-ID: <95a0c0$42s$1@nnrp1.deja.com>
Source record: 171201

In article <28290-3A7824CC-1@storefull-117.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Mark Keith wrote:
> "You probably can still buy these antennas (UHF loops) ready to go.
> Maybe at Radio Shack."
>
> I second Mark`s suggestion.

You guys underestimate what being 1/4 miles from 7 TV stations is like!!
Anything new the set will have severe reflections. I want a nicely
matched, low Q, Broadband solution that I can put up in my all-wood
attic and feed with coax.

The bowtie I mentioned would be a spin on the type RatShack sells that
have reflectors, just an essentially 2 flat pieces of metal, I'll skip
the reflector screen.

I have something I guessed the angle at, and it works pretty well. I
made it using "sticky copper tape", EMI/EMC shielding stuff, putting it
on a sheet of lexan.

I'd like to get the angle right then play with the feed-Z and line.

-Jim

Sent via Deja.com
http://www.deja.com/

2229. Re: Any thought/comments on the CCD (Constant Current Distribution) dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 21:45:57 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A7887B6.FE94F9D7@earthlink.net>
Source record: 171202

KK7HO wrote:

> Thinking about putting one up. Anyone have any experience, comments, maybe
> warnings about this antenna?? Thanks, Tim.....KK7HO

Not worth the problem
Steve WB3AMG

2230. Bunched up LL - minimum spacing for coils?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 22:00:03 UTC
From: jflanders2@home.com
Message-ID: <3a7888a5.791819206@news>
Source record: 171203

Is there a rule of thumb for how far to keep ladder-line conductors away from other conductors?

I need to make up a variable-length ladder line circuit to work with Cecil's 130 foot LL-fed multiband antenna (http://people.delphi.com/cecilmoore/mystery.htm) and would like to bunch up all the approx 32 feet of LL inside a plastic trash-can or yard building sort of "cabinet". With all that LL inside a small volume I need to worry about getting the coils too close together, and don't really have any idea how far apart to keep them. I am guessing 2-3 x the LL spacing, but I wonder if anyone has a better guess???

Anybody know how the field falls off with distance?

Jerry W4UK

2231. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 22:13:04 UTC
From: richardharrison@webtv.net
Message-ID: <26081-3A788DF0-84@storefull-114.iap.bryant.webtv.net>
Source record: 171205

Jim wrote:
"You guys underestimate what being 1/4 miles from 7 TV stations is like!!"

In that case, you may benefit from shielding inside your set (foil on the inside surface of the cabinet?).

You may also benefit from a 75-ohm resistance pad (or 300-ohm) in your antenna line to avoid set overload.

An external rabbit ear / loop combination may be more convenient than a loop mounted on the back of the set. You sure don`t need gain, and the resistance pad should take care of mismatching enough to minimize reflections (ghosts).

Best regards, Richard Harrison, KB5WZI

2232. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 22:27:18 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <95a3hk$ep8$1@iac5.navix.net>
Source record: 171204

one of the dyslectic folks trying to send S-decent or start decent ?

"Richard Harrison"
> He only had CW contact, and shortly before the crash he made only one
> transmission. In Morse he sent "STENDEC", repeated 3 times. That
>

2233. Re: Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 22:39:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A789434.49238A15@eznec.com>
Source record: 171208

Spectrum analyzers can easily fool you when looking at pulse or wideband type spectra. One reason is the scanning nature of the spectrum analyzer. For example, suppose your analyzer scans at a 60 Hz rate, and that there's a narrow pulse type interference occurring once each cycle. The pulse will produce a very broadband spectrum, but what you'll see is a "carrier" or a group of lines whose distance from the beginning of the sweep will stay fixed, pretty much regardless of the frequency span or resolution you've chosen. I suspect you're seeing a similar phenomenon.

No signal that lasts for a finite time produces a single frequency. And a spectrum analyzer would have to observe each frequency for an infinite length of time to truly show the frequency domain content of a signal. So what you see is an approximation at best.

Anyone interested in learning more about this topic should read _Modern Spectrum Analyzer Theory and Applications_ and _Modern Spectrum Analyzer Measurements_, both by Morris Engelson. I think they're available from Artech House.

Roy Lewallen, W7EL

"M.J.Powell" wrote:
>
> In article <BsZd6.140017$ge4.51323780@news2.rdc2.tx.home.com>, Pete
> Holden <peholden@home.com> writes
> >I have an Icom IC756. The spectrum scope shows the activity on the band
> >across selectable ranges from 25 kHz to 200 kHz.
> >
> >Sometimes I will get static that shows up as a sawtooth pattern lasting for
> >several seconds, then disappearing and reappearing. In fact, if I quickly
> >jump to another ham band, the sawtooth will be there also.
> >
> >Now here's the weird part. Presumably each tooth on the "saw" represents a
> >transmitted frequency. But, if I quickly change the scope's range, the
> >"teeth" don't get close together or farther apart. So, when the range is 25
> >kHz the teeth appear to be about 1 kHz apart. But when the range is 200 kHz
> >the teeth seem to be maybe 7 kHz apart.
> >
> >Any ideas?
>
> Possibly the Rx scans relatively slowly and there is some form of
> storage in the system. So the same interference appears on two bands and
> also the 'size' stays the same.
>
> Mike

> --
> M.J.Powell

2234. FS: Tonna F9FT VHF/UHF Beams

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 23:00:00 UTC
From: slo100bw@aol.com
Message-ID: <20010131180000.15266.00000141@ng-ct1.aol.com>
Source record: 171206

I have for sale the following antenna packages. Would prefer to sell as whole systems, but will sell seperately. The items listed as new, are Brand New in the box's. Never assembled. The used items have only been used for two montain top contests and have been in storage the past couple of years. I am located in NYC. Buyer to pay all freight. Any further questions, please email me. 73 Bill N2FKF

3 Used model #20655 55 element 1296 beams. $80.00 ea
1 New Model #20655. $90.00
1 Used 4 way power divider for 1296. $60.00
1 New H-frame for the above antenna's. $70.00

3 New model #20921 21 element 432mhz beams. $80.00 ea
1 Used model #20921. $55.00
1 Used 4 way power divider for the above. $60.00
1 New H-frame for the above antenna's. $70.00

4 New model #20817 17 element 2 meter beams. $100.00 ea
1 Used 4 way power didvider for the above. $60.00
NO H-frame. I am currently using it.

If someone decides to take the full 1296 package, i have extra new elements and hardware that i will throw in.

2235. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 23:19:54 UTC
From: richardharrison@webtv.net
Message-ID: <23680-3A789D9A-28@storefull-115.iap.bryant.webtv.net>
Source record: 171209

Fred, W4JLE wrote:
"one of the dyslectic folks trying to send S-decent or start decent?"
(STENDEC) ?

That`s the best looking speculatiom I`ve seen!
I`d think the sender was on pins and needles at the time and such a
turn-around would be understandable, not the message, but the cause.

Best regards, Richard Harrison, KB5WZI

2236. Re: Bunched up LL - minimum spacing for coils?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-01-31 23:47:16 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A78A404.2F2A816B@IEEE.org>
Source record: 171211

Jerry Flanders wrote:
> Is there a rule of thumb for how far to keep ladder-line conductors
> away from other conductors?

I use a rule of thumb of six inches. Keep all ladder-line at least four inches away from all metal and other ladder-line. Something that works well is to spirally loop the ladder-line around a non-conductor with six inches of spacing between adjacent loops.

I actually wound up not needing a 32 ft or a 16 ft loop on my setup. I needed to vary the length from zero to 23 ft so I have 5 loops of 1, 2, 4, 8, 8 ft. which are very easy to manage. Only the 8 ft loops require a support.
--
http://www.mindspring.com/~w6rca

2237. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 00:12:45 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A78A9FD.B91BEE40@IEEE.org>
Source record: 171213

W4JLE wrote:
> one of the dyslectic folks trying to send S-decent or start decent ?
>
> "Richard Harrison"
> > He only had CW contact, and shortly before the crash he made only one
> > transmission. In Morse he sent "STENDEC", repeated 3 times. That
> >

The name of the plane was "Stardust". "ST" could be short for "Stardust".
Could be STardust ENtering DECent or STardust ENgaged in DECent. And
"EN" and "R" are similiar so could simply be STaRdust DECending.
--
http://www.mindspring.com/~w6rca

2238. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 00:20:28 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A78ABCC.19B7@wt.net>
Source record: 171212

William Lee wrote:
>
> But Mark .... most all who use a vertical antenna mount it at or close to
> groung level or on the bumper of their car. City dwellers dont have a lot of
> room to string out wire dipoles. That is why most of them choose a vertical
> to start with. Not everyone can install a 40m GP at a heigth of 36 feet. it
> requires to much real estate and support structure to fit a city lot.

I'm on a city lot, in the big city of Houston no less. No problems here. Actually, that antenna took less room to put up than many of my other ones. The radials are only 32-33 ft long so at a 36 ft mount they are well off the ground at the ends and can slope quite a bit. Tne support was simple. A radio shack 36 ft pushup mast. The antenna itself I made from an old 5/8 cb antenna which was well made and had a good solid base section. I just extended to 32 ft with smaller tubing and a car whip on the top. Was very flexible and self supporting. No guys required. My 160.80,40 dipoles on a single coax takes much more room. 440 ft of wire in the air. It snakes all over the property though the trees. For this lot, a ground mount is harder to deal with as I don't have the proper yard room to lay out radials in all directions. No problem with the GP. I'm sure many don't want to deal with something like that, but I just feel it's my duty to tell them what they are missing. Trying a ground mount with only 8 radials is a sure way to build a dislike for verticals. I didn't like mine with 32 radials. It was mediocre at best. About equal to the dipole at a distance. If I was lucky, that is... MK
--
http://web.wt.net/~nm5k

2239. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 00:24:03 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A78ACA3.D4211A01@oio.net>
Source record: 171214

WEHowell,
What your describing is the 'classic' fuel pump noise
situation. The 'cure' is just what you already know. If
you want to get rid of the noise, you know what needs to
be done. It's just a matter of when you want to do it.
'Doc

2240. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 00:27:37 UTC
From: Prefered Customer <jfriley@swbell.net>
Message-ID: <boah7tg28nd9iv927bh7dh5dn5oni755ii@4ax.com>
Source record: 171215

jason_hsu@my-deja.com wrote:
> Exactly what is a half wavelength vertical antenna?

Those of us who've worked with them would describe them as the permanent residence of the Wizard of Oz, an antenna whose impedance is near Never-Never Land, an improbable, impossible disaster waiting to bite you on the tush. It is, in fact, the only antenna ever to physically hurt me; you can still see the burn marks on the side of my hand.

(One guy, in Charleston, West Virginia, pointed at a half-wave tower with 10 kW into it. The RF jumped at least a foot to his finger and came out his shin. It took about a year of skin grafts to patch him up.)

2241. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 00:44:07 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95abp7omf1@slb4.atl.mindspring.net>
Source record: 171216

Richard Harrison wrote in message
<28288-3A7820CB-15@storefull-117.iap.bryant.webtv.net>...
Dean Craft, W4IHK wrote:
"Until the treaty is modified, however, it is not very responsible of
you to be advocating disregard for it."

Coders have perpetrated injustice for no-coders for most of the last 87 years! They`ve done it through tyrannical organization. No-coders had no organization.

It`s now obvious that the coders` position is indefensible. So, what is their reaction? Obstruct and delay.

No-coders want all mandatory code ended here and now. No more delays!

Best regards, Richard Harrison, KB5WZI

For all practical purposes, the code requirement has been ended. 5 wpm is being maintained in accordance with international treaty. Your continued press for an immediate end without consideration for the normal process accepted by society in general is unbelievable! You are advocating breaking the law! And all for a selfish reason!

Having a common entry point into any organized effort is not an indefensible position. It brings order and a sense of community to the effort. People who refuse to enter on a common basis with all others have only their selfish interests at heart; not the common good of the group.

Injustice is always the hue and cry of those who wish to change something for their own benefit without working to acquire it. When translated literally, it is a common plea for the welfare concept of society. I exist; therefore I deserve it!

Defensibility is not a factor in setting requirements for the hobby of amateur radio. It is a hobby. It is not a social experiment; nor is it a welfare program designed to accommodate those who refuse to earn their way.

The no-coders and freebanders have no concept of the hobby of amateur radio. All they have is the I want it attitude. It is unfortunate but they have gained sufficient numbers to prevail. That says little about the state of amateur radio but says magnitudes about the state of society in general. Sad.

So, when are you going for your Extra Richard?

Dean Craft -- W4IHK

2242. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 00:44:17 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A78B161.1AD04DD3@IEEE.org>
Source record: 171217

Mark Keith wrote:
> Actually, that antenna took less room to put up than many of my other
> ones. The radials are only 32-33 ft long so at a 36 ft mount they are
> well off the ground at the ends and can slope quite a bit.

Just thinking out loud. My roof is about 14 ft. off the ground. If I installed a 16ft bottom section guyed at the top by the four ground plane wires and ran 33ft of self supporting aluminum tubing up from there, would that be mechanically sound? I could mount an SGC-230 at the feedpoint just under the ground plane and work 40m-17m. Sorry for asking but I'm a EE. :-)
--
http://www.mindspring.com/~w6rca

2243. open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:03:07 UTC
From: k9sqg@aol.com
Message-ID: <20010131200307.24428.00000125@ng-bd1.aol.com>
Source record: 171218

Today I read of large losses that result when you bend open wire line in a sharp bend. I had never heard of this before and wonder if it is true. Does anybody know exactly how much loss results?

Thanks and 73s,

Evan

2244. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:08:05 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95ad57gjm1@slb2.atl.mindspring.net>
Source record: 171119

For Richard Harrison -- KB5WZI

Richard, since you advised that you were not aware of the treaty regulation related to CW, I thought I would post this extract of an ARRL post. The material is taken from:

SB QST ARL ARLB003
ARLB003 FCC Begins WRC-2003 Preparations

"Amateur Radio-related issues on the WRC-03 agenda include the revision of Article S25 of the international Radio Regulations--the basic rules for the Amateur and Amateur-Satellite services. This includes the issue of whether to retain the treaty requirement to demonstrate Morse code proficiency for access to amateur bands below 30 MHz."

Hope this helps.

Dean Craft -- W4IHK

2245. Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:13:33 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A78B6C5.F2B836E@home.com>
Source record: 171120

If you have been wanting an antenna analyzer, RadioShack.com has the Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from Radio Shack.com. This price may not apply at the retail stores. This unit is the same as the MFJ 259B MFJ and Vectronics are sister companies, and the product is similar, with same features and functions. I had to search on the RS product number at the Radioshack.com website. the number is 940-0683. 73, KC0INZ

2246. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:27:44 UTC
From: Jim Glover <psykey@okcforum.org>
Message-ID: <t7hesgf70me3ac@corp.supernews.com>
Source record: 171121

Cecil <Cecil.A.Moore@IEEE.org> wrote:

: I've been a ham for 50 years and have concluded that what a ham
: does *after* he gets an amateur radio license is magnitudes more
: important than what he does in order to obtain an amateur radio
: license.

Amen!

Instead of a graduation exam, we should think of them as an entrance exam. If you can prove you have the necessary educational prerequisites, you can join a vast hands-on learning laboratory. Once upon a time, the written test for the general class license was identical to the written test for the technician license. Back then, the novice class was still popular. The intent was clear: We'll let you start playing (with severe restrictions) if you'll prove you've started learning. We'll give you full access (as in, a significant part of each band) once you can prove you've mastered the fundamentals. (Note: ...except for having to pass 13 wpm to get past Technician status.) The test includes knowledge of what's expected of you, and you're expected to understand that well enough that whatever you do on the air, you will take your mastery of the fundamentals and your demonstrated ability to learn this stuff, and you *will* learn whatever else is required to assure that you meet the standards you're expected to adhere to. As an incentive, we'll give you additional reserved privileges on each band if you can prove you've learned more. That was the status quo when I learned about amateur radio, lo this quarter of a century ago now, and by golly, that's about what makes sense to me. (Let's not miss an important point, here--many of us seem to believe that the way things were when *we* got *our* ticket is the way things make the most sense.)

But nothing's really that simple, is it?

People who got their license earlier than I did remember exams that pre-dated multiple choice. They were expected to do things like draw circuit diagrams. Now, *if* one has learned this stuff the right way, it doesn't make much difference. If you've learned what a particular type of circuit has, you can draw the diagram if you need to. Or, you can answer a multiple-choice question about it. Of course, if you've been advised that you'll have a certain type of multiple-choice question, you may elect to take a short cut, such as identifying one essential characteristic of each type of circuit you study, so that you can recognize it when you see it. *If* you prepare that way (and there's nothing that says you have to) then you may get by without learning as much as someone who chose to focus on the material itself. Similar dynamics surround the existence of published question/answer

pools. And so, we argue about the "dumbing down" of amateur radio. Perhaps we'd worry about this less if we look at amateur radio as a place where those who have begun to learn can continue on, and learn more.

Even though it was part of the picture when I got into ham radio, I have decided that I do not like incentive licensing. It divides us, which makes us more conquerable. It's contributed to all sorts of elitism and controversy. More to the point, it fails to address what I believe the central issue should be: Has Joe Wannabe learned enough that we can trust him to put a 1000-watt station (sigh...OK... I know..times have changed... a 1500-watt PEP station) on the air on HF? If he has, then he should be issued a full license. If not, then we probably should provide some limited-privilege license which allows him a chance to learn by doing. I *liked* the old power restrictions and xtal-only restrictions for novices. I liked the CW-only restriction, too, for novices. The novice license *should* be a license which, by virtue of its restrictions, makes it likely that someone who has only begun to learn won't mess things up too much. It also should be a license which encourages learning--you know, I almost think it should be a requirement that novices run *only* transmitters they built with their own hands.

Part of me does not want to see CW testing go. Why? Because CW is very, very cool (I was a teenager back when I got that first license, and not only were things as done by the FCC the right way to do things, back then, but also, that's a very good word: cool) and I believe that if people must pass a CW test to be a ham, many more will choose to use CW once they're licensed. Then CW will continue to be an important part of amateur radio, and... I am *convinced*... that would be very beneficial to amateur radio. I believe the popularity of CW helps promote building and designing by learners who otherwise wouldn't make the leap to more complicated modes. Learning the very basic stuff that allows one to participate in building CW equipment then empowers one to engage in very effective communications, even with modest antennas. What a wonderful incentive to learn how to build! There is no doubt in my mind: CW directly benefits much about what is so fabulous about amateur radio. I'm pretty sure CW testing promotes CW use. Therefore, CW testing should indirectly promote a lot of what's great about amateur radio. (Someone--I think it was Jim, N2EY--recently posted a very good explanation of why CW helps us achieve the official goals of the amateur service. I recommend reading it. Consider it included here, by reference.)

On the other hand, when I ask myself, "What should we require as the minimum qualifications for access to HF?" I find that I must honestly answer that I believe mastery of the fundamentals should suffice. (Note: That's mastery up to 70-whatever % correct, like it takes to pass the test--not necessarily mastery of 100% of all radio fundamentals.) If one can show that one has mastered the fundamentals, one should receive full access to HF ham bands. If one can demonstrate only having begun to learn, and yet wants to be on the air anyway, we should accommodate that admirable desire with a license which bears serious restrictions, designed to encourage learning while reducing the risk of improper operation due

to ignorance. The restrictions should, in that case, include restriction to the mode of CW, and therefore, testing of CW should be included.

In all cases, we should consider a ham license to be a certificate of qualification which entitles us to access to the hands-on lab we all enjoy. Admittance into that lab should be just the beginning of our learning experience.

OK... there's my proposal for how things ought to be done. You can all work on shooting it down now. It won't be difficult... one need only point out that the FCC isn't interested in putting out any effort to achieve any goals with licensing except reduce their own bookkeeping requirements. (It's hard to believe this is the same government agency that tried so hard in the past to design schemes which they hoped would encourage hams to learn more, even if it meant a lot more work for that government agency.) Nevertheless, I will hope that someone takes the ideas I've outlined here (a two-tiered scheme including a CW-tested learner's permit for beginners, and full ham band access for those who've learned enough to really get started) and find ways to adjust the basic idea so that it might appeal to the FCC as well.

--Jim WB5UDE

2247. Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:31:16 UTC
From: Keith Zimmermann <keithz@austin.rr.com>
Message-ID: <3A78BC63.1E5A9E96@austin.rr.com>
Source record: 171122

OK, I almost made through the whole month without asking a dumb question...

Years ago, when I was a teen-novice, someone suggested that I add salt around my ground rod and radial system. Being a novice, I of course did. I would also water and really soak the ground system prior to a planned night of DX-ing. Anything to help my 5 watts!

Now, I'm wondering if there is any benefit from doing either of those things. Dry, parched, rocky ground like we have in Texas probably needs some help...especially in the summer. I used verticals, end-fed long wires, and inverted vees back then. I had a short run from my rig and antenna tuner to the ground. I had a good radial system below my ground-mounted vertical. But no matter what, I was convinced that watering my ground improved my signal and reduced static.

Thanks for any info.

Keith K5WX

2248. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:39:43 UTC
From: richardharrison@webtv.net
Message-ID: <7673-3A78BE5F-78@storefull-116.iap.bryant.webtv.net>
Source record: 171123

Dean Craft, W4IHK wrote:
"---WRC-03--- This includes the issue of whether to retain the treaty requirement to demonstrate Morse code proficiency for access to amateur bands below 30 MHz."

My question is:
What is proficient by international specification?
Is it one word per second or is it one word per hour? Maybe it is what any member country wants to make it be.

Best regards, Richard Harrison, KB5WZI

2249. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 01:48:14 UTC
From: k1bqt@aol.com
Message-ID: <20010131204814.11262.00000120@ng-fl1.aol.com>
Source record: 171124

Hi--

Trees are not bamboo. According to Alex Shigo, one of my neighbors and one of the world's leading authors and experts on trees and tree diseases, Roy and the boys are dead right. Trees grow by adding a layer which extend both upward and outward each year. If your antenna support was parked at the 60' level ten years ago, that's where it's gonna stay. And, eventually, if the support was an eyebolt, the tree's layers will surround and cover it.

Imagine a life where you can't move in order to protect yourself----all you can do is cover up the things that happen to you. Most trees are democrats, and that's why bark-huggers hug them!

73

Rick K1BQT

2250. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:02:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95ag2o$1a2$0@208.207.71.139>
Source record: 171125

Richard Harrison wrote:
>
> Fred, W4JLE wrote:
> "one of the dyslectic folks trying to send S-decent or start decent?"
> (STENDEC) ?
>
> That`s the best looking speculatiom I`ve seen!
> I`d think the sender was on pins and needles at the time and such a
> turn-around would be understandable, not the message, but the cause.

Maybe it was a case of an inexperienced, tense, overstressed op where he made a couple nervous mistakes- S T are straightforward, the E D could have been meant to be A and R (with poor timing and the middle dah in R missed)

So he could have meant to send STARDEC which may have meant "Starting descent"

Last time I rode a commuter plane into Los Angeles we had to let down through 10,000 feet of solid grey blinding cloud cover. A few weeks earlier I had read in an article that airline pilots had voted LAX as the most dangerous US airport due to congestion and overcrowding. So I knew what a beehive of activity we were flying blind directly into, depending totally on technology and the training and experience of the pilots and the busy, overloaded air traffic control staff. In the little commuter plane we were like a small fish swimming among a school of sharks, the 747s and DC10s - in murky water, at that.
Flying doesn't bother me, but with that knowledge it was not a comfortable experience, even when I knew that it almost always works as planned.
The 1947 aircrew had to have been somewhat unnerved by it all and could easily have made CW mistakes, more so if the crewman sending the code happened to be fairly inexperienced. They almost certainly realized that such an outcome was a real possibility due to their lack of comprehensive information. With no more information, and no modern technology availailable they had to depend on only the elapsed time of their flight to determine that they had passed the mountains.

Dick

2251. Re: K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:04:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95ag86$1a2$1@208.207.71.139>
Source record: 171126

davekle@city-net.com wrote:
>
> I have been told that it would be advisable to remove a winding from
> the coil of my K40 antenna before I try to tune it for 10 Meter use.
>
> I'm interested to know whether this is necessary or not. I'm probably
> going to be using an HTX-10 rig. If the mod is recommended, does
> anyone have any directions for the proceedure?

First I'd try just shortening the stinger rod, checking for resonance
to set it correctly. It should work out OK without removing a turn from
the coil.

Dick

2252. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:09:08 UTC
From: dcollin@connix.com
Message-ID: <3a78c59c.2884315@news.mybizz.net>
Source record: 171127

On Thu, 01 Feb 2001 01:13:33 GMT, Ken Anderson <longrange2@home.com>
wrote:

>If you have been wanting an antenna analyzer, RadioShack.com has the
>Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from
>Radio Shack.com. This price may not apply at the retail stores. This
>unit is the same as the MFJ 259B MFJ and Vectronics are sister
>companies, and the product is similar, with same features and
>functions. I had to search on the RS product number at the
>Radioshack.com website. the number is 940-0683. 73, KC0INZ

Excellent! I was just about to pluck down the whole nine yards for
the MFJ. They look identical, with the exception of the power supply.
The Vectronics takes 8 AA batteries and can use their 240 VAC adapter,
while the MFJ takes 10 AA and uses a 120 VAC adapter. Not a problem!

Got one on order, now. Thanks Ken!

2253. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:18:09 UTC
From: richardharrison@webtv.net
Message-ID: <19673-3A78C761-22@storefull-118.iap.bryant.webtv.net>
Source record: 171130

Preferred Customer wrote:
"One guy, in Charleston, West Virginia, pointed at a half-wave tower with 10 KW into it. The RF jumped at least a foot to his finger and came out his shin.---"

In 1949 I worked in a broadcast plant with two 5 KW transmitters sharing the same tower. One was on 950 KHz and the other was on 1320 KHz. Problem was the tower had been a 1/4-wave for a previous occupant around 700 KHz. It was almost a 1/2-wave for the 1320 KHz station.

We had to use a "hot stick" to open the shorting switches on the antenna ammeters for readings and to close them when we were through. The hot stick had a wooden handle. No fiberglass in 1949. RF had burned a carbon trench the length of the handle. No point to replace the handle. It would just be burnt again in a few days.

Every time we opened or closed a switch with the hot stick we were treated to a real fireworks display which nipped at our fingers. We were used to it and operated the switches very quickly to minimize the burn potential.

Best regards, Richard Harrison, KB5WZI

2254. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:36:58 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <bMl4OhSeyTivQBYyvzE4eeNAqX6U@4ax.com>
Source record: 171129

On 01 Feb 2001 01:03:07 GMT, k9sqg@aol.com (K9SQG) wrote:

>Today I read of large losses that result when you bend open wire line in a
>sharp bend. I had never heard of this before and wonder if it is true. Does
>anybody know exactly how much loss results?
>
>Thanks and 73s,
>
>Evan

Hi Evan,

The sharp bend in and of itself would not be lossy. However, it is a major discontinuity that will present SWR. SWR will bring its own problems and the measure of the loss you are interested is strictly implementation specific. The first consideration is the size of the bend in relation to wavelength. Standard rules for waveguides is that a bend sweeps with a radius of more than 0.1 wavelength. These rules are far more restrictive than would be encountered in typical Ham radio service. I doubt if this "rule" would be practiced for an 80M antenna (except by a purist who has the real estate to gently bend with a 24' radius). I would imagine that a radius of less than 0.01 wavelength would be problematic.

The best answer is try for yourself with a controlled bend in your own line.

73's
Richard Clark, KB7QHC

2255. parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:41:50 UTC
From: andre <andreltb@frb.br>
Message-ID: <t7hi652ovlaf1d@corp.supernews.com>
Source record: 171128

I am building a parabolic cylinder antenna, I want it to work around anything between 200MHz and 800MHz, it needs to be something relatively small(1m-1.5m x 0.4m-0.6m) , I'm needing a help on how to calculate it's working band and its impendances. I'm not sure, but can I build the half lambeda dipole bigger than the reflector height?

Thanks

2256. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:45:07 UTC
From: richardharrison@webtv.net
Message-ID: <7673-3A78CDB3-90@storefull-116.iap.bryant.webtv.net>
Source record: 171135

Evan, K9SQG wrote:
"Today I read of large losses that result when you bend open wire line in a sharp bend."

Sounds mythical to me. Radio waves are guided by the transmission line and go where the line goes. If the impedance is upset by a bend, a reflection results and the line exhibits a standing wave ratio other than one. Only a slight increase in loss usually results because the impedance bump is usually small.

I worked for a number of years in a shortwave broadcast plant with many transmitters, miles of open wire lines, many of which had several right-angle bends, and many antenna switches and arrays, all of which had many right-angle bends. We had megawatts of power running through this mess and the losses were extremely low.

Best regards, Richard Harrison, KB5WZI

2257. K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:51:06 UTC
From: davekle@city-net.com
Message-ID: <3a78ce19.124944380@news.city-net.com>
Source record: 171210

I have been told that it would be advisable to remove a winding from the coil of my K40 antenna before I try to tune it for 10 Meter use.

I'm interested to know whether this is necessary or not. I'm probably going to be using an HTX-10 rig. If the mod is recommended, does anyone have any directions for the proceedure?

Thanks in advance for your help.

-Dave
KB3FXI

2258. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 02:58:37 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95ajgk$b86$1@slb7.atl.mindspring.net>
Source record: 171132

Richard Harrison wrote in message
<7673-3A78BE5F-78@storefull-116.iap.bryant.webtv.net>...
Dean Craft, W4IHK wrote:
"---WRC-03--- This includes the issue of whether to retain the treaty requirement to demonstrate Morse code proficiency for access to amateur bands below 30 MHz."

My question is:
What is proficient by international specification?
Is it one word per second or is it one word per hour? Maybe it is what any member country wants to make it be.

Best regards, Richard Harrison, KB5WZI

Don't play dumb Richard...it does not become you. You know exactly what it means. The US and several other countries have already set a level of proficiency that comes as close as possible to what the no-code group has advocated for quite some time. At the same time, they have stayed in compliance with international treaty obligations.

The US code speed has been reduced to 5 wpm. You also know full well that as soon as that next conference is held that a CW proficiency demonstration will in all probability be removed from the treaty. If elimination of CW is to occur, then it must be done according to the rules...not by advocating or even suggesting that we should just ignore the rules.

Dean Craft -- W4IHK

2259. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 03:00:51 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <Tj4e6.3615$Gf5.81434@news1.atl>
Source record: 171131

What helped greatly with my noise was to create a counterpoise under my car, by running several long pieces of tinned copper flat cable connecting everything I could springs muffler, frame etc. It reduced numerous types of noise AC, spark plug, and unknowns. I went from a S7-9+ nose level to a very comfortable S3, of course the antenna loves it.

73's from W4BEN,
Benjamin Blavat

"WEHowell" <wehowell@aol.com> wrote in message
news:20010131122301.10361.00000020@ng-cu1.aol.com...
> I have a '90 Ford Ranger pickup that I mant to operate with a mobile rig
on
> 40/20 meters (ICOM 706 MKII with auto tuner), however, the RFI is too
great.
> The chief offender is the fuel pump which is buried in the plastic fuel
tank.
> Has anyone had any experience with this. To bypass the fuel pump power
line to
> ground (anywhere close to the exit point) will require that I drop the
fuel
> tank. I am not ready to do that unless I have some indication that it
would
> improve the situation.
>
> All information I have is that Ford does not have a TSB on the subject.
>
> I have tried nominal fixes such as rerouting the antenna cable; this has
some
> effect but not significant. The antenna is mounted on the driver's side
rear.
>
> With the feed line diconnected at the antenna the noise is slightly
reduced;
> disconnected at the output of the antenna tuner the noise is completely
gone -
> so the noise is getting in through the feed and antenna.
>
> Thanks for any suggestions
> WB4UYA
> wehowell@aol.com

2260. WTB:Heathkit Remote Ant.Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 03:02:54 UTC
From: "P.Thamm" <WB4LZE@EROLS.COM>
Message-ID: <95ajo3$sh7$1@bob.news.rcn.net>
Source record: 171133

I am looking to buy the older Heathkit remote ant. Switch with the rotary solenoid and ceramic switch. Please email condition and price.
Thanks,
Peter Thamm

2261. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 03:09:53 UTC
From: Lou <lm1009383@onemain.com>
Message-ID: <3A78D37F.A389D237@onemain.com>
Source record: 171134

There is a Ham in Canada who put out a program called Ham Calc. The guys
call is VE3ERP. He just charges for the disk and postage. But that was
years ago. You might see if he has a web site,
Lou
KB6FFT

andre wrote:

> I am building a parabolic cylinder antenna, I want it to work around
> anything between 200MHz and 800MHz, it needs to be something relatively
> small(1m-1.5m x 0.4m-0.6m) , I'm needing a help on how to calculate it's
> working band and its impendances. I'm not sure, but can I build the half
> lambeda dipole bigger than the reflector height?
>
> Thanks

2262. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 03:55:47 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A78DE43.21C63C3F@dialpoint.net>
Source record: 171136

Have you thought how little gain a dish of that size will be ?

andre wrote:
>
> I am building a parabolic cylinder antenna, I want it to work around
> anything between 200MHz and 800MHz, it needs to be something relatively
> small(1m-1.5m x 0.4m-0.6m) , I'm needing a help on how to calculate it's
> working band and its impendances. I'm not sure, but can I build the half
> lambeda dipole bigger than the reflector height?
>
> Thanks

2263. MI: LARC Swap-N-Shop (Ham Radio, Computers, Electronics) 2-18-01

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 04:08:35 UTC
From: LARC Swap-N-Shop <swap@n8hqg.mi.org>
Message-ID: <7j5e6.87025$ft6.2288228@typhoon.mw.mediaone.net>
Source record: 171137
Cross-posted to: mi.misc,mi.wanted,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

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http://www.larc.mi.org/Swap_Form.pdf

Mark your calendars for Sunday February 18, 2001!!!

AND PLEASE TELL ALL YOUR FRIENDS.....

2264. MI: LARC Swap-N-Shop (Ham Radio, Computers, Electronics) 2-18-01

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 04:08:41 UTC
From: LARC Swap-N-Shop <swap@n8hqg.mi.org>
Message-ID: <dj5e6.87026$ft6.2288228@typhoon.mw.mediaone.net>
Source record: 171138
Cross-posted to: mi.misc,mi.wanted,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

---

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Mark your calendars for Sunday February 18, 2001!!!

AND PLEASE TELL ALL YOUR FRIENDS.....

2265. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 04:26:24 UTC
From: richardharrison@webtv.net
Message-ID: <6298-3A78E570-128@storefull-112.iap.bryant.webtv.net>
Source record: 171139

Andre wrote:
"I am building a parabolic cylinder antenna. I want it to work around anything between 200 MHz and 800 MHz. It needs to be something relatively small (1m-1.5m x 0.4m-0.6m).

Dipoles with parabolic reflectors are not very broadband antennas. the reflector must also be rather large as compared with the dipole to get gain.

How about a helical if you want gain with bandwidth?

At 200 MHz, you can take a 1-inch diameter tube, 29.5 feet long and coil it to form 6 turns with an 18.5-inch diameter, 14.2 inches between turns (1/4-wave). This is backed with a 48-inch diameter reflector (screen?).

Polarization is circular.
Gain is 8 dbd at the center frequency.
Feedpoint resistance is 130 ohms.
Bandwidth is 200%.
At 600 MHz, scale down to 1/3 the size.

This information is from Arnold B. Bailey`s "TV and Other Receiving Antennas".

Best regards, Richard Harrison, KB5WZI

2266. WTB KT34XA capacitor caps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 04:54:36 UTC
From: Gary Powell <n4dl@worldnet.att.net>
Message-ID: <g_5e6.1985$G62.101297@bgtnsc04-news.ops.worldnet.att.net>
Source record: 171140

I am looking for a new set of replacement caps for the KT34XA.

Thanks,
Gary, N4DL

2267. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 05:20:11 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A78F20B.6E74FD5D@bwcc.com>
Source record: 171141

Rick Littlefield wrote:
> Trees are not bamboo.
Right. He was referring to bamboo as a type of grass that is taller than corn (maize).

2268. Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 06:20:22 UTC
From: foffe <setta@uio.com>
Message-ID: <3A790026.E3ED9565@uio.com>
Source record: 171142

How come the commerical dipoles are shorter if they have
a BALUN as opposed to when building a dipole with none
its longer.

2269. Re: WTB KT34XA capacitor caps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 07:02:32 UTC
From: DL9MFU
Message-ID: <3a790974.2606688@newsext.muc>
Source record: 171143

On Thu, 01 Feb 2001 04:54:36 GMT, "Gary Powell"
<n4dl@worldnet.att.net> wrote:

>I am looking for a new set of replacement caps for the KT34XA.
>
>Thanks,
>Gary, N4DL
>
>
Try the following URL. M2 has KLM antennas and also parts.
http://www.m2inc.com/

73 de Helmut
DL9MFU

2270. Re: Vargarda VHF aerials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 07:27:31 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <IxSUFrAj$Qe6EAy8@ifwtech.plus.net>
Source record: 171144

Keith wrote:
>Ian,Have you ever tried any,the aerials that is ?. Who sell them in the UK
>?.Thanks.

I haven't tried them, but know several people in the UK who have.
Performance is good, and construction very good - like the Volvo, built
for Swedish winters.

A few months ago there was an announcement that someone had started
importing Vargarda in the UK again, so try e-mailing
sales@vargardaradio.se

>Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
>news:wkQKgrBrXFe6EAkv@ifwtech.plus.net...
>> Keith wrote:
>> >Any comments please
>> >
>> Built like a Volvo.
>>

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2271. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 07:39:58 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A7912CC.EEC2AFE7@rchrd.com>
Source record: 171145

Wow. I seem to have sparked quite a discussion here. I really appreciate all
the input. The little reading I've done so far about Antennas (the late Bill Orr's
books, and the ARRL Antenna HB) have lots of really interesting info.
And it looks like there's lots of room for trial and error. There are
so many parameters involved, so there are no easy solution.

The problem is: I'm about to spend some $$ on my first station. (I'm a tech
but I should have the general ticket by Feb if I keep working on the code!)

What I really want to do is work dx on 20m-6m. And I have a new IC-706MKIIG.
I'm on the Pacific coast, so Asia seems a natural. But I'd like to work
Europe too.

The question is: what antenna do I buy? I'm starting out, so from what I've
heard from other hams, antennas are like golf clubs... you're never quite
satisfied so over the years you may accumulate quite a few.

My current thinking is to get an MFJ -1769 vertical to mount on the roof
of the house. It looks good so the neighbors shouldn't complain. I'll run
it up as high as I can get away with. The house is on a slight hillside, so from
the backyard the roof is pretty high up there. Pretty good line of sight
to the horizon for 180 deg west-north-east.

I'll may also get at 3-element M2 6m beam for mountain-topping.. I think I
can get it folded up and stowed in my camper van. Here a directional beam
seems to be the right choice for portable operations.

As I mentioned in the email that started all this, I get a lot of noise on
my temporary Diamond HV7A mobile antenna, and for SSB on 2m I have to
tilt it 90 deg to cancel out harmonics from TV sound.

What I don't have room for is a really big beam antenna, or a couple of
beams stacked. I was attracted to the MFJ verticals from good reports
on this newsgroup. But then began to wonder if I was going to be
disappointed.

So far the advice seems to be: there are too many parameters to predict
how its going to work. You have to try it. But answers to the original
questions seem to be going this way:

1. Verticals too noisy? Maybe. Depends. They see more sky, therefore
more noise. But maybe not. Depends.

2. Verticals prefer to talk to verticals? By the time the signal
gets to you its hard to tell what it looked like when it started
out. This may be more the case for local QSOs. But then again,
it depends. Its probably not worth worrying about.

Great discussion. I'm learning a lot! Thanks.
--
-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
-=

2272. Re: TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 08:46:47 UTC
From: TruckDrivingMan <tansorg@cs.tu-berlin.de>
Message-ID: <95b7gu$j3a$07$1@news.t-online.com>
Source record: 171147
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

AFAIK,the open 1/4 wave cable is a short circuit for the concerning frequency.Though he should take the frequency of the tv-channel for the 1/4 wave calculation.

Tom

"Paul Keinanen" <keinanen@sci.fi> schrieb im Newsbeitrag news:63a37tcq80ho1indg6aerkfd693bdo1e8d@4ax.com...
> On Fri, 26 Jan 2001 07:30:35 -0500, "Bob Lewis" <rlewis@staffnet.com>
> wrote:
>
>
> >You can make a good inexpensive notch filter by placing a 1/4 wave (on
> >your 6M operating frequency) long piece of coax, shorted on the far
> >end, across the input to the amplifier.
>
> Make that 1/2 wave and you might see a notch :-) on that frequency
> (and remembering to compensate for the velocity factor) if you are
> using shorted stubs.
>
> A 1/4 wave _open_ stub could also be used, but it is harder to tune.
>
>

2273. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 08:54:50 UTC
From: Adam <digipoint@hotmail.com>
Message-ID: <95b8lalhi1@news.kabelfoon.nl>
Source record: 171146

A normal dipole should be about 1/2 wave length. (a little shorter than that depending on the material that is used). If it's 1/2 a wave length the impedance is about 50 Ohms when fed in the center or the dipole.

If you use a different length dipole the impedance will be more or less than 50 Ohms. A Balun/transformer can change the impedance into 50 Ohms so your transceiver will not notice that the antenna is actually not exactly the right length, compared to the work frequency.

This is not the main reason for using a balun/transformer. The main reason is to feed the antenna which is designed for the right frequency into a point where the impedance is not 50 Ohms. For instance a half wave dipole that is 'end-fed' has an impedance of about 300 Ohms and can be fed with a balun/transformer 1:4.

'73, Adam

foffe <setta@uio.com> schreef in berichtnieuws 3A790026.E3ED9565@uio.com...
> How come the commerical dipoles are shorter if they have
> a BALUN as opposed to when building a dipole with none
> its longer.
>

2274. Choke Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 12:10:57 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <nwle6.7027$%64.1695@newsfeed.slurp.net>
Source record: 171087

Can a choke balun, 6" dia, 10 turns, be wound concentric with a 2" boom, without unreasonable ill effects, either capacitive or 'shorted-turn'?

TIA.

73, Dave, K3BHJ

2275. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 12:33:59 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <XIce6.24945$cN.1148323@bgtnsc07-news.ops.worldnet.att.net>
Source record: 171148

Does anybody know the differences between these two products?

--
Mike Knowlton
Panama City Fl.
Ken Anderson <longrange2@home.com> wrote in message
news:3A78B6C5.F2B836E@home.com...
> If you have been wanting an antenna analyzer, RadioShack.com has the
> Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from
> Radio Shack.com. This price may not apply at the retail stores. This
> unit is the same as the MFJ 259B MFJ and Vectronics are sister
> companies, and the product is similar, with same features and
> functions. I had to search on the RS product number at the
> Radioshack.com website. the number is 940-0683. 73, KC0INZ
>

2276. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 13:14:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95bndn$534$1@uranium.btinternet.com>
Source record: 171149

A balun at the feedpoint does not affect the resonant length of a dipole.

What makes you think it does ? And why do you ask the question ?

It doesn't matter much anyway.

Regards, Reg, G4FGQ

****

foffe <setta@uio.com> wrote in message news:3A790026.E3ED9565@uio.com...
> How come the commerical dipoles are shorter if they have
> a BALUN as opposed to when building a dipole with none
> its longer.
>

2277. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 13:41:54 UTC
From: w9vhe1@email.msn.com
Message-ID: <3a7a675e.58878657@netnews.msn.com>
Source record: 171150

It works, some call it a "ufer" or "Eufer" ground. Adding salt and
water in a small trench around the station ground improves the ground
conductivity.

On Thu, 01 Feb 2001 01:31:16 GMT, Keith Zimmermann
<keithz@austin.rr.com> wrote:

>OK, I almost made through the whole month without asking a dumb
>question...
>
>Years ago, when I was a teen-novice, someone suggested that I add salt
>around my ground rod and radial system. Being a novice, I of course
>did. I would also water and really soak the ground system prior to a
>planned night of DX-ing. Anything to help my 5 watts!
>
>Now, I'm wondering if there is any benefit from doing either of those
>things. Dry, parched, rocky ground like we have in Texas probably needs
>some help...especially in the summer. I used verticals, end-fed long
>wires, and inverted vees back then. I had a short run from my rig and
>antenna tuner to the ground. I had a good radial system below my
>ground-mounted vertical. But no matter what, I was convinced that
>watering my ground improved my signal and reduced static.
>
>Thanks for any info.
>
>Keith K5WX

2278. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 14:02:38 UTC
From: Meegan and Jim Wilson <wilson@afn.org>
Message-ID: <3A796C7E.7D3A2947@afn.org>
Source record: 171151

Please notice that Andre said "parabolic cylinder", not "dish".

He may have mispoken and actually meant "dish", but I wonder if anyone in the amateur community has used an antenna with two (crossed) parabolic **cylinders** (i.e. without compound curves). I remember seeing such an antenna in some ancient IEEE journal or another, and I've alwasy wondered why it never saw widespread use -- it is much easier to fabricate than the conventional dish.

Jim Wilson
WA5BRB

2279. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 14:25:08 UTC
From: richardharrison@webtv.net
Message-ID: <2873-3A7971C4-14@storefull-113.iap.bryant.webtv.net>
Source record: 171153

Foffe wrote:
"How come the commercial dipoles are shorter if they have a balun as opposed to when building a dipole with none, it`s longer?"

You normally make a dipole a resonant length, balun or no balun, for a specific frequency.

For free-space, the feed resistance of a 1/2-wave dipole is 75 ohms. At the low heights typical of amateur installations the feedpoint resistance is lower and a fair match can be made by directly connected 50-ohm cable.

Directly connected coax allows some of the antenna current carried by the shield to travel on the outside of the coax. A balun minimizes current on the outside of the shield.

Current on the outside of the shield causes radiation.

Shield radiation may make the dipole look like a fatter conductor on its shield-connected side. It would then have lower inductance than the dipole wire alone. Lower inductance would require a longer wire to reach resonance.

If the original proposition is true, that is antennas are shorter when baluns are used, it must be because radiation from the feedline makes the dipole wire look as if it is fatter and so must be longer to obtain resonance.

Best regards, Richard Harrison, KB5WZI

2280. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 14:44:06 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <95bsp9$gf4$1@iac5.navix.net>
Source record: 171152

It does not affect the length of the antenna. Might I ask where you got that idea?

A balun simply does what it's name says, balanced to unbalanced. Baluns come in various transformation ratios, the most common 1:1.

"foffe" <setta@uio.com> wrote in message news:3A790026.E3ED9565@uio.com...
> How come the commerical dipoles are shorter if they have
> a BALUN as opposed to when building a dipole with none
> its longer.
>

2281. Re: Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 15:14:02 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a797b84.92479634@news.aepnet.org>
Source record: 171154

On Wed, 31 Jan 2001 14:39:48 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Spectrum analyzers can easily fool you when looking at pulse or wideband
>type spectra. One reason is the scanning nature of the spectrum
>analyzer. For example, suppose your analyzer scans at a 60 Hz rate, and
>that there's a narrow pulse type interference occurring once each cycle.
>The pulse will produce a very broadband spectrum, but what you'll see is
>a "carrier" or a group of lines whose distance from the beginning of the
>sweep will stay fixed, pretty much regardless of the frequency span or
>resolution you've chosen. I suspect you're seeing a similar phenomenon.
>
>No signal that lasts for a finite time produces a single frequency. And
>a spectrum analyzer would have to observe each frequency for an infinite
>length of time to truly show the frequency domain content of a signal.
>So what you see is an approximation at best.
>
>Anyone interested in learning more about this topic should read _Modern
>Spectrum Analyzer Theory and Applications_ and _Modern Spectrum Analyzer
>Measurements_, both by Morris Engelson. I think they're available from
>Artech House.
>
>Roy Lewallen, W7EL

H-P, now Agilent (I never will figure out how to pronounce this) had a
series of Spectrum Analyzer application notes. I have the complete
set around here someplace.

I did a quick look at their web site and found some of them,
unfortunately they didn't seem to have the one on pulse measurements
listed. :((

A lot can be inferred from the specturm if the analyzer is flexible
enough, which I doubt is true in this case.

Wes Stewart N7WS
>
>"M.J.Powell" wrote:
>>
>> In article <BsZd6.140017$ge4.51323780@news2.rdc2.tx.home.com>, Pete
>> Holden <peholden@home.com> writes
>> >I have an Icom IC756. The spectrum scope shows the activity on the band
>> >across selectable ranges from 25 kHz to 200 kHz.
>> >
>> >Sometimes I will get static that shows up as a sawtooth pattern lasting for
>> >several seconds, then disappearing and reappearing. In fact, if I quickly

>> >jump to another ham band, the sawtooth will be there also.
>> >
>> >Now here's the weird part. Presumably each tooth on the "saw" represents a
>> >transmitted frequency. But, if I quickly change the scope's range, the
>> >"teeth" don't get close together or farther apart. So, when the range is 25
>> >kHz the teeth appear to be about 1 kHz apart. But when the range is 200 kHz
>> >the teeth seem to be maybe 7 kHz apart.
>> >
>> >Any ideas?
>>
>> Possibly the Rx scans relatively slowly and there is some form of
>> storage in the system. So the same interference appears on two bands and
>> also the 'size' stays the same.
>>
>> Mike
>> --
>> M.J.Powell

2282. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 15:28:31 UTC
From: richardharrison@webtv.net
Message-ID: <11760-3A79809F-6@storefull-115.iap.bryant.webtv.net>
Source record: 171156

Dean Craft wrote:
"The US and several other countries have already set a level of
proficiency that comes as close as possible to what the no-code group
has advocated for quite some time."

Who`s dumb?

5 WPM isn`t "as close as possible" to ZERO as is one word per hour!

Best regards, Richard Harrison, KB5WZI

2283. Re: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 15:41:37 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <3a7983b2$1@news.microsoft.com>
Source record: 171155

I've found Amidon prices to be much higher than a Fair Rite distributor
(i.e. $9.00 vs $5.25 for a toroid with a 1.5 in ID, same material type)

Bought ferrites from http://www.lodestonepacific.com/ , a distributor of
Fair Rite Corp.

-rob N7QT

"KK7HO" <kk7ho@aol.communicate> wrote in message
news:20010129220457.06380.00002037@ng-cl1.aol.com...
> http://www.amidoncorp.com
>
> http://www.micrometals.com/
>
> >Harry Harms wrote:
> >>
> >> Group,
> >>
> >> To wind my own balun for exclusive use on 10m, should I use iron powder
or
> >> ferrite cores?
> >>
> >> I intend to use full legal power for Australia, 400 watts, so need a
decent
> >> sized core.. 2 1/2 inches minimum.
> >>
> >> Any help on what types of materials etc??
> >>
> >> John Mclean
> >> VK2KCE
> >>
> >Harry (or John),
> > Use ferrite. I don't remember the mixture properties, but
> >Amidon would be happy to send you a catalogue (or maybe it's on
> >their webb site?).
> > 'Doc
> >
> >
> >
> >
> >
> >
>
>

2284. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:16:15 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7999DF.5357@wt.net>
Source record: 171157

Cecil wrote:
>
> Mark Keith wrote:
> > Actually, that antenna took less room to put up than many of my other
> > ones. The radials are only 32-33 ft long so at a 36 ft mount they are
> > well off the ground at the ends and can slope quite a bit.
>
> Just thinking out loud. My roof is about 14 ft. off the ground. If I
> installed a 16ft bottom section guyed at the top by the four ground
> plane wires and ran 33ft of self supporting aluminum tubing up from
> there, would that be mechanically sound? I could mount an SGC-230 at
> the feedpoint just under the ground plane and work 40m-17m. Sorry for
> asking but I'm a EE. :-)
> --
> http://www.mindspring.com/~w6rca

Hard to say without knowing the weight and dia of the antenna. On mine, I had it attached to the house at about the top of the first section of mast. I had one set of "real" guys at about the middle, and the four radials at the 36 ft level, which also acted as extra guy wires. One thing you would need to consider is how you will attach the antenna to the mast. Thats why I like the pushup mast. I can lower it to roof level, and then stand on the roof to attach the antenna. Even using light tubing a 32 ft tall whip can be a bit hard to plant if you had to reach way up to lower it down onto the mast. Also if you attached the antenna to the mast and then tried to raise, it will likely be too tall with the mast included, and hard to raise. Mine used thinner and thinner tubing as it went up, and the top 4 ft of so was regular "car" whip with a little ball on top. Was a pretty light antenna for 32 ft tall. With strong 50 mph plus winds I never had any trouble. It would bend with the wind and not break or buckle. I've seen it almost sideways at times, but it always sprang back up straight when the winds were gone. I also reinforced the lower sections of tubing to make the bottom half stronger. I used mine on 17m as a 5/8 gp. Worked very well. Was my best 17m antenna by far compared to my wire antennas. I used a 24v relay to switch bands. A sgc tuner should work pretty well. If it could handle the high Z match on 20m, it might do well there also, as it would be a 1/2 vertical. I never got around to trying that band. MK
--
http://web.wt.net/~nm5k

2285. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:24:26 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A799BCA.39F1@wt.net>
Source record: 171158

Richard Friedman wrote:

>
> What I don't have room for is a really big beam antenna, or a couple of
> beams stacked. I was attracted to the MFJ verticals from good reports
> on this newsgroup. But then began to wonder if I was going to be
> disappointed.
>
> So far the advice seems to be: there are too many parameters to predict
> how its going to work. You have to try it. But answers to the original
> questions seem to be going this way:
>
> 1. Verticals too noisy? Maybe. Depends. They see more sky, therefore
> more noise. But maybe not. Depends.
>
> 2. Verticals prefer to talk to verticals? By the time the signal
> gets to you its hard to tell what it looked like when it started
> out. This may be more the case for local QSOs. But then again,
> it depends. Its probably not worth worrying about.
>
> Great discussion. I'm learning a lot! Thanks.

The old cushcraft R3 20-10 vertical would have been good for what you
want to do. But they don't make it anymore. For a "high" band 20-10m
vertical, I think the half wave designs are the way to go. That way you
don't require radials in general. The R7 is fairly decent for a 40-10
"1/2 wl" type of vertical. I'm not really familiar with the mfj version.
I think you have the right idea with the 3 el beam for 6m. MK
--
http://web.wt.net/~nm5k

2286. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:29:12 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A799CE8.3F26@wt.net>
Source record: 171159

foffe wrote:
>
> How come the commerical dipoles are shorter if they have
> a BALUN as opposed to when building a dipole with none
> its longer.

They don't /aren't. The only thing I can think of that would lead one to believe it does is that an undecoupled antenna uses the feedline as part of the antenna, and "could" look longer. But this is the feedline effects, not the antenna length doing this. If adding a balun makes an antenna "look" shorter, you can be assured the balun is doing it's intended job, and is "curing a common mode problem". If you had no problem before the balun, and saw no difference when adding it, you didn't have much of a common mode problem to start with. MK
--
http://web.wt.net/~nm5k

2287. dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:38:53 UTC
From: cammeres@spam_be_gone.uiuc.edu
Message-ID: <Nahe6.859$H51.10769@vixen.cso.uiuc.edu>
Source record: 171160

i am an apartment dweller, and i am taking my first stab at building an antenna out on my balcony. the antenna is for 2m, but it is not working correctly. when i key the transmitter (which is currently only a 5 watt ht), i get a very low swr of about 1.2:1, but i only see about 2.5 watts out. if i attach my rubber duck to the end of the feed line, i see about 1.5:1 and 5 watts coming out. also, if i disconnect the antenna and just transmit into the feed line, i get a full 5 watts with an swr of 2.5:1.

the construction is about 40 ft of coax running outside and connecting straight to the elements. i had a balun on there consisting of 10 turns of wire through a core, but took it off at the advice of a couple of other hams.

any ideas as to what could be wrong here?

sc

--
Sidney CAMMERESI http://www.cheesecake.org/sac
Emperor, Nukernel Software, Unl.
AB9BH

2288. Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:47:15 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <Dihe6.2495$ln1.202794@newsread2.prod.itd.earthlink.net>
Source record: 171161
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

A few days back, I posted an item about receiving some bad RG-213 coax from Radio Works. While they had UPS pick up the original cable, the replacement shipment was also defective.

When I called today about having them take back the replacement cable, they were just then inspecting the cable that had been returned. They told me they saw nothing wrong with the cable at all. I asked them if they'd looked under the several feet of black electrical tape I'd had to place over the damaged area so that it could be used for one rainy day (they hadn't noticed the tape - great inspection, eh?). They removed the tape and claimed they saw no holes and no defects. Admittedly, these were small holes, about what you'd make with the tip of a utility knife. However, one was large enough that when you flex the cable you could see the copper braid underneath. When I looked at that cable closely, I could clearly see that the jacket seam had not been completely sealed, resulting in the holes. They looked again and said they could see no damage. They ask me if I was talking about just something of "pin-hole" size (as if that somehow made it alright).

While they agreed to take the second cable shipment back, they refused to pay for the UPS charges as they had on the first, stating that it was their policy not to pay for returns a second time. The office manager then went on to explain that I was lying about the cable damage. I offered to put up $1,000 against her $1,000 to have a third party inspect the cable, but she explained how three people had already looked at it and saw no damage. Apparently, "third-party" has a different meaning in Portsmouth, VA?

I must say that I'm at a loss over this one. I've bought many, many hundreds of feet of coax over a 42 year period, and know a defective cable when I see it. It's bothersome to me that this outfit sees nothing wrong with the stuff they're shipping and would then accuse me of lying about it. What conceivable motive could there be for that?? If you do buy cable from these guys, for Pete's sake go over it very closely before installing it. If you don't know good coax from bad, here's some tips:

1. If the coax has lumps in it (like a snake that just ate), then it's BAD.

2. If the copper shield is badly oxidized (not shiny copper color) when you strip the jacket off to install the connectors, then it's BAD

3. If you run your hand down the cable and feel rough spots as if it had been drug along a concrete driveway, then it's BAD

4. If you can see the seam where the jacket was installed, look very closely and flex the cable to as to stretch this area of the cable. If you see pin holes in the jacket, then its BAD. If you can see the inner copper braid

through any of the holes, then it's REALLY BAD.

All of these conditions existed in the cable that Radio Works sent to me. They may also have all existed in the second shipment - I stopped looking after finding pin holes in the first 10 feet of the cable.

I've never heard anything negative about Radio Works before, and have no opinion on any of their many other products. However, I can assure you that at least one type of coax they're selling is just plain poor quality - make that defective. Furthermore, if you attempt to any such problems with them, you'll be subjected to the ignorance and wrath of their office manager (Judy?). I ordered replacement cable from The Wireman (no connection to them, but have received nothing but high quality cable from them over the years).

K8AC
Floyd Sense - Angier, NC

2289. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:57:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A79A370.E75B4784@eznec.com>
Source record: 171163

I agree with Richard. If you have common mode current on your feedline, the feedline becomes part of the antenna. When you use a balun, this extra part of your antenna is disconnected, making it effectively shorter. The resonant length with the balun in use should be close to the length predicted by formula or modeling program. Without the balun, you need less wire for the part you intend to be the antenna, because the feedline adds to the length actually making up the radiator.

Roy Lewallen, W7EL

W4JLE wrote:
>
> It does not affect the length of the antenna. Might I ask where you got that
> idea?
>
> A balun simply does what it's name says, balanced to unbalanced. Baluns come
> in various transformation ratios, the most common 1:1.
>
> "foffe" <setta@uio.com> wrote in message news:3A790026.E3ED9565@uio.com...
> > How come the commerical dipoles are shorter if they have
> > a BALUN as opposed to when building a dipole with none
> > its longer.
> >

2290. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 17:59:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A79A419.2547490B@eznec.com>
Source record: 171164

How are you measuring the power and SWR?

Roy Lewallen, W7EL

Sidney Cammeresi wrote:
>
> i am an apartment dweller, and i am taking my first stab at building an
> antenna out on my balcony. the antenna is for 2m, but it is not working
> correctly. when i key the transmitter (which is currently only a 5 watt
> ht), i get a very low swr of about 1.2:1, but i only see about 2.5 watts
> out. if i attach my rubber duck to the end of the feed line, i see about
> 1.5:1 and 5 watts coming out. also, if i disconnect the antenna and just
> transmit into the feed line, i get a full 5 watts with an swr of 2.5:1.
>
> the construction is about 40 ft of coax running outside and connecting
> straight to the elements. i had a balun on there consisting of 10 turns
> of wire through a core, but took it off at the advice of a couple of other
> hams.
>
> any ideas as to what could be wrong here?
>
> sc
>
> --
> Sidney CAMMERESI http://www.cheesecake.org/sac
> Emperor, Nukernel Software, Unl.
> AB9BH

2291. Re: Vargarda VHF aerials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 18:12:34 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <95c8slbhf1@newsg3.svr.pol.co.uk>
Source record: 171162

Thanks Ian,I have emailed Vargada,any info will post it here.
Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
news:IxSUFrAj$Qe6EAy8@ifwtech.plus.net...
> Keith wrote:
> >Ian,Have you ever tried any,the aerials that is ?. Who sell them in the
UK
> >?.Thanks.
>
> I haven't tried them, but know several people in the UK who have.
> Performance is good, and construction very good - like the Volvo, built
> for Swedish winters.
>
> A few months ago there was an announcement that someone had started
> importing Vargarda in the UK again, so try e-mailing
> sales@vargardaradio.se
>
> >Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
> >news:wkQKgrBrXFe6EAkv@ifwtech.plus.net...
> >> Keith wrote:
> >> >Any comments please
> >> >
> >> Built like a Volvo.
> >>
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

2292. Re: Will it help? The CAL'S

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 19:05:58 UTC
From: "K S O F (The Famous!!)" <NOjmackeySPAM@parg.org>
Message-ID: <95cc0o0k1s@news1.newsguy.com>
Source record: 171166
Cross-posted to: rec.radio.scanner,rec.radio.amateur.antenna

Hey Glenn Hansen, I thought you were busy over on rec.radio.amateur.antenna
makne more trouble & making the usuall
STUPID ASS of yourself?

How come you came back here?

Glenn <glenn.hansen@usa.net> wrote:
stupidity snipped, leaving nothing else

2293. Re: Best way to feed a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 19:30:24 UTC
From: "K S O F (The Famous!!)" <NOjmackeySPAM@parg.org>
Message-ID: <95cde80m11@news1.newsguy.com>
Source record: 171069

Glenn Hansen has a long history of making trouble on the rec.radio.*
newsgroups.

In particular, he is well known for being the idiot on the newsgroups of
rec.radio.scanner & rec.radio.swap.

Thanks for taking him here to this NG & getting him off the scanning
NG, it's a welcome relief!

<ehsjr@bellatlantic.net> wrote
> Glenn,
>
> Your last question (in a string of questions) to William was:
> "Can you lower yourself to my level and try and
> help me out William or do I need to read a book instead?"
>
> William's answer was: "nope."
>
> Where is the problem?? (Other than your demeaning inclusion
> of the phrase "can you lower yourself to my level")
>
> Why don't you, as a General class licensee, have enough basic
> understanding of antennas to know that you aren't missing anything -
> that the original poster needs to learn the fundamentals? Why didn't
> you answer his question, rather than engaging in an unprovoked
> attack on William? There was nothing rude about William's post,
> your attack was uncalled for, and you owe him an apology.
>
> Glenn wrote:
>
> > Your ability to project yourself is magnificent.
> >
> > You start trouble and then whine?
> >
> > Why not answer what I first asked you after your rude reply to a
response
> > NOT DIRECTED TO YOU?
> >
> > Again....
> >
> > The gentleman said "I would love to have a multi-band but space will not
> > permit so I have to say single band. Resonant for say 3750 or 7100".
> > Regardless of your explanation of dipole construction, transformers and
such
> > I don't see how any of these impact having room for a 80 meter antenna

but
> > not having room for the exact same length 80/40 meter antenna. How will
> > getting "a copy nof tha ARRL antenna book and" studying up resolve why
you
> > can have room for an eighty meter single band antenna but not for an
eighty
> > and 40 meter multiband antenna that is the exact same length?
> >
> > If you can't answer this then don't reply William.
> >
> > Glenn
> >
> > "William F. Hagen" <whagen@inreach.com> wrote in message
> > news:3A620ADC.27808834@inreach.com...
> > > Its funny how guys like this can usually do nothing but sling insults,
> > > they are all the same. I guess when all else fails nothing beats a
> > > personal attack.
> > > Once again, this kind of thing never helps anything or anybody. It
> > > doesnt bother me any but I do pity you, whether you like it or not.
> > > And yes, please do ignore me, it will certainly make my life better
and
> > > I bet a lot of other people would feel the same way.
> > > 73's to you
> > > William F. Hagen
> > > kc6ufe
> > >
> > > Glenn wrote:
> > > >
> > > > I didn't think you could back what you said. I'll remember to ignore
you
> > in
> > > > the future William. Now run off and play on 14.313 with your other
> > friends.
> > > > Your reason for frequenting a group to share information is
baffling.
> > > >
> > > > Glenn - KB7PKC
> > > >
> > > > "William F. Hagen" <whagen@inreach.com> wrote in message
> > > > news:3A61F212.6BA80514@inreach.com...
> > > > > nope.
> > > > >
> > > > > Glenn wrote:
> > > > > >
> > > > > > William,
> > > > > >
> > > > > > The gentleman said "I would love to have a multi-band but space
will
> > not
> > > > > > permit so I have to say single band. Resonant for say 3750 or

7100".
> > > > > > Regardless of your explanation of dipole construction,
transformers
> > and
> > > > such
> > > > > > I don't see how any of these impact having room for a 80 meter
> > antenna
> > > > but
> > > > > > not having room for the exact same length 80/40 meter antenna.
How
> > will
> > > > > > getting "a copy nof tha ARRL antenna book and" studying up
resolve
> > why
> > > > you
> > > > > > can have room for an eighty meter single band antenna but not
for an
> > > > eighty
> > > > > > and 40 meter multiband antenna that is the exact same length? Is
it
> > > mirrors?
> > > > > > Reflections off the snow? Can you lower yourself to my level and
try
> > and
> > > > > > help me out William or do I need to read a book instead?
> > > > > >
> > > > > > HUH?
> > > > > >
> > > > > > Glenn - KB7PKC
> > > > > >
> > > > > > "William F. Hagen" <whagen@inreach.com> wrote in message
> > > > > > news:3A615104.23916943@inreach.com...
> > > > > > > you are missing the help for the gentleman's request.
> > > > > > > Lots of ways to make a dipole, full length, or trap shortened,
> > even a
> > > > > > > coil in the center.
> > > > > > > Typically a dipole is fed with coax and a balun, matching the
> > > > impedances
> > > > > > > either with the coax or the balun being a transformer as well
such
> > as
> > > > > > > 4:1, 9:1 etc. also, parallel line is used, typically 300 ohm,
or
> > 450
> > > > > > > ohm, and matched with a transformer etc. Some dont match, and
use
> > a
> > > > > > > tuner at the shack to compensate.
> > > > > > > A good suggestion is to get a copy nof tha ARRL antenna book
and

> > study
> > > > > > > > up.
> > > > > > > >
> > > > > > > >
> > > > > > > > Glenn wrote:
> > > > > > > > >
> > > > > > > > > I'm confused. My multi-band fan dipole covering 80/40/20
takes
> > the
> > > > > same
> > > > > > > > > space as a 80 meter single band. I have to be missing
something
> > > > here!
> > > > > > > > >
> > > > > > > > > Glenn - KB7PKC
> > > > > > > > >
> > > > > > > > > "VE3TMT" <mdonoghue1@sympatico.ca> wrote in message
> > > > > > > > > news:VD986.61131$JT5.1847684@news20.bellglobal.com...
> > > > > > > > >
> > > > > > > > > > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > > > > > > > > > news:3A60E228.C162C28D@eznec.com...
> > > > > > > > > > > Resonant (half wavelength) or nonresonant? Single or
> > multiband?
> > > > > > > > >
> > > > > > > > >
> > > > > > > > > Personally I would love to have a multi-band but space
will
> > not
> > > > > permit
> > > > > > > > > so
> > > > > > > > > I
> > > > > > > > > have to say single band. Resonant for say 3750 or 7100.
I
> > can
> > > > > make
> > > > > > > > > as
> > > > > > > > > many
> > > > > > > > > as I need but am a little confused as far as feeding them.
> > > > > > > > >
> > > > > > > > >
> >

2294. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 19:30:54 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3a79b96f$0$30007$2c3edae7@news.voyager.net>
Source record: 171165
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

i recently received a 1000 foot roll of rg213 with the same defects that
you are describing (NOT FROM RADIO WORKS THOUGH) i returned the reel to
the sender and ordered a reel of belden cable although i paid a few more
bucks for the cable my headaches were gone
ken w8ob

Floyd Sense wrote:
>
> A few days back, I posted an item about receiving some bad RG-213 coax from
> Radio Works. While they had UPS pick up the original cable, the replacement
> shipment was also defective.
>
> When I called today about having them take back the replacement cable, they
> were just then inspecting the cable that had been returned. They told me
> they saw nothing wrong with the cable at all. I asked them if they'd looked
> under the several feet of black electrical tape I'd had to place over the
> damaged area so that it could be used for one rainy day (they hadn't noticed
> the tape - great inspection, eh?). They removed the tape and claimed they
> saw no holes and no defects. Admittedly, these were small holes, about what
> you'd make with the tip of a utility knife. However, one was large enough
> that when you flex the cable you could see the copper braid underneath.
> When I looked at that cable closely, I could clearly see that the jacket
> seam had not been completely sealed, resulting in the holes. They looked
> again and said they could see no damage. They ask me if I was talking about
> just something of "pin-hole" size (as if that somehow made it alright).
>
> While they agreed to take the second cable shipment back, they refused to
> pay for the UPS charges as they had on the first, stating that it was their
> policy not to pay for returns a second time. The office manager then went
> on to explain that I was lying about the cable damage. I offered to put up
> $1,000 against her $1,000 to have a third party inspect the cable, but she
> explained how three people had already looked at it and saw no damage.
> Apparently, "third-party" has a different meaning in Portsmouth, VA?
>
> I must say that I'm at a loss over this one. I've bought many, many
> hundreds of feet of coax over a 42 year period, and know a defective cable
> when I see it. It's bothersome to me that this outfit sees nothing wrong
> with the stuff they're shipping and would then accuse me of lying about it.
> What conceivable motive could there be for that?? If you do buy cable from
> these guys, for Pete's sake go over it very closely before installing it.
> If you don't know good coax from bad, here's some tips:
>
> 1. If the coax has lumps in it (like a snake that just ate), then it's BAD.

>
> 2. If the copper shield is badly oxidized (not shiny copper color) when you
> strip the jacket off to install the connectors, then it's BAD
>
> 3. If you run your hand down the cable and feel rough spots as if it had
> been drug along a concrete driveway, then it's BAD
>
> 4. If you can see the seam where the jacket was installed, look very closely
> and flex the cable to as to stretch this area of the cable. If you see pin
> holes in the jacket, then its BAD. If you can see the inner copper braid
> through any of the holes, then it's REALLY BAD.
>
> All of these conditions existed in the cable that Radio Works sent to me.
> They may also have all existed in the second shipment - I stopped looking
> after finding pin holes in the first 10 feet of the cable.
>
> I've never heard anything negative about Radio Works before, and have no
> opinion on any of their many other products. However, I can assure you that
> at least one type of coax they're selling is just plain poor quality - make
> that defective. Furthermore, if you attempt to any such problems with them,
> you'll be subjected to the ignorance and wrath of their office manager
> (Judy?). I ordered replacement cable from The Wireman (no connection to
> them, but have received nothing but high quality cable from them over the
> years).
>
> K8AC
> Floyd Sense - Angier, NC

2295. Re: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 19:49:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A79BDC3.FC6EF716@eznec.com>
Source record: 171074

I'd use ferrite, preferably Fair-Rite type 43 (initial permeability 850) or equivalent. If the balun has enough impedance, no ferrite type will produce enough loss in a 1:1 current balun application to significantly affect your signal. However, 70 series ferrites (higher initial permeability) might get warm if 400 watts is applied continuously. 60 series ferrites (lower initial permeability) will work also but will give you less impedance per turn squared.

It's hard to get enough impedance with high frequency powdered iron cores like types 2 and 6. If you have the means to do the measurements, though, you might be able to make a self-resonant balun on a powdered iron core that would work very well on a single band.

2-1/2 inches is plenty large. I've run 300 watts CW through a balun made with a core slightly larger than one inch OD, wound with RG-174, with no problems.

Roy Lewallen, W7EL

Harry Harms wrote:
>
> Group,
>
> To wind my own balun for exclusive use on 10m, should I use iron powder or
> ferrite cores?
>
> I intend to use full legal power for Australia, 400 watts, so need a decent
> sized core.. 2 1/2 inches minimum.
>
> Any help on what types of materials etc??
>
> John Mclean
> VK2KCE

2296. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:08:07 UTC
From: cammeres@spam_be_gone.uiuc.edu
Message-ID: <Hmje6.37$DL1.497@vixen.cso.uiuc.edu>
Source record: 171167

On Thu, 01 Feb 2001 09:59:53 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>How are you measuring the power and SWR?

with a radio shack 144/440 swr/power meter between the transmitter and
the feed line.

sc

--
Sidney CAMMERESI http://www.cheesecake.org/sac
Emperor, Nukernel Software, Unl.
AB9BH

2297. Re: Vargarda VHF aerials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:16:55 UTC
From: CA <sm6pxj@hotmail.com>
Message-ID: <Muje6.666$u7.1983@nntpserver.swip.net>
Source record: 171168

My 9 element Vargarda has survived the Swedish winters since 1985.
I think the Volvo analogy has a point.

73
sm6pxj

2298. Re: K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:25:14 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a79c5e7$0$29999$44a10c7e@news.net-link.net>
Source record: 171070

Don't monkey around with the coil--just shorten the whip and measure with analyzer. Start with cutting about 5" off at first (you can't put it back on!) I forget what I had to cut off. I have a K-40 cut down for 10 meters and it works pretty good for what it is. I get wide band coverage 2.1 swr--so it is lossy. Hustler mast and coil works better, so does full size quarter wave whip.
davekle@city-net.com wrote in message
<3a78ce19.124944380@news.city-net.com>...
>
>I have been told that it would be advisable to remove a winding from
>the coil of my K40 antenna before I try to tune it for 10 Meter use.
>
>I'm interested to know whether this is necessary or not. I'm probably
>going to be using an HTX-10 rig. If the mod is recommended, does
>anyone have any directions for the proceedure?
>
>Thanks in advance for your help.
>
>-Dave
>KB3FXI

2299. Building a mobile UKW-Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:30:17 UTC
From: Jens <jensrene@gmx.net>
Message-ID: <95ch0a$l49$07$2@news.t-online.com>
Source record: 171072

I am very new to this and i only want to build a simple antenna with good
results which is as small as possible and as good as possible
;-)
It is more important to get good results than to be small...
please make it simple, because i am new to this and don't know how to
calculate all this stuff...
PLEASE HELP!!!

2300. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:37:14 UTC
From: richardharrison@webtv.net
Message-ID: <17511-3A79C8FA-53@storefull-117.iap.bryant.webtv.net>
Source record: 171073

Sidney, AB9BH wrote:
"---I get a very low swr of about 1.2:1 but I only see about 2.5 watts out."

Roy asked a cogent question. Are you sure the power and SWR readings aren`t switched?

If your sender were a low impedance source, its power out would depend on load conductance, if reactance is disregarded. So, low power output can indicate a high load impedance.

But, 5 watts into an open-circuit via the feedline with only 2.1:1 SWR is anomalous. The feedline and/or the measuring equipment are bad. An open circuit should show extreme SWR, and the net power to the feedline should be very small.

Best regards, Richard Harrison, KB5WZI

2301. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:48:43 UTC
From: andre <andreltb@frb.br>
Message-ID: <t7jhrlh8qp9ia0@corp.supernews.com>
Source record: 171071

andre escreveu na mensagem ...
>I am building a parabolic cylinder antenna, I want it to work around
>anything between 200MHz and 800MHz, it needs to be something relatively
>small(1m-1.5m x 0.4m-0.6m) , I'm needing a help on how to calculate it's
>working band and its impendances. I'm not sure, but can I build the half
>lambeda dipole bigger than the reflector height?
>
>Thanks
>
>
I need a parabolic cylinder antenna, it's a half of a cylinder used as the
reflector and a dipole located at the central axis of the cylinder, I know
this gain would be around 4-6(6-7dB), it's an experiment, it's not for
practical use

2302. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 20:54:32 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <95cio0tun1@slb0.atl.mindspring.net>
Source record: 171075

If that is the RSU10508018, you are not getting accurate readings. I have one of those and find the readings it gives don't seem to correspond to anything.
--
CW
KC7NOD
"Sidney Cammeresi" <cammeres@spam_be_gone.uiuc.edu> wrote in message news:Hmje6.37$DL1.497@vixen.cso.uiuc.edu...
> On Thu, 01 Feb 2001 09:59:53 -0800, Roy Lewallen <w7el@eznec.com> wrote:
> >How are you measuring the power and SWR?
>
> with a radio shack 144/440 swr/power meter between the transmitter and
> the feed line.
>
>
> sc
>
> --
> Sidney CAMMERESI http://www.cheesecake.org/sac
> Emperor, Nukernel Software, Unl.
> AB9BH

2303. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 21:01:32 UTC
From: richardharrison@webtv.net
Message-ID: <17512-3A79CEAC-24@storefull-117.iap.bryant.webtv.net>
Source record: 171076

Andre escreveau na mensagem:
"I need a parabolic cylinder antenna."

My mental image is of a central slice of a parabolic reflector with a dipole and its reflector pointed at the parabolic strip.

What I posted regarding the full parabolic antenna also applies to the strip, sector, or truncaded parabolic antenna, only more so.

Cuprimentos, Richard Harrison, KB5WZI

2304. Re: Building a mobile UKW-Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 21:40:05 UTC
From: richardharrison@webtv.net
Message-ID: <11759-3A79D7B5-69@storefull-115.iap.bryant.webtv.net>
Source record: 171082

Jens wrote:
"It is more important to get good results than to be small..."

A full-sized 1/4-wave mobile UKW antenna should not be too large.

The formula: Velocity equals frequency x lambda, where Velocity is 300,000 km per sec, and lambda is the wavelength in meters, gives a value of 2.05 meters for a frequency of 146 MHz.

So, 1/4-wave is 0.514m or 20.2in. Reduced for "end effect" the antenna length becomes: 48.8cm or 19.2in.

50-ohm coax will work well with this antenna, but the actual feedpoint impedance is somewhat lower.

Best regards, Richard Harrison, KB5WZI

2305. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 21:43:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A79D865.A7EC02F8@eznec.com>
Source record: 171088

Thanks for the clarification. Yes, radials extending four wavelengths increase the ground conductivity in the region where ground reflection takes place. This would make the patterns of both the quarter and half wavelength verticals much more like the perfect-ground patterns. Both antennas would have much stronger low angle radiation if you can make a radial system like this.

Roy Lewallen, W7EL

Richard Karlquist wrote:
>
> Another poster (whose name I forget) made the statement about 40% of the
> power is
> burned up. I completely agree with you; I think we are trying to say the
> same thing.
> The half wave vertical's pattern gain makes up (approximately) for ground
> losses away
> from the base, so in practice, a half wave with no ground radials is as good
> as a quarter
> wave with a lot of radials. I found that adding radials 4 wavelengths long
> to the half
> wave vertical allows it to realize the ~2 dB gain over the quarter wave.
> This study
> has been posted on my web site www.karlquist.com for several years. The
> bottom
> line is build whichever is easier for you as the performance is about the
> same.
>
> Rick Karlquist N6RK
>
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:3A770E05.3854A1D9@eznec.com...
> > Can you explain why "40% of the power is burned up in ground losses due
> > to lack of radials" with a half wave vertical? This isn't consistent
> > with either the theory I'm familiar with or the results shown by
> > modeling programs.
> >
> > Here's what I see as equalizing the quarter and half wave verticals: The
> > half wave vertical would have a 1.6 dB gain over a quarter wave vertical
> > if both were over perfect ground. The gain is accomplished by
> > concentrating the signal at the horizon. Over perfect ground, the half
> > wave's pattern is narrower, with a higher proportion of the energy at
> > low angles. But except for salt water, real ground bears very little
> > resemblance to perfect ground. And when a vertically polarized signal
> > reflects from real dirt ground at low angles, most of the power is

> > dissipated as heat. The result is that the low angle radiation
> > disappears. But the half wave vertical concentrates a higher proportion
> > of its total field at these very angles, so a higher proportion of the
> > total radiated power is lost. This tends to equalize the antennas. On
> > the other hand, the quarter wavelength antenna will usually have lower
> > efficiency due to ground loss resistance, giving the half wave antenna
> > an edge in this regard. Both these factors depend on the ground
> > conductivity, so either antenna might be very slightly better than the
> > other in an individual installation. But if the quarter wave antenna has
> > a decent ground system, you're not likely to see a spectacular
> > difference.
> >
> > Roy Lewallen, W7EL
> >
> > Richard Karlquist wrote:
> > >
> > > Sometimes the half wave vertical without radials is criticized because
> of
> > > high ground loss away from the base.
> > > (Everyone agrees the loses due to ground current at the feed point are
> > > negligible because of the high
> > > driving point impedance). What seems to be overlooked by most people is
> > > that a half wave vertical over perfect
> > > ground has 2 dB of gain over a quarter wave radial over perfect ground.
> > > This means that even if 40% of the power is burned up
> > > in ground losses due to lack of radials, this 2 dB of pattern gain makes
> it
> > > come out even with respect to the quarter wave vertical.
> > > Thus in practice (and I have measured this experimentally), the half
> wave
> > > vertical with no radials is as good
> > > as a quarter wave vertical with a pretty decent set of radials.
> > >
> > > Rick Karlquist N6RK

2306. RE: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:01:29 UTC
From: tom_bruhns@agilent.com
Message-ID: <95cmbi$fe3$1@nnrp1.deja.com>
Source record: 171080

Quite some time ago, I had a terrible problem with RF on the line on 10 meters, and nailed it by winding a few turns of coax with an air core (perhaps 4" diameter), and shunting it (braid on one side to braid on the other side of the coil) with a capacitance to resonate it on 10 meters. Use enough turns that it's almost self-resonant, or just make it self-resonant. It's at least an alternative to consider; certainly very inexpensive.

Cheers,
Tom

In article <3a72676c$0$16389$7f31c96c@news01.syd.optusnet.com.au>,
"Harry Harms" <hrbe@dingoblue.net.au> wrote:
> Group,
>
> To wind my own balun for exclusive use on 10m, should I use iron
powder or
> ferrite cores?
>
> I intend to use full legal power for Australia, 400 watts, so need a
decent
> sized core.. 2 1/2 inches minimum.
>
> Any help on what types of materials etc??
>
> John Mclean
> VK2KCE
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

2307. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:02:02 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95cmcqcjr2@agate.berkeley.edu>
Source record: 171078
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Well, that is too bad.

It seems that the main issue with Radio Works is NOT that they have defective cable (since presumably they have nothing to do with the manufacture of the cable), but rather that they

1) did a poor job of inspecting it;

2) would not pay to return the 2nd bad cable (this REALLY shouldn't have happened because they REALLY should have looked at the 2nd cable more closely, based upon the experience with the first cable they sent you. You'd THINK that they'd want to be careful to ensure no future problems).

I think this kind of thing is important, and too bad for Radio Works because I've bought cable from them in the past and have been fortunate to not have problems. I was just looking to make another purchase in the coming weeks, but now due to your post I will look elsewhere, just to be safe.

This type of customer service is a huge pet peeve of mine.

I think that companies get away with poor service like this because people don't do anything about it. You have a bad experience with them, but then you and all your friends and aquaintences keep shopping there. Things will only change if people force them to realize they're not doing things right.

I was trying to buy a product from MFJ but had a question about it. I emailed them several times, and wrote them letters. They never did respond. Perhaps there is a secret to successful business that I don't know about, not being a businessman.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2308. Re: Morse decoders (No-code kills)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:02:33 UTC
From: n2ey@aol.com
Message-ID: <95cmdiffa1@nnrp1.deja.com>
Source record: 171079

In article <3A786AB1.77D0F1C1@3n.net>,
Old Biker <enfield@3n.net> wrote:
> n2ey@aol.com wrote:
> >
> > ...lets not play word games - whatever we call 'em, there are
devices
> > that will turn received Morse into text and vice versa.
>
> I hope they receive a whole lot better than the one I bought 10
> years ago. It worked perfectly on machine-generated Morse but
> very poorly in actual practice. I'd hoped to use it to "back up"
> my own skills and thus improve them but found I spent more time
> trying to figure out the garbage it was displaying than trying
> to copy code myself so I quit using it.

I've never owned one of the things, but have seen a few. One of our
Field Day denizens insists on having it set up in the CW tent. Doesn't
work worth a dang in real life.

One problem is that they interpret any noise burst or other signal as a
dit or dah. Stuff that a human would subconciously ignore drives them
batty.

> I suspect that most hams
> have much poorer fists than they'd like to admit;

Not in my experience. The thing worked perfectly as a monitor of what
was sent (it decoded the sidetone in the speaker) in our FD setups.
Most of the fists I hear are pretty good.

> that a good
> ear and skilled mind can gloss over their mistakes but older
> machines like mine cannot.

Don't know about new ones.

The only real use I can see for such things is to judge the quality of
somebody's sending in a test situation.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2309. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:08:41 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A79DE69.8857EDC4@dialpoint.net>
Source record: 171077

Later you mentioned a RAdio Shack meter and measuring the swr at the transmitter. Don't know much about the RS meter, but it may not be very accurate. Also on 2 meters you just about need to measuer the swr near the antenna. About 100 feet of good rg-8 cable or half that ammount of rg-58 will give a swr of around 2.5 or 3 to 1 with an open end. If you have about 400 or 500 feet of rg-58 the swr will be almost 1 to 1 with either a shorted or open transmillion line. This is due to the line loss in the cable. All the power is dissapated in the coax and by the time it gets to the end there is very little to be reflected and then the reflected power is lossed in the ruturn trip , so there is very little to measure.

A high swr will cause the meter to show more power output than there actually is. This may be why you are showing lots of power with a higher swr. You have to substract the reflected power from the forward power to get a goo indication of how much power you are actually putting out.

Sidney Cammeresi wrote:
>
> i am an apartment dweller, and i am taking my first stab at building an
> antenna out on my balcony. the antenna is for 2m, but it is not working
> correctly. when i key the transmitter (which is currently only a 5 watt
> ht), i get a very low swr of about 1.2:1, but i only see about 2.5 watts
> out. if i attach my rubber duck to the end of the feed line, i see about
> 1.5:1 and 5 watts coming out. also, if i disconnect the antenna and just
> transmit into the feed line, i get a full 5 watts with an swr of 2.5:1.
>
> the construction is about 40 ft of coax running outside and connecting
> straight to the elements. i had a balun on there consisting of 10 turns
> of wire through a core, but took it off at the advice of a couple of other
> hams.
>
> any ideas as to what could be wrong here?
>

2310. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:13:34 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A79DE15.51E5B302@home.com>
Source record: 171081

I'm glad I called the local RadioShack.com and put one of these on hold before I posted any info about the sale. The local Radioshack.com had six of these when I called to put it on hold last night, and when I went to get it today all were sold except for mine. What a shopping frenzy!

Ken Anderson wrote:

> If you have been wanting an antenna analyzer, RadioShack.com has the
> Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from
> Radio Shack.com. This price may not apply at the retail stores. This
> unit is the same as the MFJ 259B MFJ and Vectronics are sister
> companies, and the product is similar, with same features and
> functions. I had to search on the RS product number at the
> Radioshack.com website. the number is 940-0683. 73, KC0INZ

2311. Re: Will it help? The CAL'S

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:21:33 UTC
From: foffe <setta@uio.com>
Message-ID: <3A79E16D.711372D6@uio.com>
Source record: 171083
Cross-posted to: rec.radio.scanner,rec.radio.amateur.antenna

The correct spelling of the word usual is USUAL. NOT usuall.

"K S O F (The Famous!!)" wrote:

> Hey Glenn Hansen, I thought you were busy over on rec.radio.amateur.antenna
> makne more trouble & making the usuall
> STUPID ASS of yourself?
>
> How come you came back here?
>
> Glenn <glenn.hansen@usa.net> wrote:
> stupidity snipped, leaving nothing else

2312. Attic Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:24:26 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A79E0A1.55C847BD@home.com>
Source record: 171085

I am installing an Alpha Delta DX-EE in my attic tomorrow. I have about 30 feet of ridge line so I will have to run 5 feet on each end perpendicular to the rest of the antenna. At the corners where I bend the antenna at 90 degrees, what should I use to hold the wire? Can I just tie some nylon line onto the antenna wire? Or do I need some stand offs? Also, should I bend the 2 ends perpendicular in the same direction in an open box shape, or bend each one a different way like a zig zag? Thanks, Ken

2313. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:27:10 UTC
From: foffe <setta@uio.com>
Message-ID: <3A79E2BE.BE1D4F1E@uio.com>
Source record: 171084

Because if I construct an 80/40 combo dipole and directly feed
it with 50 ohm coax it is longer than the commericially sold
80/40 dipoles that are sold.
Homemade with no BALUN = about 120 feet
Commericial with BALUN = around 80 feet or so

W4JLE wrote:

> It does not affect the length of the antenna. Might I ask where you got that
> idea?
>
> A balun simply does what it's name says, balanced to unbalanced. Baluns come
> in various transformation ratios, the most common 1:1.
>
> "foffe" <setta@uio.com> wrote in message news:3A790026.E3ED9565@uio.com...
> > How come the commerical dipoles are shorter if they have
> > a BALUN as opposed to when building a dipole with none
> > its longer.
> >

2314. Re: Toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:34:14 UTC
From: jflanders2@home.com
Message-ID: <3a79e3ee.880787071@news>
Source record: 171086

On Thu, 01 Feb 2001 22:01:29 GMT, tom_bruhns@agilent.com wrote:

>Quite some time ago, I had a terrible problem with RF on the line on
>10 meters, and nailed it by winding a few turns of coax with an air
>core (perhaps 4" diameter), and shunting it (braid on one side to braid
>on the other side of the coil) with a capacitance to resonate it on 10
>meters. Use enough turns that it's almost self-resonant, or just make
>it self-resonant. It's at least an alternative to consider; certainly
>very inexpensive.
>
>Cheers,
>Tom
>

And it's core never saturates, no matter how high the power level.

Jerry W4UK

>In article <3a72676c$0$16389$7f31c96c@news01.syd.optusnet.com.au>,
> "Harry Harms" <hrbe@dingoblue.net.au> wrote:
>> Group,
>>
>> To wind my own balun for exclusive use on 10m, should I use iron
>powder or
>> ferrite cores?
>>
>> I intend to use full legal power for Australia, 400 watts, so need a
>decent
>> sized core.. 2 1/2 inches minimum.
>>
>> Any help on what types of materials etc??
>>
>> John Mclean
>> VK2KCE
>>
>>
>
>--
>Tom Bruhns -- K7ITM
>
>
>Sent via Deja.com
>http://www.deja.com/

2315. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:48:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A79E7DB.C69EE4A0@IEEE.org>
Source record: 171091

foffe wrote:
>
> Because if I construct an 80/40 combo dipole and directly feed
> it with 50 ohm coax it is longer than the commericially sold
> 80/40 dipoles that are sold.
> Homemade with no BALUN = about 120 feet
> Commericial with BALUN = around 80 feet or so

The 80ft dipole is simply a shortened antenna and is a non-resonant length on 75m. It can be tuned to resonate by the feedline and a transformer. The balun is not appreciably shortening the antenna system - it is transforming the impedance, probably at a current maximum. For instance, the 27ft "matching section" on a 102ft G5RV transforms the impedance to about 12 ohms, resistive. If a 1:4 balun is installed at that point, a near-perfect match will be achieved for 50 ohm coax.

However, on 10m, 10-20 turns of coax on a 2L pop bottle is an appreciable percentage of a wavelength. If the SWR is not 1:1, it can certainly appear that the balun is "shortening" (or "lengthening") the antenna.
--
http://www.mindspring.com/~w6rca

2316. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:49:05 UTC
From: jeffreys@cyburban.com
Message-ID: <3a79e773$0$82370$45beb828@newscene.com>
Source record: 171089

I watched over the course of 20 years as a park sign (same as a right-term sign you see on a post) was envoloped by a tree. At about 15 years, you could just make out the outline of the sign but only the middle 20% of the sign was visible!

Sounds like a horror movie subject if the tree took less time to grow!

jeffrey steinberg, kc2guc.

Very intesting question!

In article <3A78F20B.6E74FD5D@bwcc.com>, Braughler@bwcc.com says...
>
>Rick Littlefield wrote:
>> Trees are not bamboo.
>Right. He was referring to bamboo as a type of grass that is taller than corn (maize).

2317. Re: attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 22:54:07 UTC
From: jeffreys@cyburban.com
Message-ID: <3a79e880$0$82370$45beb828@newscene.com>
Source record: 171090

I have a 43' dipole from W9INN (look for the smallest ads in QST and CQ in the back of the magazine. Bill has no website.

I have his shorted 43' dipole that covers 80-10. Works great. 80 is a push but I get decent results. Not as good as the full-sized antennas, but I can talk over 800 miles away no problem. All other bands are excellent. DXCC in under 1 month, with the antenna at about 40' in my attic.

I used the DX-EE from Alpha Delta and liked that too, but it stopped at 40m.

--jeffrey steinberg, kc2guc

In article <20010128222621.21059.00001836@ng-mq1.aol.com>, testudine@aol.com says...
>
>Howdy! Im looking for antenna ideas that can be set up in an attic. must cover
>HF. Commercial antennas are appreciated. must be in $300 dollar budget.
>homebrew ideas ok too.

2318. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:00:56 UTC
From: cammeres@spam_be_gone.uiuc.edu
Message-ID: <IUle6.96$DL1.1586@vixen.cso.uiuc.edu>
Source record: 171093

On Thu, 01 Feb 2001 17:08:41 -0500, Ralph Mowery <rmowery@dialpoint.net> wrote:
>accurate. Also on 2 meters you just about need to measuer the swr near
>the antenna.

near the antenna i get swr of 1.5:1 and 1.5 watts power.

sc

--
Sidney CAMMERESI http://www.cheesecake.org/sac
Emperor, Nukernel Software, Unl.
AB9BH

2319. Re: attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:01:23 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <7VIe6.3828$g42.365920@newsread1.prod.itd.earthlink.net>
Source record: 171092

Are you using a tuner with that?

Dennis - KF2XL

"Jeffrey Steinberg" <jeffreys@cyburban.com> wrote in message
news:3a79e880$0$82370$45beb828@newscene.com...
> I have a 43' dipole from W9INN (look for the smallest ads in QST and CQ in
the
> back of the magazine. Bill has no website.
>
> I have his shorted 43' dipole that covers 80-10. Works great. 80 is a
push
> but I get decent results. Not as good as the full-sized antennas, but I
can
> talk over 800 miles away no problem. All other bands are excellent. DXCC
in
> under 1 month, with the antenna at about 40' in my attic.
>
> I used the DX-EE from Alpha Delta and liked that too, but it stopped at
40m.
>
> --jeffrey steinberg, kc2guc
>
>
> In article <20010128222621.21059.00001836@ng-mq1.aol.com>,
testudine@aol.com
> says...
> >
> >Howdy! Im looking for antenna ideas that can be set up in an attic. must
cover
> >HF. Commercial antennas are appreciated. must be in $300 dollar budget.
> >homebrew ideas ok too.
>
>

2320. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:02:24 UTC
From: VK4LAJ <vk4laj.SPAM.JAM@loaded-dog.com>
Message-ID: <3a79eb5a@grissom>
Source record: 171094

Evan

When I was doing a theory course for my ham radio ticket the tutor mentioned problems when using open wire feeders

Basically he said that it needs to be kept away from metal objects (but I guess you knew that one any way) and the other thing he mentioned was that any bends or changes in direction should be gradual... this was because if the bend is to sharp it will create an "impedance bump" (his words) in the area of the bend, which as Richard Clark, KB7QHC said will upset the standing waves.

--
Don't forget to remove the SPAM.JAM

73
Adam VK4LAJ
E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
WWW: - http://www.loaded-dog.com
Brisbane Australia
CQ Zone 29/ 30
Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
Maiden Head: - QG62mi
Height ASL: - 52m

My wife says I never listen to her...
at least that's what I think she said?
K9SQG <k9sqg@aol.com> wrote in message
news:20010131200307.24428.00000125@ng-bd1.aol.com...
> Today I read of large losses that result when you bend open wire line in a
> sharp bend. I had never heard of this before and wonder if it is true.
Does
> anybody know exactly how much loss results?
>
> Thanks and 73s,
>
> Evan

2321. Re: Building a mobile UKW-Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:03:30 UTC
From: Jens <jensrene@gmx.net>
Message-ID: <95cpvj$864$06$2@news.t-online.com>
Source record: 171095

Richard Harrison schrieb in Nachricht
<11759-3A79D7B5-69@storefull-115.iap.bryant.webtv.net>...
Jens wrote:
"It is more important to get good results than to be small..."

A full-sized 1/4-wave mobile UKW antenna should not be too large.

The formula: Velocity equals frequency x lambda, where Velocity is
300,000 km per sec, and lambda is the wavelength in meters, gives a
value of 2.05 meters for a frequency of 146 MHz.

So, 1/4-wave is 0.514m or 20.2in. Reduced for "end effect" the antenna
length becomes: 48.8cm or 19.2in.

50-ohm coax will work well with this antenna, but the actual feedpoint
impedance is somewhat lower.

Best regards, Richard Harrison, KB5WZI

Is it possible to modify this antenna to get 75-ohm?
I need 75 ohm for my radio.
And is it possible to use isolated small wire?
and can i make a coil ?

2322. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:17:26 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A79EE40.9DD775FA@GTE.net>
Source record: 171096

foffe wrote:

> Because if I construct an 80/40 combo dipole and directly feed
> it with 50 ohm coax it is longer than the commericially sold
> 80/40 dipoles that are sold.
> Homemade with no BALUN = about 120 feet
> Commericial with BALUN = around 80 feet or so
>
> W4JLE wrote:
>

This is not even close to real world. You must be referring to an antenna like the Alpha Delta 80-40. This uses a choke at 40M that looks inductive at 80M shortening the antenna to around 84' overall.

Dale W4OP

2323. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:23:27 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A79EFAD.A4AF6219@GTE.net>
Source record: 171097

Sidney Cammeresi wrote:

> i am an apartment dweller, and i am taking my first stab at building an
> antenna out on my balcony. the antenna is for 2m, but it is not working
> correctly. when i key the transmitter (which is currently only a 5 watt
> ht), i get a very low swr of about 1.2:1, but i only see about 2.5 watts
> out. if i attach my rubber duck to the end of the feed line, i see about
> 1.5:1 and 5 watts coming out. also, if i disconnect the antenna and just
> transmit into the feed line, i get a full 5 watts with an swr of 2.5:1.
>
> the construction is about 40 ft of coax running outside and connecting
> straight to the elements. i had a balun on there consisting of 10 turns
> of wire through a core, but took it off at the advice of a couple of other
> hams.
>
> any ideas as to what could be wrong here?
>
> sc

Your wattmeter most likely uses voltage sensing- the higher the Z of the load, the more power it will indicate. The only time it will read correctly is when the load is 50 Ohms resistive. Next, is your wattmeter good at VHF? When you terminate the wattmeter in 50 Ohms- what do you read? Where are you connecting the meter?

Dale W4OP

2324. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:42:01 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <t7jt2ed4jri60b@corp.supernews.com>
Source record: 171099
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

i wonder if they got a deal on some poor spec cable ..
i think most cable mfg would destroy and poor spec to keep their name off
the market..
but sometimes the stuff leaks before it gets buried..
did it have a reputable companie's logo?
"Floyd Sense" <sentek@sprintmail.com> wrote in message
news:Dihe6.2495$ln1.202794@newsread2.prod.itd.earthlink.net...
> A few days back, I posted an item about receiving some bad RG-213 coax
from
> Radio Works. While they had UPS pick up the original cable, the
replacement
> shipment was also defective.
>
> When I called today about having them take back the replacement cable,
they
> were just then inspecting the cable that had been returned. They told me
> they saw nothing wrong with the cable at all. I asked them if they'd
looked
> under the several feet of black electrical tape I'd had to place over the
> damaged area so that it could be used for one rainy day (they hadn't
noticed
> the tape - great inspection, eh?). They removed the tape and claimed they
> saw no holes and no defects. Admittedly, these were small holes, about
what
> you'd make with the tip of a utility knife. However, one was large enough
> that when you flex the cable you could see the copper braid underneath.
> When I looked at that cable closely, I could clearly see that the jacket
> seam had not been completely sealed, resulting in the holes. They looked
> again and said they could see no damage. They ask me if I was talking
about
> just something of "pin-hole" size (as if that somehow made it alright).
>
> While they agreed to take the second cable shipment back, they refused to
> pay for the UPS charges as they had on the first, stating that it was
their
> policy not to pay for returns a second time. The office manager then went
> on to explain that I was lying about the cable damage. I offered to put
up
> $1,000 against her $1,000 to have a third party inspect the cable, but she
> explained how three people had already looked at it and saw no damage.
> Apparently, "third-party" has a different meaning in Portsmouth, VA?
>
> I must say that I'm at a loss over this one. I've bought many, many

> hundreds of feet of coax over a 42 year period, and know a defective cable
> when I see it. It's bothersome to me that this outfit sees nothing wrong
> with the stuff they're shipping and would then accuse me of lying about
it.
> What conceivable motive could there be for that?? If you do buy cable
from
> these guys, for Pete's sake go over it very closely before installing it.
> If you don't know good coax from bad, here's some tips:
>
> 1. If the coax has lumps in it (like a snake that just ate), then it's
BAD.
>
> 2. If the copper shield is badly oxidized (not shiny copper color) when
you
> strip the jacket off to install the connectors, then it's BAD
>
> 3. If you run your hand down the cable and feel rough spots as if it had
> been drug along a concrete driveway, then it's BAD
>
> 4. If you can see the seam where the jacket was installed, look very
closely
> and flex the cable to as to stretch this area of the cable. If you see
pin
> holes in the jacket, then its BAD. If you can see the inner copper braid
> through any of the holes, then it's REALLY BAD.
>
> All of these conditions existed in the cable that Radio Works sent to me.
> They may also have all existed in the second shipment - I stopped looking
> after finding pin holes in the first 10 feet of the cable.
>
> I've never heard anything negative about Radio Works before, and have no
> opinion on any of their many other products. However, I can assure you
that
> at least one type of coax they're selling is just plain poor quality -
make
> that defective. Furthermore, if you attempt to any such problems with
them,
> you'll be subjected to the ignorance and wrath of their office manager
> (Judy?). I ordered replacement cable from The Wireman (no connection to
> them, but have received nothing but high quality cable from them over the
> years).
>
> K8AC
> Floyd Sense - Angier, NC
>
>

2325. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-01 23:42:58 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A79F482.CD0FD5CF@dialpoint.net>
Source record: 171098

The swr seems to checkout. A dipole not close to the ground in terms of wavelenght is around 70 ohms. The swr meter is normally set for 50 ohms so the 1.5 to 1 is right. Guess that you are feeding the transmitter into the coax and then the meter and antenna is at the other end of the coax. If so, the 1.5 watts could be right if using rg-58 or maybe rg-8x cable.

> near the antenna i get swr of 1.5:1 and 1.5 watts power.
>

2326. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 00:36:13 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a79fe6e.15809632@news.aepnet.com>
Source record: 171100
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Thu, 1 Feb 2001 17:42:01 -0600, "Henry Kolesnik" <wd5jfr@oklahoma.net> wrote:

>i wonder if they got a deal on some poor spec cable ..
>i think most cable mfg would destroy and poor spec to keep their name off
>the market..
>but sometimes the stuff leaks before it gets buried..
>did it have a reputable companie's logo?

I bought some "RG-213" locally (Tucson) that was made by JSC. The stuff is total CRAP. I probably should have returned it but the seller is an acquaintence of mine and in a struggling business and it was the weekend when I was trying to install it.

There were bunched areas in the braid, what little of it there was, that could be seen through the jacket. I didn't see any pinholes but if I had, I certainly would not have used it. No way is this 'MIL-SPEC' but therein is the problem. The MIL specs aren't maintained anymore, so anybody can stamp RG-XXX on their product.

Fortunately this is only feeding an 80 meter dipole. For the beams I use Heliax and don't worry about it.

N7WS

[snip]

2327. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 00:48:53 UTC
From: cammeres@spam_be_gone.uiuc.edu
Message-ID: <Vtne6.122$DL1.2136@vixen.cso.uiuc.edu>
Source record: 171101

On Thu, 01 Feb 2001 18:42:58 -0500, Ralph Mowery <rmowery@dialpoint.net> wrote:
>The swr seems to checkout. A dipole not close to the ground in terms
>of wavelenght is around 70 ohms. The swr meter is normally set for 50
>ohms so the 1.5 to 1 is right. Guess that you are feeding the
>transmitter into the coax and then the meter and antenna is at the other
>end of the coax. If so, the 1.5 watts could be right if using rg-58 or
>maybe rg-8x cable.

okay, that makes sense. but when i connect transmitter, swr meter,
rubber duck, i see 5 watts, and when i connect transmitter, swr meter,
feed line, dipole, i only see 2.7 watts. why is this? is the rubber
duck just reflecting a bunch of power?

sc

--
Sidney CAMMERESI http://www.cheesecake.org/sac
Emperor, Nukernel Software, Unl.
AB9BH

2328. Re: Choke Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 00:49:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A7A042B.3BA08647@eznec.com>
Source record: 171109

I doubt it.

Roy Lewallen, W7EL

"David J. Windisch" wrote:
>
> Can a choke balun, 6" dia, 10 turns, be wound concentric with a 2" boom,
> without unreasonable ill effects, either capacitive or 'shorted-turn'?
>
> TIA.
>
> 73, Dave, K3BHJ

2329. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 00:56:40 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3A7A05C8.62AB3BB6@usa.alcatel.com>
Source record: 171102

A discontinuity on a transmission line has to be long enough on the line, and of sufficient difference in impedance from the rest of the line, to generate adverse reflections. This length will be measured in large fractions of wavelengths, not inches (cm) or feet (meters). One small discontinuity, except at VERY high frequencies, seems unlikely to be a problem at all. And if you are using any kind of matching or tuning device, including line sections, any effects will be swallowed up in the matching adjustments.

What's important with a balanced feeder is to keep it balanced with respect to objects along the way. IMO, this is MUCH more important than avoiding bends getting from here to there. However, if you bend copper wire sharply, it tends to break!

Cheers,

Cortland
(ka5s@earthlink.net)

VK4LAJ wrote:

> Evan
>
> When I was doing a theory course for my ham radio ticket the tutor mentioned
> problems when using open wire feeders
>
> Basically he said that it needs to be kept away from metal objects (but I
> guess you knew that one any way) and the other thing he mentioned was that
> any bends or changes in direction should be gradual... this was because if
> the bend is to sharp it will create an "impedance bump" (his words) in the
> area of the bend, which as Richard Clark, KB7QHC said will upset the
> standing waves.
>
> --
> Don't forget to remove the SPAM.JAM
>
> 73
> Adam VK4LAJ
> E-mail: - vk4laj.SPAM.JAM@loaded-dog.com
> WWW: - http://www.loaded-dog.com
> Brisbane Australia
> CQ Zone 29/ 30
> Point your beam at: -27.39.9 South Lat. - 153.3.5 East long
> Maiden Head: - QG62mi
> Height ASL: - 52m
>
> My wife says I never listen to her...

> at least that's what I think she said?
> K9SQG <k9sqg@aol.com> wrote in message
> news:20010131200307.24428.00000125@ng-bd1.aol.com...
> > Today I read of large losses that result when you bend open wire line in a
> > sharp bend. I had never heard of this before and wonder if it is true.
> Does
> > anybody know exactly how much loss results?
> >
> > Thanks and 73s,
> >
> > Evan

2330. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:11:08 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a7a0928.18555458@news.aepnet.com>
Source record: 171103
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On 1 Feb 2001 22:02:02 GMT, David Snyder Hale <david@isi9.mtwilson.edu> wrote:

[snip]
>
>This type of customer service is a huge pet peeve of mine.
>
>I think that companies get away with poor service like this because people
>don't do anything about it. You have a bad experience with them, but then
>you and all your friends and aquaintences keep shopping there. Things will
>only change if people force them to realize they're not doing things right.

With rare exceptions, if I get screwed I complain. I write letters, I make phone calls and I will complain in person.

Most businesses want to know about problems. Often I am doing them a favor by telling them about their deficiencies. I figure that when I voice my complaint, I'm probably speaking for dozens of other folks that have neither the time nor inclination to do it for themselves.

I often get refunds, free hotel rooms or meals, not so much as payoff for bitching, but as a thank you for pointing this out.

On the other hand, it is a two-way street. If I get exceptional service I say so and I'm a big tipper if the service is top notch.
>
>I was trying to buy a product from MFJ but had a question about it. I
>emailed them several times, and wrote them letters. They never did
>respond. Perhaps there is a secret to successful business that I don't
>know about, not being a businessman.

I can tell you that this "e-commerce" thing is never going to fly (and apparently it isn't) until the sellers start taking email inquiries seriously.

There is a west coast seller of high-end seats for automobiles. I sent an email to them, as their web site encouraged, to get info on a pair of Recaro seats for my Camaro. These things sell for thousands of dollars and I gave them the color of my car's interior, the kind of driving I do, etc and asked for more info and recommendations. Never heard a peep. So I called them direct (no 800 no.) and got an answering machine. I got a promise that they would call be back. Never heard from them. Maybe they went out of business. I certainly hope so and I won't wonder why.

Wes N7WS

>
>--

>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2331. 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:11:20 UTC
From: Riverland Internet Info <info@riverland.net.au>
Message-ID: <3A7A0938.E976C975@riverland.net.au>
Source record: 171104

I'm wanting an antenna for 23cm other than a yagi....can anyone point me to a suitable site? Or does anyone have any ideas? Thanks,
VK5AW.

2332. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:13:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A7A09A7.68E606BF@eznec.com>
Source record: 171110

The comments about magnitizing and leakage inductance must be referring to an impedance transforming balun or a voltage balun. They're not a factor in 1:1 current baluns.

Leakage inductance is caused by the flux generated by the current in one winding which doesn't fully link the other. Measurements I've made on bifilar wound ferrite transformers shows extremely good coefficients of coupling -- very close to 1. This means that the leakage inductance is very small. (Actually, with many of the ferrites used for this purpose, the leakage impedance is more resistive than inductive.) If wound with coax (as I make mine), I would expect that even the very poorest coax you could get wouldn't have enough shield leakage to be measurable as a shunt impedance.

In a 1:1 current balun, magnetizing inductance doesn't appear in series or parallel with the circuit. Otherwise, a straight piece of cable with no core would be a worst case, having the lowest possible magnitizing inductance.

Impedance transforming baluns and voltage baluns are a different critter, though. These include a conventionally connected transformer (i.e., with one or more windings connected between the conductors) in one form or another. In that case, the magnetizing impedance does appear across the conductors and can cause a very noticeable change in impedance.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Foffe:
>
> Assuming that the antenna system is "balanced" with and without the balun
> in place, so that feedline radiation is not involved, then the reason the
> resonant elements seem to be shorter with the balun in place is because of
> the finite non-zero [non-ideal] "leakage" inductance of the balun.
>
> All magneticly coupled transformers [baluns or other types] have a finite
> non-zero leakage inductance [And, for that matter a non-infinite magnetizing
> inductance] which when combined with the distributed parameters of
> "resonant" antenna elements tend to result in shorter elements than for
> resonant antenna elements fed without a balun.
>
> The "parasitic" non-ideal leakage inductance of the balun acts as a sort of
> inductive loading on the antenna elements.
>

> -Peter K1PO
>
> "foffe" <setta@uio.com> wrote in message news:3A790026.E3ED9565@uio.com...
> > How come the commerical dipoles are shorter if they have
> > a BALUN as opposed to when building a dipole with none
> > its longer.
> >

2333. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:15:59 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95d1oaoki1@nntp9.atl.mindspring.net>
Source record: 171105

Foffe:

Assuming that the antenna system is "balanced" with and without the balun in place, so that feedline radiation is not involved, then the reason the resonant elements seem to be shorter with the balun in place is because of the finite non-zero [non-ideal] "leakage" inductance of the balun.

All magneticly coupled transformers [baluns or other types] have a finite non-zero leakage inductance [And, for that matter a non-infinite magnetizing inductance] which when combined with the distributed parameters of "resonant" antenna elements tend to result in shorter elements than for resonant antenna elements fed without a balun.

The "parasitic" non-ideal leakage inductance of the balun acts as a sort of inductive loading on the antenna elements.

-Peter K1PO

"foffe" <setta@uio.com> wrote in message news:3A790026.E3ED9565@uio.com...
> How come the commerical dipoles are shorter if they have
> a BALUN as opposed to when building a dipole with none
> its longer.
>

2334. Lifespan of wood for antenna supports?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:25:21 UTC
From: k9sqg@aol.com
Message-ID: <20010201202521.24512.00000244@ng-bd1.aol.com>
Source record: 171106

Does anybody have any personal experience using 2x4's as antenna supports?
Given that the wood is painted with a high grade paint, two coats, then
polyurathane, how long might it last in typical midwestern climate?

73s,

Evan

2335. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:31:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7A0DF4.65A4CB3C@IEEE.org>
Source record: 171108

VK4LAJ wrote:
> Basically he said that it needs to be kept away from metal objects (but I
> guess you knew that one any way) and the other thing he mentioned was that
> any bends or changes in direction should be gradual... this was because if
> the bend is to sharp it will create an "impedance bump" (his words) in the
> area of the bend, which as Richard Clark, KB7QHC said will upset the
> standing waves.

OTOH, if one already has standing waves, it could make things better. :-)
--
http://www.mindspring.com/~w6rca

2336. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:38:10 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a7a0f7d.20177530@news.aepnet.com>
Source record: 171107

On Thu, 01 Feb 2001 16:56:40 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>A discontinuity on a transmission line has to be long enough on the line, and of
>sufficient difference in impedance from the rest of the line, to generate
>adverse reflections. This length will be measured in large fractions of
>wavelengths, not inches (cm) or feet (meters).

So you're telling me that if, for instance, I hang a small capacitor across a
transmission line it won't matter because it isn't distributed down the length
of the line?

[snip]

Wes Stewart N7WS

2337. Re: Building a mobile UKW-Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 01:45:20 UTC
From: richardharrison@webtv.net
Message-ID: <15709-3A7A1130-104@storefull-111.iap.bryant.webtv.net>
Source record: 171111

Jens wrote:
"Is it possible to modify this antenna to get 75-ohms?

Yes, but the easy way keeps the same antenna and adds no coils and capacitors.

A match between two impedances can often be made with a 1/4-wave section of transmission line of the correct intermediate impedance. This is often called a "Q-section".

You are indeed in luck! The required intermediate impedance is the square root of the product of the in and out impedances. In this case they are 37 ohms and 75 ohms. The product is 2775 (ohms). The square root is 52.7 ohms, close enough to use 50-ohm coax.

We found the free-space 1/4-wavelength for 146 MHz to be 51.4cm or 20.2in. A wave travels more slowly in coax. In the common types such as RG8 the velocity factor is 0.66. So, 1/4-wave in coax of this type is 34cm or 13.38in. This length of coax between the antenna and the radio will make the antenna look like 75 ohms to the radio at 146 MHz. But the cable may not reach the required distance. To preserve the match, 3x this length, or 5x this length, or 7x this length will preserve the match. Even multiples of the calculated 1/4-wavelength line will repeat the 37-ohm antenna impedance and present this value to the radio as a load. this would not give the match you wanted.

Another way to get a match would be to use an auto-transformer (a tapped coil) to step up the impedance from 37 to 75 ohms, but the Q-section seems easier mechanically and electrically.

Best regards, Richard Harrison, KB5WZI

2338. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 02:23:21 UTC
From: monkdr@yahoo.com
Message-ID: <Xns903BCF81E36FCdreamyrisingmoon@24.31.3.15>
Source record: 171112

Cecil <Cecil.A.Moore@IEEE.org> wrote in <3A78A9FD.B91BEE40@IEEE.org>:

>The name of the plane was "Stardust". "ST" could be short for "Stardust".
>Could be STardust ENtering DECent or STardust ENgaged in DECent. And
>"EN" and "R" are similiar so could simply be STaRdust DECending.

This is getting close to something that makes sense!

I examined the documentation available on the Web after watching the documentary about the Stardust on Nova. This problem is like some of the logic games I've done in magazines. Applying logic to the situation:

1) The flight crew believed they were close to the airport and were about to make a routine landing.

2) The message was entered in Morse code "quickly yet clearly". But in Morse code, _anything_ that's sent quickly can easily be misread. Yet on the other hand, the sender knows this, so STENDEC could not have been seen by the sender as a matter critical to flight safety or the like. More critical messages would be sent slowly, with as few ambiguities and non-standard acronyms as possible.

3) In every historical sense, later in-flight communication references to the flight itself and the speakers' names are generally abbreviated. For instance, a modern-day pilot may communicate at the start of the conversation with ATC: "This is Captain Robert Smith of Northwest Airlines Flight 345 from Tampa requesting permission to land." Later in the conversation: "Thanks, it's a great view of Manhattan circling around up here! NWA 3-4-5 Smith out."

My analysis -- "STENDEC" represents A QUICK REHASH OF THE INCOMING FLIGHT NAME AND THE WIRE OPERATOR'S HANDLE -- like in the example above.

STR would be a shortened form of Stardust casually reaffirming the flight name to the tower (like "NWA" above). And the name of the wire operator on the Stardust was none other than DENNis Harmer!

The dots and dashes of STEN DEC are literally the same as STR DENN.

[For debatability, it would be nice to know more about Morse procedures used in that era of aviation. For example, was it commonplace for a Morse operator to use a handle at the end of a wire? And what were some general protocol of communications between flight crew and ground when using the wire? If anyone knows something about these historical aspects I'd really be thankful!]

2339. Re: Trees

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 02:28:54 UTC
From: k7jy@aol.com
Message-ID: <20010201212854.22486.00000234@ng-xc1.aol.com>
Source record: 171113

Thanks all for the insightful responses re: the growth of trees. I knew I had more climbing in my future....darn! 73 de John, K7JY, at the foot of a 100' spruce and looking up.....

2340. "THANK YOU" TVI 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 02:33:45 UTC
From: "David J. Moge" <n1rzb@mailops.com>
Message-ID: <3a7a1bf0@excalibur.gbmtech.net>
Source record: 171114
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks to all who responded to my call for help about 6 Meter TVI. I have a good base of information from which to work from.

Thanks
"73"
Dave, N1RZB

2341. Re: parabolic cylinder antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 02:49:03 UTC
From: lousherry@jps.net
Message-ID: <3A7A201F.C576D565@jps.net>
Source record: 171115

Andre
Try the program HamCal put out by a Canadian Ham VE3ERP. If you can get a hold of him he used to send out the program on a floppy disk for the price of postage and the disk, about $5. A very worth while program
Lou
KB6FFT.

andre wrote:

> andre escreveu na mensagem ...
> >I am building a parabolic cylinder antenna, I want it to work around
> >anything between 200MHz and 800MHz, it needs to be something relatively
> >small(1m-1.5m x 0.4m-0.6m) , I'm needing a help on how to calculate it's
> >working band and its impendances. I'm not sure, but can I build the half
> >lambeda dipole bigger than the reflector height?
> >
> >Thanks
> >
> >
> I need a parabolic cylinder antenna, it's a half of a cylinder used as the
> reflector and a dipole located at the central axis of the cylinder, I know
> this gain would be around 4-6(6-7dB), it's an experiment, it's not for
> practical use

2342. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 03:07:18 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u09k7t439a39hfbtf4m87oqgppnamd55gb@4ax.com>
Source record: 171042

David Snyder Hale <david@isi9.mtwilson.edu>
shared these priceless pearls of wisdom:

->
->Anyone have any better QRP beach antenna suggestions?

Fly a kite with #30 wire. Remember, Nag's Head is just down the beach a piece
from Kitty Hawk, and they flew kites there, too.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2343. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 03:07:34 UTC
From: k6mhe@arrl.net
Message-ID: <3a7a23bd.846659@news.mcn.org>
Source record: 171116
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hi Floyd,

Doesn't Radio Works advertise in QST and, if so, doesn't QST have code of conduct for this type of thing...

I would be tempted to send it or a fairly good sized section to QST and ask them to mediate. It would be interesting to see if they would.

73
Danny, K6MHE

2344. Re: Lifespan of wood for antenna supports?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 04:11:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A7A3373.ECD21048@eznec.com>
Source record: 171022

Our climate here in western Oregon isn't hospitable to wood being outdoors. But I've had an A-frame made from Douglas fir 2X4's up for somewhere around 20 years now, and it's still sound. I've painted it a couple of times with a couple of coats of stain, the kind used on siding and decks. It seems to do a good job of preserving the wood.

The vital thing, around here at least, is to keep wood from contacting the ground. Otherwise, termites and dry rot will make short work of it, painted or not. My A-frame sits on small concrete pyramids to keep it off the ground. I also keep an eye out for carpenter ants. They've used the guy ropes as a highway from the house to the yard, but so far haven't nested in the A-frame.

Roy Lewallen, W7EL

Crazy George wrote:
>
> If it is given routine care and repainting, and is not in contact with the
> ground, it will last for many decades, just like wood on houses. Needs
> attention every four or five years, though. There are some wooden towers
> from before WW2 still in use in Singapore, and that is a much more
> aggressive climate.
>
> --
> Crazy George
> K9SQG <k9sqg@aol.com> wrote in message
> news:20010201202521.24512.00000244@ng-bd1.aol.com...
> > Does anybody have any personal experience using 2x4's as antenna supports?
> > Given that the wood is painted with a high grade paint, two coats, then
> > polyurathane, how long might it last in typical midwestern climate?
> >
> > 73s,
> >
> > Evan

2345. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 04:22:28 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3A7A3634.23FF2D31@pobox.com>
Source record: 171117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

I just received my 100 ft roll of the same cable.
Upon close inspection, I see the seam where it was manufactured, I also see some very slight bumps in the cable, I don't think there is any "holes" I can see. But I will check some more.

2346. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 04:23:54 UTC
From: richardharrison@webtv.net
Message-ID: <14721-3A7A365A-46@storefull-114.iap.bryant.webtv.net>
Source record: 171021

Wes, N7WS wrote:
"So you`re telling me that if, for instance, I hang a small capacitor across a transmission line it won`t matter because it isn`t distributed down the length of the line?"

Ha, ha. Where was the smiley face?

We tried very hard to maintain line balance. We turned those right-angles without lateral tilt of the line in most cases. Physically we intersected the terminals of the lines at slightly different altitudes. Then, we connected them with vertical jumpers while carefully maintaining equal lengths in both sides of the line. We minimized capacitive stubs at the ends of the lines (and any other stubs not intended for tuning).

Best regards, Richard Harrison, KB5WZI

2347. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 04:28:02 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <mHqe6.998$gv3.106017@newsread2.prod.itd.earthlink.net>
Source record: 171118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

When you open the ends to install the PL-259s, look for oxidized strands -
let me know if you have that problem.

--
Floyd Sense - Angier, NC
"jerry r" <jerryrcremovethis@pobox.com> wrote in message
news:3A7A3634.23FF2D31@pobox.com...
> I just received my 100 ft roll of the same cable.
> Upon close inspection, I see the seam where it was manufactured, I also
> see some very slight bumps in the cable, I don't think there is any
> "holes" I can see. But I will check some more.
>
>

2348. Re: Lifespan of wood for antenna supports?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 04:32:05 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a7a39bd_4@news3.prserv.net>
Source record: 171019

If it is given routine care and repainting, and is not in contact with the ground, it will last for many decades, just like wood on houses. Needs attention every four or five years, though. There are some wooden towers from before WW2 still in use in Singapore, and that is a much more aggressive climate.

--
Crazy George
K9SQG <k9sqg@aol.com> wrote in message
news:20010201202521.24512.00000244@ng-bd1.aol.com...
> Does anybody have any personal experience using 2x4's as antenna supports?
> Given that the wood is painted with a high grade paint, two coats, then
> polyurathane, how long might it last in typical midwestern climate?
>
> 73s,
>
> Evan

2349. Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 04:45:03 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95de0f$hk0$1@agate.berkeley.edu>
Source record: 171020
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

hi,

I just finished building my first QRP rig; heck, my first transceiver of any kind. I am so excited that it works; I'm thinking of places I can take my radio now, where I couldn't before.

We always take our vacation on the beach each spring (Nag's Head, NC) and I wondered about operating from the beach. I fly there, so bringing supports such as a mast is not really an option. Bringing a roll of thin wire for a 40m dipole wouldn't be so bad, though. But then what would I do with it, just lay the dipole on the sand?

Anyone have any better QRP beach antenna suggestions?

tnx,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2350. Re: Which 2 meter vertical for a fixed station?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 05:13:57 UTC
From: spaqueen19@aol.com
Message-ID: <20010202001357.24637.00000345@ng-bg1.aol.com>
Source record: 171023

First I'm using my girlfriends account.Next I have the dimond f22 the thing works GREAT.SO swr to mess with so you just hook it to a pole and go!

73,
N9PAR

2351. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 05:31:13 UTC
From: Bill Meacham <NOSPAMexray@coqui.net>
Message-ID: <3A7A4621.A1AA7272@coqui.net>
Source record: 171024

David Snyder Hale wrote:
>
> hi,
>
> I just finished building my first QRP rig; heck, my first transceiver of
> any kind. I am so excited that it works; I'm thinking of places I can take
> my radio now, where I couldn't before.
>
> We always take our vacation on the beach each spring (Nag's Head, NC) and I
> wondered about operating from the beach. I fly there, so bringing supports
> such as a mast is not really an option. Bringing a roll of thin wire for a
> 40m dipole wouldn't be so bad, though. But then what would I do with it,
> just lay the dipole on the sand?
>
> Anyone have any better QRP beach antenna suggestions?
>
> tnx,
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

Go with a vertical. A vertical on the beach works great without
going nuts over radials.

Bill Meacham WX4A
Vieques, PR

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

2352. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 05:46:39 UTC
From: k3ky@erols.spamnocom
Message-ID: <95dhjv$49g$1@bob.news.rcn.net>
Source record: 171025

If you are right on the ocean, a vertical is the way to go.
Don't even think of wasting time with a horizontally-
polarized antenna. This is one environment where a
vertical is actually at an advantage. 73, David K3KY

In article <95de0f$hk0$1@agate.berkeley.edu>
David Snyder Hale <david@isi9.mtwilson.edu> wrote:

> hi,
>
> I just finished building my first QRP rig; heck, my first transceiver of
> any kind. I am so excited that it works; I'm thinking of places I can take
> my radio now, where I couldn't before.
>
> We always take our vacation on the beach each spring (Nag's Head, NC) and I
> wondered about operating from the beach. I fly there, so bringing supports
> such as a mast is not really an option. Bringing a roll of thin wire for a
> 40m dipole wouldn't be so bad, though. But then what would I do with it,
> just lay the dipole on the sand?
>
> Anyone have any better QRP beach antenna suggestions?
>
> tnx,
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2353. Satellite use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 06:23:17 UTC
From: Mick <hardhubby23@yahoo.com>
Message-ID: <Vkse6.1098$B81.218929@nntp2.onemain.com>
Source record: 171026

Doe anyone here use satellites for amateur. If so can you give me some ideas on what all I need.

2354. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 07:41:39 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <95dobnlok1@iac5.navix.net>
Source record: 171028

I am not sure what commercial product you are referring to, however it is not the balun causing the shorter antenna. I would suspect some sort of loading is involved.

If you let me know which antenna product you are referring to we can start from a known point and go from there.

73 Fred W4JLE

> Homemade with no BALUN = about 120 feet
Commercial with BALUN = around 80 feet or so

2355. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 08:18:21 UTC
From: "Dr. Barry L. Ornitz" <ornitz@usa.net>
Message-ID: <h4ue6.43731$s6.1636997@news-west.usenetserver.com>
Source record: 171029

"Bill Meara " <wmeara@clix.pt> wrote in message
news:3a7aa545.770378@news.clix.pt...
> I SEE A LARGE KITE IN YOUR FUTURE!
> CONSULT VIA THE INTERNET WITH THE RADIO KITE GURUS FOR MORE
> INFO ON THE ART OF WIND SUPPORTED ANTENNAS!
>
> 73 Bill N2CQR CU2JL

And there used to be a nice kite shop in one of the beach-front malls in
Nags Head.
If you get one of their parafoil kites, be prepared for the need for strong
antenna wire.
Don't fly near any power lines.

73, Barry WA4VZQ ornitz@usa.net

2356. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 09:01:21 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95dt11$l3e$1@agate.berkeley.edu>
Source record: 171030

oh man, of course; a kite! I should have thought of that.

Yes, the place we stay is near Kitty Hawk Kites, a very nice kite shop.
I even own a couple of their kites, including a parafoil. Probably best
not to use the stunt kite. ;)

To the folks that suggest a vertical, can you be more specific as to type,
since I assume you mean something commercially made. I'd like something I
can pack into a suitcase.

You know though, I'm already having second thoughts, picturing myself
sitting on the beach-- the ocean is pretty loud. I don't know if even
headphones would be enough. Well, worth a try and if not I could droop a
dipole on the balcony of the house.

tnx,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2357. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 11:05:46 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95e4aamfo1@agate.berkeley.edu>
Source record: 171031

I may have found a good answer to my "which vertical" question...

The St. Louis Vertical.

Comments?

What would REALLY be cool is if I could actually use the pole for beach fishing, too! That would certainly convince my XYL to let me bring a pole with me. But a review I read of the SouthBend SD-20 (http://www.njqrp.org/mailarchives/mar2000/0008.html) said that it didn't have any fishing line ferrules on it.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2358. HV Capacitors for beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 11:31:49 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A7A9AA5.C6AF6A2D@eskom.co.za>
Source record: 171032

Hi
I'm looking for 10 and 22pF HV capacitors for a beam. Anyone know any suppliers?
What is the best way to make them from coax?
Will RG213 coax work and what power, voltage will it handle?
Thanks
Stan
ZS6HAL

2359. FS: Avanti PDL II

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 11:41:01 UTC
From: aokd5fxt@cs.com
Message-ID: <20010202064101.10011.00000311@ng-cc1.news.cs.com>
Source record: 171033

I have an Avanti PDL II eleven meter beam for sale. I have used it on 10 meters with a tuner and believe me it does a grt job both horizontally and vertically. It is in vry good condition with the exception of a few of the bolts and nuts are rusting(a natural occurence). If u are interested, pls email with offer.

Bill

2360. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 12:06:09 UTC
From: n2ey@aol.com
Message-ID: <20010202070609.03673.00001578@nso-ck.aol.com>
Source record: 171034

In article <2349-3A77946A-16@storefull-115.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>The whole testing thing is a dead duck - a moot point - a done deal. The
>FCC has already reduced Morse testing to the bare minimum possible under
>the treaty,---."
>
>Moot means arguable or doubtful. This thread has confirmed that
>code/nocode is "moot".

Perhaps I used the wrong word there. What I'm trying to say is that the issue has been decided by the FCC. They no longer see any reason to keep code testing other than the treaty. This is clear from their actions and the wording of the R&O that caused the restructuring of 2000.

>
>Why do I think the treaty story is just another story to postpone the
>inevitable?

Because you are ignorant of the treaty and the history behind it.

> Because it fits so well with all the tooth and nail
>resistance to change the hardheads have demonstrated for half a century.

Resistance to change is not always a bad thing - all change is not progress. Why do you label those who don't share your opinions as "hardheads"? Don't they have a right to their views?
>
>I`m not familiar with the international agreement which is supposed to
>prevent further relaxation of Morse testing.

It's part S25.5 of the ITU treaty. It states that all persons wishing to have a license to operate an amateur radio station MUST demonstrate the ability to "send by hand and receive by ear, messages in Morse code". In other parts of the treaty, the terms "amateur radio station" and "Morse code" are carefully defined. There is also an amendment that says all signatory countries may waive the code requirement for amateur licenses which only allow operation above 30 MHz.

This part of the treaty has been in place since at least 1947. I think it may go back to 1936.

The treaty language requires some interpretation. "Send by hand and receive by ear" is interpreted to mean that the method used must require encoding/decoding skill by the operator, not a machine. "Messages in Morse code" means the test must be in International Morse (Continental) and must contain all of the

letters and numerals. "Any person wishing to have a license" means there must be a test or other objective measure of Morse skill BEFORE a license is issued.

> I expect it`s been grossly
>misrepresented to mislead the gullible.

Nope. The FCC makes the US rules, and the FCC has repeatedly stated that they cannot waive or eliminate the 5 wpm test because of the treaty. This was all explained more than ten years ago when the medical code waivers started.

> Many treaties direct conduct
>with no provisions of penalties for treaty violations. It must be that
>way when there is no mechanism for enforcement. It is that way for
>European poultry production and nuclear test bans. A lot of countries
>including the U.S.A. stick to a treaty as long as it seems to serve
>their interests and then freely deviate when the perceived interest is
>for violation.

Maybe so. The FCC and the State Dept. have repeatedly decided that violating the treaty is not in the best interest of the USA.
>
>I`d wager there is no need for the U.S.A. to require a 5 WPM code test
>by any international agreement.

You lose. Read and understand S25.5 - it's right there. And what matters is how FCC interprets it - they say 5 wpm is the bare minimum.

>There may be an agreement for some very
>unspecific testing for code operators on some parts of the radio
>spectrum. But, they are probably without meaning, penalty, or method of
>enforcement.

Nope. It's absolutely clear and unequivocal. That's why the next move is to change S25.5.
>
>The U.S. could today say no more code tests from this day on in this
>country and nothing could or would be done about it anywhere.
>
Maybe - but the govt. won't take that chance. The problem with such treaty violations is the precedent they set. If the US violates that part of the treaty, other countries may decide to violate other parts. Observance of the ITU treaty by signatory countries is actually very good, and the FCC doesn't want to mess with success.

I'm not saying I think any of this is "right" or "wrong" - just that it's the way things are.

73 de Jim, N2EY

2361. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 12:19:30 UTC
From: wmeara@clix.pt
Message-ID: <3a7aa545.770378@news.clix.pt>
Source record: 171027

I SEE A LARGE KITE IN YOUR FUTURE!
CONSULT VIA THE INTERNET WITH THE RADIO KITE GURUS FOR MORE
INFO ON THE ART OF WIND SUPPORTED ANTENNAS!

73 Bill N2CQR CU2JL

On 2 Feb 2001 04:45:03 GMT, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

>hi,
>
>I just finished building my first QRP rig; heck, my first transceiver of
>any kind. I am so excited that it works; I'm thinking of places I can take
>my radio now, where I couldn't before.
>
>We always take our vacation on the beach each spring (Nag's Head, NC) and I
>wondered about operating from the beach. I fly there, so bringing supports
>such as a mast is not really an option. Bringing a roll of thin wire for a
>40m dipole wouldn't be so bad, though. But then what would I do with it,
>just lay the dipole on the sand?
>
>Anyone have any better QRP beach antenna suggestions?
>
>tnx,
>
>--
>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2362. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 12:33:39 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95e9evmqs1@slb0.atl.mindspring.net>
Source record: 171035

Hey, when I go beach hamming, here's the way I do it...

I always "hang" a vertical from one of those really tall coconut palms
ringing the beach. Works great. And...

Those palms also provide shade from the brutal tropical sun.

-Peter K1PO

"Bill Meara " <wmeara@clix.pt> wrote in message
news:3a7aa545.770378@news.clix.pt...
> I SEE A LARGE KITE IN YOUR FUTURE!
> CONSULT VIA THE INTERNET WITH THE RADIO KITE GURUS FOR MORE
> INFO ON THE ART OF WIND SUPPORTED ANTENNAS!
>
> 73 Bill N2CQR CU2JL
>
>
>
> On 2 Feb 2001 04:45:03 GMT, David Snyder Hale
> <david@isi9.mtwilson.edu> wrote:
>
> >hi,
> >
> >I just finished building my first QRP rig; heck, my first transceiver of
> >any kind. I am so excited that it works; I'm thinking of places I can
take
> >my radio now, where I couldn't before.
> >
> >We always take our vacation on the beach each spring (Nag's Head, NC) and
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> >wondered about operating from the beach. I fly there, so bringing
supports
> >such as a mast is not really an option. Bringing a roll of thin wire for
a
> >40m dipole wouldn't be so bad, though. But then what would I do with it,
> >just lay the dipole on the sand?
> >
> >Anyone have any better QRP beach antenna suggestions?
> >
> >tnx,
> >
> >--
> >Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net
>

2363. 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 12:41:01 UTC
From: TruckDrivingMan <tansorg@cs.tu-berlin.de>
Message-ID: <95e9jv$bq2$01$1@news.t-online.com>
Source record: 171036

Hi all
I have a simple question: can I use a tv-antenna for 50 MHz on 6m ?

vy 73
Tom

2364. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 12:44:57 UTC
From: Jim Warner <jpwarner1@gte.net>
Message-ID: <01c08d15$fb7bd440$44de1b3f@jpwarner>
Source record: 171037
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

"You get what you pay for" gets reinforcement.
While the seller and the consumers are feverishly defending
their stand, more off-shore crap has been successfully dumped
into our economy. As they point fingers at each other to place
blame, niether will admit they both got ripped off.
Unfortunately, the hard feelings will be around, long after the
bargain price has been forgotten.
WA9Z

Floyd Sense <sentek@sprintmail.com> wrote in article
<Dihe6.2495$ln1.202794@newsread2.prod.itd.earthlink.net>...
> A few days back, I posted an item about receiving some bad RG-213 coax
from
> Radio Works. While they had UPS pick up the original cable, the
replacement
> shipment was also defective.
>
> When I called today about having them take back the replacement cable,
they
> were just then inspecting the cable that had been returned. They told me
> they saw nothing wrong with the cable at all. I asked them if they'd
looked
> under the several feet of black electrical tape I'd had to place over the
> damaged area so that it could be used for one rainy day (they hadn't
noticed
> the tape - great inspection, eh?). They removed the tape and claimed
they
> saw no holes and no defects. Admittedly, these were small holes, about
what
> you'd make with the tip of a utility knife. However, one was large
enough
> that when you flex the cable you could see the copper braid underneath.
> When I looked at that cable closely, I could clearly see that the jacket
> seam had not been completely sealed, resulting in the holes. They looked
> again and said they could see no damage. They ask me if I was talking
about
> just something of "pin-hole" size (as if that somehow made it alright).
>
> While they agreed to take the second cable shipment back, they refused to
> pay for the UPS charges as they had on the first, stating that it was
their
> policy not to pay for returns a second time. The office manager then
went

> on to explain that I was lying about the cable damage. I offered to put
up
> $1,000 against her $1,000 to have a third party inspect the cable, but
she
> explained how three people had already looked at it and saw no damage.
> Apparently, "third-party" has a different meaning in Portsmouth, VA?
>
> I must say that I'm at a loss over this one. I've bought many, many
> hundreds of feet of coax over a 42 year period, and know a defective
cable
> when I see it. It's bothersome to me that this outfit sees nothing wrong
> with the stuff they're shipping and would then accuse me of lying about
it.
> What conceivable motive could there be for that?? If you do buy cable
from
> these guys, for Pete's sake go over it very closely before installing it.
> If you don't know good coax from bad, here's some tips:
>
> 1. If the coax has lumps in it (like a snake that just ate), then it's
BAD.
>
> 2. If the copper shield is badly oxidized (not shiny copper color) when
you
> strip the jacket off to install the connectors, then it's BAD
>
> 3. If you run your hand down the cable and feel rough spots as if it had
> been drug along a concrete driveway, then it's BAD
>
> 4. If you can see the seam where the jacket was installed, look very
closely
> and flex the cable to as to stretch this area of the cable. If you see
pin
> holes in the jacket, then its BAD. If you can see the inner copper braid
> through any of the holes, then it's REALLY BAD.
>
> All of these conditions existed in the cable that Radio Works sent to me.
> They may also have all existed in the second shipment - I stopped looking
> after finding pin holes in the first 10 feet of the cable.
>
> I've never heard anything negative about Radio Works before, and have no
> opinion on any of their many other products. However, I can assure you
that
> at least one type of coax they're selling is just plain poor quality -
make
> that defective. Furthermore, if you attempt to any such problems with
them,
> you'll be subjected to the ignorance and wrath of their office manager
> (Judy?). I ordered replacement cable from The Wireman (no connection to
> them, but have received nothing but high quality cable from them over the
> years).

>
> K8AC
> Floyd Sense - Angier, NC
>
>
>

2365. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 12:51:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95eaesekt1@slb7.atl.mindspring.net>
Source record: 171038

Roy:

I stand corrected.

Thanks for that information, you are correct, distributed parameter "transmission line style" baluns, certainly have far less leakage inductance than lumped parameter, "transformer style" baluns. That was/is one of the reasons for the development of transmission-line style baluns, Ruthroff, etc...

I guess the question really is, what percentage is the balun's small leakage inductance of the antenna element's total distributed inductance?

If it is negligibly smaller than the antenna elements distributed inductance, then the effect of the balun's leakage inductance can be ignored in the length calculation for the element, if not, why then it will certainly result in a somewhat shorter element for "resonance".

Now my use of the term "negligible" is in the eye of the beholder so to speak, but generally the effect will be that, the higher in frequency one goes, the more the effect of balun leakage inductance on antenna length would become evident. i.e. the effect may not be noticeable on an 80 meter dipole but would be on a 70cm dipole, etc...

BTW... one measure of the ideality of conventional transformer's is the ratio of their leakage inductance to their magnetizing inductance, i.e. the higher this ratio is the better. For instance a ratio of more than 1000 is very desirable, and many transformer designs can achieve upward of 100,000 for that ratio.

I have often wondered?

Is there a similar measure of ideality for transmission line transformers? How does one characterize the non-ideality of transmission line or "current" baluns?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A7A09A7.68E606BF@eznec.com...
> The comments about magnitizing and leakage inductance must be referring
> to an impedance transforming balun or a voltage balun. They're not a
> factor in 1:1 current baluns.
>
> Leakage inductance is caused by the flux generated by the current in one
> winding which doesn't fully link the other. Measurements I've made on
> bifilar wound ferrite transformers shows extremely good coefficients of

> coupling -- very close to 1. This means that the leakage inductance is
> very small. (Actually, with many of the ferrites used for this purpose,
> the leakage impedance is more resistive than inductive.) If wound with
> coax (as I make mine), I would expect that even the very poorest coax
> you could get wouldn't have enough shield leakage to be measurable as a
> shunt impedance.
>
> In a 1:1 current balun, magnetizing inductance doesn't appear in series
> or parallel with the circuit. Otherwise, a straight piece of cable with
> no core would be a worst case, having the lowest possible magnitizing
> inductance.
>
> Impedance transforming baluns and voltage baluns are a different
> critter, though. These include a conventionally connected transformer
> (i.e., with one or more windings connected between the conductors) in
> one form or another. In that case, the magnetizing impedance does appear
> across the conductors and can cause a very noticeable change in
> impedance.
>
> Roy Lewallen, W7EL
>
> "Peter O. Brackett" wrote:
> >
> > Foffe:
> >
> > Assuming that the antenna system is "balanced" with and without the
balun
> > in place, so that feedline radiation is not involved, then the reason
the
> > resonant elements seem to be shorter with the balun in place is because
of
> > the finite non-zero [non-ideal] "leakage" inductance of the balun.
> >
> > All magneticly coupled transformers [baluns or other types] have a
finite
> > non-zero leakage inductance [And, for that matter a non-infinite
magnetizing
> > inductance] which when combined with the distributed parameters of
> > "resonant" antenna elements tend to result in shorter elements than for
> > resonant antenna elements fed without a balun.
> >
> > The "parasitic" non-ideal leakage inductance of the balun acts as a sort
of
> > inductive loading on the antenna elements.
> >
> > -Peter K1PO
> >
> > "foffe" <setta@uio.com> wrote in message
news:3A790026.E3ED9565@uio.com...
> > > How come the commerical dipoles are shorter if they have

> > > a BALUN as opposed to when building a dipole with none
> > > its longer.
> > >

2366. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 13:55:07 UTC
From: k4ia@aol.com
Message-ID: <20010202085507.11527.00000451@ng-cb1.aol.com>
Source record: 171039

I got mine yesterday and it looks just like the MFJ model. About $100 less
makes it a real bargain.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate,
International, Toll Free, Callback, Calling Cards, Pagers and more Tune to
http://www.ld.net/?bucksavers

2367. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 13:55:59 UTC
From: rcnixon@mindspring.com
Message-ID: <3a7abb1c.922837@news.mindspring.com>
Source record: 171040

David,

Try a kite. Use thin wire supported from the kite line, not
the kite line itself. What kite to use? I have a 1/5 or so size
"French military box kite" that is difficult to bring down in a stiff
breeze, so it should be able to support a 1/4 wave vertical. The kite
is a triangular box kite with wings. A parafoil should be ok too. A
ground rod and a couple of radials for a counterpoise should set you
up fine. Watch out for lightning! Cut the string if you must, you
can always get a new kite and more wire.

Russ - KF4WXD

David Snyder Hale <david@isi9.mtwilson.edu> wrote:

>hi,
>
>I just finished building my first QRP rig; heck, my first transceiver of
>any kind. I am so excited that it works; I'm thinking of places I can take
>my radio now, where I couldn't before.
>
>We always take our vacation on the beach each spring (Nag's Head, NC) and I
>wondered about operating from the beach. I fly there, so bringing supports
>such as a mast is not really an option. Bringing a roll of thin wire for a
>40m dipole wouldn't be so bad, though. But then what would I do with it,
>just lay the dipole on the sand?
>
>Anyone have any better QRP beach antenna suggestions?
>
>tnx,
>
>--
>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2368. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 15:14:30 UTC
From: Frank Dinger <gm0csz.kn6wh@invertain.freeserve.co.uk>
Message-ID: <95hca1bes1@newsg2.svr.pol.co.uk>
Source record: 171005

> Anyone have any better QRP beach antenna suggestions?
=======
Dave , If the beach is watched over by a guard ,he might agree with you connecting the end of a wire antenna to (the top of) his watch tower . If no trees nearby ,use the wire as a sloper.
GL

73 Frank gm0csz.kn6wh@ukrs.org

2369. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 16:26:20 UTC
From: richardharrison@webtv.net
Message-ID: <24816-3A7ADFAC-25@storefull-118.iap.bryant.webtv.net>
Source record: 171043

David Snyder Hale wrote:
"We always take our vacation on the beach---."

A salient feature of the oceanside antenna is its location. A good ground connection and a good reflecting surface are near.

Any point in any direction has an r-f field strength which is the sum of a direct and surface reflected wave

The image antenna idea is especially applicable because good quality reflections are likely.

The image of the ground mounted vertical antenna makes the monopole appear as a dipole due to its image in the ground. As in a physical 1/2-wave dipole, a 1/4-wave ground mounted antenna will have both halves of the antenna in-phase. The result is energy concentration towards the horizon.

When a horizontal antenna is mounted above a good reflector, its reflected energy is of reversed polarity. This tends to cancel energy radiation at low angles and toward the horizon. How much so depends on height.

The ability of the vertical antenna to project and collect energy at low angles over the ocean, and the inability of a low horizontal antenna to do so, is a clear reason to prefer a vertical antenna on and over the ocean.

The War Department`s "Electrical Communication System Engineering" compares vertical and horizontal antennas. It lists virtues of vertical polarization as:
(1) A simple antenna is nondirectional in a horizontal plane.
(2) A short vertical whip may produce twice the signal of a horizontal antenna at the same height in the 20 to 40 MHz band.
(3) Over sea water, vertical polarization is much better than horizontal for low antennas.
(4) Vertical antennas are less disturbed at VHF from aircraft induced flutter.

Horizontal polarization benefis are:
(1) Some directivity can be obtained to reduce interference.
(2) Man-made interference is usually vertically polarized. Horizontal antennas are less likely to pick it up.
(3) In a not too dense forest, antennas and propagation are less affected by vegetation when horizontal polarization is used.

The respondents to David`s question of what antenna to use on the beach have said go vertical, and the above seems to confirm the advice so far.

Best regards, Richard Harrison, KB5WZI

2370. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 16:28:55 UTC
From: "." <p@tp.telepac.pt>
Message-ID: <95en5q$9fe$1@venus.telepac.pt>
Source record: 171041

Tom

You will problably have a litle of SWR because they ussualy are design to 60/70 MHZ so it's short, but there are some for 54 MHZ, so it depends on the model you are talking about.

Pedro

"TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message news:95e9jv$bq2$01$1@news.t-online.com...
> Hi all
> I have a simple question: can I use a tv-antenna for 50 MHz on 6m ?
>
> vy 73
> Tom
>
>
>

2371. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 17:20:51 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <95eqcv$4us$1@slb5.atl.mindspring.net>
Source record: 171044

Tom,

KMA makes a great little Log periodic just for 6m (KMA 5054). It looks a lot like a TV antenna in size and shape. The bandwidth allows for both SSB and FM use on the same antenna. I have used one for over a year and can highly recommend it for situations where Low Profile operating is needed. Or Just simplicity. There is No tuning with this antenna. assemble it, mount it, use it.

73, Tracy
W7TRX

TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote in message news:95e9jv$bq2$01$1@news.t-online.com...
> Hi all
> I have a simple question: can I use a tv-antenna for 50 MHz on 6m ?
>
> vy 73
> Tom
>
>
>

2372. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 17:51:36 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn97lst7.i47.QSB@animas.frontier.net>
Source record: 171045

On Fri, 2 Feb 2001 13:41:01 +0100, TruckDrivingMan scribbled:
>Hi all
>I have a simple question: can I use a tv-antenna for 50 MHz on 6m ?

Search DEJA. This question comes up here about once per fortnight.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

2373. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 17:54:27 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn97lt2i.i47.QSB@animas.frontier.net>
Source record: 171046

On Fri, 2 Feb 2001 07:33:39 -0500, Peter O. Brackett scribbled:
>Hey, when I go beach hamming, here's the way I do it...
>
>I always "hang" a vertical from one of those really tall coconut palms
>ringing the beach. Works great. And...
>
>Those palms also provide shade from the brutal tropical sun.

He said:
"We always take our vacation on the beach each spring (Nag's Head, NC)"
Palm trees there ain't. <g>

Jonesy

2374. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 17:55:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7AF48F.BF1041E7@IEEE.org>
Source record: 171050

W7TRX wrote:
> KMA makes a great little Log periodic just for 6m (KMA 5054). It looks a lot
> like a TV antenna in size and shape. The bandwidth allows for both SSB and
> FM use on the same antenna. I have used one for over a year and can highly
> recommend it for situations where Low Profile operating is needed. Or Just
> simplicity. There is No tuning with this antenna. assemble it, mount it, use
> it.

Is there a problem with FM being vertically polarized and SSB being
horizontally polarized?
--
http://www.mindspring.com/~w6rca

2375. Re: HV Capacitors for beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:03:04 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7AF658.6C0B@wt.net>
Source record: 171047

stan.holmes@eskom.co.za wrote:
>
> Hi
> I'm looking for 10 and 22pF HV capacitors for a beam. Anyone know any
> suppliers?
> What is the best way to make them from coax?

Find the specs for the coax to be used and cut to length.

> Will RG213 coax work and what power, voltage will it handle?

Sure. At appx 30-31 pf per foot you would need about 8-9 inches to make
a 22 pf cap. I'm sure you would need to tweak the length to acount for
coax differences. 4 inches ahould be close to 10 pf. Should handle legal
limit 1500w I would think. MK
--
http://web.wt.net/~nm5k

2376. Re: Satellite use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:05:07 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7AF6D3.3A3A@wt.net>
Source record: 171049

Mick wrote:
>
> Doe anyone here use satellites for amateur. If so can you give me some ideas
> on what all I need.

Depends on the bird used. Can very widely. Check amsat.org for info. MK
--
http://web.wt.net/~nm5k

2377. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:06:57 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7AF741.64CA@wt.net>
Source record: 171048

David Snyder Hale wrote:
>
> I may have found a good answer to my "which vertical" question...
>
> The St. Louis Vertical.
>
> Comments?

Should do fine. If it doesn't , use it as a support for the dipole. :)
MK

--
http://web.wt.net/~nm5k

2378. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:18:04 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3A7AF9E4.77013961@sympatico.ca>
Source record: 171051
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

IIRC early on in this thread it was stated that the cable was labelled "RG213 Type"

I have always considered "type" as in RGxxx Type or 2Nxxx Type to mean "It looks more or less something like the real thing" and treaded such products as highly suspect and most likely not meeting any sort of MIL or industry spec.

It's right up there with "tested", especially for semiconductors. Sure they were tested, that's how the manufacturer determined they were rejects.

Dave

2379. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:32:04 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <3vlyQcAk0ve6EAIF@ifwtech.plus.net>
Source record: 171052

Richard Harrison wrote:
>
>The respondents to David`s question of what antenna to use on the beach
>have said go vertical, and the above seems to confirm the advice so far.
>
See http://pages.prodigy.net/k2kw/learning.html for lots of good
information from the contest-winning "Team Vertical" group.

For a very handy way of getting 33ft vertical out of a 3.5ft tote bag,
see http://www.qsl.net/dk9sq
It's a beefed-up fibreglass telescoping fishing pole - $99 from his
agent in the USA.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2380. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:37:21 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <95euse$44g$1@slb1.atl.mindspring.net>
Source record: 171053

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A7AF48F.BF1041E7@IEEE.org...
> W7TRX wrote:
> > KMA makes a great little Log periodic just for 6m (KMA 5054). It looks a
lot
> > like a TV antenna in size and shape. The bandwidth allows for both SSB
and
> > FM use on the same antenna. I have used one for over a year and can
highly
> > recommend it for situations where Low Profile operating is needed. Or
Just
> > simplicity. There is No tuning with this antenna. assemble it, mount it,
use
> > it.
>
> Is there a problem with FM being vertically polarized and SSB being
> horizontally polarized?
> --
> http://www.mindspring.com/~w6rca

Yes and no. I took mine down to use as a field antenna. Horizontal for SSB, a quick change to vertical and I'm good to go on FM. One antenna. No tuning. Many of the standard 6m designs that I have seen have too narrow a bandwidth to allow for this. I have heard of some users mounting it at a 45 degree angle for FM and SSB use. There would obviously be some loss for both polarizations, but it does allow for full 6m capability with a single beam antenna, and a single mounting configuration.

A single band LPA antenna like this is also nice for those with physical disabilities or no real enjoyment to climb high to keep fussing with antenna tuning. You can assemble this antenna on the ground, mount it and be done with it. That alone can be a huge bonus for some. I live in rain country and I have no worries about weather affecting my SWR. The real world forces compromises on many of us. This antenna design has some real advantages for some users.

As a comparison I now have a 3 ele M2 6m yagi installed. It is way too early to make any fair comparisons, but the KMA LPA seemed to have better RX. Maybe this is due to the higher FB. I do like KMA the antenna and would recommend to anyone that needs what it can offer.

73, Tracy
W7TRX

2381. 2m HB9CV 6 element

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:41:43 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <95euv9$dh7$1@news7.svr.pol.co.uk>
Source record: 171054

Any info--has anyone tried to modify the 2 el design with success.
Thanks.

2382. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 18:51:50 UTC
From: n2ey@aol.com
Message-ID: <95evk1$e0u$1@nnrp1.deja.com>
Source record: 171055

In article <t7hesgf70me3ac@corp.supernews.com>,
Jim Glover <psykey@okcforum.org> wrote:
>
> Instead of a graduation exam, we should think of them as an entrance
exam.
> If you can prove you have the necessary educational prerequisites,
> you can join a vast hands-on learning laboratory.

Agreed! But one of the problems is that some folks want the entrance exams to be so easy and simple that they require no real learning or knowledge.

> Once upon a time,
> the written test for the general class license was identical to the
> written test for the technician license. Back then, the novice class
> was still popular.

The reason the Novice was popular was that there was a significant difference between the Novice requirements and those of the other license classes. When the General written was split into two elements (1987), the difference was reduced to the point that many newcomers went straight for the Technician. When the Tech lost its code test in 1991, it became easier to get than the Novice and became the "entry level" exam by default.

The current 35 question Tech exam is about as simple as the old 1970s Novice written exam. But the current Tech carries much more privileges and is renewable.

> The intent was clear: We'll let you start playing
> (with severe restrictions) if you'll prove you've started learning.
> We'll give you full access (as in, a significant part of each band)
> once you can prove you've mastered the fundamentals.

AND we'll provide incentive in the form of a short license term and non-renewable status.

> (Note: ...except
> for having to pass 13 wpm to get past Technician status.) The test
> includes knowledge of what's expected of you, and you're expected to
> understand that well enough that whatever you do on the air, you will
> take your mastery of the fundamentals and your demonstrated ability to
> learn this stuff, and you *will* learn whatever else is required to
> assure that you meet the standards you're expected to adhere to.

Exactly. Part of the process is imparting those values (personal responsibility and continued learning) on the newcomers.

> As an
> incentive, we'll give you additional reserved privileges on each band
if
> you can prove you've learned more. That was the status quo when I
learned
> about amateur radio, lo this quarter of a century ago now, and by
golly,
> that's about what makes sense to me. (Let's not miss an important
point,
> here--many of us seem to believe that the way things were when *we*
> got *our* ticket is the way things make the most sense.)

My experience was slightly different. I was licensed in 1967, on the eve of the 1968 changes that came to be known as "incentive licensing".

Back then the structure you describe was just being put into place, amidst howls of protest by some hams. Under the system many of THEM had started out with, the Novice was for beginners, the Tech for VHF/UHF experimenter types and the General was for everybody else. A few pre-1953 OTs had Advanced, and the really knowledgeable hotshots had Extras. (There were only about 4000 Extras in 1967 - about 1.6% of the US ham population). The FCC changed the rules because they (the FCC, that is) perceived that the hams of 30-40 years ago were not technically knowledgeable enough. The FCC thought most hams of those days were learning oriented right up to the time the General arrived - then they tossed the Handbook to a beginner, bought a manufactured transceiver and stagnated. "Sputnik fever" probably had a lot to do with this.
>
> But nothing's really that simple, is it?

'Course not. There were lots of other dynamics going on - just like today. For example, many hams of the '50s and '60s bought rather than built because of the complexity of SSB and the rising tide of affluence back then.
>
> People who got their license earlier than I did remember exams that
> pre-dated multiple choice. They were expected to do things like draw
> circuit diagrams. Now, *if* one has learned this stuff the right way,
> it doesn't make much difference. If you've learned what a particular
> type of circuit has, you can draw the diagram if you need to. Or,
> you can answer a multiple-choice question about it. Of course, if
> you've been advised that you'll have a certain type of multiple-choice
> question, you may elect to take a short cut, such as identifying one
> essential characteristic of each type of circuit you study, so that
> you can recognize it when you see it. *If* you prepare that way (and
> there's nothing that says you have to) then you may get by without
> learning as much as someone who chose to focus on the material itself.
> Similar dynamics surround the existence of published question/answer
> pools.

Exactly. The prewar exams involved blue-book essays.

> And so, we argue about the "dumbing down" of amateur radio.

Yup. Some deny it exists, despite all the evidence. Others say it doesn't matter. I say we can do something about it.

> Perhaps we'd worry about this less if we look at amateur radio as a
> place where those who have begun to learn can continue on, and learn more.

There has to be a reason to learn more. Some will do it because they are interested, of course, but others won't.
>
> Even though it was part of the picture when I got into ham radio,
> I have decided that I do not like incentive licensing.

I think the idea is a sound one. The implementation is poor, though, because the rewards for learning more do not correlate with the knowledge gained. A Tech can do all of the same on-air things as an Extra today - just not on all of the same frequencies.

> It divides
> us, which makes us more conquerable. It's contributed to all sorts
> of elitism and controversy.

There have always been divisions and levels of achievement in human activities. Ham radio is no different. One of the best things about ham radio is the wide variety of ways to become "accomplished" or "elite".

This is why awards, certificates, contests and other activities are so popular - they provide measurable proof of accomplishment. The license structure used to do that too. It still does, but in a much reduced fashion.

> More to the point, it fails to address
> what I believe the central issue should be: Has Joe Wannabe learned
> enough that we can trust him to put a 1000-watt station (sigh...OK...
> I know..times have changed... a 1500-watt PEP station) on the air on HF?
> If he has, then he should be issued a full license.

The FCC seems to agree. The main question then remains: What sort of testing is adequate evidence of Joe Wannabe being worthy of that trust?

> If not, then we
> probably should provide some limited-privilege license which allows him
> a chance to learn by doing.

And what you wind up with is very similar to incentive licensing! A graded series of tests, leading up to a full privilege license.

> I *liked* the old power restrictions and
> xtal-only restrictions for novices. I liked the CW-only restriction, too,
> for novices. The novice license *should* be a license which, by

virtue
> of its restrictions, makes it likely that someone who has only begun
to
> learn won't mess things up too much.

Exactly. Those restrictions must be coupled with privileges that result
in reasonable rewards.

The restrictions had a beneficial side effect: A station that maxxed
out the old Novice privileges was within the building/buying ability of
many beginners. Not anymore.

> It also should be a license which
> encourages learning--you know, I almost think it should be a
requirement
> that novices run *only* transmitters they built with their own hands.

Nice but unenforceable.
>
> Part of me does not want to see CW testing go.

All of me does not want to see it go.

> Why? Because CW is
> very, very cool (I was a teenager back when I got that first license,
> and not only were things as done by the FCC the right way to do
things,
> back then, but also, that's a very good word: cool) and I believe
that if
> people must pass a CW test to be a ham, many more will choose to use
CW
> once they're licensed.
> Then CW will continue to be an important part of
> amateur radio, and... I am *convinced*... that would be very
beneficial
> to amateur radio. I believe the popularity of CW helps promote
building
> and designing by learners who otherwise wouldn't make the leap to more
> complicated modes. Learning the very basic stuff that allows one to
> participate in building CW equipment then empowers one to engage in
very
> effective communications, even with modest antennas. What a wonderful
> incentive to learn how to build! There is no doubt in my mind: CW
> directly benefits much about what is so fabulous about amateur radio.
> I'm pretty sure CW testing promotes CW use. Therefore, CW testing
should
> indirectly promote a lot of what's great about amateur radio.

And it does! But the FCC doesn't see it that way. So it is up to us who
know and use the mode to promote it, with or without testing.

>(Someone--
> I think it was Jim, N2EY--recently posted a very good explanation of

> why CW helps us achieve the official goals of the amateur service.
> I recommend reading it. Consider it included here, by reference.)

Thanks for the plug!
>
> On the other hand, when I ask myself, "What should we require as the
> minimum qualifications for access to HF?" I find that I must honestly
> answer that I believe mastery of the fundamentals should suffice.
(Note:
> That's mastery up to 70-whatever % correct, like it takes to pass the
> test--not necessarily mastery of 100% of all radio fundamentals.) If
one
> can show that one has mastered the fundamentals, one should receive
full
> access to HF ham bands. If one can demonstrate only having begun to
> learn, and yet wants to be on the air anyway, we should accommodate
that
> admirable desire with a license which bears serious restrictions,
designed
> to encourage learning while reducing the risk of improper operation
due
> to ignorance. The restrictions should, in that case, include
restriction
> to the mode of CW, and therefore, testing of CW should be included.

Makes sense to me.
>
> In all cases, we should consider a ham license to be a certificate of
> qualification which entitles us to access to the hands-on lab we all
> enjoy. Admittance into that lab should be just the beginning of our
> learning experience.

Yup - but if the entrance grants all privileges, what's the incentive
to learn?
>
> OK... there's my proposal for how things ought to be done. You can
> all work on shooting it down now. It won't be difficult...

I don't mean to be shooting it down. See below for my ideas.

> one need
> only point out that the FCC isn't interested in putting out any effort
> to achieve any goals with licensing except reduce their own
bookkeeping
> requirements. (It's hard to believe this is the same government
agency
> that tried so hard in the past to design schemes which they hoped
would
> encourage hams to learn more, even if it meant a lot more work for
that
> government agency.)

It's NOT the same government or the same agency. From about 1975-1980 onwards, the FCC has been slowly pushing for lowered qualifications and less admin work for themselves. One reason is less budgeting - another is being headed by career political types rather than career communications types.

> Nevertheless, I will hope that someone takes the
> ideas I've outlined here (a two-tiered scheme including a CW-tested
> learner's permit for beginners, and full ham band access for those
> who've learned enough to really get started) and find ways to adjust
> the basic idea so that it might appeal to the FCC as well.

The basic concept is right. The main thing is to rework it so it doesn't give the FCC headaches.

The biggest problem is that there hasn't been a major rethinking of the license concepts in decades. It's all been a slow patchwork job, fiddling with this, adjusting that, focusing on narrow issues instead of broad ones. The last real restructuring was 50 years ago.

How about this:

Divide each ham band into three subbands: Morse only, digital, analog phone/image. All licensees take a "Basic" test that insures they know things like safety and the regs. A Basic license gives you some low-power privileges but with restrictions like not being able to VE or control a repeater, and limited or no access to modes like SSTV. A Full license requires more written testing to address issues not tested in the Basic test, and you get more power and more modes. Access to the (very cool) Morse-only subbands requires a Morse test - sending and receiving, 5 or 10 wpm.

That way, the license privs match the test accomplishments. There could be more levels besides Basic and Full, too - say, Basic, Intermediate and Full.

Existing hams could get credit towards the new licenses based on their existing tickets. Or retest everybody over a 10 year period (you get one "free" renewal, then you have to retest before it expires or go off the air.)

The FCC isn't going to think of stuff like this. We have to do it.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2383. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 19:11:02 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A7B0646.6C8B6FC2@rchrd.com>
Source record: 171056

How easy is the KMA LP antenna to use in a portable situation?
E.g. take it down, put in a camper van, put back together on a pole on top
of some mountain, cliff, beach, etc.
I see that KMA has both a 5 element 6m LP KMA5054, beam length 6',
and a 6 element 15' "Big-Six". I wonder how portable the bigger
one is.

http://www.kmaantennas.com/6m.htm

<rchrd KG6EMF>

W7TRX wrote:

> A single band LPA antenna like this is also nice for those with physical
> disabilities or no real enjoyment to climb high to keep fussing with antenna
> tuning. You can assemble this antenna on the ground, mount it and be done
> with it. That alone can be a huge bonus for some. I live in rain country
> and I have no worries about weather affecting my SWR. The real world forces
> compromises on many of us. This antenna design has some real advantages for
> some users.
>
> As a comparison I now have a 3 ele M2 6m yagi installed. It is way too early
> to make any fair comparisons, but the KMA LPA seemed to have better RX.
> Maybe this is due to the higher FB. I do like KMA the antenna and would
> recommend to anyone that needs what it can offer.
>
> 73, Tracy
> W7TRX

--

2384. Re: Choke Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 19:16:51 UTC
From: tom_bruhns@agilent.com
Message-ID: <95f12nfjk1@nnrp1.deja.com>
Source record: 171057

Hmmm...I'll offer a guarded disagreement with Roy on this one: the inductance will be a bit lower because of the boom, but at least if it's an aluminum boom, I don't think the loss will be unreasonable. If you try it, try to keep it coaxial with the boom. Do you have any reasonably easy ways to characterize a coil like that which you can test with and without a pipe down the center? Maybe someone would like to make some actual measurements and post them. I would, but have too many other things going on right now.

Cheers,
Tom

In article <nwle6.7027$%64.1695@newsfeed.slurp.net>,
"David J. Windisch" <davidw@copper.net> wrote:
> Can a choke balun, 6" dia, 10 turns, be wound concentric with a 2"
boom,
> without unreasonable ill effects, either capacitive or 'shorted-turn'?
>
> TIA.
>
> 73, Dave, K3BHJ
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

2385. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 19:31:53 UTC
From: rwclark@seanet.com
Message-ID: <3a7b0abc.251266001@news.seanet.com>
Source record: 171058

On Thu, 1 Feb 2001 22:23:54 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Wes, N7WS wrote:
>"So you`re telling me that if, for instance, I hang a small capacitor
>across a transmission line it won`t matter because it isn`t distributed
>down the length of the line?"
>
>Ha, ha. Where was the smiley face?
>
>We tried very hard to maintain line balance. We turned those
>right-angles without lateral tilt of the line in most cases. Physically
>we intersected the terminals of the lines at slightly different
>altitudes. Then, we connected them with vertical jumpers while carefully
>maintaining equal lengths in both sides of the line. We minimized
>capacitive stubs at the ends of the lines (and any other stubs not
>intended for tuning).
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I think you have a copy of LaPorte, his work is heavily vested with
these issues is it not?

Richard Clark, KB7QHC

2386. Re: Morse decoders (No-code kills)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 19:48:53 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A7B0F25.176637E3@3n.net>
Source record: 171059

n2ey@aol.com wrote:
>
> The only real use I can see for such things is to judge the quality of
> somebody's sending in a test situation.

Seems to me that QSOs that start of within my ability often get
going faster and faster til I'm stretching my ability to copy.
That'se good because it helps us improve. I'd hoped the morse
decoder would help in that speed band where I began missing
things and thus loosing confidence. It didn't, but hope springs
...:o)
KA3DWW

2387. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 20:39:13 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <95f6ck$44j$1@slb4.atl.mindspring.net>
Source record: 171060

Richard Friedman <rchrd@rchrd.com> wrote in message
news:3A7B0646.6C8B6FC2@rchrd.com...
> How easy is the KMA LP antenna to use in a portable situation?
> E.g. take it down, put in a camper van, put back together on a pole on top
> of some mountain, cliff, beach, etc.
> I see that KMA has both a 5 element 6m LP KMA5054, beam length 6',
> and a 6 element 15' "Big-Six". I wonder how portable the bigger
> one is.
>
> http://www.kmaantennas.com/6m.htm
>
> <rchrd KG6EMF>

Richard,

I have heard of some hams using the 5054 as a portable. The elements slide into the boom and are secured with a sheet metal type screw through the top of the booms. Taking the elements out is no big deal. I am more concerned the durability of the threads into the element from the sheet metal screws. One ham pulled these out and used a tap to put machine threads near the ends of the elements. He then used machine screws to assemble. Since the elements are aluminum, I think you would still have to be careful about stripping the threads after repeated assembly. I may look into swaging a threaded brass insert into the end of the elements for durability. I may even mount small sleeves on the side of the boom that the elements can be slipped into for quick and durable assembly. I think it is the basis for a great field antenna. It is such a simple rugged design, but for field use I'd like to come up with a different mounting arrangement for the elements.
Some folks use a bit of paint or tape to mark the elements and boom for re-assembly. It really isn't necessary though. The is no front or back till you get the elements mounted. There is enough stagger to the lengths, that I just stand them up next to each other. The two longest elements go on the back. The next two mount in front of that, and so on. The boom is really two booms close together. The elements are alternated on each boom. On element goes into the top boom, the other goes into the bottom boom. It is more complicated to describe than to just do.

When assembled, the feedline attaches to the front of the booms. One connector to each boom. Many just split the coax and attach the ends to the booms. I chose to mount a ferrite bead VHF choke balun at the front of the boom. I mounted the balun in a piece of gray schedule 40 PVC for waterproofing. I tie-wrapped this narrow little balun to the bottom boom. Barely noticeable from a distance. This makes for a more water proof connection for my needs, and reduces the chance of the coax shield coupling to the lower boom. The coax will have to be attached to the lower boom for a

foot or two to get back to the mast.

When I attached my elements to the boom I used Penetrox and stainless lock washers under the sheet metal screws. I also used several different colors of green paint to make it a bit more stealthy. The backdrop to this antenna is a couple of Douglas Firs. It mostly goes un-noticed by non-hamsters. After being up a year, I took it down and checked it out. Still snug and 100% functional. For home QTH I can recommend it without reservation. For field use, I have not tried it, but I think with a bit of thought it could be an ideal field antenna. For portable use, the existing boom is 6 feet long. That is going to be a personal call as to how portable that is. The elements themselves end at the boom so they are all 1/4 wave long. That makes them all less than the 6 ft long booms. The whole thing bundles up into a nice round package. No tuning/matching hardware to fuss with,get damaged, or lost.

I have no personal experience with the Big-Six. I would have reservations about using it in the field however. It is a much larger and heavier antenna, requiring much more extensive and heavier mounting hardware. Higher wind load too. More difficult to turn as well. This long beam would likely have a more difficult time working (or even hearing) off the sides or back. Making lots of spinning necessary. Really you would need a heavy duty mast and rotor to be practical here. IMHO it is probably too much of a good thing for simple, field use. The 5054 is a great all around compromise of gain, FB, weight and size. The armstrong rotor method would be no big deal here. I had considered using one of the Radio Shack, 3 ft fold over tripods mounted to a small sheet of marine plywood. I could park the front tire of my Land Cruiser on the plywood, put the mast and antenna in the tripod, then stand the whole thing upright. Sitting right outside the drivers door would make for easy turning. Another option is to put a mast mount on a fold down trailer hitch. Again the mast and antenna are put on in the horizontal position. Then stood upright at the rear of the vehicle. A brace from the luggage rack could take some of the lateral load off, and turning should not be too difficult.

I hope this was of some value to you and I wish you good luck.

73, Tracy
W7TRX
>
> W7TRX wrote:
>
> > A single band LPA antenna like this is also nice for those with physical
> > disabilities or no real enjoyment to climb high to keep fussing with
antenna
> > tuning. You can assemble this antenna on the ground, mount it and be
done
> > with it. That alone can be a huge bonus for some. I live in rain
country
> > and I have no worries about weather affecting my SWR. The real world
forces

> > compromises on many of us. This antenna design has some real advantages
for
> > some users.
> >
> > As a comparison I now have a 3 ele M2 6m yagi installed. It is way too
early
> > to make any fair comparisons, but the KMA LPA seemed to have better RX.
> > Maybe this is due to the higher FB. I do like KMA the antenna and would
> > recommend to anyone that needs what it can offer.
> >
> > 73, Tracy
> > W7TRX
>
> --

2388. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 21:05:44 UTC
From: richardharrison@webtv.net
Message-ID: <7792-3A7B2128-4@storefull-117.iap.bryant.webtv.net>
Source record: 171062

Richard Clark wrote:
I think you have a copy of Laport, his work is heavily vested with these issues is it not?

Yes, but Ed in no way is short on inclusion of the theory. I`ll find my copy and look up the transmission line construction. There are many photos and drawings of the way things are done.

I was relating from my memory of the way we did transmission lines. It works. You can get imbalance if you let one of the wires run lower than the other. Unused connections on a line also cause upset.

Best regards, Richard Harrison, KB5WZI

2389. Need help Fritzel ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 21:15:44 UTC
From: Mike <w4mjr@home.com>
Message-ID: <3A7B238A.2E1B7A48@home.com>
Source record: 171061

I bought a Fritzel FD4 antenna about 4 years ago and it works great.
It's the 80 thru 10 meter ant.
Any of you who know alittle backgound about the maker of this type of antenna knows its no longer for sale. This antenna was also made in a 160 meter version. What I would like to do is make one for 160 and buy the Balun from Amidon, Inc. This is a off center coax fed antenna and I need to know the correct length for the 2 legs. Does anyone here know or have this type of antenna that could e-mail along the info to me.

Thanks,
Mike W4MJR

2390. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 21:44:00 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <ASFe6.1925$0E.255327@newsread1.prod.itd.earthlink.net>
Source record: 171063
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Well, they made no claim that the cable is Mil Spec. However, I think it's reasonable to assume that something sold as coaxial cable is at least capable of keeping water out of the inside, regardless of the manufacturer or price. Here's what Radio Works says about their RG-213 cable, followed by what they say about their RG-213 Plus, which is what I purchased.

"RG-213 is the standard 50 coax replacing RG-8 which was the popular choice for years. RG-213 is similar to RG-8 but is built to a much higher standard."

Now for the "plus": "There are always was (sic) to improve a product and that is what was done to RG-213 Plus. It features an improved braid and even better quality, non-contaminating jacket."

While the author may have been given to hyperbole, I think it was reasonable to assume that the stuff wasn't reject junk. If this stuff is their very best, I pity the guys who buy the cheaper stuff!

K8AC
Floyd Sense - Angier, NC

"Dave Holford" <holford@sympatico.ca> wrote in message
news:3A7AF9E4.77013961@sympatico.ca...
>
> IIRC early on in this thread it was stated that the cable was labelled
> "RG213 Type"
>
> I have always considered "type" as in RGxxx Type or 2Nxxx Type to mean
> "It looks more or less something like the real thing" and treaded such
> products as highly suspect and most likely not meeting any sort of MIL
> or industry spec.
>
> It's right up there with "tested", especially for semiconductors. Sure
> they were tested, that's how the manufacturer determined they were
> rejects.
>
> Dave
>

2391. Re: Morse decoders (No-code kills)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 22:03:20 UTC
From: n2ey@aol.com
Message-ID: <95far1$or2$1@nnrp1.deja.com>
Source record: 171064

In article <3A7B0F25.176637E3@3n.net>,
Old Biker <enfield@3n.net> wrote:
> n2ey@aol.com wrote:
> >
> > The only real use I can see for such things is to judge the quality
of
> > somebody's sending in a test situation.
>
> Seems to me that QSOs that start of within my ability often get
> going faster and faster til I'm stretching my ability to copy.
> That'se good because it helps us improve.

Yup. If ya ain't pushin' the envelope, yer not learnin' much. That's one mistake a lot of folksmake learning the code - they think they have to be perfect at, say, 15 wpm before they go near 20. The opposite is true - progress comes by trying speeds where you are missing a significant amount.

> I'd hoped the morse
> decoder would help in that speed band where I began missing
> things and thus loosing confidence.

The idea is good, but those things have not caught up with the wetware yet. (This is what drives some folks wacky - the idea that there are some things a human can do better).

> It didn't, but hope springs
> ...:o)

Worth a try, anyway. But to me it misses the whole point. It's essentially buying a machine to have your fun for you.

73 de Jim, N2EY

--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2392. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 22:27:50 UTC
From: Quequeg@quahog.com
Message-ID: <slrn97mdbl.4t.Quequeg@daystar.capecod.net>
Source record: 171065

On 2 Feb 2001 04:45:03 GMT, David Snyder Hale <david@isi9.mtwilson.edu> wrote:
>hi,
>
>I just finished building my first QRP rig; heck, my first transceiver of
>any kind. I am so excited that it works; I'm thinking of places I can take
>my radio now, where I couldn't before.
>
>We always take our vacation on the beach each spring (Nag's Head, NC) and I
>wondered about operating from the beach. I fly there, so bringing supports
>such as a mast is not really an option. Bringing a roll of thin wire for a
>40m dipole wouldn't be so bad, though. But then what would I do with it,
>just lay the dipole on the sand?
>
>Anyone have any better QRP beach antenna suggestions?
>
>tnx,
>
>--
>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

Hey! I plan to do some QRP from the beach this summer here on Cape Cod.
I'm going to try using kites and balloons to lift vertical wires over what
should be (near) perfect ground -- salt water! And, if the green police
don't catch me, I may try a home-made portable vertical over a local salt
marsh on 40 - 10 m.
Q.

--
"Dead Whale or a Stove Boat"
<---------[[[[[[[[[[[[[[[[[[

2393. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 22:56:22 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3A7B3B15.7D193CE1@usa.alcatel.com>
Source record: 171066

The question is about sharp bends, not externally adding lumped circuit parts. Still, it's intersting to look at your scenario as ONE section of line with greater capacitance than the rest of the feeder. If we do _this_, adding a lower impedance (higher capacitance) section to a feedline won't bother things much until its length is some substantial fraction of a wavelength. And then it's a series matching section. (Or MIS-matching section -- grin!)

And of course a small enough capacitor isn't going to move things around much anyway. You'll get some capacitance each time you pass near a conductor. Unless you've arranged these so they are some substantial fractions of a wavelength apart, they won't really change the match (or lack of it).

Cortland
(ka5s@earthlink.net)

Wes Stewart wrote:

> On Thu, 01 Feb 2001 16:56:40 -0800, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >A discontinuity on a transmission line has to be long enough on the line, and of
> >sufficient difference in impedance from the rest of the line, to generate
> >adverse reflections. This length will be measured in large fractions of
> >wavelengths, not inches (cm) or feet (meters).
>
> So you're telling me that if, for instance, I hang a small capacitor across a
> transmission line it won't matter because it isn't distributed down the length
> of the line?
>
> [snip]
>
> Wes Stewart N7WS

2394. Attic antenna help RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 23:17:41 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A7B3E9C.C3C51171@home.com>
Source record: 171067

Well, I got my Alpha Delta DX-EE installed in the attic. Seems to get out OK, but there is a very high noise floor with all of the electric stuff in the house. Is there a way that I can tone the noise level down some? Also, when I transmitted on 15M, I set off the fire alarm on the second floor. Is there something I can use on the alarm wires to prevent this? Thanks, Ken

2395. Should i get a Hustler 4-BTV?need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 23:18:53 UTC
From: cm13141@aol.com
Message-ID: <20010202181853.23699.00000469@ng-bj1.aol.com>
Source record: 171068

I will be taking my general exam very soon and i am setting up my first HF rig.I have a old Heathkit 101 and would like to use a vertical 10-40 meters,i have a very limited budget to work with.I am thinking of getting a Hustler 4-BTV,anyone have any thoughts on this antenna?The price $129 fits in my antenna budget and would get me on the air.Your help and advice is most welcome.
Thanks,
James

2396. Packet Radio (Slightly Off Topic)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-02 23:51:23 UTC
From: Robin Goodfellow <k.puck@ntlworld.com>
Message-ID: <ZFHe6.4644$Ee3.135245@news6-win.server.ntlworld.com>
Source record: 170969

I was wondering if anyone could give me a bit of advice. I work for a help desk that uses Vodafone's packet radio to send and receive credit card security numbers, I only recently became aware that the aerial for this is located in the same room where we work, no more than 6" from us.

I am not 100% sure but I think that this system operates on the same basis as a mobile phone, does anyone know of any regulations about safe distances etc. that this type of equipment should be kept from people, I find it very strange that it would be placed in a room full of people.

Sorry for posting here but I thought you would be the people to ask.

Thanks in advance

2397. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 01:07:48 UTC
From: lagagnon@fakesprint.ca
Message-ID: <3a7b599d.6127146@news.sprint.ca>
Source record: 170970

On 2 Feb 2001 04:45:03 GMT, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

>Anyone have any better QRP beach antenna suggestions?
>
>tnx,
>
>--
>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net
Dave : build and try the St. Louis Vertical. Search for it on the
web...I think there is a link from the NorCal QRP site. Good, easy
antenna to build and carry and folds down nicely.

Larry VE6MK
****
to send direct email remove "fake" from address

2398. Re: Should i get a Hustler 4-BTV?need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 01:31:07 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7B5F5B.480821AE@IEEE.org>
Source record: 170972

Cm13141 wrote:
> I will be taking my general exam very soon and i am setting up my first HF
> rig.I have a old Heathkit 101 and would like to use a vertical 10-40 meters,i
> have a very limited budget to work with.I am thinking of getting a Hustler
> 4-BTV,anyone have any thoughts on this antenna?The price $129 fits in my
> antenna budget and would get me on the air.Your help and advice is most
> welcome.

The 66ft dipole on my web page works well on 10m-40m and costs about $25.
--
http://www.mindspring.com/~w6rca

2399. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 01:36:02 UTC
From: Steve Ellington <N4LQ@igLou.com>
Message-ID: <3a7b5fdf_3@news.iglou.com>
Source record: 170971

If the tree grew up from the bottom then the longest branches would be on the top. Duh

--
Steve
N4LQ
"K7jy" <k7jy@aol.com> wrote in message news:20010130235025.13701.00001953@ng-ci1.aol.com...
> I know this may sound funny, but does anyone out there know how trees grow? If
> i leave an antenna wire up in a big spruce tree (over a horizontal branch) at
> 100 feet up, in five years or so will it be at 105 feet or any higher at all? I
> know that these trees grow in girth at their bases, but do they "telescope
> upwards" or do they just grow vertically from the top? Many thanks for any
> informed responses. 73, de John, K7JY, Seattle.

2400. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 01:43:37 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a7b4a71.28531916@news.aepnet.org>
Source record: 170973

On Fri, 02 Feb 2001 14:56:22 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>
>The question is about sharp bends, not externally adding lumped circuit parts. Still,
>it's intersting to look at your scenario as ONE section of line with greater
>capacitance than the rest of the feeder. If we do _this_, adding a lower impedance
>(higher capacitance) section to a feedline won't bother things much until its length
>is some substantial fraction of a wavelength. And then it's a series matching
>section. (Or MIS-matching section -- grin!)

Okay ... the original question was about sharp bends, but you changed
it to discontinuities in general and stated that they must be "long"
to have measureable effect I'm just pointing out that they don't
necessarily have to be long.

Wes N7WS

>
>And of course a small enough capacitor isn't going to move things around much anyway.
>You'll get some capacitance each time you pass near a conductor. Unless you've
>arranged these so they are some substantial fractions of a wavelength apart, they
>won't really change the match (or lack of it).
>
>Cortland
>(ka5s@earthlink.net)
>
>Wes Stewart wrote:
>
>> On Thu, 01 Feb 2001 16:56:40 -0800, Cortland Richmond
>> <Cortland.Richmond@usa.alcatel.com> wrote:
>>
>> >A discontinuity on a transmission line has to be long enough on the line, and of
>> >sufficient difference in impedance from the rest of the line, to generate
>> >adverse reflections. This length will be measured in large fractions of
>> >wavelengths, not inches (cm) or feet (meters).
>>
>> So you're telling me that if, for instance, I hang a small capacitor across a
>> transmission line it won't matter because it isn't distributed down the length
>> of the line?
>>
>> [snip]
>>
>> Wes Stewart N7WS
>

>
>
>

2401. Re: Should i get a Hustler 4-BTV?need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 02:13:04 UTC
From: Tad Danley <taddanley@nospamatatt.net>
Message-ID: <3A7B6A48.612E9F8@att.net>
Source record: 170974

Cecil wrote:

> Cm13141 wrote:
> > I will be taking my general exam very soon and i am setting up my first HF
> > rig.I have a old Heathkit 101 and would like to use a vertical 10-40 meters,i
> > have a very limited budget to work with.I am thinking of getting a Hustler
> > 4-BTV,anyone have any thoughts on this antenna?The price $129 fits in my
> > antenna budget and would get me on the air.Your help and advice is most
> > welcome.
>
> The 66ft dipole on my web page works well on 10m-40m and costs about $25.
> --
> http://www.mindspring.com/~w6rca

The dipole also has the advantage of not requiring radials to work properly. Verticals have lower angles of radiation and tend to work better for communications at a distance, like DX. Dipoles have a higher angle of radiation and tend to work better for communications relatively close by (up to several hundred miles). This may affect your decision. You might want to try the dipole and a home brew wire vertical for one band and compare them.

Wire antennas are fun to experiment with! Good luck and 73,

--
Tad Danley, K3TD
mailto:taddanley@att.net

Caution: Anti-spam address in use!

2402. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 02:28:36 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95fqck$26b$1@agate.berkeley.edu>
Source record: 170975

Jim Weir <jim@rst-engr.com> wrote:

> Fly a kite with #30 wire. Remember, Nag's Head is just down the beach a piece
> from Kitty Hawk, and they flew kites there, too.

Do I have to worry about static discharge?

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2403. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 02:31:09 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95fqhd$26b$2@agate.berkeley.edu>
Source record: 170976

Very helpful, Richard. TNX much.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2404. Re: Should i get a Hustler 4-BTV?need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 02:32:11 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7B6DAB.1964BDD1@oio.net>
Source record: 170977

James,
As others have siad, try a simple dipole for one of the
bands your interested in, much cheaper than the 4-BTV, and
in general, will do a better job for you. Unless you put in
a good ground system for the vertical, you won't be happy
with it (no matter what 'they' say).
'Doc
PS - If you decide you want the vertical, take the dipoles
down and use them for radials.

2405. Re: open wire loss due to bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 03:59:20 UTC
From: richardharrison@webtv.net
Message-ID: <24818-3A7B8218-11@storefull-118.iap.bryant.webtv.net>
Source record: 170980

Wes, N7WS wrote:
"I`m just pointing out that they don`t necessarily have to be that long." (runs of differing impedance as bump producers)

Exactly. It`s the abrupt impedance change which causes a reflection. Long abuses such as spacing transmission line wires in a vertical plane, too close to the ground, may cause a cumulative imbalance effect. That`s not good either. But, it`s the direct connection of a line or load of a different impedance from the transmission line of interest that produces a bump.

On the other hand, a tapered line section of more than 1/4-wavelength can smoothly create a transition from one impedance to another without much reflection at all. This is not popular I think because insulators of so many different lengths are needed to pull it off.

Best regards, Richard Harrison, KB5WZI

2406. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 03:59:56 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95fvns$s0a$3@bashir.peak.org>
Source record: 170979

n2ey@aol.com wrote:

:> The intent was clear: We'll let you start playing
:> (with severe restrictions) if you'll prove you've started learning.
:> We'll give you full access (as in, a significant part of each band)
:> once you can prove you've mastered the fundamentals.

: AND we'll provide incentive in the form of a short license term and non-
: renewable status.

Which was stupid. Many people were unable to devote the time etc that it took to upgrade their code speed or knowledge of electronics enough to pass the higher level segments. Those Hams, after having their Novice license for a year or two, were unable to renew or get another license right away - so they dropped out of Amateur Radio. I can verify this, as I was one of those Novices (look up WB7AVH in a mid-70s call book). I never got back into the hobby.

Now, was THAT the intent of the non-renewable license? If so, it worked admirably - as I knew several other Novices at the time who also dropped out.

: experimenter types and the General was for everybody else. A few pre-
: 1953 OTs had Advanced, and the really knowledgeable hotshots had
: Extras. (There were only about 4000 Extras in 1967 - about 1.6% of the
: US ham population). The FCC changed the rules because they (the FCC,
: that is) perceived that the hams of 30-40 years ago were not
: technically knowledgeable enough. The FCC thought most hams of those

Remember when you had to either have had a license before some given date, or have held a license for X years, before you could qualify to try for an Extra license?

--
Bill Nelson (billn@peak.org)

2407. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:02:26 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95fvsi$s0a$4@bashir.peak.org>
Source record: 170978

Richard Harrison <richardharrison@webtv.net> wrote:
: Dean Craft, W4IHK wrote:
: "---WRC-03--- This includes the issue of whether to retain the treaty
: requirement to demonstrate Morse code proficiency for access to amateur
: bands below 30 MHz."

: My question is:
: What is proficient by international specification?
: Is it one word per second or is it one word per hour? Maybe it is what
: any member country wants to make it be.

There is no international specification. It was left up to the various
countries. It could be 1 character a month, if the regulating authority
of some country decided that they wanted it to be that slow.

--
Bill Nelson (billn@peak.org)

2408. Re: K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:05:08 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95g01k$s0a$5@bashir.peak.org>
Source record: 170983

Rudy Marcelletti <rudym@net-link.net> wrote:
: Don't monkey around with the coil--just shorten the whip and measure with
: analyzer. Start with cutting about 5" off at first (you can't put it back
: on!) I forget what I had to cut off. I have a K-40 cut down for 10 meters
: and it works pretty good for what it is. I get wide band coverage 2.1
: swr--so it is lossy. Hustler mast and coil works better, so does full size
: quarter wave whip.

A high SWR does not necessarily mean that your antenna system is lossy.
Nor does a now SWR mean that your system is efficient.

--
Bill Nelson (billn@peak.org)

2409. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:08:54 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <hv0n7tgqravuom88j6s8ebi2r2nq2a3aep@4ax.com>
Source record: 171008

Quequeg@quahog.com (Queequeg)
shared these priceless pearls of wisdom:

->Hey! I plan to do some QRP from the beach this summer here on Cape Cod.
->I'm going to try using kites and balloons to lift vertical wires over what
->should be (near) perfect ground -- salt water!

Use BARE copper wire and a fishing reel to adjust it to resonance. If the wire is BARE, then you won't get the bottom-loading inductive effect of the wire wound around the reel. To the transmitter, it is just a lump of solid copper at the base of the antenna.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2410. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:10:17 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <g31n7t80k02mvanr11dli4j8oliepv2n1s@4ax.com>
Source record: 171009

David Snyder Hale <david@isi9.mtwilson.edu>
shared these priceless pearls of wisdom:

->Jim Weir <jim@rst-engr.com> wrote:
->
->> Fly a kite with #30 wire. Remember, Nag's Head is just down the beach a
piece
->> from Kitty Hawk, and they flew kites there, too.
->
->Do I have to worry about static discharge?

I guess I don't understand the question. Why would you worry more about static
discharge with this antenna as opposed to any other kind?

Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2411. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:22:28 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95g124$s0a$6@bashir.peak.org>
Source record: 170984

Adam <digipoint@hotmail.com> wrote:
: A normal dipole should be about 1/2 wave length. (a little shorter than that
: depending on the material that is used). If it's 1/2 a wave length the
: impedance is about 50 Ohms when fed in the center or the dipole.

Actually, closer to 72 ohms in free space. If you move the dipole closer
or further away from ground, the feedpoint impedance can vary quite a bit.
The usual practice is to suspend the center about 1/2 wavelength above
ground and drop the end a bit - this gets the impedance close to 50 ohms.

: If you use a different length dipole the impedance will be more or less than
: 50 Ohms. A Balun/transformer can change the impedance into 50 Ohms so your
: transceiver will not notice that the antenna is actually not exactly the
: right length, compared to the work frequency.

That doesn't happen with a current balun.

: This is not the main reason for using a balun/transformer. The main reason
: is to feed the antenna which is designed for the right frequency into a
: point where the impedance is not 50 Ohms. For instance a half wave dipole
: that is 'end-fed' has an impedance of about 300 Ohms and can be fed with a
: balun/transformer 1:4.

End feed the antenna, and it is not a dipole. It is a half-wave, end-fed
antenna.

But, in your example, I would use 72 ohm coax with a 4:1 balun for matching.
My transmitter with the tube finals would handle 72 ohms quite well.

--
Bill Nelson (billn@peak.org)

2412. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:25:09 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95g175$s0a$7@bashir.peak.org>
Source record: 170982

Richard Harrison <richardharrison@webtv.net> wrote:

: Directly connected coax allows some of the antenna current carried by
: the shield to travel on the outside of the coax. A balun minimizes
: current on the outside of the shield.

This is true for a current balun. A voltage balun is much less efficient. There was a study of this published in one of the ARRL antenna books, I forget which one.

: Current on the outside of the shield causes radiation.

Yep. If there are currents on the outside of the coax, at least for those due to leakage from the inside of the shield, then the coax is acting as part of the antenna system.

--
Bill Nelson (billn@peak.org)

2413. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:29:42 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95g1fm$4b4$0@208.206.142.74>
Source record: 170981

Bill Nelson wrote:
>
> Richard Harrison <richardharrison@webtv.net> wrote:
> : Dean Craft, W4IHK wrote:
> : "---WRC-03--- This includes the issue of whether to retain the treaty
> : requirement to demonstrate Morse code proficiency for access to amateur
> : bands below 30 MHz."
>
> : My question is:
> : What is proficient by international specification?
> : Is it one word per second or is it one word per hour? Maybe it is what
> : any member country wants to make it be.
>
> There is no international specification. It was left up to the various
> countries. It could be 1 character a month, if the regulating authority
> of some country decided that they wanted it to be that slow.
>

No one except the terminally code challenged ever considered anything
less than 5wpm to be "proficiency". Even the 5wpm'ers don't consider
that to be.

2414. Re: Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 04:33:41 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95g1n5$s0a$8@bashir.peak.org>
Source record: 170985

Wes Stewart <nospam_n7ws@arrl.net> wrote:

: H-P, now Agilent (I never will figure out how to pronounce this) had a
: series of Spectrum Analyzer application notes. I have the complete
: set around here someplace.

Agi (like in agitate) lent (as in Lent - the period prior to Easter).

--
Bill Nelson (billn@peak.org)

2415. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 05:00:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7B9076.9BB5ED4C@IEEE.org>
Source record: 170986

Bill Nelson wrote:
> There is no international specification. It was left up to the various
> countries. It could be 1 character a month, ...

Who can stay awake for a month in order to receive it?
--
http://www.mindspring.com/~w6rca

2416. Re: Will it help? The CAL'S

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 05:04:27 UTC
From: "K S O F (The Famous!!)" <NOjmackeySPAM@parg.org>
Message-ID: <95g3ed02vjm@news2.newsguy.com>
Source record: 170988
Cross-posted to: rec.radio.scanner,rec.radio.amateur.antenna

I am glad that the only thing you could find wrong with my post is a
simple, minor, spelling error.

foffe <setta@uio.com> wrote
> The correct spelling of the word usual is USUAL. NOT usuall.
>
> "K S O F (The Famous!!)" wrote:
>
> > Hey Glenn Hansen, I thought you were busy over on
rec.radio.amateur.antenna
> > makne more trouble & making the usuall
> > STUPID ASS of yourself?
> >
> > How come you came back here?
> >
> > Glenn <glenn.hansen@usa.net> wrote:
> > stupidity snipped, leaving nothing else

2417. How long can a ground strap be on a mobile screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 05:42:57 UTC
From: Dick Grady <grady@wizard.com>
Message-ID: <es4n7t05tb641othet6f06ld0pkb85t9s5@4ax.com>
Source record: 170987

I am considering purchasing the High Sierra screwdriver antenna for my 1999 Chevy Tahoe. I want to mount it on the rear of the vehicle, because the Tahoe is wide and when I'm driving up dry washes here in the NV and CA deserts I don't want the antenna catching on bushes and rock out-croppings. High Sierra sells a mount which fits into a 2x2 receiver trailer hitch, which would place the antenna about a foot behind the back bumper. See the upper left photo on http://www.hsantennas.com/inpics2.htm . The mount hinges back to allow for opening the tailgate. So allowing for this lean-back, I estimate I'll need 2.5 to 3 feet of ground strap to reach the metal body of the vehicle. Is this length ground strap OK, or is it too long for good performance in the upper frequency HF bands?

2418. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 06:07:41 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A7BA02D.1B8C9AC3@ipeg.com>
Source record: 170989

David Snyder Hale wrote:

> I may have found a good answer to my "which vertical" question...
>
> The St. Louis Vertical.
>
> Comments?
>

David,

An acquaintance of mine built one for portable qrp work. It works as advertised and he likes it a lot for his purposes. A nice, light and effective antenna (for a vertical). Should be pretty good for the beach. Get the ground into the water and it'll outdo a lot of others.

Marty...
N7MX

2419. Icom AH-4 auto tuner with Alinco DX-70?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 06:29:43 UTC
From: TR <w7trx@my-deja.com>
Message-ID: <95g8gj$gh9$1@nnrp1.deja.com>
Source record: 170990

I will be purchasing an Alinco DX-70T. I currently have an Icom AH-4 auto tuner. It looks a lot like the Alinco EDX-2. I am curious if the AH-4 can be interfaced to the DX-70? the Icom autotuner has 6m capability that lacks in the Alinco tuner.

Thanks,

Tracy, W7TRX

Sent via Deja.com
http://www.deja.com/

2420. Re: How long can a ground strap be on a mobile screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 08:38:47 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7BC397.3BA6FE6D@oio.net>
Source record: 170991

Dick,
It ought to work okay. You might think about
a means to disconnect the ground strap when you
'tilt' the antenna.
'Doc

2421. radiocom2000 Bosch KF454

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 09:54:12 UTC
From: Stéphane REY <stephane.rey@netcourrier.com>
Message-ID: <3A7BD543.CA469F7A@netcourrier.com>
Source record: 170992

Hello,

I'm looking for informations concerning the Radiocom 2000 Bosch KF454 in

order
to adapt it on the ham band 430-440MHz
If you have any information, schematics, and so on, please contact me

PLEASE, can you notify me that you have answered by mail or please
answer direct to my mail

Stephane

2422. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 11:09:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95goqu$7bi$1@plutonium.btinternet.com>
Source record: 170993

> Adam <digipoint@hotmail.com> wrote:
> : point where the impedance is not 50 Ohms. For instance a half wave
dipole
> : that is 'end-fed' has an impedance of about 300 Ohms and can be fed with
a
==========
An endfed half-wave antenna has an impedance more like 3000 ohms than 300
ohms.

Reg.

2423. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 13:00:50 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95h8ohcpj3@lure.pipex.net>
Source record: 171001

"Bill Meara " wrote ...
> ... WIND SUPPORTED ANTENNAS!

I've heard some hams going on for hours,
but I never realised why.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

2424. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 13:32:59 UTC
From: n2ey@aol.com
Message-ID: <20010203083259.10105.00001227@nso-bh.aol.com>
Source record: 170994

In article <95fvns$s0a$3@bashir.peak.org>, Bill Nelson <billn@spock.peak.org>
writes:

>n2ey@aol.com wrote:
>
>:> The intent was clear: We'll let you start playing
>:> (with severe restrictions) if you'll prove you've started learning.
>:> We'll give you full access (as in, a significant part of each band)
>:> once you can prove you've mastered the fundamentals.
>
>: AND we'll provide incentive in the form of a short license term and non-
>: renewable status.
>
>Which was stupid.

The FCC didn't think so for the first 25 years of the Novice.

The short term and nonrenewable status were done to emphasize that the Novice
was not meant to be a permanent license - that it did not represent a level of
achivement that one could stay at permanently or even for a long time. It was
meant as a learning tool.

> Many people were unable to devote the time etc that it
>took to upgrade their code speed or knowledge of electronics enough to
>pass the higher level segments.

True. In 1967 the term was extended to 2 years. In the '70s the license became
retakeable, and finally 5 year renewable.

>Those Hams, after having their Novice
>license for a year or two, were unable to renew or get another license
>right away - so they dropped out of Amateur Radio.

That was fixed by making the license retakeable.

>I can verify this,
>as I was one of those Novices (look up WB7AVH in a mid-70s call book).
>I never got back into the hobby.

There were hundreds of thousands of us who managed to upgrade, though.

Making the license retakeable but not renewable was the right move. Making it
full term and renewable removed any incentive to progress quickly, and the
Novice population of the bands began to drop because of it.

>
>Now, was THAT the intent of the non-renewable license?

As stated above - to serve as a learning tool - a step up, but not a permanent achivement.

Remember that before the Novice, ALL US hams had to do 13 wpm code and General - level written for their FIRST license.

>If so, it worked
>admirably - as I knew several other Novices at the time who also dropped
>out.
>
As noted above - that problem was fixed in the mid-70s If two years wasn't enough, take it again and get another two.

>: experimenter types and the General was for everybody else. A few pre-
>: 1953 OTs had Advanced, and the really knowledgeable hotshots had
>: Extras. (There were only about 4000 Extras in 1967 - about 1.6% of the
>: US ham population). The FCC changed the rules because they (the FCC,
>: that is) perceived that the hams of 30-40 years ago were not
>: technically knowledgeable enough. The FCC thought most hams of those
>
>Remember when you had to either have had a license before some given
>date, or have held a license for X years, before you could qualify to
>try for an Extra license?

Oh yes. Until the mid '70s it was two years. Then one year - then in the '80s it was dropped entirely. And the only experience that counted was as a General or Advanced.

I remember this very clearly because I was directly affected. I was a 13 year old Novice in 1967, then upgraded to Advanced in 1968. (I went for the General and the FCC examiner said "Try the Advanced" - and one did not say no to The Man in those days.) It was a piece of cake.

Then I went home and counted out exactly two years on the calendar, looking for the first test session when I could get the Extra. I was there in August 1970 and passed it on the first go.

Doesn't seem like 30 years.

--

Remember when you had to pass all the test elements for a given license in order at one session - no CSCEs?

Remember when any failure meant "go home and study for at least 30 days before retesting" ?

Remember when the exams were secret?

Remember the sending test?

Remember when the Technician and General used the same written test?

73 de Jim, N2EY

>

2425. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 14:25:51 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95h495$en3$1@slb6.atl.mindspring.net>
Source record: 170995

There are no palm trees ringing Nag's Head??? Darn!

See you in Antigua then...

-Peter K1PO

"Allodoxaphobia" <QSB@QRM-QRN.net> wrote in message
news:slrn97lt2i.i47.QSB@animas.frontier.net...
> On Fri, 2 Feb 2001 07:33:39 -0500, Peter O. Brackett scribbled:
> >Hey, when I go beach hamming, here's the way I do it...
> >
> >I always "hang" a vertical from one of those really tall coconut palms
> >ringing the beach. Works great. And...
> >
> >Those palms also provide shade from the brutal tropical sun.
>
> He said:
> "We always take our vacation on the beach each spring (Nag's Head, NC)"
> Palm trees there ain't. <g>
>
> Jonesy

2426. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 14:29:37 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A7C15D1.A77E1110@hiwaay.net>
Source record: 170996

Sorry, Steve, that's not quit true- I have a large grove of large Bamboo, and two facts are clear; 1. it grows from the bottom, like grasses are supposed to, and, 2. the lower limbs are longer that the older, upper ones.

A peculiarity is that the "stalk" grows fast and tall, before the "limbs" start to come out at all. I have seen some over twenty feet tall, as bare as-- well, ---

Anyone within driving distance need some large (up to 3", it's a young grove) Bamboo for a Quad? I can spare a few.

Bill-W4BSG, in NE Alabama

Steve Ellington wrote:
> If the tree grew up from the bottom then the longest branches would be on
> the top. Duh
>
> --
> Steve
> N4LQ
> "K7jy" <k7jy@aol.com> wrote in message
> news:20010130235025.13701.00001953@ng-ci1.aol.com...
> > I know this may sound funny, but does anyone out there know how trees
> grow? If
> > i leave an antenna wire up in a big spruce tree (over a horizontal branch)
> at
> > 100 feet up, in five years or so will it be at 105 feet or any higher at
> all? I
> > know that these trees grow in girth at their bases, but do they "telescope
> > upwards" or do they just grow vertically from the top? Many thanks for any
> > informed responses. 73, de John, K7JY, Seattle.

2427. Re: Icom AH-4 auto tuner with Alinco DX-70?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 14:58:21 UTC
From: Andy Evancho <andy.evancho@foxinternet.net>
Message-ID: <3A7C1C8D.86813CEC@foxinternet.net>
Source record: 170997

The Alinco DX-77 manual shows that the Alinco radio's will wire directly to the Icom AH-3. I have heard that the two Icom tuners are similar. I would expect that there would be a workaround.

Regards Andy Evancho WA7JGO

TR wrote:

> I will be purchasing an Alinco DX-70T. I currently have an Icom AH-4
> auto tuner. It looks a lot like the Alinco EDX-2. I am curious if the
> AH-4 can be interfaced to the DX-70? the Icom autotuner has 6m
> capability that lacks in the Alinco tuner.
>
> Thanks,
>
> Tracy, W7TRX
>
> Sent via Deja.com
> http://www.deja.com/

2428. Re: Best "Through Window" 2 band ant 2m 70cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 14:58:57 UTC
From: Dave Downing <wd5gdave@worldnet.att.net>
Message-ID: <3A7C1D1B.CC154F6E@worldnet.att.net>
Source record: 170998
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Mike,

I've been using through-the-glass antennas for over 20 years now, and have been very satisfied with them. It is true that most mag mount antennas out perform the through-the-glass antennas, but there is a reason for it. The on-glass antennas are usually 1/2 wave antennas and the mag mounts are typically 5/8 wave antennas (remember the apple and oranges thing?).

Be aware that through-the-glass antenas do not work with many newer vehicles that have window tinting. Evidently there are some sort of metallic particles impregnated in the glass.

I have used the Larsen 2/70 for about 10 years now, and it has done very well. It's a little pricey, but worth the money.

de Dave, WD5G

2429. Re: How long can a ground strap be on a mobile screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 15:05:49 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <h7Ve6.276926$hD4.66737756@news1.rdc1.mi.home.com>
Source record: 170999

I use the HS-1500 on my Chev Lumina Van (fiberglass body).
The trailer hitch its self is should be grounded to the chassis but install a short strap where it is bolted to the frame to make sure. Ground strapping the body parts to the frame under the vehicle will also help with noise. Mount it so the coil part of the screwdriver is above the roofline for best results. You could not have made a better choice. That HS-1500 is very high quality and has a superb finish.

William Lee

"Dick Grady" <grady@wizard.com> wrote in message news:es4n7t05tb641othet6f06ld0pkb85t9s5@4ax.com...
> I am considering purchasing the High Sierra screwdriver antenna for my 1999
> Chevy Tahoe. I want to mount it on the rear of the vehicle, because the Tahoe
> is wide and when I'm driving up dry washes here in the NV and CA deserts I don't
> want the antenna catching on bushes and rock out-croppings. High Sierra sells a
> mount which fits into a 2x2 receiver trailer hitch, which would place the
> antenna about a foot behind the back bumper. See the upper left photo on
> http://www.hsantennas.com/inpics2.htm . The mount hinges back to allow for
> opening the tailgate. So allowing for this lean-back, I estimate I'll need 2.5
> to 3 feet of ground strap to reach the metal body of the vehicle. Is this
> length ground strap OK, or is it too long for good performance in the upper
> frequency HF bands?
>

2430. Re: Weird RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 15:34:12 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <UxVe6.26848$49.4605481@news1.rdc2.pa.home.com>
Source record: 171000

> Agi (like in agitate) lent (as in Lent - the period prior to Easter).

"Agilent" is the spelled (less the apostrophe) and pronounced like the
contraction of "Agile not".

2431. Re: How long can a ground strap be on a mobile screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 16:02:27 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <mbao7tki0c36btmhroo2c2gn4jha00an6t@4ax.com>
Source record: 171002

What's wrong with using the hitch itself? Surely it is grounded to
the frame of the vehicle which should be grounded to the body. You
can always add additional ground straps from the frame to body. I had
a large nut welded to the top of the receiver (after drilling a hole
through the receiver) into which I have a bolt that I can tighten to
take out any slop in the receiver as well as provide a good connection
with the hitch stinger. This could also be done on the bottom (or
side) if you can't easily get to the top for drilling and welding.
Then you only have to be concerned about the connection at the hinge
which would be easy to strap across. If it's even necessary.

Dick - W6CCD

On Fri, 02 Feb 2001 21:42:57 -0800, Dick Grady <grady@wizard.com>
wrote:

>I am considering purchasing the High Sierra screwdriver antenna for my 1999
>Chevy Tahoe. I want to mount it on the rear of the vehicle, because the Tahoe
>is wide and when I'm driving up dry washes here in the NV and CA deserts I don't
>want the antenna catching on bushes and rock out-croppings. High Sierra sells a
>mount which fits into a 2x2 receiver trailer hitch, which would place the
>antenna about a foot behind the back bumper. See the upper left photo on
>http://www.hsantennas.com/inpics2.htm . The mount hinges back to allow for
>opening the tailgate. So allowing for this lean-back, I estimate I'll need 2.5
>to 3 feet of ground strap to reach the metal body of the vehicle. Is this
>length ground strap OK, or is it too long for good performance in the upper
>frequency HF bands?

2432. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 16:07:02 UTC
From: k1bqt@aol.com
Message-ID: <20010203110702.15092.00000548@ng-ff1.aol.com>
Source record: 171003

Cable "leakage" through the shield is not what causes a coax feedline to perturb a dipole's VSWR or resonant frequency. It's a lack of isolation between the half element connected to the shield and the outer surface of the shield itself.

When the impedance ratio between these two parallel-connected "wires" becomes small, they began to compete for dominance in detectable ways. In fact, with careful feeline trimming (or though random bad luck), it's relatively easy to create a condition where the feedline outer draws MORE current than the antenna half that's supposed to be doing the radiating--and the coax shield comes to dominate the performance of the antenna.

To prove this, a couple years back, I ran a test on a 15-meter dipole using a MFJ analyzer and some sensitive (amplified) common-mode current meters. Connecting a feedline roughly 1/4-wave in length with no balun to the dipole, I could force the outer shield to draw significantly more current than the half-element it was attached to. Moreover, by varying feedline length slightly, I could pull the antenna's "appearent" resonant frequency higher or lower by roughly 200 kHz or more.
Altering feedline length further, the current on the antenna's half-element element began to rise rapidly as the current on the feedline outer simultaneously dropped. As the current ratio changed to favor the dipole element once more, the antenna was no longer measurably perturbed by the feedline (the current ratio dropped to about -20dB with roughly 1/2-WL of feedline connected).

Installing a simple ferrite current choke at the feedpoint allowed any feedline length to be used without perturbing the antenna's measurable parameters. It made for a very dramatic demonstration for why installing a balun is a good thing!

Feedline "leakage" is usually only an issue in critical systems where several decades of port isolation is required. That's why we use double-shielded patch cables instead of cheap RG-58 used in labs and mini-hardline used in high-end equipment.

Rick K1BQT

2433. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 16:21:16 UTC
From: Steve Ellington <N4LQ@igLou.com>
Message-ID: <3a7c2f53$1_3@news.iglou.com>
Source record: 171004

But I said TREES. I don't think bamboo is a tree.

--
Steve
N4LQ
"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:3A7C15D1.A77E1110@hiwaay.net...
> Sorry, Steve, that's not quit true- I have a large grove of large
> Bamboo, and two facts are clear; 1. it grows from the bottom, like
> grasses are supposed to, and, 2. the lower limbs are longer that the
> older, upper ones.
>
> A peculiarity is that the "stalk" grows fast and tall, before the
> "limbs" start to come out at all. I have seen some over twenty feet
> tall, as bare as-- well, ---
>
> Anyone within driving distance need some large (up to 3", it's a young
> grove) Bamboo for a Quad? I can spare a few.
>
> Bill-W4BSG, in NE Alabama
>
> Steve Ellington wrote:
> >
> > If the tree grew up from the bottom then the longest branches would be
on
> > the top. Duh
> >
> > --
> > Steve
> > N4LQ
> > "K7jy" <k7jy@aol.com> wrote in message
> > news:20010130235025.13701.00001953@ng-ci1.aol.com...
> > > I know this may sound funny, but does anyone out there know how trees
> > grow? If
> > > i leave an antenna wire up in a big spruce tree (over a horizontal
branch)
> > at
> > > 100 feet up, in five years or so will it be at 105 feet or any higher
at
> > all? I
> > > know that these trees grow in girth at their bases, but do they
"telescope
> > > upwards" or do they just grow vertically from the top? Many thanks for
any

> > > informed responses. 73, de John, K7JY, Seattle.

2434. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 16:55:15 UTC
From: mikea@efn.org
Message-ID: <95hd5jsdb1@news.efn.org>
Source record: 170944
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

HI
i ues a Screwdriver off the back of my moble home it works very will
it stick up pass the top of the roof it is only up abt. 6ft. of the
grownd so i can take it down for use on the VAN . i thank one of the
reason it work so good is the hold moble home is the grownd plan steel skin.
to take off just undo power plug (power for tunning Ant.) amd lift off
I thank you would need some kind of grownd plan a long wire or some
thing

In article <9528eagcs1@nnrp1.deja.com>, jason_hsu@my-deja.com says...
>
>Some of the questions I have include:
>1. Can I use one if I only have 8 feet of clearance on the small patio
>(8 feet wide, 8 feet tall, 6 feet wide) outside my sliding door? Is it
>possible to mount the antenna at a slant? I want to hear about any
>creative solutions from you.
>2. What type of mount/tripod would be appropriate? (I don't have a
>railing.)
>3. How quickly can I assemble and disassemble the antenna? (For
>stealth and security reasons, I need to remove the antenna when I am
>not operating.)
>4. Which versions (original DK-3, ElectraSlide, etc.) of the
>Screwdriver are most appropriate for me? What advantages do the more
>expensive versions have over the original? Can some versions (like the
>D&K KH-600 HF MOBILE ANTENNA) really operate on 160m?
>
>SOME BACKGROUND:
>I am seriously considering a Screwdriver antenna for operating HF from
>my ground floor apartment (no big trees or bushes close enough to
>conceal wires and keep them out of the way of people or dogs passing
>by). A mobile antenna would be less cumbersome to work with than a big
>wire antenna. The Screwdriver seems to be the best antenna for me.
>
>I have had modest success with Hamsticks I am borrowing, but I know
>that Screwdrivers are more efficient. Also, Screwdrivers are multi-
>band and are easier to tune (due to the automatic tuning aspect). Has
>anyone used a Screwdriver antenna for non-mobile operation?
>
>I was considering a Texas Bugcatcher, but I am not sure about the
>quality of the version from Texas Radio Products, and the version from
>GLA Systems is too expensive. Screwdriver antennas are almost as
>efficient, and several versions sell for near or below $200.
>

>--
>Jason Hsu, AG4DG
>jason_hsu@@@@@@@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/
>
>
>Sent via Deja.com
>http://www.deja.com/

2435. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 17:01:20 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <ajd8OvnI9qz2+sX+2imaO855s1Bs@4ax.com>
Source record: 171006

On Sat, 3 Feb 2001 11:21:16 -0500, "Steve Ellington" <N4LQ@igLou.com>
wrote:

>But I said TREES. I don't think bamboo is a tree.
>
>--
>Steve
>N4LQ

Hi Steve,

You have a point, but many horticulturists define a tree by its height - typically 12 feet. Bamboo can easily qualify in that regard in several weeks of vigorous growth. On the other hand, I've seen apple trees that are 80 years old that hardly meet that requirement (and not for pruning).

In many parts of the US, Holly is considered a bush, but here in the Pacific Northwest, I can guarantee you it is a tree (mine is going on 20 feet tall). Same goes for Lilac, I've seen Lilacs that have grown as tall as a small Maple (30 or 40 feet tall).

73's
Richard Clark, KB7QHC

2436. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 17:43:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7C4356.C53@wt.net>
Source record: 171007

Ralph Mowery wrote:

> A high swr will cause the meter to show more power output than there
> actually is. This may be why you are showing lots of power with a
> higher swr. You have to substract the reflected power from the forward
> power to get a goo indication of how much power you are actually putting
> out.

A high SWR can make the meter read high or low. In general if you are above the resonant freq a good bit, you will read lower than you are actually doing, if you are well below the tuned freq, usually you will read much higher than actual power. As far as the HT's power I wouldn't worry about the output if the SWR is ok. In general HT's are not very critical. They don't put out enough power to cause much damage if the mismatch is large. As long as below 2:1 SWR it should be fine in spite of the power readings. I don't think the readings are too accurate in his case for some reason. MK

--
http://web.wt.net/~nm5k

2437. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 18:00:32 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7C4740.1A6E@wt.net>
Source record: 171010

Bill Nelson wrote:
>

For instance a half wave dipole
> : that is 'end-fed' has an impedance of about 300 Ohms and can be fed with a
> : balun/transformer 1:4.

Like Reg says the impedance will be much higher than 300 ohms. A 4:1
balun won't likely cut it. Also on a 1/2 wave endfed, you need to
consider the decoupling from the antenna to the feedline. This is one
reason why I tout the gamma loop for matching a base fed 1/2 wave. Of
all the different matching schemes for a 1/2 wl, I think the gamma loops
are one of the better designs as far as the decoupling from the coax as
is,without extra decoupling. Also the j pole design can do well if set
up properly. But the gamma is simpler to set up and doesn't require the
extra rods/stubs next to the radiator. Of course, even the gamma loop
can be improved as far as decoupling. A choke, or a decoupling radial
set 1/4 wl below the feed can further improve the decoupling from the
coax. But can be considered an option. I have a base fed 1/2 wave on 10m
that uses a gamma loop and no extra decoupling. Works fine. MK
--
http://web.wt.net/~nm5k

2438. FS TI 85 Graphing Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 18:47:05 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <JmYe6.12825$s12.1356817@news02.optonline.net>
Source record: 171011
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

I have a TI 85 graphing calculator. I have no need for. Will entertain BEST REASONABLE OFFER.

Mike WB2GLW

2439. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 18:53:46 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95hkeaigr1@lure.pipex.net>
Source record: 171012

"Richard Clark" wrote
> In many parts of the US, Holly is considered a bush, but here in the
> Pacific Northwest, I can guarantee you it is a tree (mine is going on
> 20 feet tall). Same goes for Lilac, I've seen Lilacs that have grown
> as tall as a small Maple (30 or 40 feet tall).

You sure you don't live in TEXAS?

:)

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

2440. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 18:58:32 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95hkecigr2@lure.pipex.net>
Source record: 171013

"Frank Dinger" wrote ...
> > Anyone have any better QRP beach antenna suggestions?
> =======
> Dave , If the beach is watched over by a guard ,he might agree with you
> connecting the end of a wire antenna to (the top of) his watch tower . If
no
> trees nearby ,use the wire as a sloper.

Should it slope away from the sea, (i.e. high end furthest from the tide
mark), towards the sea, or parallel with the waterline, for best results?.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

2441. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 19:39:32 UTC
From: richardharrison@webtv.net
Message-ID: <9670-3A7C5E74-8@storefull-118.iap.bryant.webtv.net>
Source record: 171014

N2EY wrote:
"The FCC didn`t think so for the first 25 years of the novice."

Then was then. Now is now. The FCC now has a no-code entrance to the ham bands. It doesn`t relax the obstacles to ham radio enough. There should be no code requirement for any ham band.

Morse code is more recent than the Latin language, but it is less alive and has less value. Latin is recorded in ancient writings worth interpretation and preservation. There isn`t much of that in Morse.

Why learn Morse? Only to fill some arbitrary regulatory requirement.

You can learn and practice Morse for fun. It hurts nobody. But require it? Morse is already phased out of every pursuit except amusement. Even last resort claims are more fancy than fact.

The idea that Morse enobles doesn`t prove that the same effort spent on something else wouldn`t be more enobling. It would very likely be more useful to spend your time on something else.

If you were to become accomplished in music you might entertain music lovers, but not on ham radio. You can talk on ham radio, but you would likely profit more from studying the art of conversation than learning how to say it in Morse.

The whole Morse argument is beyond odd.

The majority of the best conversationalists and scientifically astute have no interest in Morse code. If they liked Morse they might have become hams among whom Morse is still practiced. Why exclude them from any ham bands? They could improve the tone. They should be recruited.

Why exclude the inept in science and conversation who don`t do code? They might benefit from the amateur experience, and bring something to the hobby that is missing.

Numbers count!

With a large market for ham gear, you might benefit from lower unit pricing. With a lot more hams, congress would pay more attention to what hams wanted. Bigger is better. Minimum requirements is the way to grow.

Best regards, Richard Harrison, KB5WZI

2442. Re: K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 21:32:27 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <kUNZ4JArjHf6Ew9v@g3ohx.demon.co.uk>
Source record: 171017

In article <95g01k$s0a$5@bashir.peak.org>, Bill Nelson
<billn@spock.peak.org> writes
>Rudy Marcelletti <rudym@net-link.net> wrote:
>: Don't monkey around with the coil--just shorten the whip and measure with
>: analyzer. Start with cutting about 5" off at first (you can't put it back
>: on!) I forget what I had to cut off. I have a K-40 cut down for 10 meters
>: and it works pretty good for what it is. I get wide band coverage 2.1
>: swr--so it is lossy. Hustler mast and coil works better, so does full size
>: quarter wave whip.
>
>A high SWR does not necessarily mean that your antenna system is lossy.
>Nor does a now SWR mean that your system is efficient.
>

I used a base-loaded CB whip for 10m FM (with a modified CB set plus
retuned CB 40W 'burner'). I didn't cut the whip or take turns off the
coil. As the CB antenna was inductive above its 'correct' frequency, I
simply inserted a compression trimmer capacitor in series with the feed
point (between the coax inner and the bottom of the coil), and adjusted
it for minimum SWR. I then measured the value of the cap (220p?). I then
replaced this with a fixed disc ceramic (500V) of the same value. OK on
40W (and I worked Jamaica and several US repeaters).

Ian.

2443. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 21:37:39 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <3o4f6.9230$qX5.8911@newsfeed.slurp.net>
Source record: 170932

Is there an antenna news group that does not have discussions about grammer
and no effort licensing, er I mean no code?
Richard Harrison wrote in message
<18426-3A7CAEA2-89@storefull-111.iap.bryant.webtv.net>...
Ian Jackson wrote:
"---why do the Americans invariably get the use of (it`s) and (its)
wrong?"

On the American side of the Atlantic, I was taught the apostrophe is
used to indicate a contraction, and the omission of the second (i) in
(it is). Thus we have (it`s).

For the possessive (its), no apostrophe is used.

There are three words that sound alike. They are: to, too, and two.
Explain please.

Best regards, Richard Harrison, KB5WZI

2444. Ground Mounts for Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 21:55:29 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <95hv6p$2kf4$1@nntp1.ba.best.com>
Source record: 171015

Hi - I am looking for a suitable ground mount for a
light-weight vertical antenna.

The antenna is 25' tall, and weighs about 20 lb.
It will go on a base mast about 12' tall. Base mast
might be anything from TV mast to 1-1/2" galvanized.

Ideally, I'd like the whole thing to be strong enough
to be self-supporting. (The antenna section is.)

All I have come up with so far is the Gap "Quick Mount,"
which is a basic, light-duty tilt-over.

I know there are other items out there, such as tilt-overs
with cable winches (probably overkill for this). But I can't
locate any of them on the net; and HRO just gives me blank
stares.

Does anyone have any suggestions for suitable hardware,
and where to find it?

Thanks and 73, Ed W6LOL

2445. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 22:07:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95hveg$37h$1@slb1.atl.mindspring.net>
Source record: 171016

I always hang my beach wire vertical from a very tall palm tree which are often found ringing those tropical beaches, and then I try to arrange the bottom end of the wire vertical to be in the shade of those same trees!

Then, all else being equal, after a couple of pina colada's, coupled with an exotic call sign, VPyxx, or whatever... the DX just comes rolling in!

Ahhh those tropical breezes... melodious CW floating across the tropical beach, "wall-to-wall" blue sky, fluffy white clouds...

What!

Where, am I... whose calling... wife!

Shovel the driveway! What....It's snowing again. Drat!

-Peter K1PO

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:95hkecigr2@lure.pipex.net...
>
> "Frank Dinger" wrote ...
> > > Anyone have any better QRP beach antenna suggestions?
> > =======
> > Dave , If the beach is watched over by a guard ,he might agree with you
> > connecting the end of a wire antenna to (the top of) his watch tower .
If
> no
> > trees nearby ,use the wire as a sloper.
>
> Should it slope away from the sea, (i.e. high end furthest from the tide
> mark), towards the sea, or parallel with the waterline, for best results?.
>
> --
> Gary7SLL
> 1 20' W 51 23' N
> http://www.gary.peach.dial.pipex.com/
>
>

2446. Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 22:08:54 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <GLqhPYA2FIf6EwJ+@g3ohx.demon.co.uk>
Source record: 171018

Sorry for stirring, and nothing to do with radio, but why do the
Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
makes typos, but this is beginning to get to me!

FYI...
'It's' is 'it is'.
'Its' is 'belonging to it'.
It is (ie it's) an irregular use of the apostrophe. There are a few
others.

Ian.

2447. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 22:10:05 UTC
From: john anders <51561@a425977.freeserve.co.uk>
Message-ID: <95hvkd$e6m$1@newsg3.svr.pol.co.uk>
Source record: 170927

How about using a lightweight 8 metre fishing whip as a centre support? Use your wire as a dipole or with a small atu as a end fed with a small counterpoise? Works well this side of the pond!

john g3tyb

2448. Re: HV Capacitors for beam antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 22:21:47 UTC
From: kk7ho@aol.communicate
Message-ID: <20010203172147.22624.00000504@ng-cq1.aol.com>
Source record: 170919

http://www.unicornelectronics.com/

http://www.action-electronics.com/capacitr.htm

http://www.rfparts.com/

I'm sure you'll find what you nedd at one of these places. The coax will work also.

2449. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 22:53:19 UTC
From: Richard MacDonald <rsmacdonald@worldnet.att.net>
Message-ID: <dm2p7t0famsta2eh3asoe2stb3fmqhe3uu@4ax.com>
Source record: 170920

On Sat, 3 Feb 2001 22:08:54 +0000, Ian Jackson
<ianjackson@g3ohx.demon.co.uk> scrivened:

>Sorry for stirring, and nothing to do with radio, but why do the
>Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
>makes typos, but this is beginning to get to me!
>
>FYI...
>'It's' is 'it is'.
>'Its' is 'belonging to it'.
>It is (ie it's) an irregular use of the apostrophe. There are a few
>others.
>
>Ian.
Ian: It gets to me also and I'm American. I suspect it's not paying
attention in class. After all, these young people don't need written
language. The TV (telly) has everything.

Now that I think of it, much of what I see on TV has extremely poor
spelling and grammar.

But then, we old folks can complain all we want, and we will, and
nothing will be done about it. My biggest complaint is not it's for
its but the great number of places where I see an apostrophe used
before the s in plurals. People are losing their language skills.

(Turn off spout)

2450. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-03 23:38:08 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <AD0f6.509$dh1.73601@newsread1.prod.itd.earthlink.net>
Source record: 170921

Well, if you AKS (or is it axe) me, and you didn't, its's its all unrelevent and irregardless, of whos in the behind of the comment, aint dat right?

Let's get "up to 20% off... and more" (how the heck can that be? If you can get up to 20% off, how can you then get more)?

And how 'bout dis... "you can save up to 40% off the regular price". NO, NO, NO... you either "save up to 40%" or "get 40% off the regular price", but not both!

It's its like using double negatives ain't it not?

2451. Re: Ground Mounts for Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 00:14:25 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7C9EE1.E61FC20E@oio.net>
Source record: 170922

Janice and Ed Senior,
How about a two section 'push-up' pole? Drive the base
section in the ground a few feet, extend the second section.
'Doc

2452. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 00:25:52 UTC
From: dcollin@connix.com
Message-ID: <3a7ca1b3.35702561@news.mybizz.net>
Source record: 170923

On Sat, 3 Feb 2001 22:08:54 +0000, Ian Jackson
<ianjackson@g3ohx.demon.co.uk> wrote:

>Sorry for stirring, and nothing to do with radio, but why do the
>Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
>makes typos, but this is beginning to get to me!

>Ian.

It "gets" a lot of us, too. There are lots of examples of wayward
apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
some common examples here. An apostrophe does NOT mean "look out,
here comes an 'S'!".

But does is really matter? Nah ....

2453. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 00:33:45 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <I5NCzBApNKf6Ewqx@g3ohx.demon.co.uk>
Source record: 170924

In article <dm2p7t0famsta2eh3asoe2stb3fmqhe3uu@4ax.com>, Richard
MacDonald <rsmacdonald@worldnet.att.net> writes
>On Sat, 3 Feb 2001 22:08:54 +0000, Ian Jackson
><ianjackson@g3ohx.demon.co.uk> scrivened:
>
>>Sorry for stirring, and nothing to do with radio, but why do the
>>Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
>>makes typos, but this is beginning to get to me!
>>
>>FYI...
>>'It's' is 'it is'.
>>'Its' is 'belonging to it'.
>>It is (ie it's) an irregular use of the apostrophe. There are a few
>>others.
>>
>>Ian.
>Ian: It gets to me also and I'm American. I suspect it's not paying
>attention in class. After all, these young people don't need written
>language. The TV (telly) has everything.
>
>Now that I think of it, much of what I see on TV has extremely poor
>spelling and grammar.
>
>But then, we old folks can complain all we want, and we will, and
>nothing will be done about it. My biggest complaint is not it's for
>its but the great number of places where I see an apostrophe used
>before the s in plurals. People are losing their language skills.
>
>(Turn off spout)
>

Hello Richard.
Thanks for the support!
In the UK, we also have the 'Grocer's Apostrophe', as in 'APPLE'S
75p/kg' (BTW, we are no longer allowed to quote lbs and oz - BY European
Community LAW!!).

The 'Grocer's Apostrophe' is VERY common. It has not been outlawed.

Yet.

Unfortunately....

My other bitch is the use of 'You and I' in those situations where 'You
and me' is correct (sorry, Sir Cliff Richard, but you screwed up 'good'
in 'Summer Holiday'). Have you ever tried to explain the difference to

some computer whiz-kid (does that date me?)?

And there's 'less' and 'fewer'...

ENOUGH! This is hammerchewer radjio, and not a linguistic inquisition.
73 t'yall!
Ian.

2454. Re: How do trees grow?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 00:35:06 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A7CA3BA.906635D5@hiwaay.net>
Source record: 170925

Steve- Sorry- I did NOT mean to imply that Bamboo is a tree- My point had to do with the growth pattern, omly. Bamboo grows in a quit different way to trees, almost in the reverse way, as it were, with the largest limbs (they DO have limbs) at the bottom, on the youngest growth. It was a small attempt at humor (very small)

Bill-W4BSG

Steve Ellington wrote:
>
> But I said TREES. I don't think bamboo is a tree.
>
> --
> Steve
> N4LQ
>

2455. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 00:40:20 UTC
From: k3bu@aol.com
Message-ID: <20010203194020.03148.00000706@ng-co1.aol.com>
Source record: 170926

>
>Use BARE copper wire and a fishing reel to adjust it to resonance. If the
>wire
>is BARE, then you won't get the bottom-loading inductive effect of the wire
>wound around the reel. To the transmitter, it is just a lump of solid copper
>at
>the base of the antenna.
>
>Jim
>Jim Weir, VP Eng. RST Eng. WX6RST
>A&P, CFI, and other good alphabet soup
>

You can only use bare wire on the nudist beach!
Best antennas for the beach are verticals (even shotened or loaded) planted on the beach, with elevated couple of radials. Kites and baloons are for those who have time to play with them rather than operate. For serious operation and contesting they suck, too much trouble, unless you have a crew to take care of them.

Yuri, K3BU
forget the alphabet soup, doesn't belong here

2456. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 01:13:50 UTC
From: Claudia <claudiaclarkeunspammers@claudia.net>
Message-ID: <3A7CACCA.9AACA305@claudia.net>
Source record: 170928
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Sorry to learn of the bad coax.
Did you pay by credit card ? Try to dispute the charges and even if
rw wins, they will have to wait for their $$$.

I have purchased from wireman and cable experts. good people, good coax.

73cc

Floyd wrote:

> A few days back, I posted an item about receiving some bad RG-213 coax from
> Radio Works. While they had UPS pick up the original cable, the replacement
> shipment was also defective.
>
> When I called today about having them take back the replacement cable, they
> were just then inspecting the cable that had been returned. They told me
> they saw nothing wrong with the cable at all. I asked them if they'd looked
> under the several feet of black electrical tape I'd had to place over the
> damaged area so that it could be used for one rainy day (they hadn't noticed
> the tape - great inspection, eh?). They removed the tape and claimed they
> saw no holes and no defects. Admittedly, these were small holes, about what
> you'd make with the tip of a utility knife. However, one was large enough
> that when you flex the cable you could see the copper braid underneath.
> When I looked at that cable closely, I could clearly see that the jacket
> seam had not been completely sealed, resulting in the holes. They looked
> again and said they could see no damage. They ask me if I was talking about
> just something of "pin-hole" size (as if that somehow made it alright).
>
> While they agreed to take the second cable shipment back, they refused to
> pay for the UPS charges as they had on the first, stating that it was their
> policy not to pay for returns a second time. The office manager then went
> on to explain that I was lying about the cable damage. I offered to put up
> $1,000 against her $1,000 to have a third party inspect the cable, but she
> explained how three people had already looked at it and saw no damage.
> Apparently, "third-party" has a different meaning in Portsmouth, VA?
>
> I must say that I'm at a loss over this one. I've bought many, many
> hundreds of feet of coax over a 42 year period, and know a defective cable
> when I see it. It's bothersome to me that this outfit sees nothing wrong
> with the stuff they're shipping and would then accuse me of lying about it.
> What conceivable motive could there be for that?? If you do buy cable from
> these guys, for Pete's sake go over it very closely before installing it.
> If you don't know good coax from bad, here's some tips:
>

> 1. If the coax has lumps in it (like a snake that just ate), then it's BAD.
>
> 2. If the copper shield is badly oxidized (not shiny copper color) when you
> strip the jacket off to install the connectors, then it's BAD
>
> 3. If you run your hand down the cable and feel rough spots as if it had
> been drug along a concrete driveway, then it's BAD
>
> 4. If you can see the seam where the jacket was installed, look very closely
> and flex the cable to as to stretch this area of the cable. If you see pin
> holes in the jacket, then its BAD. If you can see the inner copper braid
> through any of the holes, then it's REALLY BAD.
>
> All of these conditions existed in the cable that Radio Works sent to me.
> They may also have all existed in the second shipment - I stopped looking
> after finding pin holes in the first 10 feet of the cable.
>
> I've never heard anything negative about Radio Works before, and have no
> opinion on any of their many other products. However, I can assure you that
> at least one type of coax they're selling is just plain poor quality - make
> that defective. Furthermore, if you attempt to any such problems with them,
> you'll be subjected to the ignorance and wrath of their office manager
> (Judy?). I ordered replacement cable from The Wireman (no connection to
> them, but have received nothing but high quality cable from them over the
> years).
>
> K8AC
> Floyd Sense - Angier, NC

2457. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 01:21:38 UTC
From: richardharrison@webtv.net
Message-ID: <18426-3A7CAEA2-89@storefull-111.iap.bryant.webtv.net>
Source record: 170929

Ian Jackson wrote:
"---why do the Americans invariably get the use of (it`s) and (its) wrong?"

On the American side of the Atlantic, I was taught the apostrophe is used to indicate a contraction, and the omission of the second (i) in (it is). Thus we have (it`s).

For the possessive (its), no apostrophe is used.

There are three words that sound alike. They are: to, too, and two. Explain please.

Best regards, Richard Harrison, KB5WZI

2458. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 01:37:28 UTC
From: richardharrison@webtv.net
Message-ID: <18427-3A7CB258-48@storefull-111.iap.bryant.webtv.net>
Source record: 170930

Ian Jackson wrote:
"My other bitch is the use of "you and I" in those situations where "you and me" is correct---."

You and I know better, but it makes little difference to you and me. You wouldn`t say:
"Me know better", would you?

Best regards, Richard Harrison, KB5WZI

2459. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 02:01:17 UTC
From: Woody <woody.white@att.net>
Message-ID: <3A7CB93F.FB79DC60@att.net>
Source record: 170931

A natural for Nags Head would be a kite. You might need some help to fly the kite and operate at the same time, but.. Use some thin wire w/the string line. Best way is if you can find some WW2 surplus aircraft trailing ant wire. Fair Radio used to have it. Phosphor bronze if I recall, with a fiber core. Light, strong, flexible and already on a spool. Obviously, beware of power lines!!!!! Drive a ground rod into the wet sand near the water line, use an antenna tuner and have at it.
--
Woody, WB4QXE
For Ham Radio homebrewing and
Scanning Electron Microscope Images,
visit: http://woody.white.home.att.net

2460. Re: How long can a ground strap be on a mobile screwdriver antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 04:17:11 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <bJ4f6.278800$hD4.67179435@news1.rdc1.mi.home.com>
Source record: 170933

That is it Dick. Any slop could cause static and noise.
You can not depend on the hitch bolts to the frame to give a good path
either.
Metal parts that move and rub against one another is a possable source of
noise.
It made a noticable difference in noise when I straped everything to the
frame with wire.

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:mbao7tki0c36btmhroo2c2gn4jha00an6t@4ax.com...
> What's wrong with using the hitch itself? Surely it is grounded to
> the frame of the vehicle which should be grounded to the body. You
> can always add additional ground straps from the frame to body. I had
> a large nut welded to the top of the receiver (after drilling a hole
> through the receiver) into which I have a bolt that I can tighten to
> take out any slop in the receiver as well as provide a good connection
> with the hitch stinger. This could also be done on the bottom (or
> side) if you can't easily get to the top for drilling and welding.
> Then you only have to be concerned about the connection at the hinge
> which would be easy to strap across. If it's even necessary.
>
> Dick - W6CCD
>
> On Fri, 02 Feb 2001 21:42:57 -0800, Dick Grady <grady@wizard.com>
> wrote:
>
> >I am considering purchasing the High Sierra screwdriver antenna for my
1999
> >Chevy Tahoe. I want to mount it on the rear of the vehicle, because the
Tahoe
> >is wide and when I'm driving up dry washes here in the NV and CA deserts
I don't
> >want the antenna catching on bushes and rock out-croppings. High Sierra
sells a
> >mount which fits into a 2x2 receiver trailer hitch, which would place the
> >antenna about a foot behind the back bumper. See the upper left photo on
> >http://www.hsantennas.com/inpics2.htm . The mount hinges back to allow
for
> >opening the tailgate. So allowing for this lean-back, I estimate I'll
need 2.5
> >to 3 feet of ground strap to reach the metal body of the vehicle. Is
this
> >length ground strap OK, or is it too long for good performance in the
upper

> >frequency HF bands?
>

2461. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 04:18:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7CD80E.728A42A3@IEEE.org>
Source record: 170934

Dennis Collin wrote:
> It "gets" a lot of us, too. There are lots of examples of wayward
> apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
> some common examples here. An apostrophe does NOT mean "look out,
> here comes an 'S'!".

Actually Dennis, I do believe that QSL's is the correct way to
pluralize QSL. 73's is the correct way to pluralize the number 73.
From Webster's: "apostrophe - a mark ' used to indicate ... the
plural of letters or figures" (figures meaning numbers)

There are two t's in the word "letter". That's an absolutely correct
English statement. QSL's, SASE's, and QSO's seem to me to be correct
for the same reason.
--
http://www.mindspring.com/~w6rca

2462. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 04:40:49 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <b35f6.721$l5.608414@newsfeed1.thebiz.net>
Source record: 170935

Just a heads up - information recently posted to the Towertalk reflector indicates that the Vectronics VEC-584B is probably NOT the same as the MFJ 259B. It appears to be equivalent to the older MFJ 259. Refer to the Towertalk Feb 2001 archive at www.contesting.com to read the postings.

73,
Barry N1EU

Ken Anderson <longrange2@home.com> wrote in message
news:3A78B6C5.F2B836E@home.com...
> If you have been wanting an antenna analyzer, RadioShack.com has the
> Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from
> Radio Shack.com. This price may not apply at the retail stores. This
> unit is the same as the MFJ 259B MFJ and Vectronics are sister
> companies, and the product is similar, with same features and
> functions. I had to search on the RS product number at the
> Radioshack.com website. the number is 940-0683. 73, KC0INZ
>

2463. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 04:53:08 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <efnp7t80bn5f8kcn0bgfhlo1vnar128bbc@4ax.com>
Source record: 170936

Of course you realize that 73's is an absolutely incorrect term. 73 stands for, "best regards." 73's means best regards's. Don't know why 73's always grates on me like scratching your fingernails on a blackboard, but it does.

Dick - W6CCD

On Sat, 03 Feb 2001 22:18:22 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

>Dennis Collin wrote:
>> It "gets" a lot of us, too. There are lots of examples of wayward
>> apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
>> some common examples here. An apostrophe does NOT mean "look out,
>> here comes an 'S'!".
>
>Actually Dennis, I do believe that QSL's is the correct way to
>pluralize QSL. 73's is the correct way to pluralize the number 73.
>From Webster's: "apostrophe - a mark ' used to indicate ... the
>plural of letters or figures" (figures meaning numbers)
>
>There are two t's in the word "letter". That's an absolutely correct
>English statement. QSL's, SASE's, and QSO's seem to me to be correct
>for the same reason.

2464. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 04:53:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7CE040.B51CDF4C@IEEE.org>
Source record: 170937

Dick Hughes wrote:
> Of course you realize that 73's is an absolutely incorrect term. 73
> stands for, "best regards." 73's means best regards's. Don't know
> why 73's always grates on me like scratching your fingernails on a
> blackboard, but it does.

73's is the correct way to pluralize the number 73. Why can't it
mean "Lots of best regards"?
--
http://www.mindspring.com/~w6rca

2465. Capacitance hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 05:33:01 UTC
From: jason_hsu@my-deja.com
Message-ID: <95ipieaak1@nnrp1.deja.com>
Source record: 170940
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.equipment

I understand that capacitance hats are a loading scheme used to work low frequencies with a shortened antenna. Capacitance hats are more efficient than inductive loading coils but aren't very practical for mobile use (due to the impact of the wind).

My questions:
1. How close to the top of an antenna must the capacitance hat be? Does it have to be at the very top, or can it be several inches below the top?
2. If I buy a Screwdriver antenna, can I use a shorter whip antenna combined with a capacitance hat if the longer whip makes the overall antenna height too great? (I live in an apartment, and I am interested in buying a Screwdriver antenna.)
3. Can I buy a capacitance hat from vendors?
4. Are there formulas that one can use to calculate various performance parameters of a capacitance hat?
5. What are the ramifications of different capacitance hat designs? Designs include a single wire, disk, circle with spokes, and spider webs.
6. How do you build a capacitance hat? I imagine that various mechanical issues (supporting all the conductors, keeping the capacitance hat from sliding down the whip, etc.) come into play.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

2466. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 05:38:33 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <t7pqlo56a54129@corp.supernews.com>
Source record: 170938

> 73's is the correct way to pluralize the number 73.

"Best Regardses"???

73,

John. K6QQ

2467. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 05:40:04 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <UW5f6.165619$ge4.58072224@news2.rdc2.tx.home.com>
Source record: 170939

You are right, Ian. But then, I'm cheered by the fact that there are enough of us here who also value the language. Of course, that's probably because we're all a bunch of old fogies (or is that fogie's).

Okay, now for my bitch. It's so great that we can have these discussions with people from all over the world on these newsgroups. So why the heck don't we tell each other where we're from? We always give our QTH on the air. Why not here?

Pete, KA&#65533;TZK Colorado

2468. Ground plane for supplementing radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 05:55:42 UTC
From: jason_hsu@my-deja.com
Message-ID: <95iqsu$b44$1@nnrp1.deja.com>
Source record: 170943

QUESTION: Does supplementing radials with a metal surface connected to the antenna ground substantially reduce ground losses?

As I understand it, the ideal ground plane for a vertical antenna is an infinitely large conductive plane. RF emitted by the antenna strikes the ground plane, and the interaction results in RF currents in the ground plane. These RF currents need a conductive path to the antenna in order avoid producing electromagnetic waves that destructively interfere with the already existing waves. (How accurate is this depiction?)

Except when vertical antennas are used for mobile purposes or in environments with a highly conductive ground (like near saltwater), radials are used to approximate the ground plane by providing conductive paths to the antenna for the RF currents. The more radials and the longer they are, the better the ground plane and the lower the ground losses. The more closely packed the radials are, the less additional improvement there will be if an additional radial is added.

So let's return to my question: Does supplementing radials with a metal surface connected to the antenna substantially reduce ground losses?

It seems to me that adding even a small metal plane (provided by the vehicle's metal body in the case of mobile applications) to the radials would substantially improve things. In a network of radials, some of the RF currents will form between the radials and lack a conductive path to the antenna. Adding a small metal surface electrically attached to the antenna ground should be a substantial improvement. ALL RF currents that end up on the conductive surface have a conductive path to the antenna. This is like having an infinite number of radials with no gaps in between.

Assuming that you aren't operating mobile and CANNOT mount the antenna on your car and run coax to your shack, would you be able to substantially improve the ground plane by supplementing radials with the metal surface I described?

Has anyone done this? What do you think of these ideas for a metal ground plane?
1. Using a thin sheet of metal (perhaps a piece of aluminum siding)
2. Wrapping a sheet of linoleum flooring with aluminum duct tape
3. Aluminum foil (albeit reinforced with tape)

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com

http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

2469. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 06:03:24 UTC
From: The Famous KSOF <NOSPAMjmackey@parg.org>
Message-ID: <Mg6f6.371015$U46.10970564@news1.sttls1.wa.home.com>
Source record: 170941

TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote
> I have a simple question: can I use a tv-antenna for 50 MHz on 6m ?

Yes, it will work for receive, don't transmit.

2470. Re: Ground Mounts for Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 06:07:44 UTC
From: Timmins <n3ddy@yahoo.com>
Message-ID: <Hk6f6.2$K77.239@newsfeed.slurp.net>
Source record: 170942

I mounted a Butternut HF6v (26') on a 8' section of 1" pipe driven about 6' into the ground...using 4 stainless steel hose clamps... the u-bolts were not nearly as secure. ..when the neighbor kids would leave it alone, it worked well.....and a WHOLE lot cheaper. Stood up to wind for 4 years... still would but I moved... and sold the antenna. Cut the end of the pipe you are going to drive in at a 45 degree angle with a hacksaw, it'll drive a WHOLE lot easier....

de N3DDY

"Janice and Ed Senior" <senior@best.com> wrote in message news:95hv6p$2kf4$1@nntp1.ba.best.com...
Hi - I am looking for a suitable ground mount for a light-weight vertical antenna.

The antenna is 25' tall, and weighs about 20 lb.
It will go on a base mast about 12' tall. Base mast might be anything from TV mast to 1-1/2" galvanized.

Ideally, I'd like the whole thing to be strong enough to be self-supporting. (The antenna section is.)

All I have come up with so far is the Gap "Quick Mount," which is a basic, light-duty tilt-over.

I know there are other items out there, such as tilt-overs with cable winches (probably overkill for this). But I can't locate any of them on the net; and HRO just gives me blank stares.

Does anyone have any suggestions for suitable hardware, and where to find it?

Thanks and 73, Ed W6LOL

2471. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 06:30:03 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95istb$1ki$0@208.206.142.68>
Source record: 170945

Ian Jackson wrote:
>
> Sorry for stirring, and nothing to do with radio, but why do the
> Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
> makes typos, but this is beginning to get to me!
>
> FYI...
> 'It's' is 'it is'.
> 'Its' is 'belonging to it'.
> It is (ie it's) an irregular use of the apostrophe. There are a few
> others.

Americans DON'T invaribly get it wrong. Once I never made that mistake,
nor a number of others that I now seem to come up with routinely. It's
known as years of service degradation.

2472. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 06:34:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95it5r$1ki$1@208.206.142.68>
Source record: 170946

```
Richard Harrison wrote:
>
> Ian Jackson wrote:
> "My other bitch is the use of "you and I" in those situations where "you
> and me" is correct---."
>
> You and I know better, but it makes little difference to you and me. You
> wouldn`t say:
> "Me know better", would you?

There are rules and there are exceptions.
```

2473. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 06:57:00 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <Ivt8Ot6M=RZXMGjfAuQjP46giRzt@4ax.com>
Source record: 170947

On Sat, 03 Feb 2001 22:18:22 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Dennis Collin wrote:
>> It "gets" a lot of us, too. There are lots of examples of wayward
>> apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
>> some common examples here. An apostrophe does NOT mean "look out,
>> here comes an 'S'!".
>
>Actually Dennis, I do believe that QSL's is the correct way to
>pluralize QSL. 73's is the correct way to pluralize the number 73.
>From Webster's: "apostrophe - a mark ' used to indicate ... the
>plural of letters or figures" (figures meaning numbers)
>
>There are two t's in the word "letter". That's an absolutely correct
>English statement. QSL's, SASE's, and QSO's seem to me to be correct
>for the same reason.

Hi Cecil,

For the general authority, consult :
"The Chicago Manual of Style," 6.10

Abbreviations with periods, lowercase letters used as nouns,
and Capitol letters that would be confusing if 's' alone were added:
Ph.D.'s x's and y's SOB's

There is something poetic about the cosmic conjuction of interest and
examples.

73's (so as to not confuse - 88's for the others)
Richard Clark, KB7QHC

2474. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 07:28:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95j0bq$9p2$0@208.206.142.68>
Source record: 170948

Richard Harrison wrote:
>
> Why learn Morse? Only to fill some arbitrary regulatory requirement.

No,Rich, only to 1.) Learn to use a basic communications mode, and
2.) To qualify for an HF amateur radio license so long as that
qualification is on the books as an international requirement.

> You can learn and practice Morse for fun. It hurts nobody. But require
> it? Morse is already phased out of every pursuit except amusement.

Not so, there are still a number or ham radio CW traffic nets that meet
almost daily to pass traffic, mostly for training and practice purposes.
And it is still used on occasion to actually handle traffic.
During the last hurricane season where there were serious effects from
storms experienced in coastal Georgia and Texas, in both those
situations emergency nets handled traffic using Morse code when
conditions deteriorated to the point that SSB was no longer usable. Of
course other modes could have been used had they been in place and at
the ready, but they were not, and CW handled the traffic with no
difficulty, since there were hams present who were proficient in its
use.
Comes the day than no hams are proficient in its use, that won't be
possible. That is one reason some advocates of retaining a CW
qualification continue to promote it.

> Even last resort claims are more fancy than fact.

In your experience, I'm sure that is correct. All others don't share
your view, however, and I have personally experienced circumstances
where I would have indeed been pleased to have had radiotelegraphy to
fill in for commercial communications failures. But no CW gear was
available since it had been replaced and phased out years earlier. I
don't advocate that it not have been phased out, that was the only
logical action. But in ham radio it is different. Our mission, at least
those of us who consider ham radio as anything more than "Just a hobby"
----those of us who believe it to actually be a viable backup
communications service to serve on those rare occasions when failure
call it into play---- know without doubt that Morse on radio is a
viable and potentially valuable resource, still. Even in the face of all
that has come in the recent past. Why? The answer is simple-
Radiotelegraphy remains as the most simple, basic, and most easily
implemented means of radio communication yet devised. *IF* there are
operators available who can use it.

> The idea that Morse enobles doesn`t prove that the same effort spent on
> something else wouldn`t be more enobling.

Not much in life "Enobles". Morse code does not, except in the minds of
some of its opponents. But nothing else is the equivalent of knowing and
being able to use Morse.

> It would very likely be more
> useful to spend your time on something else.

Many people feel that way, and that is certainly their right. And it's
nothing new.

> If you were to become accomplished in music you might entertain music
> lovers, but not on ham radio. You can talk on ham radio, but you would
> likely profit more from studying the art of conversation than learning
> how to say it in Morse.

Until you developed a bad case of laryngitis. Or were too far from your
intended recipient to shout and had no other means to contact him except
Morse. Unlikely, of course.

> The whole Morse argument is beyond odd.

Yes it is. The most odd part of it is that so many who should, and
probably do, know better claim that Morse no longer has potential
communications value.
Just because it has been around a long time and there are many other
more modern modes and methods.

> The majority of the best conversationalists and scientifically astute
> have no interest in Morse code. If they liked Morse they might have
> become hams among whom Morse is still practiced. Why exclude them from
> any ham bands? They could improve the tone. They should be recruited.

It has always mystified me that so many individuals who can learn so
much are put off by so little learning as Morse code represents. When I
decided as a kid to become a ham, I don't think it would have stymied me
if they had required me to learn Greek. For darn sure Morse code didn't.

> Why exclude the inept in science and conversation who don`t do code?
> They might benefit from the amateur experience, and bring something to
> the hobby that is missing.

Who excludes one who decides he doesn't want to learn something that is
really simple but takes a modest amount of time and effort? The person
himself! Why exclude him, indeed!

>
> Numbers count!

Any mathematician will confirm that statement.

> With a large market for ham gear, you might benefit from lower unit
> pricing. With a lot more hams, congress would pay more attention to what
> hams wanted. Bigger is better. Minimum requirements is the way to grow.

I've always been one who felt that it should be only as difficult as necessary to obtain a ham radio license, and never more difficult than necessary. As a practicing Volunteer Examiner for the first eight years of the new VE system I always put that exact philosophy into practice, and there are many licensed hams who were tested by my team who will confirm that. I am not a "big" CW man, by any stretch of the imagination. I do believe firmly, however, that all ham radio operators should feel the responsibility to take it onto themselves to learn to use the most basic and most simple mode of radio communication.
Any ham who cannot operate effective CW is not an accomplished ham, whatever his other accomplishments. CW is BASIC radio communication.

73, Dick Carroll W0EX

2475. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 07:43:00 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j164$25f$11@bashir.peak.org>
Source record: 170950

N2EY <n2ey@aol.com> wrote:
:>
:>Remember when you had to either have had a license before some given
:>date, or have held a license for X years, before you could qualify to
:>try for an Extra license?

: Oh yes. Until the mid '70s it was two years. Then one year - then in the '80s
: it was dropped entirely. And the only experience that counted was as a General
: or Advanced.

It was a lot longer than that, at one time - unless my memory has failed me.

: Remember when you had to pass all the test elements for a given license in
: order at one session - no CSCEs?

: Remember when any failure meant "go home and study for at least 30 days before
: retesting" ?

: Remember when the exams were secret?

: Remember the sending test?

: Remember when the Technician and General used the same written test?

I remember all these, including having to be able to draw various basic
circuits - with components, not just block diagrams.

--
Bill Nelson (billn@peak.org)

2476. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 07:44:08 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j188$25f$12@bashir.peak.org>
Source record: 170949

Dick Carroll <dixie@townsqr.com> wrote:

:> There is no international specification. It was left up to the various
:> countries. It could be 1 character a month, if the regulating authority
:> of some country decided that they wanted it to be that slow.

: No one except the terminally code challenged ever considered anything
: less than 5wpm to be "proficiency". Even the 5wpm'ers don't consider
: that to be.

Only by informal choice. As I stated, there is NO international
specification.

--
Bill Nelson (billn@peak.org)

2477. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 07:52:09 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j1n9$25f$13@bashir.peak.org>
Source record: 170953

Rick Littlefield <k1bqt@aol.com> wrote:

: Cable "leakage" through the shield is not what causes a coax feedline to
: perturb a dipole's VSWR or resonant frequency. It's a lack of isolation
: between the half element connected to the shield and the outer surface of the
: shield itself.

If you are responding to my post, which is not clear since you did not
quote the material to which you are responding, I did not mean leakage
through the coax.

Anyway, I agree with you 100%.

--
Bill Nelson (billn@peak.org)

2478. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 07:53:58 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j1qm$25f$14@bashir.peak.org>
Source record: 170951

Mark Keith <nm5k@wt.net> wrote:
: Bill Nelson wrote:

: For instance a half wave dipole
:> : that is 'end-fed' has an impedance of about 300 Ohms and can be fed with a
:> : balun/transformer 1:4.

: Like Reg says the impedance will be much higher than 300 ohms. A 4:1

Did I really say 300 ohms? My apologies for the brain fart. That is
about an order of magnitude off.

--
Bill Nelson (billn@peak.org)

2479. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 07:54:42 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j1s2$25f$15@bashir.peak.org>
Source record: 170952

```
Reg Edwards <g4fgq.regp@btinternet.com> wrote:
:> Adam <digipoint@hotmail.com> wrote:
:> : point where the impedance is not 50 Ohms. For instance a half wave
: dipole
:> : that is 'end-fed' has an impedance of about 300 Ohms and can be fed with
: a
: ===========================
: An endfed half-wave antenna has an impedance more like 3000 ohms than 300
: ohms.

Oops, as I noted in another response, that was a brain fart. My apologies.

--
Bill Nelson (billn@peak.org)
```

2480. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 08:04:33 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j2eh$25f$16@bashir.peak.org>
Source record: 170955

Dennis P. Stahr <irfutures@earthlink.net> wrote:
: Well, if you AKS (or is it axe) me, and you didn't, its's its all unrelevent
: and irregardless, of whos in the behind of the comment, aint dat right?

: Let's get "up to 20% off... and more" (how the heck can that be? If you can
: get up to 20% off, how can you then get more)?

Easy. You can have varying amounts up to 20% off on various single items,
but a larger discount for multiple purchases.

: And how 'bout dis... "you can save up to 40% off the regular price". NO,
: NO, NO... you either "save up to 40%" or "get 40% off the regular price",
: but not both!

Nope - not when talking about different items.

: It's its like using double negatives ain't it not?

No.

--
Bill Nelson (billn@peak.org)

2481. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 08:07:21 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95j2jp$25f$17@bashir.peak.org>
Source record: 170954

BarryG <bgNOSPAM@albany.net> wrote:
: Just a heads up - information recently posted to the Towertalk reflector
: indicates that the Vectronics VEC-584B is probably NOT the same as the MFJ
: 259B. It appears to be equivalent to the older MFJ 259. Refer to the
: Towertalk Feb 2001 archive at www.contesting.com to read the postings.

But still a decent price - correct?

--
Bill Nelson (billn@peak.org)

2482. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 08:31:55 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <ICJy9AA7NRf6EwZR@g3ohx.demon.co.uk>
Source record: 170959

In article <18427-3A7CB258-48@storefull-111.iap.bryant.webtv.net>,
Richard Harrison <richardharrison@webtv.net> writes
>Ian Jackson wrote:
>"My other bitch is the use of "you and I" in those situations where "you
>and me" is correct---."
>
>You and I know better, but it makes little difference to you and me. You
>wouldn`t say:
>"Me know better", would you?
>
>Best regards, Richard Harrison, KB5WZI
>

Surprisingly, in one of the UK's most famous and long-running radio soaps ('The Archers*' - have you heard of it??), even the more 'upper-class' characters often say things like 'Richard and me know better'!!! I presume that this reflects the ignorance of the scriptwriters rather than the authenticity of the regional way of speaking (somewhere to the west of Birmingham, England).

Cheers,
Ian.
*Just celebrated its half-century!

2483. Re: 6m TV Antenna for amateur ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 09:03:43 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <95j5vl$7o0$04$1@news.t-online.com>
Source record: 170956

Very good help ! For receive,I can use nearly anything,the trasnsmission is the hot aspect

"The Famous KSOF" <NOSPAMjmackey@parg.org> schrieb im Newsbeitrag news:Mg6f6.371015$U46.10970564@news1.sttls1.wa.home.com...
> TruckDrivingMan <tansorg@cs.tu-berlin.de> wrote
> > I have a simple question: can I use a tv-antenna for 50 MHz on 6m ?
>
> Yes, it will work for receive, don't transmit.
>
>

2484. Discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 09:16:03 UTC
From: francis <francis.t@wanadoo.fr>
Message-ID: <95j6g6lpl1@wanadoo.fr>
Source record: 170957

Hello,

I wish to realise a discone antenna, but i don't know how to calculate the dimensions.

Thank you to help me.

Sorry for my English.

Francis

2485. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 09:33:29 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <Dh9A1FApHSf6Ewry@g3ohx.demon.co.uk>
Source record: 170958

In article <95it5r$1ki$1@208.206.142.68>, Dick Carroll
<dixie@townsqr.com> writes
>
>
>Richard Harrison wrote:
>>
>> Ian Jackson wrote:
>> "My other bitch is the use of "you and I" in those situations where "you
>> and me" is correct---."
>>
>> You and I know better, but it makes little difference to you and me. You
>> wouldn`t say:
>> "Me know better", would you?
>
>
>
> There are rules and there are exceptions.

True, Dick, true.
I must confess that even I occasionally fail to use 'perfect' English.
Sometimes this is in keeping with common useage, and occasionally
because of sheer ignorance. However, there is no need to invoke
'exceptions' in the case of 'its' and 'it's'. 'It is' is 'it's', and
'its' ain't. Anything otherwise is simply wrong, even in 'American'
English.

Regarding the 'you and I' syndrome, I have occasionally had arguments
with otherwise intelligent people who insist that you ALWAYS say 'you
and I', even when it is the object or indirect object in the sentence.

Cheers,
Ian..

2486. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 09:35:28 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <OxvDRJAgJSf6Ewrc@g3ohx.demon.co.uk>
Source record: 170960

In article <3a7ca1b3.35702561@news.mybizz.net>, Dennis Collin
<dcollin@connix.com> writes
>On Sat, 3 Feb 2001 22:08:54 +0000, Ian Jackson
><ianjackson@g3ohx.demon.co.uk> wrote:
>
>>Sorry for stirring, and nothing to do with radio, but why do the
>>Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
>>makes typos, but this is beginning to get to me!
>
>>Ian.
>
>It "gets" a lot of us, too. There are lots of examples of wayward
>apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
>some common examples here. An apostrophe does NOT mean "look out,
>here comes an 'S'!".
>
>But does is really matter? Nah ....
>

Oh yes it does!
Ian.

2487. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 10:09:52 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95jqfffma3@lure.pipex.net>
Source record: 170887

"Ian Jackson" wrote
> My other bitch is the use of 'You and I' in those situations where 'You
> and me' is correct (sorry, Sir Cliff Richard, but you screwed up 'good'
> in 'Summer Holiday'). Have you ever tried to explain the difference to
> some computer whiz-kid (does that date me?)?

The acid test is to drop the "You and" part of the sentence; If what is left
is not grammatical then you need to use the alternative personal pronoun.
Add back the "You and" to the sentence, it's now correct.

Perhaps you would refresh my memory on the "Summer Holiday" reported error.

"to go boldly" OR "to boldly go"

The rules were changed recently, by whoever it is that sets himself up as
the arbiter of the living English Language

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

2488. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 10:16:25 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <uhpL1QA5vSf6EwuS@g3ohx.demon.co.uk>
Source record: 170961

In article <95istb$1ki$0@208.206.142.68>, Dick Carroll
<dixie@townsqr.com> writes
>
>
>Ian Jackson wrote:
>>
>> Sorry for stirring, and nothing to do with radio, but why do the
>> Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
>> makes typos, but this is beginning to get to me!
>>
>> FYI...
>> 'It's' is 'it is'.
>> 'Its' is 'belonging to it'.
>> It is (ie it's) an irregular use of the apostrophe. There are a few
>> others.
>
>
> Americans DON'T invaribly get it wrong. Once I never made that mistake,
>nor a number of others that I now seem to come up with routinely. It's
>known as years of service degradation.

But at least you KNOW that you have made a mistake (and will probably
try to correct it). Many don't and won't.
Ian.

2489. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 10:25:01 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <3h4NIUA93Sf6EwtK@g3ohx.demon.co.uk>
Source record: 170963

In article <UW5f6.165619$ge4.58072224@news2.rdc2.tx.home.com>, Pete
Holden <peholden@home.com> writes
>You are right, Ian. But then, I'm cheered by the fact that there are enough
>of us here who also value the language. Of course, that's probably because
>we're all a bunch of old fogies (or is that fogie's).
>
>Okay, now for my bitch. It's so great that we can have these discussions
>with people from all over the world on these newsgroups. So why the heck
>don't we tell each other where we're from? We always give our QTH on the
>air. Why not here?
>
>Pete, KAï¿½TZK Colorado
>
>
Hi, Pete.
Let me tell you that, in the UK.RADIO.AMATEUR ng, almost NOBODY gives
ANY indication of location when posting a 'for sale' or 'wanted'. And
then they sulk when you take them to task about it!! Now I know that UK
isn't as big as the USA, but....

73,
Ian (name and callsign as in e-mail address, QTHR in callbook(s) (ie,
particulars correct), located in south Buckinghamshire, England.)

2490. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 10:40:50 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <DQ7QZAAyGTf6EwYd@g3ohx.demon.co.uk>
Source record: 170962

In article <3A7CD80E.728A42A3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org>
writes
>Dennis Collin wrote:
>> It "gets" a lot of us, too. There are lots of examples of wayward
>> apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
>> some common examples here. An apostrophe does NOT mean "look out,
>> here comes an 'S'!".
>
>Actually Dennis, I do believe that QSL's is the correct way to
>pluralize QSL. 73's is the correct way to pluralize the number 73.
>From Webster's: "apostrophe - a mark ' used to indicate ... the
>plural of letters or figures" (figures meaning numbers)
>
>There are two t's in the word "letter". That's an absolutely correct
>English statement. QSL's, SASE's, and QSO's seem to me to be correct
>for the same reason.

Sorry, but I can't agree with Webster on this point. I cannot see the
need to use an apostrophe when adding an 's' to indicate a plural. I
suspect that Webster is simply following increasingly common usage in
the USA rather than correctness. (Yes, I know that 'common usage'
eventually leads to 'correctness').

The RSGB have an approved style of 'grammar' to be used when writing for
their numerous publications. For example, you should always use lower
case where possible, and no 'points' except where the abbreviation could
be mistaken for a word, ie (not i.e.) tv (not TV), i.f. (not if or IF).
It seems to work well, and I use this style for all sorts of things.

The use of the ''s' to indicate plurals is OK in Dutch (on the rare
occasions where this is used instead of 'en'). Surprisingly, they DON'T
use the 's on the rare occasions where they use the 's' to indicate the
posessive. In Britain, we have what is known as the 'Grocer's
Apostrophe' (because of its frequent use on boards outside grocers'
shops when the plural is indicated). Then there's the question of the
'Grocer's Tomatoe/Tomato's and Potatoe/Potatoe's'. (I believe that a
notable American once got THAT wrong!).

While (Napoleon?) said "The English are just a nation of shopkeepers", I
must conclude that the Americans are a nation of Dutch grocers.

73 (not 73's or 73'S),
Ian.

2491. Re: Discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 10:55:45 UTC
From: OH9MXE <oh9mxe@sral.fi>
Message-ID: <Ryaf6.72$LL.2229@read2.inet.fi>
Source record: 170964

Hi.

tips etc. from:
ARRL :
The ARRL Antenna Book (18th edition, page 7-17)
Vertical antenna classics

From internet:

http://www.qsl.net/dl5aza/index.html
http://www.t3.rim.or.jp/~qaz/discone.htm (wrong
language, but construction pictures)
http://www.qsl.net/n0wnt/ftpfiles.htm

73's de Markus OH9MXE

"francis" <francis.t@wanadoo.fr> wrote in message
news:95j6g6lpl1@wanadoo.fr...
> Hello,
>
> I wish to realise a discone antenna, but i don't know how to calculate the
> dimensions.
>
> Thank you to help me.
>
> Sorry for my English.
>
> Francis
>
>

2492. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 11:09:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A7D387C.53AE45AE@eznec.com>
Source record: 170965

"Peter O. Brackett" wrote:

> . . .

> BTW... one measure of the ideality of conventional transformer's is the
> ratio of their leakage inductance to their magnetizing inductance, i.e. the
> higher this ratio is the better. For instance a ratio of more than 1000 is
> very desirable, and many transformer designs can achieve upward of 100,000
> for that ratio.
>
> I have often wondered?
>
> Is there a similar measure of ideality for transmission line transformers?
> How does one characterize the non-ideality of transmission line or "current"
> baluns?

Transmission line transformers can be evaluated like any other kind. When conventionally connected (that is, with the input and output taken across windings), their nonidealities have the same effects as in any other transformer. The main advantage to a transmission line transformer in these applications is that you do get an extraordinarily high coefficient of coupling and consequently small leakage impedance. And in cases where the winding length is a significant fraction of a wavelength, there are advantages to maintaining a constant impedance between windings.

The 1:1 current balun is connected differently, however. It can be accurately described as a common mode choke, with each winding in series with one conductor. The lack of concern about magnitizing inductance affecting the differential impedance isn't because it's a transmission line transformer but because of the way it's connected. You basically want two things from one of these. One is a high common mode impedance. This is of course accomplished by maximizing the winding impedance, which is one of the things you want to do with a conventionally connected transformer -- but for a different reason. In the balun, the balun's very ability to balance currents depends on its common mode impedance relative to the impedance of the external circuit. Leakage inductance or impedance is similarly undesirable as in a conventional transformer. Here, it manifests itself as a series impedance to differential currents. But as I mentioned, it's seldom a concern, since it's generally very small because of the transmission line windings.

The way I like to evaluate a 1:1 current balun is to connect an unbalanced signal source to the input. To the output terminals I connect equal value resistors to ground, at the same physical point as the ground side of the balun input. I judge the balun by its ability to

produce equal voltages or currents across the two resistors. A good voltage balun will also show up good in this test. The second test is to connect the output side of the "hot" winding (the winding whose input end is connected to the hot side of the input) to ground, and the output side of the "cold" winding through a 51 ohm resistor to ground. A perfect current balun would deliver the full input signal across the resistor. (A voltage balun would not.) An inspection will reveal this to be a simple polarity reversing transformer. It represents the worst possible case of a current balun attempting to deliver equal currents into the worst possible imbalanced load condition. In this test, conventional transformer analysis can be applied, and leakage and magnitizing impedances will have the effects you'd expect on input impedance. A current balun won't usually be subjected to this severe of a load imbalance, but it's a good worst case test to use in comparing baluns.

Kevin, W9CF, has written an excellent treatise on baluns, and particularly their connection at the input or output of a tuner. You can find it at http://fermi.la.asu.edu/w9cf/articles/balun/index.html. I highly recommend it.

Roy Lewallen, W7EL

2493. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 11:23:18 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <95jficoat1@nnrp2.phx.gblx.net>
Source record: 170966

>> Ian Jackson wrote:
>> "---why do the Americans invariably get the use of (it`s) and (its)
>> wrong?"

> Richard Harrison wrote:

> There are three words that sound alike. They are: to, too, and two.
> Explain please.

They're context-sensitive. :-)

My favorite is the continual mix-up of 'principal' and 'principle'.

"James' principal reference for antenna design principles is still
John Kraus' book on the subject".

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

2494. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 12:24:21 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <4diq7tsna274010mraqhi62a3nlda5mub0@4ax.com>
Source record: 170967

On Sat, 03 Feb 2001 21:53:08 -0700, Dick Hughes <rhughes33@cableone.net> wrote:

>Of course you realize that 73's is an absolutely incorrect term. 73
>stands for, "best regards." 73's means best regards's. Don't know
>why 73's always grates on me like scratching your fingernails on a
>blackboard, but it does.

I don't know which I hate worse - hearing "73's" or hearing someone complain
about it. English is a "living language", guys. Let it breathe.

73, Bill W7TI

2495. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 12:28:23 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <bjiq7t4i3gjt9r8fhu6f2kjen5pr21oaqi@4ax.com>
Source record: 170968

On Sun, 4 Feb 2001 10:40:50 +0000, Ian Jackson <ianjackson@g3ohx.demon.co.uk>
wrote:

>The RSGB have an approved style of 'grammar' to be used when writing for
>their numerous publications.

Before attempting to get us Colonists squared away, how about fixing your verbs?
The RSGB is a single entity, therefore, the RSGB has, not RSGB have. Sheesh.

73, Bill W7TI

2496. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 12:40:43 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <7oiq7t8kt4hlgac1mehr6pjr1mho8ds3hj@4ax.com>
Source record: 170869

On Sat, 3 Feb 2001 19:21:38 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>There are three words that sound alike. They are: to, too, and two.
>Explain please.

Very simple explanation: Our ancestors had to choose between creating a new word spelling or deriving meaning from context. With some words they chose one way, with other words, the other. Personally, I think they achieved a reasonable balance. There are something like 50 usages of the word "run". I prefer that to having to learn 50 different spellings of new words. Likewise, in the example above you have three different spellings of the same pronunciation. English already has enough words and/or pronunciations. It's more efficient to derive meaning from context than to try to increase the number of words and/or pronunciations.

73, Bill W7TI

2497. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 12:44:14 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <ufjq7t8akqcoasdc08smvt1isbv4mi384s@4ax.com>
Source record: 170870

On Sun, 04 Feb 2001 05:40:04 GMT, "Pete Holden" <peholden@home.com> wrote:

>So why the heck
>don't we tell each other where we're from? We always give our QTH on the
>air. Why not here?
>
>Pete, KAï¿½TZK Colorado

Physician, heal thyself. I'd guess 80% of the world's people have no idea where "Colorado" is.

73, Bill W7TI
34 14 N
116 20 W

2498. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 12:44:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95jiqa$h3a$1@uranium.btinternet.com>
Source record: 170871

If the coax feeder is 1/4-wavelength long and the braid is properly grounded
at the bottom end there will be a very high impedance at the top and very
little current will flow into the braid.

Will this prevent radiation from the feeder just as the choke balun is
intended to do?

Reg, G4FGQ
========================

Bill Nelson wrote
> Richard Harrison wrote:
>
> : Directly connected coax allows some of the antenna current carried by
> : the shield to travel on the outside of the coax. A balun minimizes
> : current on the outside of the shield.
>
> This is true for a current balun. A voltage balun is much less efficient.
> There was a study of this published in one of the ARRL antenna books, I
> forget which one.
>
> : Current on the outside of the shield causes radiation.
>
> Yep. If there are currents on the outside of the coax, at least for those
> due to leakage from the inside of the shield, then the coax is acting as
> part of the antenna system.
>
> --
> Bill Nelson (billn@peak.org)
>

2499. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 13:06:23 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <jtcf6.12375$mA1.768025@bgtnsc06-news.ops.worldnet.att.net>
Source record: 170872

I'll bet Ian says al u min i um and spells smolder- s m o u l d e r. ;-)

And another thing, we got rid of Clinton, when are you going to get
rid of
those silly wigs.

--
Mike Knowlton
Panama City Fl.

2500. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 13:37:15 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A7D5B0B.8C02936@zylay.com>
Source record: 170873

Bill Turner wrote:

> On Sat, 03 Feb 2001 21:53:08 -0700, Dick Hughes <rhughes33@cableone.net> wrote:
>
> >Of course you realize that 73's is an absolutely incorrect term. 73
> >stands for, "best regards." 73's means best regards's. Don't know
> >why 73's always grates on me like scratching your fingernails on a
> >blackboard, but it does.

Y'all keep talking. I've got to go get some money from the ATM machine.

2501. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 13:40:08 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <tVDU+dA4uVf6EAMO@ifwtech.plus.net>
Source record: 170874

Ian Jackson wrote:
>In article <3A7CD80E.728A42A3@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org>

>>Actually Dennis, I do believe that QSL's is the correct way to
>>pluralize QSL. 73's is the correct way to pluralize the number 73.
>>From Webster's: "apostrophe - a mark ' used to indicate ... the
>>plural of letters or figures" (figures meaning numbers)
>>
>>There are two t's in the word "letter". That's an absolutely correct
>>English statement. QSL's, SASE's, and QSO's seem to me to be correct
>>for the same reason.
>
>Sorry, but I can't agree with Webster on this point. I cannot see the
>need to use an apostrophe when adding an 's' to indicate a plural. I
>suspect that Webster is simply following increasingly common usage in
>the USA rather than correctness. (Yes, I know that 'common usage'
>eventually leads to 'correctness').
>
With "two t's", Cecil quoted the exception and made that the rule.

Really there are no rules, only customs - but if we want to communicate with readers, we do well to follow the customs that they expect. Unfortunately there are several different customs, and lots of would-be rule-makers.

Also the rules, such as they are, were made for "art" writing. Modern commercial and technical writing is full of things the old rule-makers never had to handle.

A consistent and workable policy is to use capital letters for abbreviations and acronyms, with no abbreviation marks unless they are needed for clarity. If you don't need an apostrophe in the plural of he fully expanded form, you don't need one in the plural of the abbreviation either.

You don't *need* an apostrophe in "QSLs", "SASEs" or "QSOs" because there is no doubt about the meaning. "Two t's" is one of the exceptions where you do need one - and anyway, it isn't an abbreviation.

>The RSGB have an approved style of 'grammar' to be used when writing for
>their numerous publications. For example, you should always use lower
>case where possible, and no 'points' except where the abbreviation could
>be mistaken for a word, ie (not i.e.) tv (not TV), i.f. (not if or IF).
>It seems to work well, and I use this style for all sorts of things.
>
RSGB's rules changed, several Editors ago. The lower-case abbreviations

rule never made complete sense, because it regularly had to be broken for "if" in a radio magazine. RSGB now follow the modern convention of using capitals for abbreviations, with no points, so it's now "TV", "IF" and so on.

All kinds of other unnecessary punctuation marks are disappearing too. Points are disappearing after a person's initials - we don't *need* dots to tell us they are abbreviations. In mailing addresses, commas are disappearing after street numbers and from the ends of individual lines. Nobody misses them unless they are needed for clarity (as in 42, 42nd Street).

Now look what you've all gone and done - it's Sunday afternoon and you've pitched me into work mode!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2502. Re: Capacitance hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 13:47:23 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <L3df6.279164$hD4.67416496@news1.rdc1.mi.home.com>
Source record: 170875
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.equipment

Man ..... you aint never seen a TEXAS BUGCATCHER?
They make and sell various sizes of Capacitance hats for mobile use.

http://www.texasbugcatcher.com/cata/tbcspec.htm

William Lee

<jason_hsu@my-deja.com> wrote in message news:95ipieaak1@nnrp1.deja.com...
> I understand that capacitance hats are a loading scheme used to work
> low frequencies with a shortened antenna. Capacitance hats are more
> efficient than inductive loading coils but aren't very practical for
> mobile use (due to the impact of the wind).
>
> My questions:
> 1. How close to the top of an antenna must the capacitance hat be?
> Does it have to be at the very top, or can it be several inches below
> the top?

Either place but best at the top.

> 2. If I buy a Screwdriver antenna, can I use a shorter whip antenna
> combined with a capacitance hat if the longer whip makes the overall
> antenna height too great? (I live in an apartment, and I am interested
> in buying a Screwdriver antenna.)

Yes.

> 3. Can I buy a capacitance hat from vendors?

Yes.

> 4. Are there formulas that one can use to calculate various
> performance parameters of a capacitance hat?
> 5. What are the ramifications of different capacitance hat designs?
> Designs include a single wire, disk, circle with spokes, and spider
> webs.
> 6. How do you build a capacitance hat? I imagine that various
> mechanical issues (supporting all the conductors, keeping the
> capacitance hat from sliding down the whip, etc.) come into play.
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>

> Sent via Deja.com
> http://www.deja.com/

2503. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 13:47:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D5D7C.EA6F28B0@IEEE.org>
Source record: 170876

Bill Nelson wrote:
> Did I really say 300 ohms? My apologies for the brain fart. That is
> about an order of magnitude off.

Bill, Most other posters would call it a "typo". :-)
--
http://www.mindspring.com/~w6rca

2504. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 13:53:12 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D5EC8.28DB951E@IEEE.org>
Source record: 170877

Roy Lewallen wrote:
> The second test is to
> connect the output side of the "hot" winding (the winding whose input
> end is connected to the hot side of the input) to ground, and the output
> side of the "cold" winding through a 51 ohm resistor to ground. A
> perfect current balun would deliver the full input signal across the
> resistor. (A voltage balun would not.) An inspection will reveal this to
> be a simple polarity reversing transformer. It represents the worst
> possible case of a current balun attempting to deliver equal currents
> into the worst possible imbalanced load condition.

Somewhere I read how such a device can be used for an ~180 degree phase
reversal when feeding phased arrays.
--
http://www.mindspring.com/~w6rca

2505. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:00:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D607B.56472A0@IEEE.org>
Source record: 170878

John Moriarity wrote:
>
> > 73's is the correct way to pluralize the number 73.
>
> "Best Regardses"???

Uhhhh John, there is life outside of ham radio. 73's is the correct way to pluralize the number 73. And it means "Lots of Best Regards".
--
http://www.mindspring.com/~w6rca

2506. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:05:37 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D61B1.98BD585A@IEEE.org>
Source record: 170879

Ian Jackson wrote:
> >There are two t's in the word "letter". That's an absolutely correct
> >English statement. QSL's, SASE's, and QSO's seem to me to be correct
> >for the same reason.
>
> Sorry, but I can't agree with Webster on this point.

Sorry Ian, it matters naught that you disagree with Webster's. :-)
--
http://www.mindspring.com/~w6rca

2507. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:09:30 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D629A.32AED1AD@IEEE.org>
Source record: 170880

Bill Turner wrote:
> It's more efficient to derive meaning from context ...

Not for computers.
--
http://www.mindspring.com/~w6rca

2508. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:11:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D6323.252B6BBC@IEEE.org>
Source record: 170881

Bill Turner wrote:
>
> On Sun, 04 Feb 2001 05:40:04 GMT, "Pete Holden" <peholden@home.com> wrote:
>
> >So why the heck
> >don't we tell each other where we're from? We always give our QTH on the
> >air. Why not here?
> >
> >Pete, KAï¿½TZK Colorado
>
> --
>
> Physician, heal thyself. I'd guess 80% of the world's people have no idea where
> "Colorado" is.

I'll bet more know where "Texas" is. :-)
--
http://www.mindspring.com/~w6rca

2509. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:13:04 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D6370.54D632EC@IEEE.org>
Source record: 170882

Dick Carroll wrote:
> Americans DON'T invaribly get it wrong. Once I never made that mistake,
> nor a number of others that I now seem to come up with routinely. It's
> known as years of service degradation.

Or maybe senility. :-)
--
http://www.mindspring.com/~w6rca

2510. Re: Capacitance hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:17:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D6490.846C77B6@IEEE.org>
Source record: 170883
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.equipment

jason_hsu@my-deja.com wrote:
>
> I understand that capacitance hats are a loading scheme used to work
> low frequencies with a shortened antenna. Capacitance hats are more
> efficient than inductive loading coils but aren't very practical for
> mobile use (due to the impact of the wind).

Take a look at my top hat at
http://people.delphi.com/cecilmoore/mobnow.htm
--
http://www.mindspring.com/~w6rca

2511. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:23:17 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95jqfhfma4@lure.pipex.net>
Source record: 170888

"Cecil" wrote ...
> Dennis Collin wrote:
> > It "gets" a lot of us, too. There are lots of examples of wayward
> > apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
> > some common examples here. An apostrophe does NOT mean "look out,
> > here comes an 'S'!".
>
> Actually Dennis, I do believe that QSL's is the correct way to
> pluralize QSL. 73's is the correct way to pluralize the number 73.
> From Webster's: "apostrophe - a mark ' used to indicate ... the
> plural of letters or figures" (figures meaning numbers)

Ah! only Fowler (1926)*, with his relaxed attitude,
no fool to be chained by dogma, got it right,

see POSSESSIVE PUZZLES and PLURAL ANOMALIES

The English Language is a living language,
like it or not others will change it to suite themselves,
and whilst they remain in the majority you can like it or lump it,
but change or freeze it you won't (will not).

> There are two t's in the word "letter".
>That's an absolutely correct English statement.

In a Living Language there are no ABSOLUTES.
Absolutes only occur in dead langauges;
languages that can no longer be changed to fit their purpose in daily use.

>QSL's, SASE's, and QSO's seem to me to be correct
> for the same reason.

Try 40s and 50s to indicate the decade of years, no apostrophe required.

--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

*Fowler's,
"A Dictionary of Modern English Usage",
Clarendon Press, Oxford
ISBN 0 19 869115 7

2512. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:27:00 UTC
From: Jim Lill <jpl@vectorbd.com>
Message-ID: <95jori$u2r$1@nnrp1.deja.com>
Source record: 170886

Thanks to all for their thoughts....

I am still looking for the angle info on the bowtie (flat/planar type)

I may have to go to RadioShack and see if they have one I can eyeball.

-Jim

Sent via Deja.com
http://www.deja.com/

2513. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:28:10 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7D66FA.5DE6C740@IEEE.org>
Source record: 170884

Dick Carroll wrote:
> Any ham who cannot operate effective CW is not an accomplished ham,
> whatever his other accomplishments.

Opinions are like a$$holes, Dick. Everyone's got one. In your opinion,
there are no accomplished nocode techs. Reality doesn't agree with you.
--
http://www.mindspring.com/~w6rca

2514. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:38:14 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <82d9OsZCvkaBDY8atohZhhugrVga@4ax.com>
Source record: 170885

Ken Anderson <longrange2@home.com> wrote:

>If you have been wanting an antenna analyzer, RadioShack.com has the
>Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from
>Radio Shack.com. This price may not apply at the retail stores. This
>unit is the same as the MFJ 259B MFJ and Vectronics are sister
>companies, and the product is similar, with same features and
>functions. I had to search on the RS product number at the
>Radioshack.com website. the number is 940-0683. 73, KC0INZ

The units are similar but not the same.

See

http://www.vectronics.com/vectronics/analyzer/swr584.html

and

http://www.mfjenterprises.com/index.htm

to directly compare.

Bob
k5qwg

2515. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 14:57:31 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <5brq7t0ph7atl0j3trevhgomdhk63d0e78@4ax.com>
Source record: 170889

Hmmmm. I guess I could use 73's's when I want to wish lots and lots
of best regards. :-)

Dick - W6CCD

On Sat, 03 Feb 2001 22:53:20 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Dick Hughes wrote:
>> Of course you realize that 73's is an absolutely incorrect term. 73
>> stands for, "best regards." 73's means best regards's. Don't know
>> why 73's always grates on me like scratching your fingernails on a
>> blackboard, but it does.
>
>73's is the correct way to pluralize the number 73. Why can't it
>mean "Lots of best regards"?

2516. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 15:08:10 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <Seef6.737$l5.627988@newsfeed1.thebiz.net>
Source record: 170890

Didn't mean to add to the confusion, but let me try to clarify.

I believe the vectronics link k5qwg mentions is in error. That does not resemble the unit being sold by Radio Shack. See the picture of what's being sold by Radio Shack at

http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F001%5F002%5F001%5F000&product%5Fid=940%2D0683

I've taken the liberty to quote below what was said in two postings to the Towertalk reflector.

"I got mine yesterday. Comparing it to the MFJ catalog description, it looks like the Vectronics model is an older and less sophisticated version of the MFJ 259B. When you turn it on the Version is 1.1 and copyright 1998. It might be comparable to the original MFJ 259. It will measure SWR and the Magnitude of the impedance. I understand the MFJ 259B will tell you the reactance (X) and the Phase (+j or -j). Conclusion: The $149 Vectronics model is not an MFJ 259B."

"I notice two specific external differences -- the right-hand front panel meter is labeled "Impedance" on the 259B and "Resistance" on the Vectronics, and the 259B appears to have a separate ground terminal on the top of the case (for open wire line?) that is missing from the Vectronics."

GL/73,
Barry N1EU

Bob Miller <bamiller@texas.net> wrote in message
news:82d9OsZCvkaBDY8atohZhhugrVga@4ax.com...
> Ken Anderson <longrange2@home.com> wrote:
>
> >If you have been wanting an antenna analyzer, RadioShack.com has the
> >Vectronics VEC-584B on sale for 149.95. This is normally $229.95 from
> >Radio Shack.com. This price may not apply at the retail stores. This
> >unit is the same as the MFJ 259B MFJ and Vectronics are sister
> >companies, and the product is similar, with same features and
> >functions. I had to search on the RS product number at the
> >Radioshack.com website. the number is 940-0683. 73, KC0INZ
>
>
> The units are similar but not the same.
>
> See
>
> http://www.vectronics.com/vectronics/analyzer/swr584.html

>
> and
>
> http://www.mfjenterprises.com/index.htm
>
> to directly compare.
>
> Bob
> k5qwg
>

2517. Simple VHF/UHF Dual Band Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 15:13:47 UTC
From: Robert Shepard <rshprd@home.com>
Message-ID: <Lkef6.79740$P5.2207759@news1.rdc1.il.home.com>
Source record: 170891

About the time VHF/UHF dual band radios hit the market back in late 70s/early 80s, there was an article either in one of the ham magazines describing how to make a simple dual band antenna from a 21" Motorola NMO mount whip.

The process involved heating the lower part of the whip about 1/2" from the base, and adding (bending in) a couple of turns. It is the diameter and number of turns I cannot recall. I'm not even 100% sure about the 1/2" from the bottom, but it is the general appearance of the antenna.

The result was a 1/4 wave on 2M (slightly shortened) and I think a 5/8 or 3/4 wave on UHF.

Does anybody remember this antenna, and/or the exact way to calculate it's dimensions?

Please email response if possible.

Thanks,
Bob-KA9FLX
mailto:ka9flx@arrl.net

2518. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 15:31:16 UTC
From: k1bqt@aol.com
Message-ID: <20010204103116.05578.00000692@ng-da1.aol.com>
Source record: 170892

Hi Reg--

>If the coax feeder is 1/4-wavelength long and the braid is properly grounded at the bottom end there will be a very high impedance at the top and very little current will flow into the braid.<

True enough--assuming a clean cable run and an exceptionally good RF ground at the transceiver (which it seldom available). Then, the transformation you describe could occur, changing the critical line length from 1/4 to 1/2 wave!

Of course, there are many other factors, in addition to length, that may lower the driving impedance of the coax outer. These include mutual coupling to parallel lines, masts, towers, metal building components, etc.

Rather than "fiddling and diddling", it makes more sense to me to install a choke, break the common-mode current path, and have done with it. How difficult can it be to coil up a few feet of feedline?

Rick K1BQT

2519. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:05:03 UTC
From: n2ey@aol.com
Message-ID: <20010204110503.10105.00001257@nso-bh.aol.com>
Source record: 170893

In article <95j164$25f$11@bashir.peak.org>, Bill Nelson <billn@spock.peak.org>
writes:

>N2EY <n2ey@aol.com> wrote:
>:>
>:>Remember when you had to either have had a license before some given
>:>date, or have held a license for X years, before you could qualify to
>:>try for an Extra license?
>
>: Oh yes. Until the mid '70s it was two years. Then one year - then in the
>'80s
>: it was dropped entirely. And the only experience that counted was as a
>General
>: or Advanced.
>
>It was a lot longer than that, at one time - unless my memory has failed me.

The experience requirement was two years from the beginning of the Extra
license (1951) It was reduced to one year in the late 1970s, then eliminated a
few years later. It was never more than two years.

The old Amateur Extra First Class license of the early 1920s required one year
experience.

What you may be recalling is that, for a long time, anyone who could show that
they had held a US amateur license before WW1 would get an Extra.
>
>: Remember when you had to pass all the test elements for a given license in
>: order at one session - no CSCEs?
>
>: Remember when any failure meant "go home and study for at least 30 days
>before
>: retesting" ?
>
>: Remember when the exams were secret?
>
>: Remember the sending test?
>
>: Remember when the Technician and General used the same written test?

The exams I took were governed by all of the above rules - and more.
>
>I remember all these, including having to be able to draw various basic
>circuits - with components, not just block diagrams.

The written tests became all-multiple-choice in the late 1950s.

73 de Jim, N2EY

2520. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:07:09 UTC
From: k1bqt@aol.com
Message-ID: <20010204110709.05578.00000693@ng-da1.aol.com>
Source record: 170894

The MFJ-259 (or its Vectronics equivalent) is an analog meter without the PIC-driven add-on features provided by the MFJ-259B. However, before ruling out the "plain vanillia" MFJ-259 as a good choice, here are a couple important things to think about.

First, keep in mind that SWR is about the ONLY antenna measurement any of these low-cost analyzers can perform (including Autek and AEA) that is not impacted by timing or impedance transformations in the antenna's feedline. Second, the MFJ-259 employs simpler circuitry and is less prone to calibration error.

I have both meters and grab the first one my hand lands on for most jobs. If you want advanced functions, break out the HP-8753 and do it right!.

Rick K1BQT

2521. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:10:25 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95juthotq0@208.206.142.71>
Source record: 170895

Bill Nelson wrote:
>
> Dick Carroll <dixie@townsqr.com> wrote:
>
> :> There is no international specification. It was left up to the various
> :> countries. It could be 1 character a month, if the regulating authority
> :> of some country decided that they wanted it to be that slow.
>
> : No one except the terminally code challenged ever considered anything
> : less than 5wpm to be "proficiency". Even the 5wpm'ers don't consider
> : that to be.
>
> Only by informal choice. As I stated, there is NO international
> specification.

No, actually it was a formal choice by FCC who reasoned that ability
consists of more than the first-time use of a lookup table.

2522. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:16:55 UTC
From: k1bqt@aol.com
Message-ID: <20010204111655.05578.00000694@ng-da1.aol.com>
Source record: 170896

Hi Bill--

>Cable "leakage" through the shield is not what causes a coax feedline to perturb a dipole's VSWR or resonant frequency.<

I believe I did respond to your comment, and did so without following the entire thread. Sounds like I commented out of context, for which I apologize.

Rick K1BQT

2523. Re: Capacitance hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:21:27 UTC
From: who? <glennt@ibm.net>
Message-ID: <3a7d83bf_2@news1.prserv.net>
Source record: 170897
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.equipment

hmmm...

jason_hsu@my-deja.com wrote in message <95ipieaak1@nnrp1.deja.com>...
>I understand that capacitance hats are a loading scheme used to work
>low frequencies with a shortened antenna. Capacitance hats are more
>efficient than inductive loading coils but aren't very practical for
>mobile use (due to the impact of the wind).
>
>My questions:

<snip>

>6. How do you build a capacitance hat? I imagine that various
>mechanical issues (supporting all the conductors, keeping the
>capacitance hat from sliding down the whip, etc.) come into play.

I used a 2 feet diameter hat some years back. It was constructed from
#6 solid copper wire. A 2' diameter circle of #6 with 6 #6 spokes in
a hexagon configuration. It retained its shape very well up to... uhhhh...
whatever the freeway speed limit was ;-) It did deform a little when it
encountered a low flying tree at 50mph, but was not difficult to repair
once we stopped...

>
>--
>Jason Hsu, AG4DG
>jason_hsu@@@@@@@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/

73 de Glenn

2524. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:39:47 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95k0kj$9p$0@208.206.142.71>
Source record: 170898

"Jim Bromley, K7JEB" wrote:

> My favorite is the continual mix-up of 'principal' and 'principle'.
>
> "James' principal reference for antenna design principles is still
> John Kraus' book on the subject".

It seems to explain each and every principle pertaining to antennas.

2525. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 16:51:14 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95k22ljqv4@lure.pipex.net>
Source record: 170899

"Bill Turner" <w7ti@jps.net> wrote in message

> 73, Bill W7TI
> 34 14 N
> 116 20 W

It is convention to give Easting first Bill
73
--
Gary7SLL
1° 20' W 51° 23' N
http://www.gary.peach.dial.pipex.com/

in passin
116° 20' W - 1° 20' W = 115°
divide this by 15 = 7 2/3 note 360/24 = 15
you are 7 Hours 40 minutes in time behind me.
Locators won't do that for you :)

I'll try to make good use of the Sun before I pass it on to you. :)

Who said the Brits were too stiff upper lip to pass the time of day?

Of course if someone has a spherical geometry program running perhaps s/he
can calculate the distance and bearing between us which would seem more
appropriate in a group devoted to Ham Radio.

Of course I can get the map out and see that you live near the Gulf of St
Catalina and I can ask you about the Under Sea Gardens nr Avelon or some
such, or what is Palm Springs like.
Of course you are not far from Goldstone there, have you been out to the
Tracking Station?

Perhaps I should refine my sig and add the seconds of arc.

2526. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:13:59 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95k2kn$53o$0@208.206.142.71>
Source record: 170900

```
Cecil wrote:
>
> Bill Turner wrote:
> > It's more efficient to derive meaning from context ...
>
> Not for computers.

That, sir, is a weakness of computers.
```

2527. Newbie Dipole Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:18:10 UTC
From: newbie
Message-ID: <3a7d88c5.12511499@news.accessnv.com>
Source record: 170901

A few dipole questions if I may.

I want to make a 20 meter dipole. Everything I have read said it should be 1/2 wavelength (33 ft) above the ground for the figure 8 directivity pattern or else it will be omnidirectional. What if the roof of my house is 15 feet high at the peak, does that mean I would install the dipole 18 feet above the roof? Or does the roof qualify as the ground so the dipole would still have to be 33 ft above the roof?

Another question. Would a dipole mounted on the roof, say 3 or 4 feet above the roof, out perform a dipole running over my yard (about 15 feet off the ground but running parallel between the house and a steep hill with about 5 feet between the antenna and house and the antenna and the hill (basicallly a 10 foot wide "alley" between the house and hill and the antenna running down the middle).

If I feed a dipole with 50 ohm coax and the feed point of a dipole is 75 ohms, don't I already have a 2:1 SWR ratio even exactly at resonance? Do I need a 1:1.5 balun? Some baluns I have seen look big as if you might need a support just to hold up the balun at the center of the antenna. My transmission line would run out of a slightly open window. The edges of the window, as well as the window frame, are made of aluminum so I guess twinlead or ladder line would be affected by the metal content and I don't have an antenna tuner anyway.

Last question, how far should the ends of the dipole be from the "masts" that are holding them up? When I try a rope to the end insulators, what is the minimum spacing between the end insulators and the mast I try the rope to? Does it make a difference whether the masts are a tree or a metal pipe? Thanks for any help.

2528. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:18:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95k2tv$5u2$0@208.206.142.71>
Source record: 170902

Cecil wrote:
>
> Dick Carroll wrote:
> > Any ham who cannot operate effective CW is not an accomplished ham,
> > whatever his other accomplishments.
>
> Opinions are like a$$holes, Dick. Everyone's got one.

Did you look into the mirror when you formed your last one?

> In your opinion,
> there are no accomplished nocode techs. Reality doesn't agree with you.

I haven't heard any no-code techs assert that they are accomplished CW
operators. And CW remains as the most simple, basic, easily implemented
radiocommunications mode.
Don't blame it on me, Cecil, It was fact long before I came along.

2529. Loop antenna results

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:24:18 UTC
From: "Max Donoghue (VE3TMT)" <mdonoghue1@sympatico.ca>
Message-ID: <6fgf6.187518$JT5.6768806@news20.bellglobal.com>
Source record: 170903

Finally finished construction of my small transmitting loop antenna. Using a vacuum variable cap 450 pf @ 7.5KV allows me to tune 40-10m. Antenna will actually tune down to 4.8 MHz. At resonance SWR is unmeasureable on my TS450S. First contact running 50 watts was a fellow in Buffalo (about 350 miles) on 40m with a 57 report. Not bad considering the antenna was still in my basement about 3 feet below ground. If anyone is interested in constructing one themselves I can provide pictures and a list of the materials I used in building mine. My total cost including the cap (I got a great deal, thanks John!) was about $150 Canadian, compared with the MFJ loops which sell for over $650 here! Maybe now I can enjoy some good HF.

73,

Max

2530. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:25:54 UTC
From: n2ey@aol.com
Message-ID: <20010204122554.22631.00001715@nso-fz.aol.com>
Source record: 170904

In article <9670-3A7C5E74-8@storefull-118.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>N2EY wrote:
>"The FCC didn`t think so for the first 25 years of the novice."
>
>Then was then. Now is now.

You've taken the above statement completely out of context.

>The FCC now has a no-code entrance to the ham
>bands.

Yup - for ten years now.

After it was enacted, there was a short flurry of newcomers - then the number of new licensees went back to the pre-1991 levels. Turned out the code test WASN'T a major reason for slow growth.

>It doesn`t relax the obstacles to ham radio enough.

What's left? The Tech written was made even easier in the last restructuring. I took a couple of test exams, and didn't even encounter a single Ohm's Law problem. It's basically an extremely basic test on the regs and safety. Easier than the old Novice written.

Do not be fooled by the increased rate of growth of the Tech numbers since April 2000. The FCC is renewing Tech Pluses as Techs, so the growth is composed of both new licensees and old renewals from Tech Plus.

>There should be no code requirement for any ham band.

I disagree. It's all opinions, anyway. The treaty prevents any further code test reduction.

The best compromise I've seen is to have Morse-only subbands. in each of the HF/MF ham bands. Morse test for those subbands only. Those who want to use Morse would need take the test - everybody else doesn't.
>
>Morse code is more recent than the Latin language, but it is less alive
>and has less value.

No. That's just not true. Now you are talking against the MODE, not the TEST.

How many humans use Latin in their daily communications? Very very few. How many use Morse? Hundreds of thousands, at least. Morse is alive and well on the ham bands.

In fact, that's your best argument against a Morse test. Even though hams are not required to use Morse, hundreds of thousands do so BY CHOICE. No reason to run down the mode like you do.

> Latin is recorded in ancient writings worth
>interpretation and preservation.

Sure. That makes it a language of the past. It's not being used today. How do I say "The double conversion superheterodyne receiver has a crystal filter in the 45 MHz first IF and a DSP-based selectivity/demodulation system in the 455 kHz second IF" in Latin?

>There isn`t much of that in Morse.

Because it's not a "language" in the same sense as Latin.

How many radio stations transmit any Latin? How many use Latin as the primary mode, or even as the only one? Extremely few- probably none. But there are plenty of stations that use Morse that way.

Your comparison works against you. Latin is dead, Morse is alive.
>
>Why learn Morse? Only to fill some arbitrary regulatory requirement.

Wrong again. Totally wrong. Why such antagonism for such a wonderful mode?

The license is one reason. But there are many, many others. Here's a short list:

- Lots of folks on the air using it
- Simple equipment can give excellent results
- Gets through when many other modes don't.
- A different experience than voice or keyboard
- Lots of fun once you have some skill
>
>You can learn and practice Morse for fun. It hurts nobody.

Then why do you run it down and condemn it in practically every post? You'd think the USE of the mode was akin to some sort of vice.

>But require it?

Use is not required. Only a very basic test. That test will almost certainly disappear after the treaty changes.

>Morse is already phased out of every pursuit except amusement.

Not true! Simply not true.

It's use is highly limited outside of ham radio, of course. But why is what OTHERS do such a concern about what hams do? Other services have largely phased out SSB, too. Any other services use 60 wp Baudot RTTY? SSTV? EME?

>Even last resort claims are more fancy than fact.

Tell that to the crew of MV Oak.
>

>The idea that Morse enobles doesn`t prove that the same effort spent on
>something else wouldn`t be more enobling.

"Enobling"? What are you talking about?

>It would very likely be more
>useful to spend your time on something else.

Like what? Would you force hams to do something else? Sounds like it.
>
>If you were to become accomplished in music you might entertain music
>lovers, but not on ham radio. You can talk on ham radio, but you would
>likely profit more from studying the art of conversation than learning
>how to say it in Morse.

What does this have to do with anything? You are grasping at straws, trying to
run down a useful mode of communication.
>
>The whole Morse argument is beyond odd.

The way you present it is very odd.
>
>The majority of the best conversationalists and scientifically astute
>have no interest in Morse code.

On what do you base that? I know plenty of counterexamples to your claim.

>If they liked Morse they might have
>become hams among whom Morse is still practiced.

??
> Why exclude them from
>any ham bands? They could improve the tone. They should be recruited.

I see. You support selective recruitment of certain people you deem as
"improving the tone". What if they are not interested in studying for the
WRITTENS? Should they be eliminated, too?
>
>Why exclude the inept in science and conversation who don`t do code?
>They might benefit from the amateur experience, and bring something to
>the hobby that is missing.

Like what?
>
>Numbers count!
>
>With a large market for ham gear, you might benefit from lower unit
>pricing. With a lot more hams, congress would pay more attention to what
>hams wanted.

Maybe. Or maybe not. They pay the most attention to the big corporations with
the new whiz-bang "wireless technologies" and the big bucks.

>Bigger is better.

Quality overrides quantity.

>Minimum requirements is the way to grow.

Then why hasn't it worked?

The "minimum requirements" idea has already been tried. It's called CB. The result has been chaos. The FCC has been trying to control and clean up CB since the early '60s, with little success. Have CB's enormous numbers gotten them a better service? NO!!

The latest reductions in license requirements have been motivated in part by the hope at the FCC that some of the CB and freeband folks will get ham licenses and clean up their acts. Maybe it will work, maybe it won't. But if you want to see what a "fishing license" type of radio service is like, just tune around 27 MHz. Is that what you want ham radio to become? I don't.

73 de Jim, N2EY
>

2531. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:43:16 UTC
From: richardharrison@webtv.net
Message-ID: <29520-3A7D94B4-10@storefull-114.iap.bryant.webtv.net>
Source record: 170908

Dick Carroll wrote (concerning a c-w licensing requirement): "---only to 1.) Learn to use a basic communications mode, and 2.) To qualify for an HF amateur radio license so long as ---."

CW may be basic, but it is no prerequisite to any other mode.

CW has been defended as essential to emergency communications, which is mistakenly claimed as a mandate of amateur radio.

Amateur radio is a hobby.

Amateurs set up emergency and public service groups in which they can put their communications gear to good use. It`s all voluntary. Cell phone users can do the same. If the cell phones fail, there are satellite phone and internet connections.There are more do-gooders with cell phones than radio amateurs. They are welcomed volunteers with the Red Cross, etc..

Amateur emergency help may be welcome, but it is seldom essential.

Newsflash: Amateurs don`t have to earn spectrum for their radio hobby through good deeds. They have access rights simply by getting an FCC license. Just as commerce and industry are worthy and have rights, so do individuals, for their life, liberty, and pursuit of happiness.

Dick Carroll is dwelling upon long gone times and conditions before there were modern communications.

Best regards, Richard Harrison, KB5WZI

2532. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:45:27 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <ZpJ9OtzLj5WvLRtmdZTfs8yU71a8@4ax.com>
Source record: 170905

On Sun, 04 Feb 2001 08:09:30 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Bill Turner wrote:
>> It's more efficient to derive meaning from context ...
>
>Not for computers.

Sorry Cecil,

You are at least 20 years behind the curve with your statement.
Object Orient Programming (OOP - Smalltalk so many years ago) accepts
the tenet of deriving meaning from context through a process known as
operator and function overloading. The central basis of OOP is that
one term may fit many functionalities based upon the context of the
usage.

To go further, OOP also has what is known as "inheritance" where the
meanings of functions are acquired automatically by related functions.

There are more sophisticated languages such as Trilogy, Prolog, or
LISP that push this even further through a mechanism known as
Predicate Calculus. This form of language can figure out meanings
when context is not provided, but must be derived.

73's
Richard Clark, KB7QHC

2533. Re: Newbie Dipole Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 17:52:35 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7D96E3.CC2188BE@oio.net>
Source record: 170906

newbie,
First, understand that none of this is 'cast in stone', there's
a lot of variation between installations.
As with any antenna, the higher the 'better'. If you can get an
antenna up at a 1/2 wave length, that's great. But if you can't, it
may not make as much difference as you may think.
If there is a lot of wiring, A/C ducting, other metal, in your
attic, the 'roof' may act more like a ground than if there were'nt
any metal there. How do you tell for sure? You don't, try it and
see what happens. Usually, 'ground' is somewhere between 'dirt' and
the roof, and really doesn't make ~that~ much difference.
Would an antenna near a roof out perform an antenna in the clear?
That's another one of those questions that has no definite answer, try
it and see. The antenna in the clear, all other things being equal,
would probably 'work' better. I'd think antenna orientation would
make some difference, but I don't know of any way to predict how much.
The input impedance of a dipole is seldom what the 'book' value
says it is. It'll be somewhere close, but never 'on the money'. The
impedance mismatch you gave wouldn't give you a 2:1 SWR, more like a
1.5:1. Depending on the transmitter, a SWR of 1.5:1 isn't worth
worrying about. If you want to use ladder line, and are worried about
bringing it into the house through a metal frame window, put a spacer
between the window and the jam. I use a 1x6 board, drill holes for
the
ladder line, then shut the window on the board. If you stay 3-4 times
the width of the ladderline from metal, there isn't enough interaction
to make any difference.
Given the choice, the ends of an antenna should be at least 1/4
wave length from any near-by objects. That 1/4 wave length of
distance
is also ~not~ 'cast in stone'. You want the ends as far from 'stuff'
as you can get it, but, if that's 3 feet, then that'll have to do.
If you end up with RFI, or get 'bit' from RF in the shack, try moving
the ends further away from the shack, and/or what ever they are close
to. Changing the dipole's shape from the classic 'flat-top' or
inverted
'V' is okay. The more drastic the change in shape, the more reaction
to that change.
Don't be afraid to experiment with all the variables of erecting
an antenna, that's half the fun of it. There's almost always a
compromise that will 'work' for you... just have to find it!
'Doc

2534. Re: Newbie Dipole Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 18:10:07 UTC
From: KA9FLX <ka9flx@arrl.net>
Message-ID: <3Wgf6.79804$P5.2213135@news1.rdc1.il.home.com>
Source record: 170907

See Responses Below:

> I want to make a 20 meter dipole. Everything I have read said it
> should be 1/2 wavelength (33 ft) above the ground for the figure 8
> directivity pattern or else it will be omnidirectional. What if the
> roof of my house is 15 feet high at the peak, does that mean I would
> install the dipole 18 feet above the roof? Or does the roof qualify as
> the ground so the dipole would still have to be 33 ft above the roof?

Basically, what you refer to is an ideal situation, which most of us do not have. Having the antenna on the roof will certainly help, but yes, you will probably get some interaction/pattern skewing from your roof. I would not get real concerned about this, generally speaking. No installation is perfect.

>
> Another question. Would a dipole mounted on the roof, say 3
> or 4 feet above the roof, out perform a dipole running over my yard
> (about 15 feet off the ground but running parallel between the house
> and a steep hill with about 5 feet between the antenna and house and
> the antenna and the hill (basically a 10 foot wide "alley" between
> the house and hill and the antenna running down the middle).

Altitude, is almost always a benefactor, so again, go with the roof.

>
> If I feed a dipole with 50 ohm coax and the feed point of a dipole is
> 75 ohms, don't I already have a 2:1 SWR ratio even exactly at
> resonance? Do I need a 1:1.5 balun? Some baluns I have seen look big
> as if you might need a support just to hold up the balun at the center
> of the antenna. My transmission line would run out of a slightly open
> window. The edges of the window, as well as the window frame, are
> made of aluminum so I guess twinlead or ladder line would be affected
> by the metal content and I don't have an antenna tuner anyway.

The feed point of a dipole is ~ 75 ohms if the dipole is stretched out in a straight line, i.e. looks like a "T" with the feed line. However, if the elements are drooped down ~ 120 degrees, it creates the "inverted V" antenna, which also tends to make the feed point impedance closer to 50 ohms. A balun is always a good thing as it tends to minimize radiation from the feedline coax. They do not have to be large, but I know what you mean.

>
> Last question, how far should the ends of the dipole be from the
> "masts" that are holding them up? When I try a rope to the end
> insulators, what is the minimum spacing between the end insulators and

> the mast I try the rope to? Does it make a difference whether the
> masts are a tree or a metal pipe? Thanks for any help.

This should not really matter much, unless you are using a metal support. However, if you are simply tying off to a tree, wooden mast, or perhaps the fence, it really does not matter. On the other hand, you do want to keep any part of the antenna itself well out of reach from children, and probably most adults, for safety. There can be quite a bit of RF voltage on any antenna that is radiating. RF burns really hurt, and tend to take a long time to heal.

Basically, do the math as best you can, cut your dipole to 1/2 wavelength, connect a balun in the center if you have one, get it as high up as reasonably possible, and then enjoy yourself.

You will find that the cutting length becomes somewhat less critical on lower frequencies. I have in a pinch, rough cut a roll of 4 conductor telephone line to an approximate half wave (plus minus a few inches), hooked it to a 1:1 balun, shot a line up into a tree, and had lots of fun on 80/75M all night will no SWR problems on a solid state rig.

It took all of 15 minutes to measure, cut, wrap (no soldering BTW), and then pull the ends up into a couple of trees. Probably did not have the antenna more than 30 ft in the air tops. I got tons of 20, and 40, over reports from coast to coast while running portable in central Wisconsin..

ALWAYS PUT SAFETY FIRST!
This sounds like a broken record of a statement, but people still ignore things like the AC mains from the power company and other potential hazards around the home. Do not assume anything where non-antenna cables or wire are concerned. The telephone line is capable of giving a lethal shock under the right conditions. Don't become a SK!

Otherwise, don't over think dipole antennas, just have fun.

Bob-KA9FLX
mailto:ka9flx@arrl.net

>

2535. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 18:30:37 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn97r7ud.m8j.QSB@animas.frontier.net>
Source record: 170909

On Sat, 3 Feb 2001 22:08:54 +0000, Ian Jackson scribbled:
>Sorry for stirring, and nothing to do with radio, but why do the
>Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
>makes typos, but this is beginning to get to me!

It's the Everybody-Has-To-Feel-Good-About-Themselves education system
we have here. Everyone 'deserves' a high school diploma -- not everyone
gets a high school education.

Don't *even* get me started on:
Their, They're, There
Your , You're
and several others.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

2536. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 18:36:09 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95k7gfmaq1@nntp9.atl.mindspring.net>
Source record: 170910

>
>snip<
Dick Carroll is dwelling upon long gone times and conditions before
there were modern communications.

Best regards, Richard Harrison, KB5WZI

And Richard Harrison is dwelling on the welfare concept of amateur radio.
His motto is, I exist, therefore I deserve everything that anyone else in
amateur radio has!

Dean Craft -- W4IHK

2537. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 18:37:57 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95k7hv$o3n$1@slb0.atl.mindspring.net>
Source record: 170911

Hmmm.... I wonder.

Can one hear a "brain fart" or is that sort of like the sound of "one hand clapping"?

Clearly "typo" is probably more appropriate for application to the USENET NG medium.

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A7D5D7C.EA6F28B0@IEEE.org...
> Bill Nelson wrote:
> > Did I really say 300 ohms? My apologies for the brain fart. That is
> > about an order of magnitude off.
>
> Bill, Most other posters would call it a "typo". :-)
> --
> http://www.mindspring.com/~w6rca

2538. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 18:43:46 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <Cphf6.170522$ge4.59103769@news2.rdc2.tx.home.com>
Source record: 170912

Point well taken, Bill.

Pete KA&#65533;TZK Colorado, USA

> Physician, heal thyself. I'd guess 80% of the world's people have no idea
where
> "Colorado" is.
>
> 73, Bill W7TI
> 34 14 N
> 116 20 W

2539. Dentron mt-2000a -or- mt-3000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 19:07:17 UTC
From: DL <phochief@adelphia.net>
Message-ID: <95k96p$1d2m$1@news.gate.net>
Source record: 170913

I'm looking for an antenna tuner capable of handling full legal power. Can anyone tell me the difference between Dentron's MT-3000A and the MT-2000A other than the obvious switches and meters? Can the 2000a handled full power?

Thanks...
David,K4ZZR

2540. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 19:13:30 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <O6N9Ot51CfrSn1EdDIeDXNZrKI=c@4ax.com>
Source record: 170914

On Sun, 4 Feb 2001 13:36:09 -0500, "Dean Craft" <w4ihk@mindspring.com>
wrote:

>>
>>snip<
>Dick Carroll is dwelling upon long gone times and conditions before
>there were modern communications.
>
>Best regards, Richard Harrison, KB5WZI
>
>
>And Richard Harrison is dwelling on the welfare concept of amateur radio.
>His motto is, I exist, therefore I deserve everything that anyone else in
>amateur radio has!
>
>Dean Craft -- W4IHK
>

Hi Dean,

This is much different than the Republican Welfare State that doles
out the Public Domain in generous handouts to its shiftless commercial
bed partners that perpetuate the revolving door of economic boom and
bust. These Welfare Whores still travel by Mercedes and Cadillac to
the Welfare Office to claim that their "rights" be undisturbed by the
people who paid for them.

The owners of this Commonwealth (yeah, that of the people and by the
people - not the corporation) seek to retain their own rights and
property and are hassled by every right-wing panhandler mumbling he
only wants spare change to cover his cheap drug habit.

The left wingers want to give it away, the right wingers would be
satisfied with a bottle of Muscatel.

Just say no. A pox on both their houses!

73's
Richard Clark, KB7QHC

2541. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 19:30:43 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95kagn$96u$1@slb6.atl.mindspring.net>
Source record: 170915

Roy:

Thanks for that detailed explanation of the current balun. I agree with all you have shared with us, however there are different ways of viewing things and so...

Let me feed back what I think you said...

I believe another way of stating what you wrote is that the current balun is actually an inductive reactance choke placed in the common mode path so that it "blocks" common mode currents.

Thus the "current balun" a.k.a. "common mode choke" actually enforces the current "balance" on the counter-directional transmission line paths for the go and return currents by inserting a high impedance in series with them and enforcing approximately zero current flow on the third path, the parallel combination of the go and return paths. [the "sneak" path a.k.a. common mode path].

A physcial model for this common mode choke is simply a pair of coupled coils wound "two in hand" with each physically separate winding connected, for conduction currents, in series with the paths making up the transmission line, and only the mutual magnetic coupling, and stray capacitances, connecting the two sides. Such a pair of coils will have a small primary Lp and a small secondary Ls leakage inductance a mutual inductance M, and a coupling factor k, from which one can calculate the "large" magnetizing inductance Lm. In addition there will be 'stray" interwinding capacitance which will contain some imbalance as measured from one side to the other with opposite ends of windings grounded...

i..e. all the same stuff as any other transformer... and so far... the current balun is no different than the conventional transformer, no?

The ONLY difference that I can see between a convention transformer and the current balun is in the "connection" to the transmission line... otherwise they seem to be the same to me.

For any transformer we always strive to get (Lp+Ls)/Lm as small as possible, no? What?

For the current balun, it is only the somewhat different or unconventional "connection" in the transmission line of this "two in hand" wound transformer which then causes the large magnetizing inductance to appear in series with each conductor on the transmission line, while the two smaller leakage inductances and the interwinding capacitances, now actually cross couple the two conductors in the differential transmission line paths. [Sort of the opposite situation from conventional transformer usage where

the magnetizing inductance appears across rather than through and vice versa for the leakage inductances and interwinding capacitances.]

Now the high impedance, or more accurately the high inductive reactance, of the magnetizing inductance of the "two in hand" current balun blocks the common mode currents on the transmission line, while the imbalance of the the two leakage inductances together with any imbalance in distributed capacitance, and/or winding resistance, between the windings will tend to let common modes sneak by again.

And so... I believe that the ratio of the magnetizing to the leakage inductance for any two winding transformer is a quantitative measure of the "ideality" of the balun in either case. Either for a voltage balun or for a current balun. i.e. one wants the ratio of the magnetizing inductance to the leakage inductance of the transformer to be as high as possible, whether or not it is connected as a current balun or as a voltage balun.

It just so happens that... winding a two winding transformer by taking two conductors and winding them "two in hand" instead of say sequentially or overlapping them, etc.. is a very good way of getting the physical symmetry that creates equal and small Ls and Lp, while simultaneously maximizing k and Lm! This will make a good current balun or a good voltage balun, it doesn't matter.

Winding a transformer with two wires "in hand" is a good thing to do, nothing more, nothing less. Just a way of making a great transformer!

A good current balun should make an equally good voltage balun and vice versa.

Given that the best manufacturing process for either the current or voltage balun is the same, i.e. wind using the "two in hand" technique, then the only diffrerence between the two is in the way you hook them up (application), not in the way you wind them (construction).

Either the current or voltage balun should be made as close to perfect as you can make em.

Then after you have a well made, nearly ideal, ttransformer, you can decide how you wish to hook the device up, i.e. to reduce common mode transmission line currents by "blocking" [read current mode] or by "forcing" [read voltage mode].

In some applications one hook up is better than the other and vice versa.

Now if an ideal transformer has:

(a) Infinite magnetizing inductance Lm
(b) Zero leakage inductances.
(c) Zero interwinding capacitances

ignoring winding resistance, then...

a "real" transformer has finite magnetizing inductance and non zero leakage
and interwinding capacitances.

Then in balun construction, one should strive to get Lm/(Lp+Ls) as high as
possible, while minimizing the parasitic capacitance unbalances.

I wonder which is the dominant factor in causing performance degradation in
current mode baluns??

Low Lm/(Lp+Ls) ratio or parasitic/stray inter-winding capacitance unbalance?

Thoughts comments?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A7D387C.53AE45AE@eznec.com...
> "Peter O. Brackett" wrote:
>
> > . . .
>
> > BTW... one measure of the ideality of conventional transformer's is the
> > ratio of their leakage inductance to their magnetizing inductance, i.e.
the
> > higher this ratio is the better. For instance a ratio of more than 1000
is
> > very desirable, and many transformer designs can achieve upward of
100,000
> > for that ratio.
> >
> > I have often wondered?
> >
> > Is there a similar measure of ideality for transmission line
transformers?
> > How does one characterize the non-ideality of transmission line or
"current"
> > baluns?
>
> Transmission line transformers can be evaluated like any other kind.
> When conventionally connected (that is, with the input and output taken
> across windings), their nonidealities have the same effects as in any
> other transformer. The main advantage to a transmission line transformer
> in these applications is that you do get an extraordinarily high
> coefficient of coupling and consequently small leakage impedance. And in
> cases where the winding length is a significant fraction of a
> wavelength, there are advantages to maintaining a constant impedance
> between windings.
>
> The 1:1 current balun is connected differently, however. It can be
> accurately described as a common mode choke, with each winding in series
> with one conductor. The lack of concern about magnitizing inductance
> affecting the differential impedance isn't because it's a transmission
> line transformer but because of the way it's connected. You basically

> want two things from one of these. One is a high common mode impedance.
> This is of course accomplished by maximizing the winding impedance,
> which is one of the things you want to do with a conventionally
> connected transformer -- but for a different reason. In the balun, the
> balun's very ability to balance currents depends on its common mode
> impedance relative to the impedance of the external circuit. Leakage
> inductance or impedance is similarly undesirable as in a conventional
> transformer. Here, it manifests itself as a series impedance to
> differential currents. But as I mentioned, it's seldom a concern, since
> it's generally very small because of the transmission line windings.
>
> The way I like to evaluate a 1:1 current balun is to connect an
> unbalanced signal source to the input. To the output terminals I connect
> equal value resistors to ground, at the same physical point as the
> ground side of the balun input. I judge the balun by its ability to
> produce equal voltages or currents across the two resistors. A good
> voltage balun will also show up good in this test. The second test is to
> connect the output side of the "hot" winding (the winding whose input
> end is connected to the hot side of the input) to ground, and the output
> side of the "cold" winding through a 51 ohm resistor to ground. A
> perfect current balun would deliver the full input signal across the
> resistor. (A voltage balun would not.) An inspection will reveal this to
> be a simple polarity reversing transformer. It represents the worst
> possible case of a current balun attempting to deliver equal currents
> into the worst possible imbalanced load condition. In this test,
> conventional transformer analysis can be applied, and leakage and
> magnitizing impedances will have the effects you'd expect on input
> impedance. A current balun won't usually be subjected to this severe of
> a load imbalance, but it's a good worst case test to use in comparing
> baluns.
>
> Kevin, W9CF, has written an excellent treatise on baluns, and
> particularly their connection at the input or output of a tuner. You can
> find it at http://fermi.la.asu.edu/w9cf/articles/balun/index.html. I
> highly recommend it.
>
> Roy Lewallen, W7EL

2542. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 20:35:19 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <yImcPPAH0bf6Ewff@g3ohx.demon.co.uk>
Source record: 170819

In article <jtcf6.12375$mA1.768025@bgtnsc06-news.ops.worldnet.att.net>,
AMDX <AMDX@worldnet.att.net> writes
> I'll bet Ian says al u min i um and spells smolder- s m o u l d e r. ;-)
>
> And another thing, we got rid of Clinton, when are you going to get
>rid of
>those silly wigs.
>
>
>--
>Mike Knowlton
>Panama City Fl.
>
>
Yes, more like 'allum-minny-um'. I spell 'colour' and 'labour' with a
'u', and there are two Ls in 'traveller'. I pronounce 'solder' as it is
spelt (not 'sodder').
As for wigs, I think that they are really mainly used for ceremonial
appearences (I presume you are talking legal).
However, I often prefer the American spelling of 'analyzer' and similar
words (with a 'z').
73,
Ian.

2543. Re: Newbie Dipole Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 20:41:23 UTC
From: k1bqt@aol.com
Message-ID: <20010204154123.18602.00000825@ng-mj1.aol.com>
Source record: 170916

Hi Bob--

1. Height: If you can get the dipole up 30-40 feet AGL, that's pretty ideal for good DX on 20 meters. However, go too high (say around 60 feet) or too low (say 15-25 feet), and the low-angle pattern you need for working DX will probably drop off.

2. SWR: A 75 ohm antenna yields 1.5:1 in a 50-ohm system, not worth bothering with. However, if you configure the antenna as an inverted "V", this will lower it impedance--bringing it closer to 50 ohms.

3. Pole Material: You can use a metal pole--the coupling between the horizontal (or inverted V) antenna and vertical pole will be minimal. Just don't let either leg of the antenna contact and enegize it!

4. Balun: Use one! However, rather than spending big bucks to buy one, just wind up a few feet of coax at the feedpoint and tape it together. This'll work just as well.

Good luck with it!

73

Rick K1BQT

2544. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 20:41:34 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <4YIerQA+5bf6Ew+c@g3ohx.demon.co.uk>
Source record: 170918

In article <tVDU+dA4uVf6EAMO@ifwtech.plus.net>, Ian White, G3SEK
<G3SEK@ifwtech.com> writes

<snips>

>RSGB's rules changed, several Editors ago. The lower-case abbreviations
>rule never made complete sense, because it regularly had to be broken
>for "if" in a radio magazine. RSGB now follow the modern convention of
>using capitals for abbreviations, with no points, so it's now "TV", "IF"
>and so on.
>
<snips>

>Now look what you've all gone and done - it's Sunday afternoon and
>you've pitched me into work mode!
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

All noted, Ian.
And sorry about the 'work mode'.
Ian (the other one).

2545. Icom AH-4

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 20:44:40 UTC
From: kd5daf <kd5daf@home.com>
Message-ID: <Yajf6.171298$ge4.59302147@news2.rdc2.tx.home.com>
Source record: 170917

I have a Ah-4 for sale, it's about 2 years old and come with the ICOM paper manual.
Ah-4 is worki9ng order and I'm asking 200.00.

Thanks

Mike KD5KGA

2546. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 21:37:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A7DCBA5.D7D7856B@eznec.com>
Source record: 170820

Yes. All you need to do is place your rig on the ground, run radial
wires out from it in the yard, and connect it via a 1/4 wavelength
feedline to the antenna. Makes a great setup for an outdoor picnic.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> If the coax feeder is 1/4-wavelength long and the braid is properly grounded
> at the bottom end there will be a very high impedance at the top and very
> little current will flow into the braid.
>
> Will this prevent radiation from the feeder just as the choke balun is
> intended to do?
> ---
> Reg, G4FGQ
> ========================

2547. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 21:40:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A7DCC56.2C147273@eznec.com>
Source record: 170821

Cecil wrote:
>
> Roy Lewallen wrote:
> > The second test is to
> > connect the output side of the "hot" winding (the winding whose input
> > end is connected to the hot side of the input) to ground, and the output
> > side of the "cold" winding through a 51 ohm resistor to ground. A
> > perfect current balun would deliver the full input signal across the
> > resistor. (A voltage balun would not.) An inspection will reveal this to
> > be a simple polarity reversing transformer. It represents the worst
> > possible case of a current balun attempting to deliver equal currents
> > into the worst possible imbalanced load condition.
>
> Somewhere I read how such a device can be used for an ~180 degree phase
> reversal when feeding phased arrays.
> --
> http://www.mindspring.com/~w6rca

Indeed it can, as long as you're aware of the impedance level you're dealing with and design the transformer accordingly.

Roy Lewallen, W7EL

2548. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 21:44:11 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <95kjk3$5vu$1@nntp9.atl.mindspring.net>
Source record: 170822

For beach operating, a kite antenna is ideal. Put the kite up high enough
for stability (doesn't have to be very high on the beach, the wind is
smooth). Attach your antenna to the line at a point that will elevate it to
the desired altitude and operate. Using a good kite, it will fly unattended
all day and you won't have to worry about poles. I have done this a lot.
Works great.
--
CW
KC7NOD
"Woody" <woody.white@att.net> wrote in message
news:3A7CB93F.FB79DC60@att.net...
> A natural for Nags Head would be a kite. You might need some help to
> fly the kite and operate at the same time, but.. Use some thin wire
> w/the string line. Best way is if you can find some WW2 surplus
> aircraft trailing ant wire. Fair Radio used to have it. Phosphor
> bronze if I recall, with a fiber core. Light, strong, flexible and
> already on a spool. Obviously, beware of power lines!!!!! Drive a
> ground rod into the wet sand near the water line, use an antenna tuner
> and have at it.
> --
> Woody, WB4QXE
> For Ham Radio homebrewing and
> Scanning Electron Microscope Images,
> visit: http://woody.white.home.att.net

2549. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 21:52:40 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <5$duyBAo8cf6Ewsl@g3ohx.demon.co.uk>
Source record: 170823

In article <bjiq7t4i3gjt9r8fhu6f2kjen5pr21oaqi@4ax.com>, Bill Turner
<w7ti@jps.net> writes
>On Sun, 4 Feb 2001 10:40:50 +0000, Ian Jackson <ianjackson@g3ohx.demon.co.uk>
>wrote:
>
>>The RSGB have an approved style of 'grammar' to be used when writing for
>>their numerous publications.
>
>>--
>
>Before attempting to get us Colonists squared away, how about fixing your verbs?
>The RSGB is a single entity, therefore, the RSGB has, not RSGB have. Sheesh.
>
>73, Bill W7TI

True, true... Sorry Bill! Shuddah known bettah!
Societies, teams and governments HAS. I only make that mistake when
under stress. I sit corrected.
Ian.

2550. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 21:57:51 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <FOQxuGAfBdf6EwYg@g3ohx.demon.co.uk>
Source record: 170825

In article <3A7D61B1.98BD585A@IEEE.org>, Cecil <Cecil.A.Moore@IEEE.org>
writes
>Ian Jackson wrote:
>> >There are two t's in the word "letter". That's an absolutely correct
>> >English statement. QSL's, SASE's, and QSO's seem to me to be correct
>> >for the same reason.
>>
>> Sorry, but I can't agree with Webster on this point.
>
>Sorry Ian, it matters naught that you disagree with Webster's. :-)

I know, I know. I really don't dare if they are wrong. It's their
misfortune.
Ian.

2551. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 21:58:08 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <95kkjpgcr1@nntp9.atl.mindspring.net>
Source record: 170826

For beach operating, a kite antenna is ideal. Put the kite up high enough for stability (doesn't have to be very high on the beach, the wind is smooth). Attach your antenna to the line at a point that will elevate it to the desired altitude and operate. Using a good kite, it will fly unattended all day and you won't have to worry about poles. I have done this a lot. Works great.
--
CW
KC7NOD
"Woody" <woody.white@att.net> wrote in message
news:3A7CB93F.FB79DC60@att.net...
> A natural for Nags Head would be a kite. You might need some help to
> fly the kite and operate at the same time, but.. Use some thin wire
> w/the string line. Best way is if you can find some WW2 surplus
> aircraft trailing ant wire. Fair Radio used to have it. Phosphor
> bronze if I recall, with a fiber core. Light, strong, flexible and
> already on a spool. Obviously, beware of power lines!!!!! Drive a
> ground rod into the wet sand near the water line, use an antenna tuner
> and have at it.
> --
> Woody, WB4QXE
> For Ham Radio homebrewing and
> Scanning Electron Microscope Images,
> visit: http://woody.white.home.att.net

2552. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 22:01:18 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <De8wqJAuEdf6Ew4f@g3ohx.demon.co.uk>
Source record: 170824

In article <18426-3A7CAEA2-89@storefull-111.iap.bryant.webtv.net>,
Richard Harrison <richardharrison@webtv.net> writes
>Ian Jackson wrote:
>"---why do the Americans invariably get the use of (it`s) and (its)
>wrong?"
>
>On the American side of the Atlantic, I was taught the apostrophe is
>used to indicate a contraction, and the omission of the second (i) in
>(it is). Thus we have (it`s).
>
>For the possessive (its), no apostrophe is used.
>
>There are three words that sound alike. They are: to, too, and two.
>Explain please.
>
>Best regards, Richard Harrison, KB5WZI
>

I have too say that there's no need two explain.
Ian.

2553. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 22:48:35 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7DDC43.388E@wt.net>
Source record: 170827

N2EY wrote:

>
> The written tests became all-multiple-choice in the late 1950s.
>
> 73 de Jim, N2EY

You sure??? I remember in the early 70's a friend of mine took the advanced when in jr.hi school and he had to draw a few circuits if I remember right. I remember him talking about them. This was about 1971 or so. The majority of the questions were multiple choice though. Seems he only had to draw out one or two circuits on the whole test. MK

--
http://web.wt.net/~nm5k

2554. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 22:59:18 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <95mlgj$b4o$1@nnrp1.phx.gblx.net>
Source record: 170785

>> "Jim Bromley, K7JEB" wrote:
>> My favorite is the continual mix-up of 'principal' and 'principle'.
>> "James' principal reference for antenna design principles is still
>> John Kraus' book on the subject".

> Dick Carroll replied:
> It seems to explain each and every principle pertaining to antennas.

Perhaps not each and every one, but certainly the principal principles.

:-)

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

2555. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-04 23:13:12 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7DE208.672E@wt.net>
Source record: 170828

Cecil wrote:
>
> Bill Nelson wrote:
> > Did I really say 300 ohms? My apologies for the brain fart. That is
> > about an order of magnitude off.
>
> Bill, Most other posters would call it a "typo". :-)
> --
> http://www.mindspring.com/~w6rca

A cerebral cough maybe??? A common affliction with me.... Or could be
the dreaded brain fag. "a realï¿½ affliction" BTW... :-/ MK

--
http://web.wt.net/~nm5k

2556. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 00:16:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7DF0FB.A382777F@IEEE.org>
Source record: 170829

Rick Littlefield wrote:
> Rather than "fiddling and diddling", it makes more sense to me to install a
> choke, break the common-mode current path, and have done with it.

Rick, down here in Texas we enjoy fiddling and diddling. :-)
--
http://www.mindspring.com/~w6rca

2557. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 00:28:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7DF3CB.83794C72@IEEE.org>
Source record: 170831

Richard Clark wrote:
>
> On Sun, 04 Feb 2001 08:09:30 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Bill Turner wrote:
> >> It's more efficient to derive meaning from context ...
> > >
> > >Not for computers.
>
> Sorry Cecil,
>
> You are at least 20 years behind the curve with your statement.

I didn't say it was impossible, Richard. My computer simply finds it
to be *more efficient* if I talk to it in a context free language.
--
http://www.mindspring.com/~w6rca

2558. Re: I WILL MAKE YOU RICH BEYOND YOUR DREAMS. 1931

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 00:29:23 UTC
From: Pervert_Extraordinair <valued_customer1@att.com>
Message-ID: <3A7DF3E3.EB95AD07@att.com>
Source record: 170830

brucepm@pacbell.net wrote:
>
> CONTACT ME FOR DETAILS ON GETTING FILTHY RICH
>
> BRUCE P. MEYERS
> 10517 VALPARAISO STREET
> LOS ANGELES, CA 90034
> PHONE:(310)202.9005
> CELL:(310)213.1148
> E-Mail:brucepm@pacbell.net

Should we all send this guy an EMAIL stating "No Thank You" ?

2559. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 00:41:47 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95kssbevu4@bashir.peak.org>
Source record: 170832

Cecil <Cecil.A.Moore@ieee.org> wrote:
: Bill Nelson wrote:
:> There is no international specification. It was left up to the various
:> countries. It could be 1 character a month, ...

: Who can stay awake for a month in order to receive it?

That is immaterial. The international agreement specifies that the person
be "proficient" - there is no requirement that the minimum rate be practical.

--
Bill Nelson (billn@peak.org)

2560. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 01:09:46 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95kugqevu5@bashir.peak.org>
Source record: 170837

Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
: Hmmm.... I wonder.

: Can one hear a "brain fart" or is that sort of like the sound of "one hand
: clapping"?

In the internet context, you wouldn't hear it unless you read aloud. However, such brain farts are certainly visible.

: Clearly "typo" is probably more appropriate for application to the USENET NG
: medium.

To me, typos consist of such things as - transposing letters, dropping or adding letters in words that are normally spelled correctly, adding an occasional random character, dropping a word or typing it twice in a row.

A brain fart is when you know better, but think the wrong thing when you type. My "300 ohm" mistake was a brain fart. I know that the impedance is much closer to 3000 - but I thought 300, as in the case of a folded dipole.

--
Bill Nelson (billn@peak.org)

2561. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 01:13:18 UTC
From: k1bqt@aol.com
Message-ID: <20010204201318.05654.00000749@ng-da1.aol.com>
Source record: 170833

Hi Cecil--

>Rick, down here in Texas we enjoy fiddling and diddling. :-)<

Waaaalll, up here in NH, we do plenty of Quebecua fiddling, but also have a strong perchant for the diddling. As they say when November rolls in, "When the frost is on the pumpkin, 'tis the time for dickie dunkin!" :-)

Rick K1BQT

2562. military grid dipper AN/PRN-10

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 01:14:13 UTC
From: carkenord@juno.com
Message-ID: <95kup3$nn2$1@nnrp1.deja.com>
Source record: 170834

One of these dippers, in good shape, complete, working just fine.....

would be worth what?

Lee Carkenord KA0FPJ

Sent via Deja.com
http://www.deja.com/

2563. Re: Dentron mt-2000a -or- mt-3000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 01:25:57 UTC
From: jayvan <jayvan@jps.net>
Message-ID: <3A7E0125.8EF39C30@jps.net>
Source record: 170835

It is the same Tuner except for the knobs, switches and meters on the front and the number of antenna inputs on the back. does Coax, long wire and Balanced line and has a built in 4-1 Balun with 3 cores. Power rating is 3kw pep just like the 3000a. These are both great tuners.
Ka6otj

DL wrote:

> I'm looking for an antenna tuner capable of handling full legal power. Can
> anyone tell me the difference between Dentron's MT-3000A and the MT-2000A
> other than the obvious switches and meters? Can the 2000a handled full
> power?
>
> Thanks...
> David,K4ZZR

2564. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 01:32:55 UTC
From: n2ey@aol.com
Message-ID: <20010204203255.14870.00001655@nso-fr.aol.com>
Source record: 170836

In article <bjiq7t4i3gjt9r8fhu6f2kjen5pr21oaqi@4ax.com>, Bill Turner <w7ti@jps.net> writes:

>The RSGB is a single entity, therefore, the RSGB has, not RSGB have.

Actually, the RSGB is NOT a single entity - it's a "society". Americans tend to use the singular, but the correct way is to use the plural. "The committee have decided", for example.

--

It's and its are so easy to tell apart - simply try to use "it is" there and see what happens. If it works, use the apostrophe version, if not , use the other. Simple.

--

73 is already plural. Adding an s or 's makes no sense. "Best regardss"? Best regards's"?

--

73 de Jim, N2EY

2565. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 02:14:26 UTC
From: richardharrison@webtv.net
Message-ID: <9817-3A7E0C82-58@storefull-112.iap.bryant.webtv.net>
Source record: 170838

Jim, N2EY wrote:
"How many humans use Latin in their daily communications??

Many do, one way or another. Money talks. Take a quarter from your pocket and it says "E PLURIBUS UNMUM". I think that means 25 cents makes 1 quarter of a dollar.

Best regards, Richard Harrison, KB5WZI

2566. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:00:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7E176A.C33A452E@IEEE.org>
Source record: 170840

N2EY wrote:
> 73 is already plural. Adding an s or 's makes no sense. "Best regardss"? Best
> regards's"?

Lots of Best Regards?
--
http://www.mindspring.com/~w6rca

2567. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:07:56 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3A7E190C.EC4B1179@tir.com>
Source record: 170839

Dear Ian:
Not all North Americans make errors. You have overstated the
condition. It is bad, but not universal. 73 Mac

Ian Jackson wrote:
>
> Sorry for stirring, and nothing to do with radio, but why do the
> Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
> makes typos, but this is beginning to get to me!
>
> FYI...
> 'It's' is 'it is'.
> 'Its' is 'belonging to it'.
> It is (ie it's) an irregular use of the apostrophe. There are a few
> others.
>
> Ian.

--
J. Mc Laughlin n8tt@tir.com Michigan ~

2568. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:13:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7E1A76.12EB030C@IEEE.org>
Source record: 170841

Dick Carroll wrote:
>
> Cecil wrote:
> >
> > Dick Carroll wrote:
> > > Any ham who cannot operate effective CW is not an accomplished ham,
> > > whatever his other accomplishments.
> >
> > In your opinion,
> > there are no accomplished nocode techs. Reality doesn't agree with you.
>
> I haven't heard any no-code techs assert that they are accomplished CW
> operators.

You didn't say "accomplished CW operator", Dick, you said "accomplished ham". That's a near-infinite conceptual difference. Read your above statement and you will be forced to admit that you think a nocode tech cannot possibly be an "accomplished ham" even if he/she is far superior to you in every respect besides Morse code. Your delusions of grandeur are showing. Why don't you find something different to base your sagging self esteem on besides Morse code? Are you a failure at everything else?
--
http://www.mindspring.com/~w6rca

2569. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:16:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7E1B13.D878E55E@IEEE.org>
Source record: 170842

Dean Craft wrote:
> And Richard Harrison is dwelling on the welfare concept of amateur radio.
> His motto is, I exist, therefore I deserve everything that anyone else in
> amateur radio has!

How is that different from your desired welfare support system for
Morse code? "I exist, therefore I deserve to make the rules."
--
http://www.mindspring.com/~w6rca

2570. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:32:21 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7E1EC5.23FE@wt.net>
Source record: 170843

Cecil wrote:
>
> Rick Littlefield wrote:
> > Rather than "fiddling and diddling", it makes more sense to me to install a
> > choke, break the common-mode current path, and have done with it.
>
> Rick, down here in Texas we enjoy fiddling and diddling. :-)
> --
> http://www.mindspring.com/~w6rca

Not necessarily in that order...:-/ MK
--
http://web.wt.net/~nm5k

2571. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:40:07 UTC
From: Rory Davis <n7cr@bellsouth.net>
Message-ID: <ahpf6.189$TV5.21157@news2.atl>
Source record: 170844

The lousy grammar used by many of today's generation seems to me to be the result of the lack of time spent in primary and elementary school spent on drilling in the rules of language. Most of the common mistakes I see are caused by the lack of the application of those rules.

Could it be that time formerly dedicated in the third and fourth grades to grammar, spelling and handwriting is now spent teaching keyboarding, drug awareness and dealing with social problems?
Not to mention the lack of time allotted for teachers to apply the sharp red pencil to student essays, when the student to teacher ratio exceeds thirty to one?

> Dear Ian:
> Not all North Americans make errors. You have overstated the
> condition. It is bad, but not universal. 73 Mac
>
> Ian Jackson wrote:
> >
> > Sorry for stirring, and nothing to do with radio, but why do the
> > Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
> > makes typos, but this is beginning to get to me!
> >
> > FYI...
> > 'It's' is 'it is'.
> > 'Its' is 'belonging to it'.
> > It is (ie it's) an irregular use of the apostrophe. There are a few
> > others.
> >
> > Ian.
>
> --
> J. Mc Laughlin n8tt@tir.com Michigan ~

2572. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 03:53:19 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95l83f$9kq$0@208.207.71.165>
Source record: 170845
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Richard Harrison wrote:

> CW may be basic, but it is no prerequisite to any other mode.

Of course not, it is prerequisite unto itself- you can't use it if you don't know how.

>
> CW has been defended as essential to emergency communications,

No, it has not- it has been shown to be the most basic of radio communications modes, still very effective even though it is quite ancient by comparison to the flashy efficient new modes that require much more hardware overhead and support.

> which is
> mistakenly claimed as a mandate of amateur radio.

You can ignore the history of the amateur radio service but your attitude cannot change it.

>
> Amateur radio is a hobby.

Sure it is. But unlike almost all other hobbies, it is something much more. No stamp or coin collector will ever find himself in the position to use his hobby to perform critical public services. Most hams will never see the time when they are called to do so, either. So in your opinion no ham need ever prepare nor expect such a thing to happen nowadays, what with cell phones and satellites. Your understanding of the frailties of modern communications belies the level of your education and experience. You simply should know better than that. For some strange reason a number of engineer-hams suffer from that very deficiency. Oddly, many are no-coders, also.

> Amateurs set up emergency and public service groups in which they can
> put their communications gear to good use. It`s all voluntary. Cell
> phone users can do the same. If the cell phones fail, there are
> satellite phone and internet connections. There are more do-gooders with
> cell phones than radio amateurs. They are welcomed volunteers with the
> Red Cross, etc..

This paragraph only shows your lack of expressed knowledge of reality of life in the world of communications. Only ham radio incorporates such a diversified widespread cadre of operator/stations as to be capable of detaching itself from the gridded infrastructure to the extent that it

can function on its own without dependence on such things as power grids, networking schemes, or both. When the lights go out for long periods, or some natural calamity comes, the telephone network clogs- did you ever get the "all circuits are busy" notice? Don't even mention the cellphone network. It was never designed to handle large percentages of its subscribers and saturates straight away. Satellite phones? You mean IRIDIUM? Globalstar? Yeah, right! Not much help there. ALL public safety comms are in instant overload when the ship hits the sand, been there and done that. That leaves FRS and CB. Real organization and true communications capability there, for sure. NOT!

So you go right on blithely assuming that all is well, and your world is secure. If you lived in California you would have assumed, until a couple weeks ago, that your lights were certain to stay on at will, too, and there would always be a working traffic signal at each intersection on the glutted streets and highways.
Modern communications systems are far more fragile and vulnerable than you evidently can imagine. Ever hear of the "Digital Pearl Harbor"? Everything out there is ran by computer these days. That makes everything vulnerable to the hackers. Microsoft itself is not secure. What next? It won't necesarily be a natural disaster that takes modern comms down.
A few years ago in a fairly large town not far away a fire in the central telephone office put the city off all telephone service for days. Meanwhile, the local ham radio 2meter repeater filled in nicely for local critical communcations. Later the telephone company awarded the ham radio club repeater space on its mountaintop site in appreciation of their help. Not a big deal, and rare, but just one more example. So many of you code bashers are so eager to do away with all but the "hobby" aspect of ham radio. Why?

> Amateur emergency help may be welcome, but it is seldom essential.

And when it is essential it is far more than welcome. It is - well, essential.

> Newsflash: Amateurs don`t have to earn spectrum for their radio hobby
> through good deeds. They have access rights simply by getting an FCC
> license.

Ah, now we get down to it. "I have a right". Sure you do. One which can be withdrawn at the stroke of a pen "In the public interest, convenience and necessity".
Comes the time when amateur radio is seen by officialdom as nothing but a burdensome klaven of simple hobbyists and troublesome misfits, a significant portion of whom really don't care, and that pen stroke becomes reality. It has been made perfectly clear that the slide in the direction of worthlessness as a service has been in progress within the Amateur Radio Service for decades.
The instant brouhaha merely serves to grease the skids.

> Just as commerce and industry are worthy and have rights, so do
> individuals, for their life, liberty, and pursuit of happiness.

Which does NOT include transmitting access to any part of the radio spectrum for recreational purposes. There is a "basis and purpose" for the amateur radio service in the FCC rules. You really should read it sometime.

> Dick Carroll is dwelling upon long gone times and conditions before
> there were modern communications.

Very creative writing, Rich, but far too unrealistic to gain credibility as fact.

73, Dick Carroll W0EX

2573. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:17:42 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95l9h6$cu2$0@208.207.71.165>
Source record: 170846

Bill Nelson wrote:

The international agreement specifies that the person
> be "proficient" - there is no requirement that the minimum rate be practical.

And thus, each government which signed the treaty was left to their own definitions of "proficient". Some decided that 12wpm was the minimum level of proficiency. Others decided 5wpm. Not one, anywhere, decided on any speed below 5wpm. The USA decided on 5wpm instead of some higher speed, preferring to allow those who urged themselves on to higher speeds to gain additional operating privileges by so doing.
You guys are lucky. Instead you feel offended. Pity.

2574. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:23:22 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95l9rq$cu2$1@208.207.71.165>
Source record: 170847

Richard Harrison wrote:
>
> Jim, N2EY wrote:
> "How many humans use Latin in their daily communications??
>
> Many do, one way or another. Money talks. Take a quarter from your
> pocket and it says "E PLURIBUS UNMUM". I think that means 25 cents makes
> 1 quarter of a dollar.

Nope. It means "From many, one". A symbol of the Union.

2575. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:41:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95lat9$g6l$0@208.207.71.165>
Source record: 170848

Cecil wrote:
>
> Dick Carroll wrote:
> >
> > Cecil wrote:
> > >
> > > Dick Carroll wrote:
> > > > Any ham who cannot operate effective CW is not an accomplished ham,
> > > > whatever his other accomplishments.
> > >
> > > In your opinion,
> > > there are no accomplished nocode techs. Reality doesn't agree with you.
> > >
> > I haven't heard any no-code techs assert that they are accomplished CW
> > operators.
>
> You didn't say "accomplished CW operator", Dick, you said "accomplished
> ham". That's a near-infinite conceptual difference. Read your above statement
> and you will be forced to admit that you think a nocode tech cannot possibly
> be an "accomplished ham" even if he/she is far superior to you in every
> respect besides Morse code.

Any ham who cannot perform minimally at Morse code, the most basic
radio communications mode, is inherently unqualified at basic radio
communications.
When one is unqualified at the basics, how can he claim to be fully
accomplished?

> Your delusions of grandeur are showing.

No, YOUR delusions of grandeur are trying to show, but they aren't
making much headway because you know that fact is fact, and you are on
the wrong side of the argument.

> Why
> don't you find something different to base your sagging self esteem on
> besides Morse code? Are you a failure at everything else?

You really don't get it at all, it's plain to see. This isn't about
me, nor you, except that you would join them for reasons of your own.
It's about those who prefer to ignore reality. That is: The most basic
radio communications mode is radiotelegraphy. Find one that you can show
to be more basic and we'll look again. I won't stay up late waiting.

2576. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:47:25 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95lb8tgtn0@208.207.71.165>
Source record: 170849

Rory Davis wrote:
>
> The lousy grammar used by many of today's generation seems to me to be the
> result of the lack of time spent in primary and elementary school spent on
> drilling in the rules of language. Most of the common mistakes I see are
> caused by the lack of the application of those rules.
>
> Could it be that time formerly dedicated in the third and fourth grades to
> grammar, spelling and handwriting is now spent teaching keyboarding, drug
> awareness and dealing with social problems?
> Not to mention the lack of time allotted for teachers to apply the sharp red
> pencil to student essays, when the student to teacher ratio exceeds thirty
> to one?

From the perspective of being married to an elementary school teacher
for many years, yes to all the above.

2577. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:50:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7E311E.EEEAB50E@IEEE.org>
Source record: 170850

Dick Carroll wrote:
>
> Richard Harrison wrote:
> > Many do, one way or another. Money talks. Take a quarter from your
> > pocket and it says "E PLURIBUS UNMUM". I think that means 25 cents makes
> > 1 quarter of a dollar.
>
> Nope. It means "From many, one". A symbol of the Union.

Nope, it doesn't, Dick. I'm not sure what UNMUM means but it is
not "one". "One" is UNUM.
--
http://www.mindspring.com/~w6rca

2578. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:54:23 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95lc44$k40$1@slb2.atl.mindspring.net>
Source record: 170851

Cecil wrote in message <3A7E1B13.D878E55E@IEEE.org>...
>Dean Craft wrote:
>> And Richard Harrison is dwelling on the welfare concept of amateur radio.
>> His motto is, I exist, therefore I deserve everything that anyone else in
>> amateur radio has!
>
>How is that different from your desired welfare support system for
>Morse code? "I exist, therefore I deserve to make the rules."
>--
>http://www.mindspring.com/~w6rca

Play with the words as you will Cecil. It seems to be one of your favorite pastimes when you don't know exactly how to respond to something you don't like. It really is quite simple. We are a rule based society whether you approve of that or not. Acquiring what you want through effort directed toward fulfilling the requirements under the rules is not called welfare...it is called earning your way.

Earning your way unfortunately is rapidly becoming outdated in today's politically correct society. We should not require anything of anyone if the process could possibly result in their not acquiring whatever they want. Discrimination, favoritism, being deprived of something that belongs to all people...all are buzz words used in the process of lowering standards throughout all of society.

The freebanders want no rules in place. Everyone who wants a ham ticket, gets one. No rules equals chaos, ie, citizens band.

Dean Craft -- W4IHK

2579. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 04:57:39 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7E32C3.2452346C@IEEE.org>
Source record: 170852

Dick Carroll wrote:
> Any ham who cannot perform minimally at Morse code, the most basic
> radio communications mode, is inherently unqualified at basic radio
> communications.
> When one is unqualified at the basics, how can he claim to be fully
> accomplished?

How can you be fully accomplished without experience at Spark Gap?
Spark Gap is certainly one of the original "basics". Your delusions
of grandeur about Morse code are worrisome, Dick. Aren't you good
at anything else in the world? Hanging all your self esteem on an
outdated governmental requirement is psychologically dangerous.
--
http://www.mindspring.com/~w6rca

2580. Re: Ground plane for supplementing radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:13:02 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <yDqf6.173426$ge4.60232039@news2.rdc2.tx.home.com>
Source record: 170853

I'm going to jump in here, Jason, but I'll be first to admit that others can undoubtedly give you a more authoritative answer.

You didn't say where you were going to mount this antenna. But, if it will be above ground, I think you are making a simple job way too complicated. My "Antenna Handbook" by Bill Orr and Stuart Cowan has a great graph showing that the number of radials needed is dependent on the height of the antenna base above ground. For example, at ground level it is ideally 120 radials; at 0.1 wavelengths it's 60; at 0.2 it 10 radials and at 0.5 it's 4 radials.

I took this to heart when I made my 20m ground plane out of scrape aluminum tubing and mounted it on my roof peak 27 feet up. With five 1/4 wave radials it works great. I can't think of a single CQ I haven't bagged on the first try (Of course, I usually go after the strong signals so I guess I'm preselecting here.).

Pete KATZK Colorado, USA

2581. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:22:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7E3893.CE103F4F@IEEE.org>
Source record: 170855

Dean Craft wrote:
> The freebanders want no rules in place.

The freebanders don't abide by rules so it doesn't make any difference to them whether rules are in place or not. Setting the rules requirement sky high makes not one iota of difference to the freebanders. This is the same as the gun control argument. You must be a Liberal.

> Everyone who wants a ham ticket, gets one.

Everyone who meets the requirements for a ham ticket, gets one, just like it has always been.

> No rules equals chaos, ie, citizens band.

No rules will never happen as long as the FCC exists. Is your alter ego named Chicken Little?
--
http://www.mindspring.com/~w6rca

2582. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:27:19 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A710ABA.7F871516@earthlink.net>
Source record: 170854

Keith Zimmermann wrote:

> OK, I almost made through the whole month without asking a dumb
> question...
>
> Years ago, when I was a teen-novice, someone suggested that I add salt
> around my ground rod and radial system. Being a novice, I of course
> did. I would also water and really soak the ground system prior to a
> planned night of DX-ing. Anything to help my 5 watts!
>
> Now, I'm wondering if there is any benefit from doing either of those
> things. Dry, parched, rocky ground like we have in Texas probably needs
> some help...especially in the summer. I used verticals, end-fed long
> wires, and inverted vees back then. I had a short run from my rig and
> antenna tuner to the ground. I had a good radial system below my
> ground-mounted vertical. But no matter what, I was convinced that
> watering my ground improved my signal and reduced static.
>
> Thanks for any info.
>
> Keith K5WX

Good way to corrode ground systems, There has been more than a few radio
stations that tried the same
then when their signal goes down the toilet the staff or consultant when
checking the radials start to dig
and find green in the soil that use to be radials.

Steve WB3AMG

2583. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:33:22 UTC
From: n2ey@aol.com
Message-ID: <20010205003322.02997.00001868@nso-mg.aol.com>
Source record: 170856

In article <3A7DDC43.388E@wt.net>, Mark Keith <nm5k@wt.net> writes:

>N2EY wrote:
>
>>
>> The written tests became all-multiple-choice in the late 1950s.
>>
>> 73 de Jim, N2EY
>
>You sure???

Absolutely. I have several License Manuals - earliest is 1948. The 1953 and earlier editions mention having to draw schematics and block diagrams. The 1962 edition specifically mentions no schematic drawing - all multiple choice. The ARRL License Manual sample questions were actually reprints of the FCC-issued sample questions/study guides. The info in the LMs was derived directly from the FCC stuff.

> I remember in the early 70's a friend of mine took the
>advanced when in jr.hi school and he had to draw a few circuits if I
>remember right. I remember him talking about them. This was about 1971
>or so.

He was pulling your leg.

I took the Novice in 1967 (age 13, 7th grade) and the Tech and Advanced in 1968 (age 14, in the summer between 7th and 8th grade). All multiple choice - no place to draw schematics if you wanted to!

What they DID do was to show a schematic of, say, a crystal oscillator and ask you what it was. They also showed an almost-complete schematic with various points identified and asked you what was needed to complete it.

Like this:

"The circuit shown is a triode RF power amplifier. To neutralize this circuit, which of the following should be done?

1) connect a resistor from A to B
2) connect a capacitor equal to Cgp from B to C
3) connect a capacitor equal to Cgp from C to E
4) connect an RF choke from D to A...

(you get the idea)

Same thing for block diagrams.

I took the Extra in the sumer of 1970 - had to wait two years back then.

>The majority of the questions were multiple choice though.

By 1961, all of them were. There were two main reasons for this:

1) Less work for the FCC to mark them
2) More objective testing - no interpretation needed. Either you picked the right answer or you didn't.

>Seems
>he only had to draw out one or two circuits on the whole test.

He was pulling your leg - the schematic drawing stuff was gone when he was still in diapers. I know - I was there before him and took all of the tests before he did.

None of the old tests were particularly "hard" IF you knew the material. I knew of some 12 year old Extras in 1970 or so - that means they had to get their Generals by age 10. I was an old timer by comparison, getting it at 16.

The big difference was that since you did not know what the exact Q&A were, nor how they would be distributed, most hams went in overprepared. For example, a prosepective ham knew there would be Ohm's Law questions, but not how many or what they would look like. So he/she learned Ohm's Law and related stuff backwards, forwards and upside-down, to be ready for any possibility. Same for lots of other stuff.

That's not necessary today.

73 de Jim, N2EY

2584. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:35:26 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <ones7t4qosml7l53oc5kadcdojn7c76hih@4ax.com>
Source record: 170857

I agree with you Rory, except for the last part. I can't remember
ever being in a class with less than 30 students, especially in
college. Neither were my children. I think other factors are at work
here which takes away from the time available to teach.

Dick Hughes

On Sun, 4 Feb 2001 21:40:07 -0600, "Rory Davis" <n7cr@bellsouth.net>
wrote:

>The lousy grammar used by many of today's generation seems to me to be the
>result of the lack of time spent in primary and elementary school spent on
>drilling in the rules of language. Most of the common mistakes I see are
>caused by the lack of the application of those rules.
>
>Could it be that time formerly dedicated in the third and fourth grades to
>grammar, spelling and handwriting is now spent teaching keyboarding, drug
>awareness and dealing with social problems?
>Not to mention the lack of time allotted for teachers to apply the sharp red
>pencil to student essays, when the student to teacher ratio exceeds thirty
>to one?

2585. Re: What is a half wavelength vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:39:46 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A710DA3.BF71E4FC@earthlink.net>
Source record: 170858

Richard Harrison wrote:

> Preferred Customer wrote:
> "One guy, in Charleston, West Virginia, pointed at a half-wave tower
> with 10 KW into it. The RF jumped at least a foot to his finger and came
> out his shin.---"
>
> In 1949 I worked in a broadcast plant with two 5 KW transmitters sharing
> the same tower. One was on 950 KHz and the other was on 1320 KHz.
> Problem was the tower had been a 1/4-wave for a previous occupant around
> 700 KHz. It was almost a 1/2-wave for the 1320 KHz station.
>
> We had to use a "hot stick" to open the shorting switches on the antenna
> ammeters for readings and to close them when we were through. The hot
> stick had a wooden handle. No fiberglass in 1949. RF had burned a carbon
> trench the length of the handle. No point to replace the handle. It
> would just be burnt again in a few days.
>
> Every time we opened or closed a switch with the hot stick we were
> treated to a real fireworks display which nipped at our fingers. We were
> used to it and operated the switches very quickly to minimize the burn
> potential.
>
> Best regards, Richard Harrison, KB5WZI

A radio station that use to be near Washington's Crossing, Pa had top
loaded 5/8 wave towers
with driving impedance's that was next to impossible like 0.6 -J 800 ohms
that was a challenge
at best. A OIB-1 rated 10 KW smoked with 500 watts applied, at monitoring
points you could
watch signal levels change with someone just walking into the doghouse! The
other 3 towers
were better but not by much, Truly a installation from hell.

Steve Dobak WB3AMG

2586. Re: dipole problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:52:35 UTC
From: Stephen Dobak <shdobak@earthlink.net>
Message-ID: <3A7110A3.F33FA6B7@earthlink.net>
Source record: 170859

Sidney Cammeresi wrote:

> i am an apartment dweller, and i am taking my first stab at building an
> antenna out on my balcony. the antenna is for 2m, but it is not working
> correctly. when i key the transmitter (which is currently only a 5 watt
> ht), i get a very low swr of about 1.2:1, but i only see about 2.5 watts
> out. if i attach my rubber duck to the end of the feed line, i see about
> 1.5:1 and 5 watts coming out. also, if i disconnect the antenna and just
> transmit into the feed line, i get a full 5 watts with an swr of 2.5:1.
>
> the construction is about 40 ft of coax running outside and connecting
> straight to the elements. i had a balun on there consisting of 10 turns
> of wire through a core, but took it off at the advice of a couple of other
> hams.
>
> any ideas as to what could be wrong here?
>
> sc
>
> --
> Sidney CAMMERESI http://www.cheesecake.org/sac
> Emperor, Nukernel Software, Unl.
> AB9BH

First the handheld is likely tuned for the rubber duck, you would have to
retune the output stage
to match your new antenna, second you have lossy feedline.

Steve WB3AMG

2587. Re: Imax 2000 vs. Maco V58 - opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 05:59:07 UTC
From: WALTERB@prodigy.net
Message-ID: <95lf7b$jvmg$1@newssvr06-en0.news.prodigy.com>
Source record: 170860

Cowboy,
The Imax 2000 will cover the lower part of 10meters 28.300 to 28.500 and
11meters OK or 12meters & 11 meters but in order to do all three you would
have to use at least 100ft of coax or a tuner to cover all three bands at
the same time. 73s Oldtimer
Cowboy <cowboy_krs21208@my-deja.com> wrote in message
news:93d57h$4af$1@nnrp1.deja.com...
> I am looking for a vertical that can be used across 10, 11 and 12 meter
> operations. I've heard that the Imax 2000 is broadbanded enough and
> handles the 3 meters fine and without tuning. I've also heard that the
> Imax 2000 is prone to causing a greater amount of RFI to neighbors.
>
> Does anyone have any experience related to the Imax a/o the Maco, their
> ability to work across the 3 meters I've mentioned, and their relative
> RFI.
>
> --
> 73's
> Cowboy
>
>
> Sent via Deja.com
> http://www.deja.com/

2588. Re: K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 06:10:50 UTC
From: WALTERB@prodigy.net
Message-ID: <95lfta$12k0$1@newssvr06-en0.news.prodigy.com>
Source record: 170861

I have used a K40 on 28.300 to 28.500 with a low swr for many years and it worked just fine, K40 made a K10 and the stinger was about 3in shorter.
Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote in message news:kUNZ4JArjHf6Ew9v@g3ohx.demon.co.uk...
> In article <95g01k$s0a$5@bashir.peak.org>, Bill Nelson
> <billn@spock.peak.org> writes
> >Rudy Marcelletti <rudym@net-link.net> wrote:
> >: Don't monkey around with the coil--just shorten the whip and measure with
> >: analyzer. Start with cutting about 5" off at first (you can't put it back
> >: on!) I forget what I had to cut off. I have a K-40 cut down for 10 meters
> >: and it works pretty good for what it is. I get wide band coverage 2.1
> >: swr--so it is lossy. Hustler mast and coil works better, so does full size
> >: quarter wave whip.
> >
> >A high SWR does not necessarily mean that your antenna system is lossy.
> >Nor does a now SWR mean that your system is efficient.
> >
>
> I used a base-loaded CB whip for 10m FM (with a modified CB set plus
> retuned CB 40W 'burner'). I didn't cut the whip or take turns off the
> coil. As the CB antenna was inductive above its 'correct' frequency, I
> simply inserted a compression trimmer capacitor in series with the feed
> point (between the coax inner and the bottom of the coil), and adjusted
> it for minimum SWR. I then measured the value of the cap (220p?). I then
> replaced this with a fixed disc ceramic (500V) of the same value. OK on
> 40W (and I worked Jamaica and several US repeaters).
>
> Ian.
>

2589. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 06:15:41 UTC
From: richardharrison@webtv.net
Message-ID: <1992-3A7E450D-89@storefull-111.iap.bryant.webtv.net>
Source record: 170863

Dick Carroll wrote:
"Only ham radio incorporates such a diversified widespread cadre of operator/stations as to be capable of detaching itself from the gridded infrastructure to the extent that it can function on its own without dependence on such things as power grids, networking schemes or both."

You enjoy lower insurance rates because your fire and police departments have hardened radio systems which can be independent of the local telephone and power systems.

Come on! The commercial networks are extremely tolerant of disruption. Failure triggers instant rerouting to get the message through.

In dire continuing problem spots, there are available elaborate police and sheriff communications vans with everything needed for fairly long-term operations. These are always ready to roll. There are National Guard units with communications gear and operators awaiting a governor`s orders to be used where needed. The armed forces are well equiped and awaiting federal orders. Then, there is a multitude of private industrial and commercial communications networks with independent power and divertable capacity. Almost any large TV station can dispatch a capable satellite remote across the street or around the world. Or they can send a helicopter with a minicam.

All hams could be ordered off the air and be hardly missed for emergency communications. All the police, military, industrial, commercial, broadcast, and other professional emergency communications are operated by disciplined professionals using professional equipment and are more reliable than the amateur community.

You can have all the heroic dreams you like, but it doesn`t square with reality.

What ham radio does well is provide communications for marathons, fun runs, bicycle tours, etc. which are promoted by charities as fund-raisers. Free communications for these is not in the charter of the other organizations.

Best regards, Richard Harrison., KB5WZI

2590. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 06:22:20 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95lgs3$60s$1@slb5.atl.mindspring.net>
Source record: 170862

Cecil wrote in message <3A7E3893.CE103F4F@IEEE.org>...
>Dean Craft wrote:
>> The freebanders want no rules in place.
>
>The freebanders don't abide by rules so it doesn't make any difference
>to them whether rules are in place or not. Setting the rules requirement
>sky high makes not one iota of difference to the freebanders. This is
>the same as the gun control argument. You must be a Liberal.
>
>> Everyone who wants a ham ticket, gets one.
>
>Everyone who meets the requirements for a ham ticket, gets one, just
>like it has always been.
>
>> No rules equals chaos, ie, citizens band.
>
>No rules will never happen as long as the FCC exists. Is your alter
>ego named Chicken Little?
>--
>http://www.mindspring.com/~w6rca

You are no better in guessing political proclivities than you are at determining fairness with respect to rewarding initiative, work ethic and earning one's way. It is also obvious you pay little, if indeed any, attention to what amounts to a total lack of rules and enforcement within the CB arena. Whether they are called freebander or no-coder, the end result is identical. They want a ticket to ride without earning it.

Dean Craft -- W4IHK

2591. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 07:06:51 UTC
From: richardharrison@webtv.net
Message-ID: <1993-3A7E510B-34@storefull-111.iap.bryant.webtv.net>
Source record: 170864

UNMUM?
Must mean there is no stinking money.
Best regards, Richard Harrison, KB5WZI

2592. Re: Ground plane for supplementing radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 07:45:20 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7E5A10.7E16@wt.net>
Source record: 170865

jason_hsu@my-deja.com wrote:
>
> QUESTION: Does supplementing radials with a metal surface connected to
> the antenna ground substantially reduce ground losses?

Yes, at the base of a vertical that could help a lot.
>
> As I understand it, the ideal ground plane for a vertical antenna is an
> infinitely large conductive plane.

You pretty much answered your own question with that statement. A solid
sheet or plate would be better than wires with gaps in between them. The
solid plate is total saturation of the radials. Can't do any better than
that. This means the most at the base of the antenna. I would think the
farther away , the less critical. MK
--
http://web.wt.net/~nm5k

2593. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 08:07:57 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7E5F5D.A32@wt.net>
Source record: 170770

N2EY wrote:

>
> The big difference was that since you did not know what the exact Q&A were, nor
> how they would be distributed, most hams went in overprepared. For example, a
> prosepective ham knew there would be Ohm's Law questions, but not how many or
> what they would look like. So he/she learned Ohm's Law and related stuff
> backwards, forwards and upside-down, to be ready for any possibility. Same for
> lots of other stuff.
>
> That's not necessary today.
>
> 73 de Jim, N2EY

I'd have to ask him. I thought he had to draw out a couple of
oscillators or something along those lines, but I may have mistaken that
for what you mentioned. I didn't get a ticket until 1977. I learned all
I needed to get the novice in 1971 "8th grade", but then just put it
off for some reason. I was also busy with band and running track at that
time. I finally took the test in 77 when I was 20. As I liked the code,
I didn't mind being a novice. I stayed a novice until 84, when I
upgraded to general. I probably would still be a general except they
started the "buy a call sign" thing, and I decided to dump my old call
which I wasn't overly fond of. Thats the only reason I upgraded. I took
the advanced one week , and the extra a couple of weeks later. Didn't
stay advanced very long at all. I blinked and it was gone. That was in
96 I guess. At this time, I have 4 paper tickets that all have valid
dates. Three for WD5CJL, and one for NM5K. Of course only the last is
"really" any good now. I have a general, advanced, and two extras. :-/
MK
--
http://web.wt.net/~nm5k

2594. Re:Lightning hit update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 09:07:58 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <95lqh9imu1@slb1.atl.mindspring.net>
Source record: 170866

Last year I posted about lightning going for my tree and then across the room to the metal heat/ac duct under my bed wile I was in it.
My long wire, 9:1 transformer, thrown out the window to the ground coax were untouched.
I suffered tiny donut blisters on my back, and developed violent jumping in my sleep (a small hernia from it) and a traumatized hearing impaired cat.
Its been about 8 months the jumping has gone but I still do not feel the same as I was before the incident.
I also have developed back pain.
3 Doc's say I am fine, its anxiety, my imagination, my age getting up (40), possibly not enough of exercise.
Anyone suffer the same from one of these hit's

2595. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 09:39:37 UTC
From: John Burrell <john@g8ozh.com>
Message-ID: <nZvf6.27873$wq.3822527@nnrp3.clara.net>
Source record: 170769

Gary,

I'm not so sure that you are correct with your assertion of Eastings preceding Northings. I accept that this applies when using map grid references such as Ordnance Survey, but when using latitude and longitude they are expressed in that order.i.e. Degrees (and their subdivisions depending on the system used) North (or South) followed by West (or East).

73 John, G8OZH

Gary Peach <xcg34@dial.pipex.com> wrote in message
news:95k22ljqv4@lure.pipex.net...
>
> "Bill Turner" <w7ti@jps.net> wrote in message
>
> > 73, Bill W7TI
> > 34 14 N
> > 116 20 W
>
> It is convention to give Easting first Bill
> 73
> --
> Gary7SLL
> 1° 20' W 51° 23' N
> http://www.gary.peach.dial.pipex.com/
>
>
> in passin
> 116° 20' W - 1° 20' W = 115°
> divide this by 15 = 7 2/3 note 360/24 = 15
> you are 7 Hours 40 minutes in time behind me.
> Locators won't do that for you :)
>
> I'll try to make good use of the Sun before I pass it on to you. :)
>
> Who said the Brits were too stiff upper lip to pass the time of day?
>
> Of course if someone has a spherical geometry program running perhaps s/he
> can calculate the distance and bearing between us which would seem more
> appropriate in a group devoted to Ham Radio.
>
> Of course I can get the map out and see that you live near the Gulf of St
> Catalina and I can ask you about the Under Sea Gardens nr Avelon or some
> such, or what is Palm Springs like.

> Of course you are not far from Goldstone there, have you been out to the
> Tracking Station?
>
> Perhaps I should refine my sig and add the seconds of arc.
>
>

2596. Trap calculation help requested

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 09:40:04 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A7E74F3.E579A350@eskom.co.za>
Source record: 170867

I have made a HF trap for 28.8MHz. The trap specification are Dia
22.3mm, Coil Length 51.0mm, Turns 17, Wire Dia 1.6mm copper with
Resistance of 8.6 Ohms / KM
The calculated inductance is 3.05i¿½H and the Capacitance is 10pF

I want to calculate the Q of the trap. Please show your calculations.
Thanks
Stan
ZS6HAL

2597. Re: Should i get a Hustler 4-BTV?need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 10:16:29 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <14vf6.174868$ge4.60630765@news2.rdc2.tx.home.com>
Source record: 170868

The other nice thing about experimenting with wire is that you can make it into one kind of antenna, then tear it down and make it into another. Dipole to inverted-V is obvious. But, you could also make it into a vertical (for the higher bands) if you have a tree or other vertical support. Ground mounted verticals are a pain, though, since you usually need a zillion radials.

--
Pete KA TZK Colorado, USA

2598. Re: Loop antenna results

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 11:58:50 UTC
From: DOUG NOBLE <dougnoble@tannoyaudix.com>
Message-ID: <qEwf6.4558$yU.54867@NewsReader>
Source record: 170771

yes they go well dont they, Ive built a couple for 10-20m and 80 -30 and would be interested in knowing a couple of things -
1) Which option did you use to match to the loop
2) Have you tried modeling your loop on Reg Edwards loop software, if so how did it compare.

Doug Noble
GM0DJN

2599. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 12:06:47 UTC
From: n2ey@aol.com
Message-ID: <20010205070647.14870.00001664@nso-fr.aol.com>
Source record: 170773

In article <1992-3A7E450D-89@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Dick Carroll wrote:
>"Only ham radio incorporates such a diversified widespread cadre of
>operator/stations as to be capable of detaching itself from the gridded
>infrastructure to the extent that it can function on its own without
>dependence on such things as power grids, networking schemes or both."
>
>You enjoy lower insurance rates because your fire and police departments
>have hardened radio systems which can be independent of the local
>telephone and power systems.

No, I don't. The insurance companies don't check such things - they simply look
at the overall response time and make an educated guess at their risk.
>
>Come on! The commercial networks are extremely tolerant of disruption.

Until enough critical elements fail. Then it's all over.

>Failure triggers instant rerouting to get the message through.

Sure - until enough critical elements fail.

And many of our fire departments are volunteer. How do you think those folks
would respond to "it's just a hobby"?
>
>In dire continuing problem spots, there are available elaborate police
>and sheriff communications vans with everything needed for fairly
>long-term operations. These are always ready to roll.

Not every location has them. And they are limited in number.

> There are National
>Guard units with communications gear and operators awaiting a governor`s
>orders to be used where needed.

Yup. How many hours does it take them to mobilize?

>The armed forces are well equiped and
>awaiting federal orders.

You ever see Army units providing emergency relief in the USA?

>Then, there is a multitude of private
>industrial and commercial communications networks with independent power
>and divertable capacity. Almost any large TV station can dispatch a
>capable satellite remote across the street or around the world. Or they

>can send a helicopter with a minicam.

Which helps out how?

The key factor is "a" satellite remote or "a" minicam. Such resources are very limited in number. And they need to be able to get to the problem area from far away.
>
>All hams could be ordered off the air and be hardly missed for emergency
>communications.

Why would that happen?

>All the police, military, industrial, commercial,
>broadcast, and other professional emergency communications are operated
>by disciplined professionals using professional equipment and are more
>reliable than the amateur community.

Their numbers are also limited.
>
>You can have all the heroic dreams you like, but it doesn`t square with
>reality.

Oklahoma City bombing - Red River floods - northeast ice storms of 97 - several hurricanes over the past few years - where were all the "disciplined professionals"? Strained to the limit.
>
>What ham radio does well is provide communications for marathons, fun
>runs, bicycle tours, etc. which are promoted by charities as
>fund-raisers. Free communications for these is not in the charter of the
>other organizations.

The New York City Marathon is a "fund-raiser"?

Sorry Richard, your arguments just keep getting weaker.

73 de Jim, N2EY

2600. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 12:06:48 UTC
From: n2ey@aol.com
Message-ID: <20010205070648.14870.00001665@nso-fr.aol.com>
Source record: 170772

In article <9817-3A7E0C82-58@storefull-112.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) writes:

>Jim, N2EY wrote:
>"How many humans use Latin in their daily communications??
>
>Many do, one way or another. Money talks.

Something else walks.

>Take a quarter from your
>pocket and it says "E PLURIBUS UNMUM".

No, it doesn't.

It says "E PLURIBUS UNUM" which means "From many, one" - the motto of the USA.
(I had two years of Latin in high school. It was required of all academic-track
students.)

It also says "IN GOD WE TRUST" and a bunch of other stuff. So what? Nobody I
know uses Latin in their daily communication. Lots of folks I know use Morse -
on the radio yet.

Your claims keep getting stranger and stranger, Richard. Comparing Morse to
Latin has backfired on you.

73 de Jim, N2EY

I think that means 25 cents makes
>1 quarter of a dollar.

2601. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 12:32:38 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <G3xf6.14144$mA1.850848@bgtnsc06-news.ops.worldnet.att.net>
Source record: 170774

> I pronounce 'solder' as it is spelt (not 'sodder').

*We (as in Americans) say it more like sole jer.

*to qualify it further; We, born in the US, not raised in an ethnic
community, or Boston or the Bronx or the south.

Ah jeez, I may be the only one to pronounce it sole jer!
Hey John Wayne did too. :-)

--
Mike Knowlton
Panama City Fl.

2602. Re: Tinfoil hats (Art Bell returns tonite!)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 13:03:58 UTC
From: Hey mon <hselisor@phillo.net>
Message-ID: <2xxf6.724$9%3.97722@newsread2.prod.itd.earthlink.net>
Source record: 170775
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.equipment

<jason_hsu@my-deja.com> wrote in message news:95ipieaak1@nnrp1.deja.com...
> I understand that capacitance hats are a loading scheme used to work
> low frequencies with a shortened antenna. Capacitance hats are more
> efficient than inductive loading coils but aren't very practical for
> mobile use (due to the impact of the wind).

True. What they used to do was make a ring of aluminum
with 4 "spokes" to couple it to the radiator. This way the
wind would blow thru it while mobile.

BTW - Don't forget that Art Bell returns tonite to late night radio.

see the URLs--> www.artbell.com and www.coasttocoastam.com

But also

2603. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 13:44:21 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Oa1+OojKumFQ6a0PX1WMyE=wvv51@4ax.com>
Source record: 170776

Cecil <Cecil.A.Moore@IEEE.org> wrote:

>Dennis Collin wrote:
>> It "gets" a lot of us, too. There are lots of examples of wayward
>> apostrophes to be found on the internet ... QSL's, SASE's, QSO's are
>> some common examples here. An apostrophe does NOT mean "look out,
>> here comes an 'S'!".
>
>Actually Dennis, I do believe that QSL's is the correct way to
>pluralize QSL. 73's is the correct way to pluralize the number 73.
>From Webster's: "apostrophe - a mark ' used to indicate ... the
>plural of letters or figures" (figures meaning numbers)
>
>There are two t's in the word "letter". That's an absolutely correct
>English statement. QSL's, SASE's, and QSO's seem to me to be correct
>for the same reason.

I agree -- from my best grammar book, Standard Handbook for
Secretaries...

Plurals of figures: 10's 20's

Plurals of words: if's and's

Plurals of letters: ABC's t's

Bob
k5qwg

2604. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 14:17:03 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7EB5DF.A9FEF320@IEEE.org>
Source record: 170778

Bob Miller wrote:
> I agree -- from my best grammar book, Standard Handbook for
> Secretaries...
>
> Plurals of figures: 10's 20's
>
> Plurals of words: if's and's
>
> Plurals of letters: ABC's t's

Thanks Bob, I find it strange that people complain about proper
English and want to replace it with ham jargon. :-)
--
http://www.mindspring.com/~w6rca

2605. Re:Lightning hit update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 14:18:17 UTC
From: k3bu@aol.com
Message-ID: <20010205091817.03223.00001043@ng-co1.aol.com>
Source record: 170777

>I also have developed back pain.
>3 Doc's say I am fine, its anxiety, my imagination, my age getting up (40),
>possibly not enough of exercise.
>Anyone suffer the same from one of these hit's
>

Dunno,
but my father once revived person who was hit by lightning and pronounced dead, by quickly burrying the body in the ground (face sticking out). The person came back to life after a while, appears that charge was "sucked" by the earth and function of the organs was restored (body wasn't burned).
Not sure if this would work after so long, but might be worth trying, can't hurt. Doctors don't know everything.
Strange things happen like blind woman got hit in the head and started seeing again (recently in the news).

Yuri, K3BU

2606. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 14:30:56 UTC
From: richardharrison@webtv.net
Message-ID: <26627-3A7EB920-1@storefull-112.iap.bryant.webtv.net>
Source record: 170780

Jim, N2EY wrote:
"The New York City Marathon is a "fund-raiser"?"

It is illegal to use ham radio in "for-profit" activities.

For-profit companies can use their commercial radios for non-profit activities. It works out that way unintentionally for some. For others, their extensive radio systems are often intentionally used for the emergency non-profit greater good of the community. Our company about 40 years ago installed ham radios around the USA for cooperation with hams in emergency situations. Don`t recall them ever being used for relief, only for amusement of some employees who were hams. The FCC would likely frown upon companies using their commercial radio channels to support local "Fun-Runs".

Best regards, Richard Harrison, KB5WZI

2607. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 14:33:48 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7EB9CC.8B31D10F@IEEE.org>
Source record: 170779

Dean Craft wrote:
> You are no better in guessing political proclivities than you are at
> determining fairness with respect to rewarding initiative, work ethic and
> earning one's way.

Where can I obtain a crystal ball like you have? Where are the hoards
of CBers and freebanders who were supposed to invade the ARS after
April 15?

> It is also obvious you pay little, if indeed any,
> attention to what amounts to a total lack of rules and enforcement within
> the CB arena.

CBers are untested, unlicensed, and unsupervised. They bear no resemblance
to the ARS.

> Whether they are called freebander or no-coder, the end
> result is identical. They want a ticket to ride without earning it.

Make the ARS requirements a PhD in electronics and 100wpm code. The
freebanders will still be there. The no-coders would disappear. Freebanders
are unlicensed criminals. No-coders are licensed amateur radio operators.
There is no comparison. P.S. (Prozac would probably reduce your paranoid
delusions. :-)
--
http://www.mindspring.com/~w6rca

2608. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 16:06:28 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <8rjt7tchvu4vjcu59hitkj8bf79q8aut4k@4ax.com>
Source record: 170781

On Sun, 4 Feb 2001 13:40:08 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.com> wrote:

>Really there are no rules, only customs - but if we want to communicate
>with readers, we do well to follow the customs that they expect.
>Unfortunately there are several different customs, and lots of would-be
>rule-makers.

The best comment of all, including mine. Thanks, Ian!

73, Bill W7TI

2609. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 16:10:00 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <i1kt7t8nko99117np4crdliv0gv3tsktl3@4ax.com>
Source record: 170782

On Sun, 04 Feb 2001 08:09:30 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

>Bill Turner wrote:
>> It's more efficient to derive meaning from context ...
>
>Not for computers.

True, considering the well-known IQ of computers.

73, Bill W7TI

2610. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 16:14:09 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <88kt7t4n4ire4d346607g023p3upgq0i15@4ax.com>
Source record: 170783

On Sun, 4 Feb 2001 16:51:14 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:

>> 73, Bill W7TI
>> 34 14 N
>> 116 20 W
>
>It is convention to give Easting first Bill
>73

My lat/lon learning is from the recreational boating world, and there it's normally N/S first, E/W second.

73, Bill W7TI

2611. MFJ-1798 have anyone used this Ant. on 80/75 meter ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 16:20:40 UTC
From: Yul Kwan <vr2myy@ctimail.com>
Message-ID: <95mjmn$no0$1@news.ctimail.com>
Source record: 170784

Hi all,
Have anyone ever used the MFJ-1798, I don't have much room of my roof
need an low band Ant with low take off angel and no radial for 80/75 meter.
Some small and will do the job on 80/75 meter. Many thanks 73 to all.

<vr2my@qsl.net>
Yul/VR2MY

2612. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 17:06:25 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95mmi5$t20$1@slb6.atl.mindspring.net>
Source record: 170786

Cecil wrote in message <3A7EB9CC.8B31D10F@IEEE.org>...
>
>
> No-coders are licensed amateur radio operators.
>There is no comparison. P.S. (Prozac would probably reduce your paranoid
>delusions. :-)
>--
>http://www.mindspring.com/~w6rca

No-coders and freebanders are the recipients of the welfare state of amateur radio because that is what they have made it. They now outnumber those who believe in the old fashion method of acquiring what you want by earning it. When you are outvoted, you loose. I don't like it but I accept it because that is the way things work.

I suggest you might want to consider whether you could derive benefit from using the Prozac that you prescribed for myself. It does seem to me that you are spending an inordinate amount of time worrying about, and attempting to define, what you refer to as delusions of grandeur; sagging self esteem; the political leanings and the alter egos of, many of those posting to the group.

Dean Craft -- W4IHK

2613. SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 17:20:39 UTC
From: Jim <arnoldjimjim@hotmail.com>
Message-ID: <3A7EE153.FA13502A@hotmail.com>
Source record: 170787
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

I've read through SW antenna discussions and it's all way way beyond me. Web pages all seem over my head too. Can someone point me to an "antennas for dummies" (or beginners) web page or book please. Maybe I also need a reference about basic radio theory. Perhaps there is a FAQ posting I haven't seen. (I had a good reference 30 years ago called "Instructions for Radio Construction", but alas it went with the wonderful tube radios my parents gave away when I was 20 (Normende Elektra, Grundig, and FM transmitter I built and a couple of crystal sets. I working on relieving the pain now).

I live in Saskatoon, Saskatchewan, Canada, and what I gather (sort of) is a passive outdoor antenna is likely best. I am completely lost as to why wire must be insulated, why/whether lengths and gauge matter, how the plug-ins in the side of my Sangean ATS 909 and Grundig 300PE are set up. I have the plug passive antennas these radios came with.

The last time I had a big antenna was 1968 or 70 and I just strung 120 feet of wire out the window around the second storey of my childhood home, stuffing it under the shingles and chucking it over to the neighbour's roof and doing the same thing there, clipping it to the telescope antennas with an alligator clip. What will I gain by something more complex? Does north/south/east/west orientation around a roof make a difference. The active/passive antenna thing also has me completely boggled. I am looking to extend the SW hours into the daytime more (I can only get BBC fading in and out, USA audio-evangelists and lots of Spanish, though I heard Russia and got Kuwait yesterday), and I am a long way from signals here (-7 hours UTC), 600 miles north of USA border. Any simple instructions and why I would choose this or that would be gratefully accepted.

Thanks, Jim Arnold
arnoldjimjim@hotmail.com

2614. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 17:22:33 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80701DC2B@www.premiersi.com>
Source record: 170721

Please bear in mind that this is the country that brought "wazzzuuppp" into
the English language...
Many of us don't know "wear" from "where" or "here" from "hear" or correct
usage of "me" versus "I".

Although many who fall into one of those groups can CaPiTiAlIzE DiFfErEnT
LeTtErS almost without a single error when writing, they fail to grasp basic
grammar (often spelling it "grammer" when they use the term). I have not
been able to figure these things out and I live here, Ian.

"Ian Jackson" <ianjackson@g3ohx.demon.co.uk> wrote in message
news:GLqhPYA2FIf6EwJ+@g3ohx.demon.co.uk...
> Sorry for stirring, and nothing to do with radio, but why do the
> Americans invariably get the use of 'it's' and 'its' WRONG? Everybody
> makes typos, but this is beginning to get to me!
>
> FYI...
> 'It's' is 'it is'.
> 'Its' is 'belonging to it'.
> It is (ie it's) an irregular use of the apostrophe. There are a few
> others.
>
> Ian.

2615. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 17:23:22 UTC
From: n2ey@aol.com
Message-ID: <95mnhr$466$1@nnrp1.deja.com>
Source record: 170788

In article <3A7E5F5D.A32@wt.net>,
nm5k@wt.net wrote:
>
> I'd have to ask him.

(referring to drawing of schematics in FCC tests circa 1971)

> I thought he had to draw out a couple of
> oscillators or something along those lines, but I may have mistaken
that
> for what you mentioned.

He was probably pulling your leg or maybe he remembered it that way.
But the FCC ham tests were all multiple-choice before 1961 - at least
ten years before he took his.

I can photocopy the old LMs and QST articles if proof is needed.

> I didn't get a ticket until 1977. I learned all
> I needed to get the novice in 1971 "8th grade", but then just put it
> off for some reason.

Back then you had two years to upgrade or lose it. Some hams (then and
now) would get the license with no thought about how they were going to
get on the air. By the time they had acquired a receiver, transmitter,
key, T/R system and antenna, precious months had been lost. So it may
have been a wise choice.

> I was also busy with band and running track at that
> time. I finally took the test in 77 when I was 20. As I liked the
code,
> I didn't mind being a novice. I stayed a novice until 84, when I
> upgraded to general. I probably would still be a general except they
> started the "buy a call sign" thing, and I decided to dump my old call
> which I wasn't overly fond of. Thats the only reason I upgraded. I
took
> the advanced one week , and the extra a couple of weeks later. Didn't
> stay advanced very long at all. I blinked and it was gone. That was in
> 96 I guess. At this time, I have 4 paper tickets that all have valid
> dates. Three for WD5CJL, and one for NM5K. Of course only the last is
> "really" any good now. I have a general, advanced, and two extras. :-
/

What a neat story! I was sort of the opposite - couldn't wait to get on
the air, then to upgrade.

Got the Novice in 67 and went for the General in 68, but the FCC examiner couldn't read my writing so I muffed 13 per the first time. (That was back when you got 5 minutes of code and at the end the examiner pulled the paper - no time to go back and fix anything.) But there were 25 consecutive characters legible, so they let me take the General written and I walked out with a Tech - held both Tech and Novice at the same time, and which callsign I used depended on the band used.

Went home and taught myself how to block print so there would be no confusion over longhand. 35 days after the first try (the next possible session after the 30 day wait to retest) I passed 13 wpm - and the examiner said "why not try the Advanced?". One did not say no to The Man back then - certainly not if you were 14 years old. So I tried and passed and walked out an Advanced.

Back then you could not use the new privileges until the actual license arrived - which took 6-8 weeks. I spent the time getting a VFO set up so I could move out of the Novice band. When it came (fall of 68) I had a few weeks of full privileges, then lost them because "Incentive Licensing" took effect.

You know the rest of that story - got 'em back in 1970. Got this callsign in 1977 when I moved to WNY and kept it when I moved back to EPA. Back then you couldn't buy a callsign (legally, anyway) - you just took the next one on the pile.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2616. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 18:16:11 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7EEDEB.650E564B@IEEE.org>
Source record: 170791

Dean Craft wrote:
> No-coders and freebanders are the recipients of the welfare state of amateur
> radio because that is what they have made it.

The government cannot control criminal behaviour on RF any better than
it can keep guns out of the hands of criminals. Nocode techs are just as
much a legal part of the ARS as you are. Freebanders are criminals and
don't care one iota about license requirements. There is absolutely no
relationship between unlicensed freebanders and licensed nocode techs.
Your Chicken Little attitude needs a reality check.

> I suggest you might want to consider whether you could derive benefit from
> using the Prozac that you prescribed for myself. It does seem to me that
> you are spending an inordinate amount of time worrying about, and attempting
> to define, what you refer to as delusions of grandeur; sagging self esteem;
> the political leanings and the alter egos of, many of those posting to the
> group.

I *AM* on Prozac, Dean, and it fixed all my delusions, sagging self-
esteem, and alter egos. That's why it is so easy for me to recognize
those same symptoms in you. Like CW, been there, done that. :-)
--
http://www.mindspring.com/~w6rca

2617. Re: K40 mod necessary for 10 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 18:20:20 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a7eeeae$0$30002$44a10c7e@news.net-link.net>
Source record: 170789

The K10 has different windings in the coil. I think I had to cut off about
8 to 10 inches on my K40. I never said low SWR means good antenna or low
loss or whatever. Low SWR means I was not hurting or cutting back my rig.
Usually on a short or loaded antenna, wide band width and low SWR acrossed
it means poorer performance. That is what I see with my K-40 compared to a
Huster, SGC, screwdriver, or 102" whip with Icom AH-4 coupler.
WALTERB@prodigy.net wrote in message
<95lfta$12k0$1@newssvr06-en0.news.prodigy.com>...
>I have used a K40 on 28.300 to 28.500 with a low swr for many years and it
>worked just fine, K40 made a K10 and the stinger was about 3in shorter.
>Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote in message
>news:kUNZ4JArjHf6Ew9v@g3ohx.demon.co.uk...
>> In article <95g01k$s0a$5@bashir.peak.org>, Bill Nelson
>> <billn@spock.peak.org> writes
>> >Rudy Marcelletti <rudym@net-link.net> wrote:
>> >: Don't monkey around with the coil--just shorten the whip and measure
>with
>> >: analyzer. Start with cutting about 5" off at first (you can't put it
>back
>> >: on!) I forget what I had to cut off. I have a K-40 cut down for 10
>meters
>> >: and it works pretty good for what it is. I get wide band coverage 2.1
>> >: swr--so it is lossy. Hustler mast and coil works better, so does full
>size
>> >: quarter wave whip.
>> >
>> >A high SWR does not necessarily mean that your antenna system is lossy.
>> >Nor does a now SWR mean that your system is efficient.
>> >
>>
>> I used a base-loaded CB whip for 10m FM (with a modified CB set plus
>> retuned CB 40W 'burner'). I didn't cut the whip or take turns off the
>> coil. As the CB antenna was inductive above its 'correct' frequency, I
>> simply inserted a compression trimmer capacitor in series with the feed
>> point (between the coax inner and the bottom of the coil), and adjusted
>> it for minimum SWR. I then measured the value of the cap (220p?). I then
>> replaced this with a fixed disc ceramic (500V) of the same value. OK on
>> 40W (and I worked Jamaica and several US repeaters).
>>
>> Ian.
>>
>
>

2618. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 18:22:44 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <aex+OnEAgHBMaTJm3ls6i+A=aZju@4ax.com>
Source record: 170790

Jim <arnoldjimjim@hotmail.com> wrote:

> The active/passive antenna thing
>also has me completely boggled. I am looking to extend the SW hours into the
>daytime more (I can only get BBC fading in and out, USA audio-evangelists and
>lots of Spanish, though I heard Russia and got Kuwait yesterday), and I am a
>long way from signals here (-7 hours UTC), 600 miles north of USA border. Any
>simple instructions and why I would choose this or that would be gratefully
>accepted.

Well, you can make this highly overly-complicated, or simple. There's
just not a hell of a lot that is critical in a receiving antenna for
shortwave (transmitting antennas are much more complicated).

Just string up the longest piece of wire you can. If you can get it
outdoors, that's great. If you can keep it away from the house, where
you might pick up interference from household gadgets, and away from
powerlines, where you can pick up powerline buzz, so much the better.
It doesn't really matter much how long the wire is. Just make it as
long as you can and don't worry about it. The higher the better. The
more in the clear, the better.

Another thing you can do, if you wish, is contact stores that sell swl
stuff, tell them you're a total doofus on antennas, and do they have
any basic swl-ing books that explain this stuff. The stores below are
good places to start.

Good luck!

Bob
k5qwg

http://www.universal-radio.com/

http://www.ccrane.com/

2619. Re: Should i get a Hustler 4-BTV?need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 18:26:20 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a7ef158$0$30009$44a10c7e@news.net-link.net>
Source record: 170792

Good antenna. Just make sure you have the room for radials. Works better
if elevated. Works good with at least 2, preferably 4 or more radials on
lowest band, in your case at least 33 feet long or so in an X patern from
the base of the antenna. You need coax also. I would go with a 80 meter
dipole and feed it with ladder line to cover all bands and you can get a MFJ
tuner for about $150.00 to flatten the dipole. Works on 6 meters too.
Spend a bit of money on the tuner now because you can play with a lot of
antennas you can build cheap from wire. You can't do that with the 4BTV.
Cm13141 wrote in message <20010202181853.23699.00000469@ng-bj1.aol.com>...
>I will be taking my general exam very soon and i am setting up my first HF
>rig.I have a old Heathkit 101 and would like to use a vertical 10-40
meters,i
>have a very limited budget to work with.I am thinking of getting a Hustler
>4-BTV,anyone have any thoughts on this antenna?The price $129 fits in my
>antenna budget and would get me on the air.Your help and advice is most
>welcome.
>Thanks,
>James

2620. Re: Attic antenna help RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 18:35:23 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <MfB+OgtF2M3BLybOiKrpagldgegn@4ax.com>
Source record: 170793

Ken Anderson <longrange2@home.com> wrote:

>Well, I got my Alpha Delta DX-EE installed in the attic. Seems to get
>out OK, but there is a very high noise floor with all of the electric
>stuff in the house. Is there a way that I can tone the noise level down
>some? Also, when I transmitted on 15M, I set off the fire alarm on the
>second floor. Is there something I can use on the alarm wires to
>prevent this? Thanks, Ken

I tried an attic antenna once, and every time I transmitted, the whole
damned house went crazy. My "surf"-noise bedside gadget let out loud
snarls whenever the transmitter was keyed; lamps lit up; it was funny.

You might just go around the house and unplug appliances and gadgets
individually to see where the noise is coming from. Maybe you can
solve the problem with ferrite split beads on the AC lines. Ferrites
might also help the fire alarm. Maybe...

Bob
k5qwg

(I solved my problem by going with an outdoor antenna.)

2621. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:06:50 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95mtka$8hk$1@agate.berkeley.edu>
Source record: 170794

Jim Weir <jim@rst-engr.com> wrote:

>>> Fly a kite with #30 wire. Remember, Nag's Head is just down the beach a

>>Do I have to worry about static discharge?

> I guess I don't understand the question. Why would you worry more about
> static discharge with this antenna as opposed to any other kind?

Well, I'm not completely positive, which is why I asked the question. But
I did a web search for kite antenna, and most of them said that one must be
very careful about providing a path for static discharge so as not to
damage the rig or the operator.

Something about there being no ground mounted physical support in a kite
antenna, as there is with any other kind of antenna, and that the normal
support distorts the earth's EM field enough to not have this problem.

I dunno. Like I said, that's why I'm asking here.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2622. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:09:17 UTC
From: rwclark@seanet.com
Message-ID: <3a7ef894.508761350@news.seanet.com>
Source record: 170795

On Sun, 04 Feb 2001 18:28:59 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>>
>> On Sun, 04 Feb 2001 08:09:30 -0600, Cecil <Cecil.A.Moore@IEEE.org>
>> wrote:
>>
>> >Bill Turner wrote:
>> >> It's more efficient to derive meaning from context ...
>> >
>> >Not for computers.
>>
>> Sorry Cecil,
>>
>> You are at least 20 years behind the curve with your statement.
>
>I didn't say it was impossible, Richard. My computer simply finds it
>to be *more efficient* if I talk to it in a context free language.

Hi Cecil,

I can only imagine that by "context free language" you are speaking
about DOS Batch files. I say this because since the introduction of
Win95, I would speculate that nearly every application has been
developed in an OOP language. There is still VisualBasic out there,
and I am sure Chairman Bill would claim it is OOP too (I've even heard
of there being a VisualCobol - what a dream!).

As for efficiency - Hahahaha - sure. I suppose the IEEE has a
definition for non dissipated bits?

73's
Richard Clark, KB7QHC

2623. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:13:22 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95mu0i$8hk$2@agate.berkeley.edu>
Source record: 170796

How about a continuously loaded vertical?

I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of wire and wrap a linear coil around a non conducting support which is at least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot fishing pole with 122 feet of wire.

Has anyone ever tried this? I am really liking this idea as being the most compact. If I could figure out a good removable/reattachable connection between sections of a pole, I could pre-wrap a small fishing pole with the wire, then once on-site, assemble the pole, connect the wire between the sections somehow, then be on the air, or fish if no one is on the band.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2624. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:20:46 UTC
From: rwclark@seanet.com
Message-ID: <3a7ffb8a.509519620@news.seanet.com>
Source record: 170797
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Mon, 05 Feb 2001 17:20:39 GMT, Jim <arnoldjimjim@hotmail.com>
wrote:

>
>I live in Saskatoon, Saskatchewan, Canada, and what I gather (sort of) is a
>passive outdoor antenna is likely best. I am completely lost as to why wire
>must be insulated, why/whether lengths and gauge matter, how the plug-ins in the
>side of my Sangean ATS 909 and Grundig 300PE are set up. I have the plug
>passive antennas these radios came with.
>

Hi Jim,

There are no hard and fast rules other than "more wire - higher up."

ANYTHING will do to satisfy this one rule.

To optimize your signal gathering capability, you might want to put
either a tuner or a tunable pre-selector in front of your receiver.
This is to protect your rig(s) from front end overload (this may not
be a problem in Saskatoon).

Enjoy your DXing.

73's
Richard Clark, KB7QHC

2625. continuously loaded vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:27:26 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95muqu$8hk$3@agate.berkeley.edu>
Source record: 170798

I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of wire and wrap a linear coil around a non conducting support which is at least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot fishing pole with 122 feet of wire. Also, add a corona disk to the top.

Has anyone tried this that can comment on what you might've had to have done to make it work well? Eg. what did you tune it with, Nr. of radials, performance, change in design, etc.?

Tnx,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2626. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:30:33 UTC
From: Piotr Balcerzak <bpiotrek@yahoo.com>
Message-ID: <95mv0q$bl1$1@nnrp1.deja.com>
Source record: 170801
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <3A7EE153.FA13502A@hotmail.com>,
Jim <arnoldjimjim@hotmail.com> wrote:
> I've read through SW antenna discussions and it's all way way beyond
me. Web
> pages all seem over my head too. Can someone point me to
an "antennas for
> dummies" (or beginners) web page or book please. Maybe I also need a
reference
> about basic radio theory. Perhaps there is a FAQ posting I haven't
seen. (I
> had a good reference 30 years ago called "Instructions for Radio
Construction",
> but alas it went with the wonderful tube radios my parents gave away
when I was
> 20 (Normende Elektra, Grundig, and FM transmitter I built and a
couple of
> crystal sets. I working on relieving the pain now).
>
> I live in Saskatoon, Saskatchewan, Canada, and what I gather (sort
of) is a
> passive outdoor antenna is likely best. I am completely lost as to
why wire
> must be insulated, why/whether lengths and gauge matter, how the plug-
ins in the
> side of my Sangean ATS 909 and Grundig 300PE are set up. I have the
plug
> passive antennas these radios came with.
>
> The last time I had a big antenna was 1968 or 70 and I just strung
120 feet of
> wire out the window around the second storey of my childhood home,
stuffing it
> under the shingles and chucking it over to the neighbour's roof and
doing the
> same thing there, clipping it to the telescope antennas with an
alligator clip.
> What will I gain by something more complex? Does
north/south/east/west
> orientation around a roof make a difference. The active/passive
antenna thing
> also has me completely boggled. I am looking to extend the SW hours
into the
> daytime more (I can only get BBC fading in and out, USA audio-

evangelists and
> lots of Spanish, though I heard Russia and got Kuwait yesterday), and
I am a
> long way from signals here (-7 hours UTC), 600 miles north of USA
border. Any
> simple instructions and why I would choose this or that would be
gratefully
> accepted.
>
> Thanks, Jim Arnold
> arnoldjimjim@hotmail.com
>
>

--

I have J.Carr "Practical Antenna Handbook" and it is
excellent - very practical antenna presentation with
only few equations. There is available another book by
Carr: "Receiving Antennas" (if I'm not mistaken) -
I saw it in a bookstore - it contains everything that
you could need to get started.

"ARRL Antenna Book" is also very good but more difficult
to follow by a beginner. It contains more info regarding
various antennas calculations.

Hope this helps.
Piotr

Sent via Deja.com
http://www.deja.com/

2627. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:33:59 UTC
From: rwclark@seanet.com
Message-ID: <3a80fdb3.510072124@news.seanet.com>
Source record: 170800

On 5 Feb 2001 19:06:50 GMT, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

>Jim Weir <jim@rst-engr.com> wrote:
>
>>>> Fly a kite with #30 wire. Remember, Nag's Head is just down the beach a
>
>>>Do I have to worry about static discharge?
>
>> I guess I don't understand the question. Why would you worry more about
>> static discharge with this antenna as opposed to any other kind?
>
>Well, I'm not completely positive, which is why I asked the question. But
>I did a web search for kite antenna, and most of them said that one must be
>very careful about providing a path for static discharge so as not to
>damage the rig or the operator.
>
>Something about there being no ground mounted physical support in a kite
>antenna, as there is with any other kind of antenna, and that the normal
>support distorts the earth's EM field enough to not have this problem.
>
>I dunno. Like I said, that's why I'm asking here.

Hi David,

The problem comes from the possibility of erecting a vertical/sloper
that is considerably longer/higher than other options available at the
beach. This answers the objection above in that what was not a
problem at home is now a problem along the shore. It is basically the
very simple fact that wind will strip your wire of electrons building
a static potential WRT ground. Wind at a beach is probably much more
vigorous than that found in the backyard of a suburban domicile.

The solution is to drive that (bare) wire straight into ground and to
gamma feed it. This is the standard solution in most backyards for
the same reason. There are, of course, other solutions that do
basically the same thing - all of them have some DC path from sky to
ground.

73's
Richard Clark, KB7QHC

2628. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:35:02 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7F0066.3273@wt.net>
Source record: 170799

n2ey@aol.com wrote:

>
> Back then you had two years to upgrade or lose it. Some hams (then and
> now) would get the license with no thought about how they were going to
> get on the air. By the time they had acquired a receiver, transmitter,
> key, T/R system and antenna, precious months had been lost. So it may
> have been a wise choice.

In my case I already had a working station on 40m in 1971. I built a homebrew one tube xmtr and used a cheapy SWL radio with a AMBC radio next to it for a BFO. When I was in the 8th grade I was bootlegging on 40 cw as WN5MBK...g "my initials" Never got caught either. I was a good cw op even in those pre ticket days. Of course, at that time WN5MBK was still a long ways down the road callsign wise ,but most didn't realize it. "No instant call lookups in those days". When I finally got a ticket in 77, I built a second one tube xmtr. The first had been dismantled. And I also broke down an got a hammurland<sp>?? hq-110 receiver. With a real built in bfo even. Then I found a valiant xmtr. Quite a powerhouse compared to the single 6v6.
>

>
> What a neat story! I was sort of the opposite - couldn't wait to get on
> the air, then to upgrade.

I didn't waste much time getting on the air, but upgrading didn't mean much to me unless it added to my usuable abilities. At that time I didn't even have a phone xmtr, so a general didn't mean much to me. But even at that time, I was out copying many of my general class friends on cw. I used to copy for one general friend when the going got too fast for him. And that was a long time before I got a ticket. By the time I took the novice in 77, I was doing a solid 18 wpm.

--
http://web.wt.net/~nm5k

2629. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:46:22 UTC
From: rwclark@seanet.com
Message-ID: <3a820035.510714909@news.seanet.com>
Source record: 170802

On 5 Feb 2001 19:13:22 GMT, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

>How about a continuously loaded vertical?
>
>I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of
>wire and wrap a linear coil around a non conducting support which is at
>least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot
>fishing pole with 122 feet of wire.
>
>Has anyone ever tried this? I am really liking this idea as being the most
>compact. If I could figure out a good removable/reattachable connection
>between sections of a pole, I could pre-wrap a small fishing pole with the
>wire, then once on-site, assemble the pole, connect the wire between the
>sections somehow, then be on the air, or fish if no one is on the band.

Hi David,

This (the beach scenario) is a wonderful opportunity to examine the
application of these designs, because a Kite or Ballon launch affords
you the possibility of erecting very tall/long antennas - which by
definition are necessary.

73's
Richard Clark, KB7QHC

2630. Employment US RF Antenna Engineer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:55:16 UTC
From: #jackl1 <jackl1@ix.netcom.com>
Message-ID: <95n07gmdj1@slb6.atl.mindspring.net>
Source record: 170803
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur.club.clarc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave

POSITION TITLE: Electrical Engineer RF

JOB DESCRIPTION:
Conceive, design, prototype and evaluate sensors for invasive medical device aplications. Design Radio Frequency subsystems for intravasular catheters. Design experiments to test the feasibility of solutions. Construct anlysitcal models to guide design development.

REQUIREMENTS:
BS/MS Electrical Engineering, PhD physics with Radio Frequency emphasis also considered. 3-7 years experience with RF antenna, transmission line and matching circuitry. MRI, ultrasound, or optical systems experience desireable. Experience should demonstrate a sound grasp of fndamental principles that can be applied to new problems. Experience with MEMS fabrication techniques is also desireable. Should be able to work autonomously within a team evironment.

Contact:
Brian Jackley
Jackley Search Consultants
Tel: 952-831-2344
Fax: 952-831-9101
Brian@jackley.com

2631. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 19:59:27 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn97u1gt.non.QSB@animas.frontier.net>
Source record: 170804

On Mon, 05 Feb 2001 12:32:38 GMT, AMDX scribbled:
>> I pronounce 'solder' as it is spelt (not 'sodder').
>
>*We (as in Americans) say it more like sole jer.
>*to qualify it further; We, born in the US, not raised in an ethnic
>community, or Boston or the Bronx or the south.
> Ah jeez, I may be the only one to pronounce it sole jer!
>Hey John Wayne did too. :-)

If so, you probably are!
John Wayne never pronounced solder that-a-way -- I'll betcha.
He no doubt pronounced *soldier* that way!

2632. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 20:01:59 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn97u1ll.non.QSB@animas.frontier.net>
Source record: 170805

On Sun, 4 Feb 2001 21:52:40 +0000, Ian Jackson scribbled:
>
>True, true... Sorry Bill! Shuddah known bettah!
>Societies, teams and governments HAS. I only make that mistake when
>under stress. I sit corrected.

Still under stress, I see.
A society, a team, a government HAS.
Societies, teams and governments HAVE.

2633. stupid questions about homebrew loops

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 20:02:55 UTC
From: salmonsm@missouri.edu
Message-ID: <95n0t8dlf1@nnrp1.deja.com>
Source record: 170806

Hello,

I am a novice antenna maker and am currently working on a large loop for mediumwave. I have followed plans that I've found online, but I am a little dense regarding some of the technical details. I was wondering if someone could shed some light.

-what is the best wire to use for a loop? Does the wire have to be "magnetic," what does that mean and where can I get it?

-I am robbing an old shortwave of its tuner for my variable capacitor. I've pulled the tuner itself (the rotating shaft with two sets of fins, one that is fixed, one that rotates). Is that the only part that makes up the Variable capacitor? How can I tell which lead goes to the fixed part and which goes to the variable part?

-I want to use this with a stereo component tuner (AM) and portables. With the portables I plan to use induction (just moving it near and perpendicular to the radio). What about the component? It has a single AM terminal and a ground (plus two for FM). How would one hook this up?

I would appreciate any advice. Thanks.

Michael Salmons
Columbia MO

Sent via Deja.com
http://www.deja.com/

2634. Re: Employment US RF Antenna Engineer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 20:24:57 UTC
From: rickets@knac.com
Message-ID: <3a7f0c05.17774133@news-server.socal.rr.com>
Source record: 170807
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur.club.clarc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave

They want to plant a transmitter in my head!!!!!!

On Mon, 5 Feb 2001 13:55:16 -0600, "#jackl1" <jackl1@ix.netcom.com>
wrote:

>POSITION TITLE: Electrical Engineer RF
>
>JOB DESCRIPTION:
>Conceive, design, prototype and evaluate sensors for invasive medical device
>aplications. Design Radio Frequency subsystems for intravasular catheters.
>Design experiments to test the feasibility of solutions. Construct
>anlysitcal models to guide design development.
>
>REQUIREMENTS:
>BS/MS Electrical Engineering, PhD physics with Radio Frequency emphasis also
>considered. 3-7 years experience with RF antenna, transmission line and
>matching circuitry. MRI, ultrasound, or optical systems experience
>desireable. Experience should demonstrate a sound grasp of fndamental
>principles that can be applied to new problems. Experience with MEMS
>fabrication techniques is also desireable. Should be able to work
>autonomously within a team evironment.
>
>
>Contact:
>Brian Jackley
>Jackley Search Consultants
>Tel: 952-831-2344
>Fax: 952-831-9101
>Brian@jackley.com
>
>
>
>

2635. Re: continuously loaded vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 20:32:01 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A7F0DC1.4146@wt.net>
Source record: 170808

David Snyder Hale wrote:
>
> I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of
> wire and wrap a linear coil around a non conducting support which is at
> least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot
> fishing pole with 122 feet of wire. Also, add a corona disk to the top.
>
> Has anyone tried this that can comment on what you might've had to have
> done to make it work well? Eg. what did you tune it with, Nr. of radials,
> performance, change in design, etc.?
>
> Tnx,
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

If you've seen a hamstick, you've seen one of these. Of course, you can
make much more efficient versions with a wider form etc. Also with this
type of antenna if you want good performance you need a stinger on top
to act as capacitance. A helical antenna with coil the whole way up and
no stinger is not a real good antenna. But if you take the same antenna
and reduce the windings, and add a stinger to the top it will work much
better. It will vary of course, but as a general rule you will need
twice the wire or more to equal a normal 1/4 wl whip. So if you need 8
ft for a 10m whip, you will likely need over 16 ft of wire to make a
helical "4 ft " version.
With the proper design, which can include the methods of winding etc,
and the use of long stingers, these antennas can do real well. The best
designs maximise the windings near the top to act as a "lumped coil"
which will improve the current distribution. Also you can wind the
matching coil right into the base of the antenna. MK
--
http://web.wt.net/~nm5k

2636. Re: Simple VHF/UHF Dual Band Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 20:45:09 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <95n3ci$g40$1@nnrp1.deja.com>
Source record: 170809

Save yourself the time and trouble and go here:

http://www.hamstick.com/nmo270.htm

In article <Lkef6.79740$P5.2207759@news1.rdc1.il.home.com>,
"Robert Shepard" <rshprd@home.com> wrote:
> About the time VHF/UHF dual band radios hit the market back in late
> 70s/early 80s, there was an article either in one of the ham magazines
> describing how to make a simple dual band antenna from a 21" Motorola
NMO
> mount whip.
>
> The process involved heating the lower part of the whip about 1/2"
from the
> base, and adding (bending in) a couple of turns. It is the diameter
and
> number of turns I cannot recall. I'm not even 100% sure about the
1/2" from
> the bottom, but it is the general appearance of the antenna.
>
> The result was a 1/4 wave on 2M (slightly shortened) and I think a
5/8 or
> 3/4 wave on UHF.
>
> Does anybody remember this antenna, and/or the exact way to calculate
it's
> dimensions?
>
> Please email response if possible.
>
> Thanks,
> Bob-KA9FLX
> mailto:ka9flx@arrl.net
>
>

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

2637. Re: Trap calculation help requested

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 21:24:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95n5jmlnb1@uranium.btinternet.com>
Source record: 170810

Hello Stan,

For 17 turns your calculated inductance has a small error. This does not matter very much because you will have to adjust the tuning capacitance to resonate it to the correct frequency in any case.

The DC resistance of the wire (ohms/KM) has nothing to do with Q. It is necessary to know only that the wire is copper and that its diameter is 1.6mm.

You do not say how you measure the coil diameter. Is it between the wire centres ? Or is it the diameter of the former over which the wire is wound ? The difference due to wire diameter matters.

From the information you give, at 28.8, MHz Q is somewhere between 450 and 600 depending on the environment in which it is used. The Q of the capacitance will also make a difference.

But Q doesn't matter very much in antenna traps provided it is not too low for the TX power. Your coil should be OK for a 100 watt transmitter.

Download program SOLNOID2 from website below. Downloads in a few seconds. Not zipped up. Run immediately. User friendly.

For starters enter in the program:- Length=51mm, Dia=22.7mm, Turns=18, Ratio=0.534, F=28.8 MHz, 800 volts.

Then look for wire diameter = 1.6mm and sum of tune capacitor plus strays = 10 pF.

For design of two-band trapped dipole, including estimate of power lost in traps, download program TRAPDIP.

If you want a high power job then there's no alternative but to have BIG traps.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

<stan.holmes@eskom.co.za> wrote in message
news:3A7E74F3.E579A350@eskom.co.za...
>
>
> I have made a HF trap for 28.8MHz. The trap specification are Dia

> 22.3mm, Coil Length 51.0mm, Turns 17, Wire Dia 1.6mm copper with
> Resistance of 8.6 Ohms / KM
> The calculated inductance is 3.05�H and the Capacitance is 10pF
>
> I want to calculate the Q of the trap. Please show your calculations.
> Thanks
> Stan
> ZS6HAL
>
>
>
>

2638. Re: Ground plane for supplementing radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 21:50:02 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <YLKf6.1019$RM.8638@newsfeed.slurp.net>
Source record: 170747

Jason,

The ultimate ground plane for any vertical antenna would be a plane
of superconducting material extending to infinity in all directions. Since
you probably only expect to communicate to other hams here on earth, perhaps
if the superconducting material extends just to the horizon would be
sufficient. Anything less is a compromise. Of course in the real world
mechanical and financial factors dictate that we make compromises. There is
lots of data on performance of ground plane antenna with various compromise
antenna's. If you study a bunch of that data you will find that the
difference in signal generated by the antenna with the ideal ground plane
and ones with practical compromises does not justify the expense.
Broadcasters have pretty much settled on 120 radial wires stretched out 1/4
wavelength long, evenly spaced around the feedpoint. You'd have a very
difficult time detecting the difference if you cut the number in half. What
is interesting is the comparison between say four 1/4 wavelength radials and
eight 1/8 wave radials. Same amount of wire used. The system with eight 1/8
wavelength radials is slightly better. This is because near the base of the
ground plane the current density is higher. So yes a conductive plate at the
center of the radial system is better than not having one. How much better?
I don't know. If you've already got the material and you're not going to use
it for anything else, I say "go for it". Also if you're going to have a
large radial system a large diameter disk to connect all the radials to is a
good way to do it. Much better than a bunch of eye lugs stacked on a bolt.
If you have the disk it's going to be easier to add radials as you scrounge
more wire.
The bottom line on radials is that more is better, and a few good ones
may be as good as you need.

Have fun, Ken N6KB
jason_hsu@my-deja.com wrote in message <95iqsu$b44$1@nnrp1.deja.com>...
>QUESTION: Does supplementing radials with a metal surface connected to
>the antenna ground substantially reduce ground losses?
>
>As I understand it, the ideal ground plane for a vertical antenna is an
>infinitely large conductive plane. RF emitted by the antenna strikes
>the ground plane, and the interaction results in RF currents in the
>ground plane. These RF currents need a conductive path to the antenna
>in order avoid producing electromagnetic waves that destructively
>interfere with the already existing waves. (How accurate is this
>depiction?)
>
>Except when vertical antennas are used for mobile purposes or in
>environments with a highly conductive ground (like near saltwater),
>radials are used to approximate the ground plane by providing

>conductive paths to the antenna for the RF currents. The more radials
>and the longer they are, the better the ground plane and the lower the
>ground losses. The more closely packed the radials are, the less
>additional improvement there will be if an additional radial is added.
>
>So let's return to my question: Does supplementing radials with a metal
>surface connected to the antenna substantially reduce ground losses?
>
>It seems to me that adding even a small metal plane (provided by the
>vehicle's metal body in the case of mobile applications) to the radials
>would substantially improve things. In a network of radials, some of
>the RF currents will form between the radials and lack a conductive
>path to the antenna. Adding a small metal surface electrically
>attached to the antenna ground should be a substantial improvement.
>ALL RF currents that end up on the conductive surface have a conductive
>path to the antenna. This is like having an infinite number of radials
>with no gaps in between.
>
>Assuming that you aren't operating mobile and CANNOT mount the antenna
>on your car and run coax to your shack, would you be able to
>substantially improve the ground plane by supplementing radials with
>the metal surface I described?
>
>Has anyone done this? What do you think of these ideas for a metal
>ground plane?
>1. Using a thin sheet of metal (perhaps a piece of aluminum siding)
>2. Wrapping a sheet of linoleum flooring with aluminum duct tape
>3. Aluminum foil (albeit reinforced with tape)
>
>--
>Jason Hsu, AG4DG
>jason_hsu@@@@@@@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/
>
>
>Sent via Deja.com
>http://www.deja.com/

2639. Re: Trap calculation help requested

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 22:11:07 UTC
From: tom_bruhns@agilent.com
Message-ID: <95n8di$kv8$1@nnrp1.deja.com>
Source record: 170812

I assume you'll use a capacitor whose Q is high enough to let the coil be the dominant factor in the Q of the trap. The inductor Q may be estimated with Reg's coil program or the one from www.saratogasoftware.com, or just from the graph and formula of fig. 3 of the Fundamentals of Networks chapter of Reference Data for Engineers. That last one gives roughly 120*sqrt(28.8)*22.3/25.4, or about 560. The Saratoga Software program, for contrast, suggests the inductance is about 2.66 microhenries and Qu is about 615. "YMMV"

Cheers,
Tom

In article <3A7E74F3.E579A350@eskom.co.za>,
stan.holmes@eskom.co.za wrote:
>
>
> I have made a HF trap for 28.8MHz. The trap specification are Dia
> 22.3mm, Coil Length 51.0mm, Turns 17, Wire Dia 1.6mm copper with
> Resistance of 8.6 Ohms / KM
> The calculated inductance is 3.05�H and the Capacitance is 10pF
>
> I want to calculate the Q of the trap. Please show your calculations.
> Thanks
> Stan
> ZS6HAL
>
>

--
Tom Bruhns -- K7ITM

Sent via Deja.com
http://www.deja.com/

2640. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 22:11:49 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3A7F2438.F9AC9C08@netdoor.com>
Source record: 170811
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Whoa! Whol up little pardner,

Jim do not sell no junk. One more time, Jim do not sell no junk, to nobody. and Thats that. You took a whole page of type to try and tell us that Jim sells junk. Up yours little weenie man. Please take it back to your little weenie group and cry there.

Butch Magee KF5DE we ain't related in any way except that I'm a many year happy customer of his and he is honest and overly generous.

Tell'im Butch said that!

Floyd Sense wrote:

> A few days back, I posted an item about receiving some bad RG-213 coax from
> Radio Works. While they had UPS pick up the original cable, the replacement
> shipment was also defective.
>
> When I called today about having them take back the replacement cable, they
> were just then inspecting the cable that had been returned. They told me
> they saw nothing wrong with the cable at all. I asked them if they'd looked
> under the several feet of black electrical tape I'd had to place over the
> damaged area so that it could be used for one rainy day (they hadn't noticed
> the tape - great inspection, eh?). They removed the tape and claimed they
> saw no holes and no defects. Admittedly, these were small holes, about what
> you'd make with the tip of a utility knife. However, one was large enough
> that when you flex the cable you could see the copper braid underneath.
> When I looked at that cable closely, I could clearly see that the jacket
> seam had not been completely sealed, resulting in the holes. They looked
> again and said they could see no damage. They ask me if I was talking about
> just something of "pin-hole" size (as if that somehow made it alright).
>
> While they agreed to take the second cable shipment back, they refused to
> pay for the UPS charges as they had on the first, stating that it was their
> policy not to pay for returns a second time. The office manager then went
> on to explain that I was lying about the cable damage. I offered to put up
> $1,000 against her $1,000 to have a third party inspect the cable, but she
> explained how three people had already looked at it and saw no damage.
> Apparently, "third-party" has a different meaning in Portsmouth, VA?
>
> I must say that I'm at a loss over this one. I've bought many, many
> hundreds of feet of coax over a 42 year period, and know a defective cable
> when I see it. It's bothersome to me that this outfit sees nothing wrong
> with the stuff they're shipping and would then accuse me of lying about it.
> What conceivable motive could there be for that?? If you do buy cable from

> these guys, for Pete's sake go over it very closely before installing it.
> If you don't know good coax from bad, here's some tips:
>
> 1. If the coax has lumps in it (like a snake that just ate), then it's BAD.
>
> 2. If the copper shield is badly oxidized (not shiny copper color) when you
> strip the jacket off to install the connectors, then it's BAD
>
> 3. If you run your hand down the cable and feel rough spots as if it had
> been drug along a concrete driveway, then it's BAD
>
> 4. If you can see the seam where the jacket was installed, look very closely
> and flex the cable to as to stretch this area of the cable. If you see pin
> holes in the jacket, then its BAD. If you can see the inner copper braid
> through any of the holes, then it's REALLY BAD.
>
> All of these conditions existed in the cable that Radio Works sent to me.
> They may also have all existed in the second shipment - I stopped looking
> after finding pin holes in the first 10 feet of the cable.
>
> I've never heard anything negative about Radio Works before, and have no
> opinion on any of their many other products. However, I can assure you that
> at least one type of coax they're selling is just plain poor quality - make
> that defective. Furthermore, if you attempt to any such problems with them,
> you'll be subjected to the ignorance and wrath of their office manager
> (Judy?). I ordered replacement cable from The Wireman (no connection to
> them, but have received nothing but high quality cable from them over the
> years).
>
> K8AC
> Floyd Sense - Angier, NC

2641. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 22:28:18 UTC
From: doug <wehrs@alltel.net>
Message-ID: <95n9dl$e9r$1@iac5.navix.net>
Source record: 170813
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

is a tuner the same as the rf gain control? thanks, doug
"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a7ffb8a.509519620@news.seanet.com...
> On Mon, 05 Feb 2001 17:20:39 GMT, Jim <arnoldjimjim@hotmail.com>
> wrote:
>
> >
> > >I live in Saskatoon, Saskatchewan, Canada, and what I gather (sort of) is
a
> > >passive outdoor antenna is likely best. I am completely lost as to why
wire
> > >must be insulated, why/whether lengths and gauge matter, how the plug-ins
in the
> > >side of my Sangean ATS 909 and Grundig 300PE are set up. I have the plug
> > >passive antennas these radios came with.
> >
>
> Hi Jim,
>
> There are no hard and fast rules other than "more wire - higher up."
>
> ANYTHING will do to satisfy this one rule.
>
> To optimize your signal gathering capability, you might want to put
> either a tuner or a tunable pre-selector in front of your receiver.
> This is to protect your rig(s) from front end overload (this may not
> be a problem in Saskatoon).
>
> Enjoy your DXing.
>
> 73's
> Richard Clark, KB7QHC

2642. Re: HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 22:50:38 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3A7F2D51.B4902553@netdoor.com>
Source record: 170814

Gap Titan. 80 thru two meters 'iffy' on six

Just don't get no better, Butch KF5DE

alex_whizkid@my-deja.com wrote:

> Hi
>
> I'm after some advice.
>
> I wish to use 20/15/10 metres. My garden (yard) is 40ft long and 15ft
> wide. Can anybody suggest an effective antenna(s) which isn't too
> expensive?
>
> Thanks
>
> AlexP
>
> Bristol, UK
>
> Sent via Deja.com
> http://www.deja.com/

2643. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 22:58:08 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <t7uc0757nnm07a@corp.supernews.com>
Source record: 170815

Awl,

Eye dew knot sea watt the big deal is all about hear... yore fancy computer
should half a spell-checker built inn. Aisle even bet that if sum off yew
used them more often it wood make are daze moor pleasant.

((spell-checked it myself - not a single error ;-))

-larry
K8UT
"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a7ef894.508761350@news.seanet.com...
> On Sun, 04 Feb 2001 18:28:59 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Richard Clark wrote:
> >>
> >> On Sun, 04 Feb 2001 08:09:30 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> >> wrote:
> >>
> >> >Bill Turner wrote:
> >> >> It's more efficient to derive meaning from context ...
> >> >
> >> >Not for computers.
> >>
> >> Sorry Cecil,
> >>
> >> You are at least 20 years behind the curve with your statement.
> >
> >I didn't say it was impossible, Richard. My computer simply finds it
> >to be *more efficient* if I talk to it in a context free language.
>
> Hi Cecil,
>
> I can only imagine that by "context free language" you are speaking
> about DOS Batch files. I say this because since the introduction of
> Win95, I would speculate that nearly every application has been
> developed in an OOP language. There is still VisualBasic out there,
> and I am sure Chairman Bill would claim it is OOP too (I've even heard
> of there being a VisualCobol - what a dream!).
>
> As for efficiency - Hahahaha - sure. I suppose the IEEE has a
> definition for non dissipated bits?
>
> 73's

> Richard Clark, KB7QHC

2644. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 23:07:46 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3A7F3153.FE61B13A@netdoor.com>
Source record: 170816

OK! I'm lost on this one. 'Splain toomee!

Butch

Cecil wrote:

> Roy Lewallen wrote:
> >
> > Cecil wrote:
> > > They say it is an air core coil but it isn't 100%. Find out what that
> > > "protective tube" is made out of before you decide to buy. I wouldn't
> > > buy it if that "protective tube" is made out of PVC.
> >
> > Why is that?
>
> Air core is less lossy.
> --
> http://www.mindspring.com/~w6rca

2645. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 23:13:17 UTC
From: rwclark@seanet.com
Message-ID: <3a7f32fa.523711537@news.seanet.com>
Source record: 170817

On Mon, 5 Feb 2001 17:58:08 -0500, "Larry Gauthier"
<larryg5099@chartermi.net> wrote:

>Awl,
>
>Eye dew knot sea watt the big deal is all about hear... yore fancy computer
>should half a spell-checker built inn. Aisle even bet that if sum off yew
>used them more often it wood make are daze moor pleasant.
>
>((spell-checked it myself - not a single error ;-))
>
>-larry
>K8UT

Hi Larry,

Perhaps the next generation of news readers will include a grandma
checker.

73's
Richard Clerk, KB7QHC

2646. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 23:15:29 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3A7F3320.351149B2@netdoor.com>
Source record: 170818

Doggone Cecil, after a 3-4 inch build up of bugs on the coil, it looses its "lossy" but don'w resonnamate wuth a shirt either. Gimme a quick fix. You did notice that there were no buggy ones at the shootouts. Did'nt you?

Butch

Cecil wrote:

> 'Doc wrote:
> >
> > Cecil wrote:
> > > Air core is less lossy.
> >
> > Probably, but do you really think it's going
> > to make that much difference?
>
> To the best of my knowledge, no one using PVC pipe for the coil
> form has ever won a 75m shootout.
> --
> http://www.mindspring.com/~w6rca

2647. WTB:TS-430s faceplate

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 23:30:13 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <95ncvl$9k7$1@slb3.atl.mindspring.net>
Source record: 170719
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap

Need clean faceplate for a abused TS-430s (someone was a careless slob)

2648. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 23:42:14 UTC
From: rwclark@seanet.com
Message-ID: <3a823a50.525589818@news.seanet.com>
Source record: 170720
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Mon, 5 Feb 2001 17:28:18 -0500, "doug" <wehrs@alltel.net> wrote:

>is a tuner the same as the rf gain control? thanks, doug

Hi Doug,

Nope, not even close. RF gain control is part of the feedback path from the IF back to the RF stages where the more voltage available from the IF lowers the gain of the RF (and vice-versa). Thus a strong signal will automatically lower the Gain of your radio so that the IF stages are not overloaded and add distortion. On the flip side, very low signal levels will cause the radio's gain to increase to find weak signals. Your RF gain control adjusts how much of this goes on in a sort of mix of manual and automatic control. The term for this is properly called AGC (automatic gain control), the improper term is AVC (automatic volume control) but it does operate equivalently. The RF gain control is in the AGC circuit. The Audio gain control is in the AVC circuit (if it exists and is not incorrectly identified as AGC).

A tuner, on the other hand, limits what frequencies can enter the RF stages. Many modern radios have RF stages that listen to every frequency simultaneously, and it is the mixing stages that establish where you are tuned and the IF stages limit the band of frequencies that are accepted for listening.

The problem of this wide open "front end" (another term for the RF stages) is that any big AM station in town can find its way to your radio and dominate your radio's sensitivity by overloading the first stage (making it, and the rest of your set, deaf). This is a VERY COMMON problem to many SWLers.

If you are tuned to the Deutsche Welle on the 31M band, you don't want the local bubble-gum station pounding the first RF stage and clobbering the Germans. To prevent this, you put a tuner in front of the radio and tune it to the 31M band and thus have it REJECT the AM station that is nearby. A tunable preselector accomplishes the same thing and also adds a stage of RF amplification BEFORE the radio sees it (two good things for the price of one). The only issue with a tunable pre-selector is that you may not need the gain it offers (just the tunability). Hence the cheap solution is to find a box and put a variable cap and inductor inside and two connectors (antenna goesinta and the tuner comesouta). More elaborate designs could include bandswitching and more tuning elements (a Ham Tuner would be an example and is perfectly suitable for your needs).

The problem with adding a tuner is knowing what settings work best.
This won't be obvious (especially when there are more than two knobs),
but within a couple of days it will become an acquired skill.

73's
Richard Clark, KB7QHC, WPE0EPH

2649. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-05 23:48:19 UTC
From: dennis@wawa.juniper.net
Message-ID: <95ne43fqo1@heap.juniper.net>
Source record: 170722

Richard Clark <rwclark@seanet.com> wrote:
>On Sun, 04 Feb 2001 18:28:59 -0600, Cecil <Cecil.A.Moore@IEEE.org>
>wrote:
>
>>Richard Clark wrote:
>>>
>>> On Sun, 04 Feb 2001 08:09:30 -0600, Cecil <Cecil.A.Moore@IEEE.org>
>>> wrote:
>>>
>>> >Bill Turner wrote:
>>> >> It's more efficient to derive meaning from context ...
>>> >
>>> >Not for computers.
>>>
>>> Sorry Cecil,
>>>
>>> You are at least 20 years behind the curve with your statement.
>>
>>I didn't say it was impossible, Richard. My computer simply finds it
>>to be *more efficient* if I talk to it in a context free language.
>
>Hi Cecil,
>
>I can only imagine that by "context free language" you are speaking
>about DOS Batch files. I say this because since the introduction of
>Win95, I would speculate that nearly every application has been
>developed in an OOP language. There is still VisualBasic out there,
>and I am sure Chairman Bill would claim it is OOP too (I've even heard
>of there being a VisualCobol - what a dream!).
>
>As for efficiency - Hahahaha - sure. I suppose the IEEE has a
>definition for non dissipated bits?

Richard,

I think you are confusing syntax, which is what Cecil wants to be context-free, with semantics, which are never really free of context. Operator semantics may sometimes be redefined in an OOP language, but OOP languages along with modern computer languages in general still usually have a context-free syntax because it is indeed easier for computers to deal with.

An example of a programming language that lacks a context-free syntax is FORTRAN, where one may validly write

```
IF = 4
IF (IF) 2,3.5
```

leaving it up to the compiler to deduce what `IF' means when it appears. A more modern programming language will usually define its syntax to disallow or avoid all such cases.

As for efficiency, if you compare the code required to implement a FORTRAN parser to a parser for, say, C or C++, it is likely to become apparent that a context-free syntax is substantially more efficient, at least for the guy who has to spend his time writing the parser for the language.

Dennis Ferguson

2650. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:17:39 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A7F42A2.A93C16ED@ipeg.com>
Source record: 170723

David Snyder Hale wrote:

> Jim Weir <jim@rst-engr.com> wrote:
>
> > Fly a kite with #30 wire. Remember, Nag's Head is just down the beach a piece
> > from Kitty Hawk, and they flew kites there, too.
>
> Do I have to worry about static discharge?
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

Dave,

A general problem with kite supported antennas is that every time the angle of the antenna wire changes with respect to the earth the SWR changes as well. Unless one has a good automatic antenna tuner in line, you spend all your time adjusting a tuner and little time operating. That, in a nutshell, is my experience with kite antennas.

marty...
N7MX

2651. Re: Antenna Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:22:44 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95ng4k$c6k$1@agate.berkeley.edu>
Source record: 170724

Rick Littlefield <k1bqt@aol.com> wrote:

> First, keep in mind that SWR is about the ONLY antenna measurement any
> of these low-cost analyzers can perform (including Autek and AEA) that
> is not impacted by timing or impedance transformations in the antenna's
> feedline. Second, the MFJ-259 employs simpler circuitry and is less
> prone to calibration error.

Keep also in mind that if you live in a high RF environment then it won't work at all. I live about 1-2 mi from 15MW ERP AM/FM/TV farm for Los Angeles. My MFJ-259B is worthless. I am only keeping it for benchtop measurements of inductors and capacitors vs. frequency (plus someday I may move to a location where I can actualy use it for antennas).

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2652. Looking for some AB105 tower 120 ft or more.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:36:46 UTC
From: Jack <poster@gate.net>
Message-ID: <3A7F471E.5832526D@gate.net>
Source record: 170725

Free PHOTO ads placed here.
http://www.graphicstouch.com

2653. FS Texas Instruments Graphing Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:40:02 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <CJHf6.20443$s12.2970716@news02.optonline.net>
Source record: 170727
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment

I have a TI model 85 I do not need. I only used it for 2 classes and completed my degree. Calculator runs on AA batteries and I do not have the manual. Unit is in real nice shape compared to some of my classmates units.

Best Reasonable Offer.

2654. Hustler antenna and SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:42:15 UTC
From: lbratche <lbratche@swbell.net>
Message-ID: <IKHf6.59$4s4.143893@nnrp2.sbc.net>
Source record: 170726

I recently installed an Alinco HF-70T in my truck. I'm using the Hustler antennas with the different resonators for the different bands. I bought the 10 meter resonator new and the rest I pick up used. The 15 and 20 meter resonators will not longer tune. The best I can get is about 4:1 SWR. The 10 meter will tune to 2:1 or less. I suspect the resonators went bad, but I want another opinion before trashing them and buying more.

I also have another question. While playing around with this problem, I discovered that the 10 meter resonator gets about 1.75 SWR on 17 meter and 2.5 or 2.7 on 15 and 20 meters. Would an auto tuner allow be to install one resonator and not have to switch it out on 10 - 20 meters? If so, should I go with a 10 meter or 20 meter resonator or would it make a difference? This may seem like a dump question, but I'm not too experienced in the mobile area. I know I would need to switch for 40 and 80 meters.

Thanks

Larry

2655. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:46:30 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <95nhh4teh1@nnrp1.deja.com>
Source record: 170730
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

In article <3A7F2438.F9AC9C08@netdoor.com>,
Butch Magee <lynyrd@netdoor.com> wrote:
> Whoa! Whol up little pardner,
>
> Jim do not sell no junk. One more time, Jim do not sell

If his story is accurate, how would you characterize it? Either he is
lieing or SOMEONE sold junk!

--
Randy A. Hefner
http://talk.to/frs
http://go.to/qx3

Sent via Deja.com
http://www.deja.com/

2656. Re: general "authority"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:47:39 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A7F49AB.DF4461F6@bwcc.com>
Source record: 170728

Richard Clark wrote:
> For the general authority, consult :
> "The Chicago Manual of Style," 6.10
>
> Abbreviations with periods, lowercase letters used as nouns,
> and Capitol letters that would be confusing if 's' alone were added:
> Ph.D.'s x's and y's SOB's

capitOl letters?

2657. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 00:51:10 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <95nhpjcr1@slb7.atl.mindspring.net>
Source record: 170729

Cecil wrote in message <3A7EEDEB.650E564B@IEEE.org>...
>snip<
>
>I *AM* on Prozac, Dean
>--
>http://www.mindspring.com/~w6rca

I apologize Cecil. I had no idea that you were actually operating under a medical handicap. I concede and withdraw.

Dean Craft -- W4IHK

2658. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 01:23:23 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <fmlf6.14751$mA1.901628@bgtnsc06-news.ops.worldnet.att.net>
Source record: 170731

> He no doubt pronounced *soldier* that way!

Your spelling doesn't tell me how you or John pronounced it.

Websters says -sol jer- with a long o and the er as in perhaps.
--
Mike Knowlton
Panama City Fl.

2659. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 01:24:22 UTC
From: rwclark@seanet.com
Message-ID: <3a80487a.529215651@news.seanet.com>
Source record: 170732

On 5 Feb 2001 23:48:19 GMT, dennis@wawa.juniper.net (Dennis Ferguson) wrote:

>Richard,
>
>I think you are confusing syntax, which is what Cecil wants to be
>context-free, with semantics, which are never really free of context.
>Operator semantics may sometimes be redefined in an OOP language, but
>OOP languages along with modern computer languages in general still
>usually have a context-free syntax because it is indeed easier for
>computers to deal with.
>
>An example of a programming language that lacks a context-free syntax
>is FORTRAN, where one may validly write
>
> IF = 4
> IF (IF) 2,3.5
>
>leaving it up to the compiler to deduce what `IF' means when it
>appears. A more modern programming language will usually define its
>syntax to disallow or avoid all such cases.
>
>As for efficiency, if you compare the code required to implement a
>FORTRAN parser to a parser for, say, C or C++, it is likely to become
>apparent that a context-free syntax is substantially more efficient,
>at least for the guy who has to spend his time writing the parser for
>the language.
>
>Dennis Ferguson

Hi Dennis,

I've written compilers/translators and the efficiency you speak of is one of a consideration for the parser generator - not the user (such as Cecil). For this efficiency statement of yours to be true, the best way to perform that is with the unix tools lex and yacc which uses a sophisticated lookup table rather than chained instructions. Yes, the table is a chaining mechanism, but it too is computer generated from the syntax provided by the designer. All languages, by the way, are composed of Syntax (it generally goes without saying). The most common specification is found in the Backus Naur Form (BNF). That modern languages can cope with semantic variation is already part of their syntax (and design), and is called extensibility.

My work with compilers/translators has included Natural Language Parsing that includes a full grammar of English. English is heavily vested with what you call semantics, and yet it is reducible to a BNF representation. This is not done simply (very few Engineers have good enough grades in English to understand the problems involved).

Having designed at every level from Assembler through Java (with stops along the way to include PL/M, Pascal, Fortran IV, Flecs Fortran, a bajillion flavors of Basic, C, C++, Trilogy, Lisp, Prolog, Actor, Smalltalk) I can acknowledge some languages are more accessible to the problem I am designing for (and rarely the language forced upon me by other considerations).

Both Prolog and Trilogy, as examples of Predicate Calculus, allow me to state the problem and have the solution both in the same design. As a statement of efficiency, these two languages are the tersest and simplest to express. However these same two languages come with so much baggage that they can overwhelm a system with demands for resources. Here, in the case to be made for "efficiency," they suck big-time! When it comes to the efficiency of operation, the tables turn again and these languages glow where standard, procedural language designs gets lost in combinatorial explosions that drop their efficiency to zip point nada.

Efficiency statements for computers is still akin to nailing jelly to a tree.

73's
Richard Clark, KB7QHC

2660. Butternut HF6V-X Mounting on Roof Help??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 01:53:56 UTC
From: mmorjoseph@socal.rr.com
Message-ID: <bslu7t4h7ghp4lf44v3kjgc3l8ctnmqv7r@4ax.com>
Source record: 170733

I need alittle help I got a Butternut antenna all ready to put up on
my Roof cause I can not do a ground mount need some help on installing
it on a Roof cause of my Town House also need help on how to run the
ground radials on the roof any help on this please......
What kind of mast do I mount this antenna too cause it does not have
any
mounting brackets?? Also once its mounted how many ground radials must
I put on the Roof
do you just lay them out flat on the Roof?? any help please.....
Mike so cal... pager 714 266-9500 email or page me and ill call you
back thanks so much..

2661. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 01:59:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95nlotukq1@slb3.atl.mindspring.net>
Source record: 170734

Bill:

Uh, oh... now I get it... was that a spontaneous brain fart or the forced deliberate kind that you shared with us?

-Peter K1PO

"Bill Nelson" <billn@spock.peak.org> wrote in message news:95kugqevu5@bashir.peak.org...
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
> : Hmmm.... I wonder.
>
> : Can one hear a "brain fart" or is that sort of like the sound of "one hand
> : clapping"?
>
> In the internet context, you wouldn't hear it unless you read aloud. However,
> such brain farts are certainly visible.
>
> : Clearly "typo" is probably more appropriate for application to the USENET NG
> : medium.
>
> To me, typos consist of such things as - transposing letters, dropping or
> adding letters in words that are normally spelled correctly, adding an
> occasional random character, dropping a word or typing it twice in a row.
>
> A brain fart is when you know better, but think the wrong thing when you type.
> My "300 ohm" mistake was a brain fart. I know that the impedance is much
> closer to 3000 - but I thought 300, as in the case of a folded dipole.
>
> --
> Bill Nelson (billn@peak.org)
>

2662. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 02:30:33 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95nnk5$2ek$1@slb0.atl.mindspring.net>
Source record: 170735

Roy:

After some thought... I see that I was wrong, and ... I'm going to answer my own rambling prior post here below.

In fact for a conventional transformer, i.e. one where the two windings are not wound "two in hand" but wound sequentially or in layers, or whatever, it is the, unavoidable, inter-winding capacitance which causes degradation in the common mode rejection of the transformer when it is hooked up a voltage balun. So in conventional transformers one will always try to lay up the two windings so as to minimize inter-winding capacitance. In fact sometimes "faraday screens" are placed between the windings to reduce inter-winding capacitance.

Now winding "two in hand" will tend to increase the inter-winding capacitance since the two conductors are laid up against each other very closely all along their path, and so... this will result in a lower common mode rejection when this design is hooked up as a voltage balun because of the capacitive coupling between windings.

Hence, I have now come to believe that... a transmission line balun, or a balun wound "two in hand", will have a fairly high interwinding capacitance, but because of the way it is hooked into the transmission line (application), that high inter-winding capacitance will not affect the common mode rejection. While if it is hooked up as a voltage balun it will display poor common mode rejection because of the inter-winding capacitance.

And so... since there appear to be two ways to wind a balun on a core, one being the "two in hand" or "wind the transmission line on the core" appoach, and the other methods wherein the windings are separate and not wound together, or even separated by a Faraday screen, the latter will often have less inter-winding capacitance while the former will have a large inter-winding capacitance.

When you connect the former two in hand design as a current balun, the interwinding capacitance simply becomes "absorbed" into the transmission line' natural inter-conductor distributed capacitance and so does not affect common mode rejection.

While in a conventional transformer hooked in voltage balun mode, the presence of inter-winding capacitance actually causes common mode rejection degradation.

I have now convinced myself that the current balun common mode rejection ability is not limited by inter-winding capacitance as is the voltage balun common mode rejection.

In fact a measure of the non-ideality of the current balun is probably not related to inter-winding capacitance at all, it is probably the ratio of leakage to magnetizing inductance that limits the common mode rejection of the current balun. Any one who has read this far into my rambling posting here know for sure?

And so I now believe that my statement, in my last post, that winding "two in hand" simply makes a great transformer for either current or voltage balun operation is WRONG! Mea culpa.

A two in hand wound balun makes a great current balun but not a great voltage balun, and a conventionally wound transformer makes a great voltage balun but a poor current balun.

And so, due largely to these "secondary" effects, simply making the best damm transformer possible i.e. one with low stray capacitance and low leakage inductance, will not necessarily optimize the transformer for either current or voltage balun use.

Sorry for the "rambling" but I just had to explain that to myself...

Now I ask again, can anyone reading my ramblings here suggest a measure... i.e. what is the best quantitative measure, in terms of the basic transformer parameters [leakage inductance, magnetizing inductance, inter-winding capacitance, imbalance of any of the above, what?], of the common mode rejection of a current balun?

-Peter K1PO

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message news:95kagn$96u$1@slb6.atl.mindspring.net...
> Roy:
>
> Thanks for that detailed explanation of the current balun. I agree with all
> you have shared with us, however there are different ways of viewing things
> and so...
>
> Let me feed back what I think you said...
>
> I believe another way of stating what you wrote is that the current balun is
> actually an inductive reactance choke placed in the common mode path so that
> it "blocks" common mode currents.
>
> Thus the "current balun" a.k.a. "common mode choke" actually enforces the
> current "balance" on the counter-directional transmission line paths for the
> go and return currents by inserting a high impedance in series with them and
> enforcing approximately zero current flow on the third path, the parallel

> combination of the go and return paths. [the "sneak" path a.k.a. common
mode
> path].
>
> A physcial model for this common mode choke is simply a pair of coupled
> coils wound "two in hand" with each physically separate winding connected,
> for conduction currents, in series with the paths making up the
transmission
> line, and only the mutual magnetic coupling, and stray capacitances,
> connecting the two sides. Such a pair of coils will have a small primary
Lp
> and a small secondary Ls leakage inductance a mutual inductance M, and a
> coupling factor k, from which one can calculate the "large" magnetizing
> inductance Lm. In addition there will be 'stray" interwinding capacitance
> which will contain some imbalance as measured from one side to the other
> with opposite ends of windings grounded...
>
> i..e. all the same stuff as any other transformer... and so far... the
> current balun is no different than the conventional transformer, no?
>
> The ONLY difference that I can see between a convention transformer and
the
> current balun is in the "connection" to the transmission line... otherwise
> they seem to be the same to me.
>
>
> For any transformer we always strive to get (Lp+Ls)/Lm as small as
possible,
> no? What?
>
> For the current balun, it is only the somewhat different or unconventional
> "connection" in the transmission line of this "two in hand" wound
> transformer which then causes the large magnetizing inductance to appear
in
> series with each conductor on the transmission line, while the two smaller
> leakage inductances and the interwinding capacitances, now actually cross
> couple the two conductors in the differential transmission line paths.
> [Sort of the opposite situation from conventional transformer usage where
> the magnetizing inductance appears across rather than through and vice
versa
> for the leakage inductances and interwinding capacitances.]
>
> Now the high impedance, or more accurately the high inductive reactance,
of
> the magnetizing inductance of the "two in hand" current balun blocks the
> common mode currents on the transmission line, while the imbalance of the
> the two leakage inductances together with any imbalance in distributed
> capacitance, and/or winding resistance, between the windings will tend to
> let common modes sneak by again.
>

> And so... I believe that the ratio of the magnetizing to the leakage
> inductance for any two winding transformer is a quantitative measure of
the
> "ideality" of the balun in either case. Either for a voltage balun or for
a
> current balun. i.e. one wants the ratio of the magnetizing inductance to
> the leakage inductance of the transformer to be as high as possible,
whether
> or not it is connected as a current balun or as a voltage balun.
>
> It just so happens that... winding a two winding transformer by taking two
> conductors and winding them "two in hand" instead of say sequentially or
> overlapping them, etc.. is a very good way of getting the physical
symmetry
> that creates equal and small Ls and Lp, while simultaneously maximizing k
> and Lm! This will make a good current balun or a good voltage balun, it
> doesn't matter.
>
>
> Winding a transformer with two wires "in hand" is a good thing to do,
> nothing more, nothing less. Just a way of making a great transformer!
>
> A good current balun should make an equally good voltage balun and vice
> versa.
>
>
> Given that the best manufacturing process for either the current or
voltage
> balun is the same, i.e. wind using the "two in hand" technique, then the
> only diffrerence between the two is in the way you hook them up
> (application), not in the way you wind them (construction).
>
> Either the current or voltage balun should be made as close to perfect as
> you can make em.
>
> Then after you have a well made, nearly ideal, ttransformer, you can
decide
> how you wish to hook the device up, i.e. to reduce common mode
transmission
> line currents by "blocking" [read current mode] or by "forcing" [read
> voltage mode].
>
> In some applications one hook up is better than the other and vice versa.
>
> Now if an ideal transformer has:
>
> (a) Infinite magnetizing inductance Lm
> (b) Zero leakage inductances.
> (c) Zero interwinding capacitances
>

> ignoring winding resistance, then...
>
> a "real" transformer has finite magnetizing inductance and non zero
leakage
> and interwinding capacitances.
>
> Then in balun construction, one should strive to get Lm/(Lp+Ls) as high as
> possible, while minimizing the parasitic capacitance unbalances.
>
> I wonder which is the dominant factor in causing performance degradation
in
> current mode baluns??
>
> Low Lm/(Lp+Ls) ratio or parasitic/stray inter-winding capacitance
unbalance?
>
> Thoughts comments?
>
> -Peter K1PO
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3A7D387C.53AE45AE@eznec.com...
> > "Peter O. Brackett" wrote:
> >
> > > . . .
> >
> > > BTW... one measure of the ideality of conventional transformer's is
the
> > > ratio of their leakage inductance to their magnetizing inductance,
i.e.
> the
> > > higher this ratio is the better. For instance a ratio of more than
1000
> is
> > > very desirable, and many transformer designs can achieve upward of
> 100,000
> > > for that ratio.
> > >
> > > I have often wondered?
> > >
> > > Is there a similar measure of ideality for transmission line
> transformers?
> > > How does one characterize the non-ideality of transmission line or
> "current"
> > > baluns?
> >
> > Transmission line transformers can be evaluated like any other kind.
> > When conventionally connected (that is, with the input and output taken
> > across windings), their nonidealities have the same effects as in any

> > other transformer. The main advantage to a transmission line transformer
> > in these applications is that you do get an extraordinarily high
> > coefficient of coupling and consequently small leakage impedance. And in
> > cases where the winding length is a significant fraction of a
> > wavelength, there are advantages to maintaining a constant impedance
> > between windings.
> >
> > The 1:1 current balun is connected differently, however. It can be
> > accurately described as a common mode choke, with each winding in series
> > with one conductor. The lack of concern about magnitizing inductance
> > affecting the differential impedance isn't because it's a transmission
> > line transformer but because of the way it's connected. You basically
> > want two things from one of these. One is a high common mode impedance.
> > This is of course accomplished by maximizing the winding impedance,
> > which is one of the things you want to do with a conventionally
> > connected transformer -- but for a different reason. In the balun, the
> > balun's very ability to balance currents depends on its common mode
> > impedance relative to the impedance of the external circuit. Leakage
> > inductance or impedance is similarly undesirable as in a conventional
> > transformer. Here, it manifests itself as a series impedance to
> > differential currents. But as I mentioned, it's seldom a concern, since
> > it's generally very small because of the transmission line windings.
> >
> > The way I like to evaluate a 1:1 current balun is to connect an
> > unbalanced signal source to the input. To the output terminals I connect
> > equal value resistors to ground, at the same physical point as the
> > ground side of the balun input. I judge the balun by its ability to
> > produce equal voltages or currents across the two resistors. A good
> > voltage balun will also show up good in this test. The second test is to
> > connect the output side of the "hot" winding (the winding whose input
> > end is connected to the hot side of the input) to ground, and the output
> > side of the "cold" winding through a 51 ohm resistor to ground. A
> > perfect current balun would deliver the full input signal across the
> > resistor. (A voltage balun would not.) An inspection will reveal this to
> > be a simple polarity reversing transformer. It represents the worst
> > possible case of a current balun attempting to deliver equal currents
> > into the worst possible imbalanced load condition. In this test,
> > conventional transformer analysis can be applied, and leakage and
> > magnitizing impedances will have the effects you'd expect on input
> > impedance. A current balun won't usually be subjected to this severe of
> > a load imbalance, but it's a good worst case test to use in comparing
> > baluns.
> >
> > Kevin, W9CF, has written an excellent treatise on baluns, and
> > particularly their connection at the input or output of a tuner. You can
> > find it at http://fermi.la.asu.edu/w9cf/articles/balun/index.html. I
> > highly recommend it.
> >
> > Roy Lewallen, W7EL
>

>

2663. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 02:37:11 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7F6357.267F7E0A@IEEE.org>
Source record: 170736

Butch Magee wrote:
> Doggone Cecil, after a 3-4 inch build up of bugs on the coil, it looses
> its "lossy" but don'w resonnamate wuth a shirt either. Gimme a quick
> fix. You did notice that there were no buggy ones at the shootouts.
> Did'nt you?

It's true. I clean all my coils before the shootout. But my HS-1600
came with a thin plastic bug shield. It works well and is easy to
clean.
--
http://www.mindspring.com/~w6rca

2664. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 02:40:49 UTC
From: richardharrison@webtv.net
Message-ID: <8391-3A7F6431-16@storefull-114.iap.bryant.webtv.net>
Source record: 170742

In the early months of "No-code kills" there was a radio life saving story of a Colorado miner treated via CW instructions from a qualified physician in the valley below.

I opined that the patient might have been plucked from his high altitude perch by a helicopter in this day and age. I`ve done a Rocky mountain sight-seeing helicopter tour, so it seemed a reasonable speculation to me.

There were howls that the high altitude would preclude a helicopter rescue.

I just watched "Rainier, The Mountain" on PBS. The Park Service`s primary rescue device on Rainier which tops out at 14,408 feet, the highest peak in the contiguous 48 states, is a really big helicopter. They also have trained dogs and park rangers.

What works in the state of Washington, probably works in the state of Colorado.
I just speculated. We really don`t know all the local conditions.

Best regards, Richard Harrison, KB5WZI

2665. Re: Employment US RF Antenna Engineer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 02:52:18 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <3A7F66CB.2381CD@sccoast.net>
Source record: 170737
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur.club.clarc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave

Dave wrote:
>
> They want to plant a transmitter in my head!!!!!!

Relax, Dave. They're looking for someone to design the transmitter,
not for someone to actually try out the transmitter (those ads will
appear later).

Besides, you already have a transmitter inplanted in your head.
Didn't you ever wonder why you would get some song in your head,
huming along with it for days? Some lab technician was just having a
little fun listening as you tried to sing something else in an effort
to forget the first song (you don't sing very well, especially when
you're thinking of another song at the same time).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

2666. What type of grease to use on rotor bearings ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 02:56:57 UTC
From: Jack <5406285@127.0.0.1>
Message-ID: <3a7f67f9@news.newsfeeds.com>
Source record: 170739

Is it OK to use white lithium grease on
rotor bearing races. Thought I read
once not to use because of low melting
point. Please email to wd9ifw@arrl.net
TNX & 73's. Jack

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

2667. Re: continuously loaded vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 02:57:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95np4vmpr1@neptunium.btinternet.com>
Source record: 170738

Download small program HELICAL3 from website below. Download in a few seconds. Not zipped up. Run immediately.

Covers anything from bottom loaded vertical to broom handles wound with 18 gauge wire with a whip on top.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

David Snyder Hale <david@isi9.mtwilson.edu> wrote in message news:95muqu$8hk$3@agate.berkeley.edu...
> I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of
> wire and wrap a linear coil around a non conducting support which is at
> least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot
> fishing pole with 122 feet of wire. Also, add a corona disk to the top.
>
> Has anyone tried this that can comment on what you might've had to have
> done to make it work well? Eg. what did you tune it with, Nr. of radials,
> performance, change in design, etc.?
>
> Tnx,
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

2668. Re: Texas Bugcatcher manufacturers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 03:01:31 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7F690B.36BBAC22@IEEE.org>
Source record: 170740

Butch Magee wrote:
> OK! I'm lost on this one. 'Splain toomee!

This is a subject of much debate. Air and vacuum coils have very low dielectric losses. Rigid coil forms have additional losses, some high and some low. The property associated with this loss is called the Dissipation Factor and the lower the better. Here is a partial list: Plexiglas .05-.06, Lexan .0009, Teflon less than .0003, PVC .020-.007, ABS .003-.008, Nylon .02, Polyethylene and Polypropylene less than .0005, Polystyrene .0001-.0006, Acetate .003-.02, Acrylic .04-.05

As you can see, PVC is not the best choice and varies widely in its characteristics. Since a large percentage of the losses in a 75m mobile antenna occur in the coil, it's best to chose a low loss coil form. I'm sorry, I don't have the Dissipation Factor for Phenolic but I think it is pretty good.
--
http://www.mindspring.com/~w6rca

2669. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 03:07:10 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7F6A5E.47850713@IEEE.org>
Source record: 170741

"Peter O. Brackett" wrote:
> A two in hand wound balun makes a great current balun but not a great
> voltage balun, and a conventionally wound transformer makes a great voltage
> balun but a poor current balun.

Just about the best you can do with "two in hand" is when one of the
two is the center conductor in a piece of coax. Ten turns of RG-400
on an FT-240-61 core makes a dandy HF 1:1 balun/choke. It reduces
common mode currents in either balanced or unbalanced applications.
--
http://www.mindspring.com/~w6rca

2670. Re: Hustler antenna and SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 03:19:28 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7F6D40.AACD2647@IEEE.org>
Source record: 170743

lbratche wrote:
> Would an auto tuner allow be to install one
> resonator and not have to switch it out on 10 - 20 meters? If so, should I
> go with a 10 meter or 20 meter resonator or would it make a difference?

It will work and you should use the 10m resonator. For quite awhile,
I ran an SGC-230 with a 11.5 ft. whip for 10m-20m.
--
http://www.mindspring.com/~w6rca

2671. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 03:22:38 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7F6DFE.E92A4287@IEEE.org>
Source record: 170744

Dean Craft wrote:
> I apologize Cecil. I had no idea that you were actually operating under a
> medical handicap. I concede and withdraw.

I apologize, Dean. I was only kidding. However, I do take poor man's
Prozac - St. John's Wort.
--
http://www.mindspring.com/~w6rca

2672. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 03:34:15 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95nrbn$890$0@208.206.142.72>
Source record: 170745

Cecil wrote:
>
> Dick Carroll wrote:
> > Any ham who cannot perform minimally at Morse code, the most basic
> > radio communications mode, is inherently unqualified at basic radio
> > communications.
> > When one is unqualified at the basics, how can he claim to be fully
> > accomplished?
>
> How can you be fully accomplished without experience at Spark Gap?

Well, you can check out what this innovitave fellow did with it, right in your old San Francisco stomping grounds...

http://antiqueradios.com/chrs/journal/herrold.html

> Spark Gap is certainly one of the original "basics".

Are you serious??? Spark is no more a MODE than DSP. See again what that fine fellow at the above URL did with spark. It sure wasn't Morse code.

I would have expected you to know that, considering that the Icom 756 sitting here on the desk before me is also tuned to a Morse code transmission, and guess what--it will also send Morse code, since I happen to be moderately proficient at using it.

Your delusions
> of grandeur about Morse code are worrisome, Dick.

What's that you call such attacks? Ad Hominem?

Aren't you good
> at anything else in the world?

Sure I am, and I said yesterday that I'm far from being one of the better MOrse code operators you'll find out there. THOSE guys are the people who did Morse daily, day after day, for a living and they got GOOD at it. I, on the other hand, had to struggle a bit, since I did it only as a ham, but I can tell you that I sure learned what it will and can do, when humans learn to use it, even moderately as I do.

Hanging all your self esteem on an
> outdated governmental requirement is psychologically dangerous.

Cecil, you keep Adding all those Hominems and soon there won't be room for you *or* your dog in your hamshack.

Seven Threes, Good Bud. And a pair of eights to the pooch.

Dick

2673. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 03:52:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A7F74F8.9181548E@IEEE.org>
Source record: 170746

Dick Carroll wrote:
>
> Cecil wrote:
> > Spark Gap is certainly one of the original "basics".
>
> Are you serious??? Spark is no more a MODE than DSP. See again what
> that fine fellow at the above URL did with spark. It sure wasn't Morse
> code.

Who said Spark Gap was a mode? I said it was one of the original "basics".
I don't know what kind of code they used with Spark Gaps. What kind was it?

> > Your delusions
> > of grandeur about Morse code are worrisome, Dick.
>
> What's that you call such attacks? Ad Hominem?

It's not an attack if it's the truth and that's my honest opinion.
--
http://www.mindspring.com/~w6rca

2674. Re: WTB:TS-430s faceplate

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 04:30:49 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A7F7DF9.AB51AF62@oio.net>
Source record: 170749
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap

Joe wrote:
>
> Need clean faceplate for a abused TS-430s (someone was a careless slob)

Joe,
Just one place to find one, call Kenwood.
'Doc

2675. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 04:31:32 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95nun4$h7p$0@208.206.142.72>
Source record: 170748

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "Only ham radio incorporates such a diversified widespread cadre of
> operator/stations as to be capable of detaching itself from the gridded
> infrastructure to the extent that it can function on its own without
> dependence on such things as power grids, networking schemes or both."
>
> You enjoy lower insurance rates because your fire and police departments
> have hardened radio systems which can be independent of the local
> telephone and power systems.
>
> Come on! The commercial networks are extremely tolerant of disruption.
> Failure triggers instant rerouting to get the message through.
>
> In dire continuing problem spots, there are available elaborate police
> and sheriff communications vans with everything needed for fairly
> long-term operations. These are always ready to roll. There are National
> Guard units with communications gear and operators awaiting a governor`s
> orders to be used where needed. The armed forces are well equiped and
> awaiting federal orders. Then, there is a multitude of private
> industrial and commercial communications networks with independent power
> and divertable capacity. Almost any large TV station can dispatch a
> capable satellite remote across the street or around the world. Or they
> can send a helicopter with a minicam.
>
> All hams could be ordered off the air and be hardly missed for emergency
> communications. All the police, military, industrial, commercial,
> broadcast, and other professional emergency communications are operated
> by disciplined professionals using professional equipment and are more
> reliable than the amateur community.
>
> You can have all the heroic dreams you like, but it doesn`t square with
> reality.
>
> What ham radio does well is provide communications for marathons, fun
> runs, bicycle tours, etc. which are promoted by charities as
> fund-raisers. Free communications for these is not in the charter of the
> other organizations.
>

You really DON'T have a clue, do you? All is well with your world,
you're relaxed, comfortable, the communications world has been well
engineered, according to current doctrine, and things are perking right

along, right on schedule. Right! Nothing whatever is amiss. And then, a little crack appears in the dam.....

When you get into disaster communications, you're now on MY turf. You don't really want to get me started, but I can tell you that over a dozen years I sat on many statewide planning committees investigating just that subject, with an subject of "Migigation of an earthquake disaster on the New Madrid Fault".
One of the early conclusions was that a wide area disaster of the sort experienced in that region in 1811-1812, when the earth shook most of the time for three straight months and included six major temblor events above 8.0 on the Richter scale, as determined later by geologists, *WILL* again occur at some unknown future time. When it does, there will be nothing that is in place that can be depended upon to survive to be useful and no personnel in the area of the event--major portions of several states-- can be relied upon to report for duty since they all are just as affected as the the rest of the population, with families and their own lives and homes to attend to. All relief must come from somewhere else, at least two hundred miles away. Before that relief can move it must be mobilized. It is expected that at least 3 days will pass before the beginnings of relief arrive in any serious quantity.
The most pressing need in those circumstances when virtually all infrastructure is severly compromoised, is communications. Information, what happend, where are the victims who need help, priorities. It happens that hams are very well situated to provide a large amount of those communications, given their wide dispersal throughout the population. I leave it to your imagination to decide how it proceeds from there. Beleive me, our planning DID include ham radio operators.

One thing more. Virtually all the natural gas supply pipelines serving the northeast quadrant of the USA today pass through this same region. When that earthquake occurs, there will be vast areas of the country besides just the area affected that will suffer longterm severe difficulties.

It might be worthwhile for you to get out and take a good look around. You've been spending too much time reading the IEEE journal, which I'm sure has a solution for every problem. The real world looks considerably different. Very few governmental entities invest scarce funding in facilities which must be held, unused, in place awaiting such an event. Government budgets just don't devote that sort of capital to it, nor are they ever likely to. Frankly the taxpayers have other priorities and elected officials know it.

You pointedly ignored the "Digital Pearl Harbor" to which I referred. If you are really interested in modern communications technology, you might want to do a web search to find out just what that referrs to. The potiential is at hand for that scenario to make a New Madrid earthquake seem like peanuts, with the entirety of civilisation relying on computers.

On the other hand, you've made it more than clear that you have about the same interest in ham radio that a CBer has in his bit of spectrum. It's nothing more than just a bland hobby, devoid of any real serious communications valur or potential. No wonder you can't imagine anyone actually being serious about such an ancient communications mode as Morse code.

73, Dick W0EX

2676. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 04:34:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95nus5$h7p$1@208.206.142.72>
Source record: 170750

```
Cecil wrote:
>
> Dick Carroll wrote:
> >
> > Richard Harrison wrote:
> > > Many do, one way or another. Money talks. Take a quarter from your
> > > pocket and it says "E PLURIBUS UNMUM". I think that means 25 cents makes
> > > 1 quarter of a dollar.
> >
> > Nope. It means "From many, one". A symbol of the Union.
>
> Nope, it doesn't, Dick. I'm not sure what UNMUM means but it is
> not "one". "One" is UNUM.

Gee, Cecil, outta clout so early in the scrap that you must use someone
else's typo to slam me?
```

2677. Re: WTB:TS-430s faceplate

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 04:39:37 UTC
From: Ed Cregger <ecregger@earthlink.net>
Message-ID: <deLf6.387$v_5.55763@newsread2.prod.itd.earthlink.net>
Source record: 170751
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap

They ran out of 430 faceplates many years ago. But, it never
hurts to call.
--
Ed Cregger
ecregger@earthlink.net

"'Doc" <w5lz@oio.net> wrote
>
> Joe wrote:
> >
> > Need clean faceplate for a abused TS-430s (someone was a
careless slob)
>
> Joe,
> Just one place to find one, call Kenwood.
> 'Doc
>

2678. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 04:53:39 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95o00j$h7p$2@208.206.142.72>
Source record: 170752

Cecil wrote:
>
> I *AM* on Prozac, Dean, and it fixed all my delusions, sagging self-
> esteem, and alter egos. That's why it is so easy for me to recognize
> those same symptoms in you. Like CW, been there, done that. :-)

Because you're on Prozac everyone who disagrees with you should be,
too?

2679. Re: Hustler antenna and SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 05:13:18 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95o15e$n75$0@208.206.142.72>
Source record: 170753

I'd be looking that coaxial feedline over real carefully, from the
PL259 all the way back to where you did a GOOD job of grounding the
shield to the vehicle frame. Doesn't seem like bad Hustler resonators,
though it is possible. It's rare for two of them to go bad
simultaneously.

Dick

lbratche wrote:
>
> I recently installed an Alinco HF-70T in my truck. I'm using the Hustler
> antennas with the different resonators for the different bands. I bought
> the 10 meter resonator new and the rest I pick up used. The 15 and 20 meter
> resonators will not longer tune. The best I can get is about 4:1 SWR. The
> 10 meter will tune to 2:1 or less. I suspect the resonators went bad, but I
> want another opinion before trashing them and buying more.
>
> I also have another question. While playing around with this problem, I
> discovered that the 10 meter resonator gets about 1.75 SWR on 17 meter and
> 2.5 or 2.7 on 15 and 20 meters. Would an auto tuner allow be to install one
> resonator and not have to switch it out on 10 - 20 meters? If so, should I
> go with a 10 meter or 20 meter resonator or would it make a difference?
> This may seem like a dump question, but I'm not too experienced in the
> mobile area. I know I would need to switch for 40 and 80 meters.
>
> Thanks
>
> Larry

2680. Re: WTB:TS-430s faceplate

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 05:21:41 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <95o1kj$8mj$1@slb5.atl.mindspring.net>
Source record: 170754
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap

Long gone, calling and E mailing Kenwood was the first thing I did.
I dont understand how someone could be entrusted to sell clean estate stuff
then be a total slob.
The seller threw it and a Heathkit in a box of transformers, meters and
heavy Motorola crap (uncovered) to ride several hundred miles to a hamfest.
His explanation between choking on a cigarette was "its just a couple
scratches"
.....Your making a big deal about nothing !
"Most people usually dont mind, sorry I couldn't sell it"
"I am Sorry OK !..... I will buy it, hows $150 ?

.....I cant post the reply given him.
I believe the SOB pig switched panels with an older set, but cant prove it.
Now AM Receive is dead !

Ed Cregger wrote in message ...
>They ran out of 430 faceplates many years ago. But, it never
>hurts to call.
>--
>Ed Cregger
>ecregger@earthlink.net
>
>
>"'Doc" <w5lz@oio.net> wrote
>>
>> Joe wrote:
>> >
>> > Need clean faceplate for a abused TS-430s (someone was a
>careless slob)
>>
>> Joe,
>> Just one place to find one, call Kenwood.
>> 'Doc
>>
>
>

2681. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 05:29:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95o24dntb0@208.206.142.72>
Source record: 170755

Cecil wrote:
>

> >
> It's not an attack if it's the truth and that's my honest opinion.
>

I'll remind what you always say - Opinions are like a$$holes, everyone
has one. Your just smells a little worse than average.

2682. Butternut HF6V-X Mounting on Roof Help??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 05:36:06 UTC
From: bcolenso@aol.com
Message-ID: <20010206003606.21044.00000693@ng-mh1.aol.com>
Source record: 170756

Back in the mid-80's I had an HF6V that I mounted on the roof of my house. Not a bad antenna, for a vertical.

It was mounted on a 10 foot (~3 meter) tripod on the peak of the house, with a 10 foot mast. The tripod had three 10 foot 2x4's, one for each leg, on the under side of the roof, and three 5/8-24x3" bolts for each leg (two through each tripod foot, and one at the far end of the 2x4). A big fender washer on both ends of the bolt, and RTV on top water proofed the whole thing.

At first I used the Butternut Stub Tuned Radial kit, but that didn't last the first winter here in the Detroit area. Use four radials made from #12 wire, cut to 1/4 wavelength plus 5%, for each band. You can use your 40 meter radials for 15 (third harmonic). The angle of your radials will affect your SWR, so you may have to play around with that. Start at 45 degrees and go from there.

This setup gave me many years of satisfaction. I've "talked" all over the world with it, and even the rare occasion then I pulled the mic out of the box in the drawer, I could normally break a pile up with only 100 watts.

Bob
KD8WU
Remove the obvious when responding by e-mail

U of M GO BLUE !!!

2683. Re: WTB:TS-430s faceplate

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 05:50:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95o3afsei0@208.206.142.72>
Source record: 170757
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap

'Doc wrote:
>
> Joe wrote:
> >
> > Need clean faceplate for a abused TS-430s (someone was a careless slob)
>
> Joe,
> Just one place to find one, call Kenwood.
> 'Doc

I'd be very surprised. They don't support any of their older rigs, I believe the earliest is the TS850.

You can send an email to Terry at tandt@townsqr.com. I swapped him 430 parts rig some time back and he may make a faceplate available if he still has it.

Dick

2684. Re: WTB:TS-430s faceplate

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 06:07:54 UTC
From: Bill Meacham <NOSPAMexray@coqui.net>
Message-ID: <3A7F94BA.F92B00F3@coqui.net>
Source record: 170758
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap

Joe wrote:
>
> Need clean faceplate for a abused TS-430s (someone was a careless slob)

As long as we're doing faceplates, I could use one for an Icom
745.
--

Bill Meacham WX4A
Vieques, PR

2685. Antenna Microstrip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 06:44:49 UTC
From: nghhung@ptithcm.edu.vn
Message-ID: <95o6h0$ef6$1@nnrp1.deja.com>
Source record: 170759

I want to design and simulink about Microstrip Antenna. But I don't know where buy printed-circuit board. Would anyone help me. Thank You verry much!!

Sent via Deja.com
http://www.deja.com/

2686. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 08:35:23 UTC
From: Paul Mech <no@ddress.com>
Message-ID: <3a7fb703@news.iprimus.com.au>
Source record: 170760
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Jim" <arnoldjimjim@hotmail.com> wrote in message
news:3A7EE153.FA13502A@hotmail.com...
> I've read through SW antenna discussions and it's all way way beyond me.
Web
> pages all seem over my head too. Can someone point me to an "antennas for
> dummies" (or beginners) web page or book please. Maybe I also need a
reference
> about basic radio theory. Perhaps there is a FAQ posting I haven't seen.
(I
> had a good reference 30 years ago called "Instructions for Radio
Construction",
> but alas it went with the wonderful tube radios my parents gave away when
I was
> 20 (Normende Elektra, Grundig, and FM transmitter I built and a couple of
> crystal sets. I working on relieving the pain now).
>
> I live in Saskatoon, Saskatchewan, Canada, and what I gather (sort of) is
a
> passive outdoor antenna is likely best. I am completely lost as to why
wire
> must be insulated, why/whether lengths and gauge matter, how the plug-ins
in the
> side of my Sangean ATS 909 and Grundig 300PE are set up. I have the plug
> passive antennas these radios came with.
>
> The last time I had a big antenna was 1968 or 70 and I just strung 120
feet of
> wire out the window around the second storey of my childhood home,
stuffing it
> under the shingles and chucking it over to the neighbour's roof and doing
the
> same thing there, clipping it to the telescope antennas with an alligator
clip.
> What will I gain by something more complex? Does north/south/east/west
> orientation around a roof make a difference. The active/passive antenna
thing
> also has me completely boggled. I am looking to extend the SW hours into
the
> daytime more (I can only get BBC fading in and out, USA audio-evangelists
and
> lots of Spanish, though I heard Russia and got Kuwait yesterday), and I am
a
> long way from signals here (-7 hours UTC), 600 miles north of USA border.

Any
> simple instructions and why I would choose this or that would be
gratefully
> accepted.

I bought a simple SW antenna kit from Dick Smiths over here in Australia, and I can assure you that Radio Shack or other good electronic stores will have a similar kit. Anyhoo, the kit I bought has made a world of difference on my Sangean 808. I have been able to pick up a hell of a lot more now since I installed this antenna. Last week, I picked up BBC World Service from Skelton England in Sydney (at least thats what Passport 2001 reckons anyway)

The antenna is very basic, it comes with 25 metres of insulated copper wire, 10 metres of insulated rope and 2 egg insulators. Cost me A$27, and it performs really well, for a low price.
--
Paul
Sydney Australia

2687. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 09:17:41 UTC
From: Peter Parker <parkerp@alphalink.com.au>
Message-ID: <3a805c34@news.alphalink.com.au>
Source record: 170761

> Anyone have any better QRP beach antenna suggestions?
>

Have a look at http://www.alphalink.com.cu/~parkerp/project.htm

A squid pole can collapse to 1.1m, but extend to 9m. It's also fairly
light.

I've used it to support a quad loop for 20m with good results.

73, Peter

2688. Q: theory isotron antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-06 10:58:35 UTC
From: Olaf <dl7und@kimo.com.tw>
Message-ID: <hulv7t4umqu0uqgljpslci2veh6kk2p1m6@4ax.com>
Source record: 170762

Hi,

I'm looking for some theory (explanations) about isotron antennas, hopefully enough to build one myself. Unfortunately, except of "classic" antenna designs, I can only find information about magnetic antennas. Is this really only a field for commercial manufacturers or has anybody some more info?

Thanks,

Olaf, DL7UND

2689. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 04:31:58 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <95rkm0$k28@news-central.tiac.net>
Source record: 170679
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <3A80CBD0.AB709B4E@IEEE.org>, "Cecil" <Cecil.A.Moore@ieee.org>
wrote:

> Dick Carroll wrote:
>> I'm saying that you slam them with no experience whatever from which
>> to derive a true functional evaluation.
>> ...
> But you said they perform better than I think. Do they? If so, they must
> violate the laws of physics.
>...

No, Dick's using a different performance criterion than you are.

Exactly what the criterion is, I can't say. The challenge to the theorist
in a case like this is to figure out what the user's criterion really is.

An antenna for somewhat shorter wavelengths, Smithsonian's "Multiple
Mirror Telescope" of the 1970's was an engineering failure: the
laser/actuator system that was supposed to hold the mirrors in alignment
never worked properly. Or was it? In fact, the telescope was an incredible
success! Its lightweight structure provoked much less air turbulence in
its immediate vicinity than a conventional structure. The result was
images that were better than expected, despite the failure of the active
alignment system. Rather than deny this, telescope designers learned that
their performance criteria needed revision. The current generation of very
large telescopes could not have been built without this insight.

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

2690. Re: Q: theory isotron antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 09:50:49 UTC
From: Olaf <dl7und@kimo.com.tw>
Message-ID: <p0418ts1ctdgbre05b55s1ppnn35tm4jdn@4ax.com>
Source record: 170763

On Tue, 06 Feb 2001 18:20:23 +0100, Thomas Beckert
<Thomas.Beckert@alcatel.de> wrote:

>If this is not successfull go to
>http://www.s-line.de/homepages/dl4sz/isotron.html
>
Looks interesting. I will contact you by mail.

>> search in www.altavista.de for "ISOTRON" .
>> you will find more than one example how to build your own.
>>
Among others, I tried Raging, which should be the same, but the only
thing coming out are commercial sites - unfortunately...

bye,

Olaf

2691. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 10:08:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95r6ns$9vh$1@slb3.atl.mindspring.net>
Source record: 170764

Reg, Cecil:

Hey thanks for the feedback. I agree with Cecil that winding the coax transmission on the core makes a great quick and dirty current balun or common mode choke, and Reg's speaker wire construction is my personal favorite, since I hate coax... but... I still wonder how does one "optimize" the design of a current balun? i.e. how many turns of the two in hand, how close should they be spaced, how big should the core be, what are the secondary effects that cause loss of common mode rejection capabilities, etc, etc...

I am still curious and ask... if one were to take an existing "current balun device" and characterize it's "primary" parameters, instead of it's "secondary" parameters. e.g, leakage inductance, magnetizing inductance, capacitance, rather than total common mode impedance, how can one calculate it's common mode rejection.

How can one tell if one current balun design is better than another. Which one to buy? Etc....

I know Reg will say, once it's good enough, there's no need for the average ham to make it better, it will only affect signals strength by 0.001 S Units, and so... who cares, but "I am curious".

As my sons used to say when they were young, why daddy?

If one measures the primary capacitance parameters on a conventional transformer, i..e. interwinding capacitances and their imbalances, then one can more or less calculate the "mid-band" common mode rejection from those capacitance values.

Understanding the physical makeup of those inter-winding capacitances guides one in the physical construction of conventional transformers having high common mode rejection, up to and including the design of Faraday screens between windings which can really help to generate very high common mode rejection. But I just don't get it yet, and I wonder what the "rules" are for designing a good current balun?

What are physical parameters and approachs applicable for designing high common mode rejection for a current balun? Will simply winding on more turns of the transmission line, "the two in hand wires", create higher common mode rejection, or will some maximum be reached and then fall off, etc... i.e. when have you put too many turns on the core, and...

Perhaps winding the transmission lines on the core in a fractal pattern will help? Fractal balun's ought to be better than straight baluns, no?

In other words, I wonder, what are the guidelines for and how does one "optimize" the physical design of a current balun, not just make one that's "good enough for government work" or perhaps "good enough for ham use".

Thoughts, comments?

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:95oq3q$qb9$1@neptunium.btinternet.com...
> All that's needed is a ferrite rod or ring wound with twin, multi-strand, 18
> gauge speaker wire. This has Zo roughly 150 ohms.
>
> Optimum Zo for the winding is the geometric mean of the two terminations.
> For example, Sqrt(50*450) = 150 ohms.
>
> Obviously the twin 150-ohm line has less loss than coax. The teeny inner
> coax conductor is just a hot fuse wire.
>
> But the whole issue is a storm in a teacup. ;o)
> --
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A7F6A5E.47850713@IEEE.org...
> > "Peter O. Brackett" wrote:
> > > A two in hand wound balun makes a great current balun but not a great
> > > voltage balun, and a conventionally wound transformer makes a great voltage
> > > balun but a poor current balun.
> >
> > Just about the best you can do with "two in hand" is when one of the
> > two is the center conductor in a piece of coax. Ten turns of RG-400
> > on an FT-240-61 core makes a dandy HF 1:1 balun/choke. It reduces
> > common mode currents in either balanced or unbalanced applications.
> > --
> > http://www.mindspring.com/~w6rca
>
>

2692. Re: lat/lon, Easting/Northing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 10:09:24 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95raplagi2@lure.pipex.net>
Source record: 170766

"Brian.Farrelly" wrote ...
> I think the disagreement is due to the *difference* in
> the conventions for lat/lon and for Easting/Northing.
>
> lat/lon are given in that order though I do not know
> why this is the convention.

Perhaps it is because of the calculations of Longitude and position where:
The distance per degree of longitude at the Equator is about 111.32 km
(69.18 miles) and at the poles, 0.
Longitude gives time and Time gives Longitude when combined with a star
observation. But you will require Latitude to apply the appropriate
distance.
i.e (Degrees Difference Longitude) * Cos (Latitude) * 69.18 miles

> Easting/Northing are given in this order.

Yes, what about Postcode? :)
Sorry that's a local joke.
Though I do have a CD-ROM that can translate from Postcode to Easting and
Northing, but it is by means of a look up table.

> I assume this is because Easting and Northing are
> xy-coordinates on a map projected onto a plane.

Yes indeed but ther is a mathematical relationship that is used by programs
and GPSs to convert between the co-ordinate systems.

The 'x' is equivalent to Easting and Longitude

And 'y' to Northing

Have you seen the marvellous film about Harrison;
or read Dava Sobel's book "Longitude"?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2693. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 10:35:59 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95rapvagi3@lure.pipex.net>
Source record: 170767

"Bob Miller wrote
> Jim <arnoldjimjim@hotmail.com> wrote:
...
>
> Well, you can make this highly overly-complicated, or simple. There's
> just not a hell of a lot that is critical in a receiving antenna for
> shortwave (transmitting antennas are much more complicated).

I'm sorry but I must disagree.
Receiving Antennas are identical to Transmitting antennas except it on the one hand their power handling and on the other hand noise pick up, and the fact that generally speaking a Transmitter will usually only be operated over a very small segment of the band and the Antenna may be made resonant and it doesn't matter a damd about noise pick up.
A receiving antenna on HF will be required to look at a broad spectrum generally most people woykl like it to go from 1 MHz to 30 Mhz with good performance all the way through, or at least good performance on all of either the Hma Bands or conversely the Broadcast bands. Meeting the criteria of performing reasonably over such a wide spectrum is a daunting prospect. But more importantly is the consideration of noise pick up. Too much of this and you might as well just use a small whip that is part of the receiver. There will be lots less signal but also less noise permitting you to hear the few signals that you can pick up.

Most receivers have more than sufficient sensitivity for the HF bands, (Many far too much), but the signals that you will be able to hear all depend upon the quality and location of your Antenna/ Aerial.
A good Earth is also an advantage.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2694. Re: Remote antenna switchbox relay types?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 11:07:12 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A812C60.B05E88AE@oio.net>
Source record: 170765

Zoran,
In the remote switch that I have the relays appear to
be standard open frame, double pole, single throw. Can't
tell you thepart/relay number, though.
'Doc

2695. CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 11:17:25 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <99ag6.285117$hD4.69392993@news1.rdc1.mi.home.com>
Source record: 170768

So .... what is up with the CFA antennas?
Have they ever been developed to the point of retail sales for amatuer use?

William Lee

2696. Re: CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 12:42:39 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0702010742390001@jbw-mac.itd.nrl.navy.mil>
Source record: 170669

In article <99ag6.285117$hD4.69392993@news1.rdc1.mi.home.com>, "William Lee" <n5wrx@home.com> wrote:

> So .... what is up with the CFA antennas?
> Have they ever been developed to the point of retail sales for amatuer use?
>
> William Lee

Ahh, the crossed-field antenna. Surely the "Phoenix" of antenna designs. I can't comment on commercially-available amateur versions, but if you want to build one, there were construction articles available at www.antennex.com. You might also want to read the article by Dr. John Belrose at this site if it's still available. I would also encourage you to read the previous postings on this ng and perhaps others (do a search at www.deja.com). Personally, I would rather spend my time constructing some of the antennas in the ARRL publications (e.g., Handbook for Radio Amateurs, Antenna Book, Antenna Compendium, QST). Unlike the proponents of the CFA, the ARRL authors appear to know what they're talking about. Best of luck. 73s,

John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

2697. Re: Cushcraft Angst...Is It Me?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:02:18 UTC
From: k4ia@aol.com
Message-ID: <20010207080218.11727.00001569@ng-cb1.aol.com>
Source record: 170670

I had an R7000 that blew a trap. Getting a replacement was an ordeal I do not care to repeat. Cushcraft's customer service is terrible. Some have suggested they have decided to abandon the ham market but haven't yet pulled the plug.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

2698. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:05:38 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <95rhgdmqj1@newpoisson.nosc.mil>
Source record: 170673

Bumper sticker of all Bumper stickers seen often here in South Carolina
that's related to this thread: "Friends don't let friends drive Chevys"

Change Chevy to GMC and no foul!

P.S. I drive a F-250 with the Power Stroke Diesel.

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A588B3F.8D748EFB@IEEE.org...
> "Peter O. Brackett" wrote:
> > Hmm... doesn't look like an F-150, maybe a Ram? What?
>
> GMC, the most electrically noiseless vehicle I have ever owned.
>
> > Cec, do you remove the tailgate on the pick-up to reduce em losses or is
it
> > to reduce wind and gasoine losses? Or perhaps both?
>
> Yep, both. Something for nothing. :-) Wonder if anyone makes a
> fiberglas replacement tailgate?
> --
> http://www.mindspring.com/~w6rca

2699. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:10:59 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <95rhq7mrk1@newpoisson.nosc.mil>
Source record: 170674

John: several third party manufacturers out there make composite or steel
louvered tail gates that obviate truck bed wind drag concerns, etc. I
employ one because I tow a 30 foot fifth wheel and the model I chose has a
notch in it so I can back the truck up to the trailer hitch without having
to get out, drop the gate, hook up the hitch, close the gate...yatta, yatta.

Regards, Jim R.

"John Passaneau" <jxp16@psu.edu> wrote in message
news:934mc4$u74@r02n01.cac.psu.edu...
> 'Very neat looking setup, but I believe that in Pennsylvania driving a
> pickup with out a tail gate is illegal. If I remember right, even the net
> kind of replacement tailgate is not allowed.
> That looks like the kind of setup that people look at and say "I bet he's
> not married" .
>
>
>
>
> --
> John Passaneau
> Penn State University, State College Pa.
> W3JXP
> w3jxp@arrl.net
>
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>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A550054.82F9864D@IEEE.org...
> > I realize that this is the Morse code and guns newsgroup but hope
> > that no one will object to some antenna information.

> >
> > I promised to do some measurements for someone but I don't remember
> > who or what thread - so here it is. My HS-1600 with top hat can be
> > viewed at: http://people.delphi.com/cecilmoore/mobnow.htm
> >
> > It is tuned for 75m and note that only 2/3 of the coil is engaged.
> > Someone asked me what height of stinger was equivalent to my top
> > hat. I had never approached it from that angle before so I did
> > some measurements leaving the position of the HS-1600 coil fixed.
> >
> > The top hat is located at eleven ft from the ground. There is no stinger
> > above the top hat. If I remove the top hat and install a stinger
> > to resonate at the same frequency, a twelve foot stinger is required.
> > That makes the antenna 23ft from the ground - slightly illegal.
> >
> > The resonant frequency with the top hat is 3.95MHz. The resonant
> > frequency without the top hat is 8.5MHz. The top hat shifts the
> > resonant frequency by 4.5MHz. Since minimum inductance on the
> > loading coil results in maximum field strength, the effect of
> > a top hat is as close to something for nothing as one can get
> > with mobile antennas.
> > --
> > http://www.mindspring.com/~w6rca
>
>
>
>

2700. Wanrted Alliance HD73 Rotors

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:15:45 UTC
From: w3nrs@aol.com
Message-ID: <20010207081545.08499.00001524@ng-fq1.aol.com>
Source record: 170671

I am looking for up to 12 Alliance HD73 rotors in any condition.
Let me know what you have and what you want.
Thanks
Clem W3NRS
W3NRS@AOL.COM

2701. Re: CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:15:53 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A814A89.6A8D856C@oio.net>
Source record: 170672

William Lee,
Don't hold your breath! They can't even make
a consistant story, much less an antenna that works.
'Doc

2702. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:31:25 UTC
From: richardharrison@webtv.net
Message-ID: <16472-3A814E2D-1@storefull-118.iap.bryant.webtv.net>
Source record: 170676

Bill Nelson wrote:
"All that is needed for most emergency communications is CW or voice - not video."

A video baseband can carry hundreds of voice channels. Let`s see, 5000 KHz divided by 4KHz is 1250 channels. That is exactly the way it is done with old fashioned frequency division multiplex. Digitization uses time slots in place of frequency slots, but the relation between frequency and bandwidth remains.

The single-channel network equipment I mentioned is only providing one voice channel. This means narrowband equipment equipment is being used.

The slice of noise accepted is proportional to the bandwidth accepted. So, a smaller dish can be used with a single channel because not so much signal is needed to overpower the noise accepted.

On the other hand, the TV remote vans use large dishes because they have 5 MHz of bandwidth to convey, and accept a 5MHz slice of noise. They need proportionally more signal strength for the same signal to noise ratio. Larger dishes produce larger power gains to get the larger signal strength needed.

Best regards, Richard Harrison, KB5WZI

2703. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:38:27 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <zk+BOjN+qeBGhBcEp6op5bIOj64C@4ax.com>
Source record: 170675

"Gary Peach" <xcg34@dial.pipex.com> wrote:

>
>"Bob Miller wrote
>> Jim <arnoldjimjim@hotmail.com> wrote:
>...
>>
>> Well, you can make this highly overly-complicated, or simple. There's
>> just not a hell of a lot that is critical in a receiving antenna for
>> shortwave (transmitting antennas are much more complicated).
>
>I'm sorry but I must disagree.
>Receiving Antennas are identical to Transmitting antennas except it on the
>one hand their power handling and on the other hand noise pick up, and the
>fact that generally speaking a Transmitter will usually only be operated
>over a very small segment of the band and the Antenna may be made resonant
>and it doesn't matter a damd about noise pick up.
>A receiving antenna on HF will be required to look at a broad spectrum
>generally most people woykl like it to go from 1 MHz to 30 Mhz with good
>performance all the way through, or at least good performance on all of
>either the Hma Bands or conversely the Broadcast bands. Meeting the criteria
>of performing reasonably over such a wide spectrum is a daunting prospect.

Daunting prospect? With that, I disagree. There's just not a lot of
difference, receiving, with a miscellaneous-length long wire or dipole
versus a dipole tuned perfectly to the frequency. Maybe the resonant
antenna will have an advantage of 1 or 2 S-units, maybe not.

The original poster seemed confused by all of the conflicting
information he'd gathered on antennas, and I was trying to steer him
to something simple. A long wire, indoors or out. A misc.-length
dipole. A Radio Shack swl'ers wire dipole. Something like that.

Yes, there are noise considerations, and problems with front end
overload on the less expensive shortwave receivers, but you've got to
start some place, and an odd length of wire, indoors or out, or a
Radio Shack wire dipole for swl'ers, options like that would be about
as good a way to go, and if there are problems, then you at least have
a starting point.

Bob
k5qwg

>But more importantly is the consideration of noise pick up. Too much of this
>and you might as well just use a small whip that is part of the receiver.
>There will be lots less signal but also less noise permitting you to hear

>the few signals that you can pick up.
>
>Most receivers have more than sufficient sensitivity for the HF bands, (Many
>far too much), but the signals that you will be able to hear all depend upon
>the quality and location of your Antenna/ Aerial.
>A good Earth is also an advantage.

2704. Wednesday Morning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 13:53:25 UTC
From: Rita Zimmermann <ritaz@austin.rr.com>
Message-ID: <3A815355.9C5F84D7@austin.rr.com>
Source record: 170677

Keith,
Thank you for working for our family. I pray you have a great day.
Thank you for allowing me to help at the open house last night. I pray
it will bless the school and the families that attended.

" All scripture is inspired by God and profitable for teaching, for
reproof, for correction, for training in righteousness; that the man of
God may be adequate, equipped for every work." II TIm 3:16-17

Enjoy his word today and be equipped for good work.

Love, Rita

2705. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 14:08:28 UTC
From: richardharrison@webtv.net
Message-ID: <11793-3A8156DC-2@storefull-113.iap.bryant.webtv.net>
Source record: 170678

Dick Carroll wrote:
"Richard can do as he likes, except for spreading false information with impunity."

Liar, liar, pants on fire!

Best regards, Richard Harrison, KB5WZI

2706. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 14:47:05 UTC
From: richardharrison@webtv.net
Message-ID: <11791-3A815FE9-11@storefull-113.iap.bryant.webtv.net>
Source record: 170681

On rereading my explanation of why it is often possible to use smaller dishes for voice than video, I see a clarification may help.

The bandwidth of the receiver determines how much noise it accepts. A voice channel receiver needs only about 4 KHz bandwidth. The usual video receiver needs about 5 MHz bandwidth.

More received signal produces a better signal to noise ratio, for a certain amount of noise.

The wider band receiver accepts more noise, so it needs more signal.

Best regards, Richard Harrison, KB5WZI

2707. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 15:01:08 UTC
From: "Steven J Robeson", K4YZ <k4yz@my-deja.com>
Message-ID: <95rnve$ff3$1@nnrp1.deja.com>
Source record: 170680

In article <11793-3A8156DC-2@storefull-113.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:

> Dick Carroll wrote:

> "Richard can do as he likes, except for spreading false information
with impunity."

> Liar, liar, pants on fire!

Oh...so you CAN go around spreading false information with
impunity, Richard?

Very Lenniesque.
--
"It Could Be That Your Life's Only Meaning Is To Serve As A Warning To
Others Of How Bad It Could REALLY Be!"

PLEASE SEND PRIVATE E MAIL COMMENTS TO K4YZ@AOL.COM. RESPSONSES TO THE
DEJA MAY OR MAY NOT BE RETRIEVED IN A TIMELY FASHION.

Sent via Deja.com
http://www.deja.com/

2708. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 15:06:25 UTC
From: "Steven J Robeson", K4YZ <k4yz@my-deja.com>
Message-ID: <95ro9afkn1@nnrp1.deja.com>
Source record: 170682

In article <16472-3A814E2D-1@storefull-118.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:

> On the other hand, the TV remote vans use large dishes because they
have 5 MHz of bandwidth to convey, and accept a 5MHz slice of noise.

Hmmmmmm....I put an ATV signal on the air with a yagi that
measured just over 1 meter long. No big dish needed there, and the
bandwidth was comparable.

> They need proportionally more signal strength for the same signal to
> noise ratio. Larger dishes produce larger power gains to get the
> larger signal strength needed.

THERE YA GO!......The size of the antenna (other than simple
wavelength considerations) has little if anything to do with the
bandwidth of the signal. The desired gain has exponentially MORE to do
with it's size, however.

K4YZ
--
"It Could Be That Your Life's Only Meaning Is To Serve As A Warning To
Others Of How Bad It Could REALLY Be!"

PLEASE SEND PRIVATE E MAIL COMMENTS TO K4YZ@AOL.COM. RESPSONSES TO THE
DEJA MAY OR MAY NOT BE RETRIEVED IN A TIMELY FASHION.

Sent via Deja.com
http://www.deja.com/

2709. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 15:35:31 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A816B43.AF605844@IEEE.org>
Source record: 170683

"Peter O. Brackett" wrote:
> ... but... I still wonder how does one
> "optimize" the design of a current balun? i.e. how many turns of the two in
> hand, how close should they be spaced, how big should the core be, what are
> the secondary effects that cause loss of common mode rejection capabilities,
> etc, etc...

You've asked a lot of good questions, Peter. Most of what I know is contained in an information brochure, "Iron-Powder and Ferrite Coil Forms", available from Amidon and two books, "Transmission Line Transformers" and "Building and Using Baluns and Ununs", by Jerry Sevick.
--
http://www.mindspring.com/~w6rca

2710. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 15:37:48 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A816BCB.3EE0@pacbell.net>
Source record: 170686

Cecil wrote:
>
> Richard Harrison wrote:
> >
> > Dick Carroll wrote:
> > "BTW, I just saw on TV a few minutes ago that Mount Fuji in Japan is
> > getting ready to blow---First time in almost 300 years."
> >
> > Sorry for today`s Japanese. Wouldn`t you know, that volcano is 60 years
> > late. Why was it asleep when we needed it?
>
> We should've dropped the nukes into Mt. Fuji. :-)
> --
> http://www.mindspring.com/~w6rca

That would be like shooting an elephant with a pea shooter.
Writing about Mt. St. Helens in a March 1981 Scientific American
article, Robert and Barbara Decker wrote, "The volcano's sustained
power output might therefore be compared to the serial detonation
of some 27,000 Hiroshima-size bombs: nearly one a second for
nine hours."

Tom Donaly KA6RUH

2711. Re: I WILL MAKE YOU RICH...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 16:13:47 UTC
From: June <junebugnospammers@juneco.com>
Message-ID: <3A81743D.4DF42D86@juneco.com>
Source record: 170684

ignore this, most likely the phone and contact info
are not the person who sent this junk.

THink about it, thousands of emails sent to your
work mailbox could get you in hot water !

73 june

wrote:

> brucepm@pacbell.net wrote:
> >
> > CONTACT ME FOR DETAILS ON GETTING FILTHY RICH
> >
> > BRUCE P. MEYERS
> > 10517 VALPARAISO STREET
> > LOS ANGELES, CA 90034
> > PHONE:(310)202.9005
> > CELL:(310)213.1148
> > E-Mail:brucepm@pacbell.net
>
> Should we all send this guy an EMAIL stating "No Thank You" ?

2712. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 16:18:04 UTC
From: June <junebugnospammers@juneco.com>
Message-ID: <3A81753A.2434B29E@juneco.com>
Source record: 170685
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

NO on e I know of inspects every cm of coax on a spool before
it is sold to a customer.

Perhaps the originator can post a link to photos of the coax in question.

Remember, anything made by a machine can have a defect.

73

Butch wrote:

> Whoa! Whol up little pardner,
>
> Jim do not sell no junk. One more time, Jim do not sell no junk, to
> nobody. and Thats that. You took a whole page of type to try and tell us that
> Jim sells junk. Up yours little weenie man. Please take it back to your little
> weenie group and cry there.
>
> Butch Magee KF5DE we ain't related in any way except that I'm a many year happy
> customer of his and he is honest and overly generous.
>
> Tell'im Butch said that!
>
> Floyd Sense wrote:
>
> > A few days back, I posted an item about receiving some bad RG-213 coax from
> > Radio Works. While they had UPS pick up the original cable, the replacement
> > shipment was also defective.
> >
> > When I called today about having them take back the replacement cable, they
> > were just then inspecting the cable that had been returned. They told me
> > they saw nothing wrong with the cable at all. I asked them if they'd looked
> > under the several feet of black electrical tape I'd had to place over the
> > damaged area so that it could be used for one rainy day (they hadn't noticed
> > the tape - great inspection, eh?). They removed the tape and claimed they
> > saw no holes and no defects. Admittedly, these were small holes, about what
> > you'd make with the tip of a utility knife. However, one was large enough
> > that when you flex the cable you could see the copper braid underneath.
> > When I looked at that cable closely, I could clearly see that the jacket
> > seam had not been completely sealed, resulting in the holes. They looked
> > again and said they could see no damage. They ask me if I was talking about
> > just something of "pin-hole" size (as if that somehow made it alright).
> >
> > While they agreed to take the second cable shipment back, they refused to
> > pay for the UPS charges as they had on the first, stating that it was their

> > policy not to pay for returns a second time. The office manager then went
> > on to explain that I was lying about the cable damage. I offered to put up
> > $1,000 against her $1,000 to have a third party inspect the cable, but she
> > explained how three people had already looked at it and saw no damage.
> > Apparently, "third-party" has a different meaning in Portsmouth, VA?
> >
> > I must say that I'm at a loss over this one. I've bought many, many
> > hundreds of feet of coax over a 42 year period, and know a defective cable
> > when I see it. It's bothersome to me that this outfit sees nothing wrong
> > with the stuff they're shipping and would then accuse me of lying about it.
> > What conceivable motive could there be for that?? If you do buy cable from
> > these guys, for Pete's sake go over it very closely before installing it.
> > If you don't know good coax from bad, here's some tips:
> >
> > 1. If the coax has lumps in it (like a snake that just ate), then it's BAD.
> >
> > 2. If the copper shield is badly oxidized (not shiny copper color) when you
> > strip the jacket off to install the connectors, then it's BAD
> >
> > 3. If you run your hand down the cable and feel rough spots as if it had
> > been drug along a concrete driveway, then it's BAD
> >
> > 4. If you can see the seam where the jacket was installed, look very closely
> > and flex the cable to as to stretch this area of the cable. If you see pin
> > holes in the jacket, then its BAD. If you can see the inner copper braid
> > through any of the holes, then it's REALLY BAD.
> >
> > All of these conditions existed in the cable that Radio Works sent to me.
> > They may also have all existed in the second shipment - I stopped looking
> > after finding pin holes in the first 10 feet of the cable.
> >
> > I've never heard anything negative about Radio Works before, and have no
> > opinion on any of their many other products. However, I can assure you that
> > at least one type of coax they're selling is just plain poor quality - make
> > that defective. Furthermore, if you attempt to any such problems with them,
> > you'll be subjected to the ignorance and wrath of their office manager
> > (Judy?). I ordered replacement cable from The Wireman (no connection to
> > them, but have received nothing but high quality cable from them over the
> > years).
> >
> > K8AC
> > Floyd Sense - Angier, NC

2713. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 17:06:05 UTC
From: richardharrison@webtv.net
Message-ID: <27146-3A81807D-7@storefull-111.iap.bryant.webtv.net>
Source record: 170687

Steven, K4YZ wrote:
"I put an ATV signal on the air with a yagi that measured just over 1 meter long. No big dish needed there, and the bandwidth is comparable."

Well, the antenna gain required depends on path loss and transmitted power in addition to the minimum acceptable received carrier power.

You see the tiny dishes used with Direct TV. That is possible because the power transmitted by the TV satellite is relatively high.

The voice-frequency network doesn`t use nearly as much power. It is a cheap service. But, the voice-frequency network gets away with small earth dishes because it uses narrowband receivers.

K4YZ`s yagi probably wasn`t trying to reach a geosynchronous (geostationary) satellite 22,300 miles above the earth.

To compare apples with apples, the transmitting frequency must be considered. A small dish at a lot of gigahertz can have more gain than a 1-meter-long yagi at 1/2-gigahertz.

Best regards, Richard Harrison, KB5WZI

2714. Details on why ground plane is needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 17:30:17 UTC
From: jason_hsu@my-deja.com
Message-ID: <95s0nb$o41$1@nnrp1.deja.com>
Source record: 170688

I know that a ground plane is needed for a 1/4 wavelength monopole antenna. I'm trying to gain a good understanding of why this ground plane is needed.

1. Exactly why won't the antenna perform if you don't have a ground plane? I know that the ground plane is needed to provide a conductive path back to the antenna. But why is this conductive path necessary? And what happens to the RF if this ground plane is not present? My general understanding is that the RF is reflected, and the reflected RF is out-of-phase with the original RF, thus cancelling out the radiation. Can someone provide more details on why the reflected RF is out of phase? (I'm not afraid of a few equations.)
2. If the antenna is shortened through loading schemes (capacity hats, loading coils, etc.), is the size of the ground plane required also smaller? Does a shorter antenna have a different near-field and far-field radiation pattern than a full size antenna?
3. How exactly does ground conductivity matter? It seems to me that there would be a VERY high resistance between the antenna and a point in the far field of the antenna.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

2715. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 17:44:10 UTC
From: richardharrison@webtv.net
Message-ID: <3321-3A81896A-40@storefull-112.iap.bryant.webtv.net>
Source record: 170693

Tom Donaly, KA6RUH quoted a "Scientific American" article:
"The volcano`s sustained power output might therefore be compared to the serial detonation of some 27,000 Hiroshima-size bombs: nearly one a second for nine hours."

Wow! What leverage, but even if Fuji were centered in downtown Tokyo, the Japs probably wouldn`t have believed in the atom bomb without its unadorned exhibition.

My shipmates and I had no idea what an atom bomb was, but it seemed as if it might mean we would be going home soon. We got to see the devastation at Nagasaki before coming home, it turned out. Awesome.

Best regards, Richard Harrison, KB5WZI

2716. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 17:56:26 UTC
From: n2ey@aol.com
Message-ID: <95s284pjn1@nnrp1.deja.com>
Source record: 170692

In article <14105-3A802BEE-15@storefull-117.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Jim, N2EY wrote:
> "The problem is simple: The phone system is designed for the usual
level
> of use, not the worst case."
>
> Yes, that is about right. Actually it is designed for slightly more
than
> the normal "busy-hour" traffic. Economics so dictate.

Not just economics. Also a mindset that bad things don't happen very
often. The same sort of thinking that led to inadequate lifeboat space
on the Titanic and the Challenger disaster. "We don't worry about that -
the chances of it happening are too remote". Uh-huh.
>
> There is a place for ham radio to relay a message during a disaster to
> nieces and nephews that Aunt Suzy is safe.

That - and a lot more. Ever hear of RACES?

> That`s worthwhile and memorable.

Thanks for noticing.

Lots of those messages are relayed by hams using Morse, too.

73 de Jim, N2EY
--
FISTS #4360
BIT #0001

Sent via Deja.com
http://www.deja.com/

2717. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 18:01:07 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A818D63.6863@wt.net>
Source record: 170691
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

RanHefner wrote:
>
> In article <3A7F2438.F9AC9C08@netdoor.com>,
> Butch Magee <lynyrd@netdoor.com> wrote:
> > Whoa! Whol up little pardner,
> >
> > Jim do not sell no junk. One more time, Jim do not sell
>
> If his story is accurate, how would you characterize it? Either he is
> lieing or SOMEONE sold junk!

Someone is selling junk somewhere. This is not the first case I've heard of bad 213 coax. I also heard a guy on the radio talking about it, BEFORE Floyds post, saying they bought 1000 ft of 213 that had twice the normal loss. I don't know Jim, or Bob, or Elwood, or any of the other wire sales dudes/dudetts around the world, but someone IS selling junk 213. If I remember right, the company that sold the junk 213 to the guy I heard on the radio, WAS NOT radioworks. But I'd almost bet they are selling the same shoddy overseas coax. To me , these companies which apparantly are buying this bulk 213 are victims of shoddy product also. But I wonder? Don't they test random samples of this stuff before they sell it? MK
--
http://web.wt.net/~nm5k

2718. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 18:01:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95s2hn$q78$0@208.206.142.109>
Source record: 170689

Richard Harrison wrote:
>
> Steven, K4YZ wrote:
> "I put an ATV signal on the air with a yagi that measured just over 1
> meter long. No big dish needed there, and the bandwidth is comparable."
>
> Well, the antenna gain required depends on path loss and transmitted
> power in addition to the minimum acceptable received carrier power.
>
> You see the tiny dishes used with Direct TV. That is possible because
> the power transmitted by the TV satellite is relatively high.

There's a lot more to it than that,of course. The higher the frequency the smaller the dish which will deliver the same gain. The small DTV dishes operating on or above KU band will deliver the same relative gain that a much larger dish operating on the C band.
Then there's the factor of much improved microwave amplifying devices. In the C band satellite TV days a 100 degre Kelvin Low noise amplifier needed a 10 foot diameter dish to deliver a noise free picture on the weaker satellite transponders. Much improved noise figures in microwave amplifiers allow dish sizes down to 4 feet to be useful. And on KU and up, those amplifiers with much improved noise figures coupled with digital compression technolgy allow virtually perfect video with an 18 inch dish.
Actually, the use of higher powered transponders is not necessarily needed at all. Frequency and receiver electronics are more likely to be the reason. Power is at a premium on satellites, of course, so higher transmit powers would be the last option to be put in use.

> The voice-frequency network doesn`t use nearly as much power. It is a
> cheap service. But, the voice-frequency network gets away with small
> earth dishes because it uses narrowband receivers.

But these earth stations are not all that common, and are almost all highly specialized as to use. The eariliest communications needs in a major disaster are communications NOW, with no time to arrange for acquisition, transportation setup and operator availability. Hams have all that builtin.

>
> K4YZ`s yagi probably wasn`t trying to reach a geosynchronous
> (geostationary) satellite 22,300 miles above the earth.
>
> To compare apples with apples, the transmitting frequency must be
> considered. A small dish at a lot of gigahertz can have more gain than a

> 1-meter-long yagi at 1/2-gigahertz.

Yes indeed!

Dick

2719. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 18:04:03 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95s2mj$q78$1@208.206.142.109>
Source record: 170690

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "Richard can do as he likes, except for spreading false information with
> impunity."
>
> Liar, liar, pants on fire!

You speak on banal generalities and claim them to be fully
comprehensive facts. What else could you call it???

Dick

2720. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 18:24:20 UTC
From: "Steven J Robeson", K4YZ <k4yz@my-deja.com>
Message-ID: <95s3s6rcr1@nnrp1.deja.com>
Source record: 170694

In article <27146-3A81807D-7@storefull-111.iap.bryant.webtv.net>,
richardharrison@webtv.net (Richard Harrison) wrote:
> Steven, K4YZ wrote:

>>"I put an ATV signal on the air with a yagi that measured just over 1
>>meter long. No big dish needed there, and the bandwidth is
>>comparable."

>Well, the antenna gain required depends on path loss and transmitted
>power in addition to the minimum acceptable received carrier power.

Bandwidth and gain are two diff'rnt critters, Richard.

>K4YZ`s yagi probably wasn`t trying to reach a geosynchronous
>(geostationary) satellite 22,300 miles above the earth.

My ground plane for 2 meters made it to Mir. Twice. A friend of
mine routinely works EME with a 2-yagi array on 432 and 150 watts.
That's 20 times farther (round trip) That's about .0003 watts per mile
if we discount all the attenuation up and down, etc.

>To compare apples with apples, the transmitting frequency must be
>considered. A small dish at a lot of gigahertz can have more gain
>than a 1-meter-long yagi at 1/2-gigahertz.

We don't have any allocations at 500MHz. (At least I don't).

73

Steve, K4YZ

--
"It Could Be That Your Life's Only Meaning Is To Serve As A Warning To
Others Of How Bad It Could REALLY Be!"

PLEASE SEND PRIVATE E MAIL COMMENTS TO K4YZ@AOL.COM. RESPSONSES TO THE
DEJA MAY OR MAY NOT BE RETRIEVED IN A TIMELY FASHION.

Sent via Deja.com
http://www.deja.com/

2721. Re: Details on why ground plane is needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 18:27:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8193AE.33E8686D@IEEE.org>
Source record: 170695

jason_hsu@my-deja.com wrote:
> 1. Exactly why won't the antenna perform if you don't have a ground
> plane? I know that the ground plane is needed to provide a conductive
> path back to the antenna. But why is this conductive path necessary?

Current needs a closed path. Installing radials decreases the
dissipative resistance in the closed current path thus reducing
losses. Wire is less lossy than earth.
--
http://www.mindspring.com/~w6rca

2722. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 18:57:54 UTC
From: richardharrison@webtv.net
Message-ID: <24740-3A819AB2-4@storefull-114.iap.bryant.webtv.net>
Source record: 170696

Dick Carroll wrote:
"You speak on banal generalities and claim them to be fully
comprehensive facts."

Morse code is obsolescent in amateur radio and already obsolete
elsewhere.

That is the truth without obfuscation. Can`t say the same for Dick
Carroll`s obtuse statements.

Best regards, Richard Harrison, KB5WZI

2723. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 19:31:11 UTC
From: richardharrison@webtv.net
Message-ID: <16469-3A81A27F-29@storefull-118.iap.bryant.webtv.net>
Source record: 170698

Steven, K4YZ wrote:
"Bandwidth and gain are two diff`rnt critters."

Yes they are. Often they are antagonistic. That is, gain must be sacrificed for bandwidth or vice versa. That is not the issue here. The antenna bandwidth is not the problem. Noise is a function of receiver bandwidth.

Noise distribution is almost constant in a segment of bandwidth. So, a wide receiver bandpass lets more noise through than a narrow receiver bandpass does.

A video receiver requires a wide bandpass. An audio receiver does not.

The video receiver will filter out less noise than the audio receiver. So, the video receiver requires more signal to overpower the noise.

Best regards, Richard Harrison, KB5WZI

2724. Re: CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 19:32:55 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <95s7t7nof1@nnrp2.phx.gblx.net>
Source record: 170697

William Lee <n5wrx@home.com> wrote:
: So .... what is up with the CFA antennas?
: Have they ever been developed to the point of retail sales for amatuer use?
:

Evereything that I know that has been published is listed in the
technical bibliography on the subject on my web page at:

http://www.primenet.com/~ctrask

There is a lot of activity going on at present. The Italian RAI replaced
a vertical with one, and it worked well enough that the vertical was
removed, or so the engineer says in the interview in Radio World recently.
There are two under construction in Brazil, a couple here in the US, and
more in Europe. The Isle of Man installation is about to undergo (or
maybe already undergoing) testing after being delayed.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

2725. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 20:02:32 UTC
From: "Volker Tonn [odo]" <screwdriver@mailberlin.net>
Message-ID: <3A81A9D8.3DB27B64@mailberlin.net>
Source record: 170699
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

doug schrieb:

> is a tuner the same as the rf gain control? thanks, doug

No.
RF-gain control is used to only decrease *all* the power coming from the antenna. This is used to prevent frontend overload (mostly recomended on the "cheaper" radios below US$1000 ;-)) and to lower the overall noisefloor to get a slightly better signal to noise ratio.

A tuner is used to match the impedance of the antenna to the input impedance of the RX (most commonly 50 Ohms on PL- or RCA- connectors). This is for giving best performance on a specific frequency to prevent loss on weak signals. Using an antenna not resonant to your specific frequency you may have a better signal reading on a S-meter and a little decrease on other (out of band) signals. So it gives you a better sensitivity and selectivity in some cases.

Using a tuner on a TX is just another theme :-)

hth,
odo

2726. Re: CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 20:09:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95sa0ecfi1@plutonium.btinternet.com>
Source record: 170700

On the other hand, there are a number of commercial organisations and broadcasing companies who are taking an interest in CFA's. Some CFA's have already been erected and more are in the planning stage.

But this situation can be explained by assuming the engineers employed by commercial organisations and broadcasting companies are just as scatterbrained and as gullible Ph.D's as the 'inventors' of this marvellous extra-Maxwell antenna.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

'Doc <w5lz@oio.net> wrote in message news:3A814A89.6A8D856C@oio.net...
>
>
> William Lee,
> Don't hold your breath! They can't even make
> a consistant story, much less an antenna that works.
> 'Doc

2727. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 20:36:22 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A81B1C6.6A4177F9@IEEE.org>
Source record: 170702

Reg Edwards wrote:
> There is no optimum length of line or cable to be wound on a 1-to-1 current
> balun.

One needs enough turns to present the desired impedance to
the common mode currents. There are formulas for such.
--
http://www.mindspring.com/~w6rca

2728. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 20:36:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95sbkj$i7s$1@neptunium.btinternet.com>
Source record: 170701

It seems the storm in a teacup is still raging.

There is no optimum length of line or cable to be wound on a 1-to-1 current balun. Just get a lot of turns on the core. It matters very little what a lot of turns means. In some cases zero turns are satisfactory. But at 1.9MHz, on a lump of ferrite, 9 or 10 turns are good enough. That's if you really need a balun of course.

Just limit the length of the winding to no more than 1/8th of a wavelength at the highest operating frequency.

On the other hand, if everybody took THAT common sense viewpoint, there would be nothing for the annual handbook and monthly magazine authors to review or write about. Technical editors would have difficuly in justifying their salaries. Amateur radio newsgroups would lapse into oblivion. Great unemployment in would ensue.

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:95r6ns$9vh$1@slb3.atl.mindspring.net...
> Reg, Cecil:
>
> Hey thanks for the feedback. I agree with Cecil that winding the coax
> transmission on the core makes a great quick and dirty current balun or
> common mode choke, and Reg's speaker wire construction is my personal
> favorite, since I hate coax... but... I still wonder how does one
> "optimize" the design of a current balun? i.e. how many turns of the two
in
> hand, how close should they be spaced, how big should the core be, what
are
> the secondary effects that cause loss of common mode rejection
capabilities,
> etc, etc...
>
> I am still curious and ask... if one were to take an existing "current
balun
> device" and characterize it's "primary" parameters, instead of it's
> "secondary" parameters. e.g, leakage inductance, magnetizing inductance,
> capacitance, rather than total common mode impedance, how can one

calculate
> it's common mode rejection.
>
> How can one tell if one current balun design is better than another.
Which
> one to buy? Etc....
>
> I know Reg will say, once it's good enough, there's no need for the
average
> ham to make it better, it will only affect signals strength by 0.001 S
> Units, and so... who cares, but "I am curious".
>
> As my sons used to say when they were young, why daddy?
>
> If one measures the primary capacitance parameters on a conventional
> transformer, i..e. interwinding capacitances and their imbalances, then
one
> can more or less calculate the "mid-band" common mode rejection from those
> capacitance values.
>
> Understanding the physical makeup of those inter-winding capacitances
guides
> one in the physical construction of conventional transformers having high
> common mode rejection, up to and including the design of Faraday screens
> between windings which can really help to generate very high common mode
> rejection. But I just don't get it yet, and I wonder what the "rules" are
> for designing a good current balun?
>
> What are physical parameters and approachs applicable for designing high
> common mode rejection for a current balun? Will simply winding on more
> turns of the transmission line, "the two in hand wires", create higher
> common mode rejection, or will some maximum be reached and then fall off,
> etc... i.e. when have you put too many turns on the core, and...
>
> Perhaps winding the transmission lines on the core in a fractal pattern
will
> help? Fractal balun's ought to be better than straight baluns, no?
>
> In other words, I wonder, what are the guidelines for and how does one
> "optimize" the physical design of a current balun, not just make one
that's
> "good enough for government work" or perhaps "good enough for ham use".
>
>
> Thoughts, comments?
>
> -Peter K1PO
>
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message

> news:95oq3q$qb9$1@neptunium.btinternet.com...
> > All that's needed is a ferrite rod or ring wound with twin,
multi-strand,
> 18
> > gauge speaker wire. This has Zo roughly 150 ohms.
> >
> > Optimum Zo for the winding is the geometric mean of the two
terminations.
> > For example, Sqrt(50*450) = 150 ohms.
> >
> > Obviously the twin 150-ohm line has less loss than coax. The teeny inner
> > coax conductor is just a hot fuse wire.
> >
> > But the whole issue is a storm in a teacup. ;o)
> > --
> > **********
> > Regards, Reg, G4FGQ
> > Free radio design & modelling software
> > http://www.btinternet.com/~g4fgq.regp
> >
> > **********
> >
> > Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> > news:3A7F6A5E.47850713@IEEE.org...
> > > "Peter O. Brackett" wrote:
> > > > A two in hand wound balun makes a great current balun but not a
great
> > > > voltage balun, and a conventionally wound transformer makes a great
> > voltage
> > > > balun but a poor current balun.
> > >
> > > Just about the best you can do with "two in hand" is when one of the
> > > two is the center conductor in a piece of coax. Ten turns of RG-400
> > > on an FT-240-61 core makes a dandy HF 1:1 balun/choke. It reduces
> > > common mode currents in either balanced or unbalanced applications.
> > > --
> > > http://www.mindspring.com/~w6rca
> >
> >
>
>

2729. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 21:53:09 UTC
From: Jim Lill <jpl@vectorbd.com>
Message-ID: <95sg40$7up$1@nnrp1.deja.com>
Source record: 170703

In article <95jori$u2r$1@nnrp1.deja.com>,
Jim Lill <jpl@vectorbd.com> wrote:
> Thanks to all for their thoughts....
>
> I am still looking for the angle info on the bowtie (flat/planar type)
>
> I may have to go to RadioShack and see if they have one I can eyeball.

I have found the answer by searching through old patents. For UHF you
can use a 3.5 X 14 bowtie, something with a ~ 30 deg inc. angle on each
7 inch side.

I'll report results after trying this.

-Jim

Sent via Deja.com
http://www.deja.com/

2730. Re: CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 22:00:18 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <uZQJMDAyVcg6Ew0E@pickmere.demon.co.uk>
Source record: 170704

In article <95s7t7nof1@nnrp2.phx.gblx.net>, Christopher Trask
<ctrask@primenet.com> writes
>William Lee <n5wrx@home.com> wrote:
>: So .... what is up with the CFA antennas?
>: Have they ever been developed to the point of retail sales for amatuer use?
>:
>
> Evereything that I know that has been published is listed in the
>technical bibliography on the subject on my web page at:
>
> http://www.primenet.com/~ctrask
>
>There is a lot of activity going on at present. The Italian RAI replaced
>a vertical with one, and it worked well enough that the vertical was
>removed, or so the engineer says in the interview in Radio World recently.
>There are two under construction in Brazil, a couple here in the US, and
>more in Europe. The Isle of Man installation is about to undergo (or
>maybe already undergoing) testing after being delayed.

The I.o.M. installation was refused planning permission recently, Chris.
I believe they are now looking for another site, still in the I.o.M.

A test mast is being constructed near Cosford in the UK midlands.
Engineers from BBC, Merlin, Crown will be invited to inspect and monitor
tests. Frequency probably 972 kc/s.

Mike
--
M.J.Powell

2731. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 22:15:15 UTC
From: gsanial@ecn.ab.ca
Message-ID: <3a81c8f3@ecn.ab.ca>
Source record: 170705

Bill Turner (w7ti@jps.net) wrote:
: On Sat, 03 Feb 2001 21:53:08 -0700, Dick Hughes <rhughes33@cableone.net> wrote:

: >Of course you realize that 73's is an absolutely incorrect term. 73
: >stands for, "best regards." 73's means best regards's. Don't know
: >why 73's always grates on me like scratching your fingernails on a
: >blackboard, but it does.

: _____

: I don't know which I hate worse - hearing "73's" or hearing someone complain
: about it. English is a "living language", guys. Let it breathe.

: 73, Bill W7TI

Their you go...

73 de VE6GES.
--

2732. Re: Details on why ground plane is needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 22:39:57 UTC
From: richardharrison@webtv.net
Message-ID: <11791-3A81CEBD-62@storefull-113.iap.bryant.webtv.net>
Source record: 170706

Cecil said succinctly what I`ll repeat, more or less, in other words.

Though you may have no jumper wire between a vertical antenna (radiator) and its ground plane, you can have a current flowing in the space between them.

In a wire you can get r-f "conduction" current. In space you can get r-f "displacement" current. This is just like the a-c current you can get between the plates of a capacitor.

If your antenna`s displacement is only between the radiator and ground plane wires, the loss will likely be low because no lossy ground intervenes.

If your antenna`s displacement current includes some lossy ground in its circuit, antenna efficiency will be lowered.

Best regards, Richard Harrison, KB6WZI

2733. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-07 23:05:51 UTC
From: rwclark@seanet.com
Message-ID: <3a819976.681019273@news.seanet.com>
Source record: 170707

On Wed, 7 Feb 2001 11:06:05 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>To compare apples with apples, the transmitting frequency must be
>considered. A small dish at a lot of gigahertz can have more gain than a
>1-meter-long yagi at 1/2-gigahertz.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

It must be remembered that at a higher frequency (if we are to compare the power capturing ability on par values) that antenna MUST have more gain to operate equivalently to the lower frequency, lower gain antenna.

This has to do with the power illumination of the service area by satellites. These small antennas have to capture a certain power level that is measured in W/cM (or more likely uW/cM). This is the principle boundary condition that must be met for any service.

The large 12 foot to 20 foot models were capturing a certain power level to satisfy the signal to noise ratio for the TV (and all things considered) - lets call it 1 uW (an arbitrary value for the purpose of discussion).

Lets say that we are operating with the smaller 12 foot model which presents a total area (aperture) of 100,000 sq cM. We thus have 1 uW total absorbed from 100,000 sq cM which is an equivalent statement that the satellite is illuminating the surface of the earth with 1 uW/100,000 sq cM.

Two different ways of looking at this is
10 pW/sq cM
or
10W/1000 sq kM
which roughly corresponds to the older, lower fequency generation of satellite radiated power level for its fixed service area.

NOW, if we raise the frequency, the same wavelength proportional area is found in the smaller antenna, but the power level will drop in the inverse physical proportion, hence the higher frequency antenna must either have more gain, or the satellite must emit more power.

I can hazard a guess that the new generation of higher frequency satellites radiate more power by virtue of this frequency AND to

satisfy a market that demands a solution smaller that 12 feet across.

Engineering design is driven more by market pressures than pure engineering requirements.

73's
Richard Clark, KB7QHC

2734. Re: FS: 2 Rhon towers

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 00:08:36 UTC
From: "B.Henderson" <bbbb@mindspring.com>
Message-ID: <9qo38ts4l93urivapovf1v8qhnruqbpjeh@4ax.com>
Source record: 170708

Hi,

Is the Rhon 55g still available?

Regards,
Brad Henderson

On 27 Jan 2001 18:13:30 GMT, n8wgm@aol.com (N8WGM) wrote:

>For Sale: 8 ten foot sections of Rhon 55g tower with top bearing plate. $600.00
>Never used.
>
>Also---40 foot Rhon commercial grade tower---model not known. In 2 twenty foot
>sections. $250.00
>
>Located in Southeastern Ohio near Cambridge..
>
>N8WGm
>N8WGM

2735. Re: Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 00:17:32 UTC
From: Brian <reidb@nbnet.nb.ca>
Message-ID: <3A81E57C.5E7FEB53@nbnet.nb.ca>
Source record: 170709

I'm no antenna guru however I can share my experience with you. When I got my ham ticket, I went out and bought a Gap Titan vertical, mainly because I don't have a lot of room here for dipoles. I suspect you may be in the same situation. The Gap worked fine, but it was a sizeable investment for me and I was always worried about it in wind/ice storms. Also, if something goes wrong with it who will fix it?? It will be up to you. I now use a dipole in my attic, I had to put a lot of bends in it to get it all in there but it works.
My advice is: put up a wire antenna, if you get a chance try someone elses vertical to see if you like it, then decide.

Brian

jm wrote:

> Hello antenna guru's. I have just purchased a Yaesu FT-847 radio. I would
> like advice on a good multiband vertical antenna for the HF bands (perhaps
> 10-80). I have seen posts regarding the Gap Titan and the Cushcraft R8 -
> though assume there are also others. I am very fresh at this hobby (have
> only used local FM in the past). What would you guys stick $200-$400 into if
> you were to buy a single HF antenna? Thanks for your advice!
>
> jmacfarl@visi.com

2736. Re: Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 01:00:34 UTC
From: dcollin@connix.com
Message-ID: <3a81eada.131002940@news.mybizz.net>
Source record: 170710

>jm wrote:
>
>> Hello antenna guru's. I have just purchased a Yaesu FT-847 radio. I would
>> like advice on a good multiband vertical antenna for the HF bands (perhaps
>> 10-80). I have seen posts regarding the Gap Titan and the Cushcraft R8 -
>> though assume there are also others. I am very fresh at this hobby (have
>> only used local FM in the past). What would you guys stick $200-$400 into if
>> you were to buy a single HF antenna? Thanks for your advice!
>>
>> jmacfarl@visi.com

Not a guru, but have had some antennas ...

Both are rather expensive, and don't necessarily work better than a simple wire dipole. If you can get 100 feet of wire between 2 supports (trees, chimney, whatever) and can get it up off the ground (the higher the better) you can make an antenna that'll work nearly as well for the price of copper wire and coax.

I have owned the Gap Titan (didn't think much of it especially on the low bands), Cushcraft R7 (overpriced and prone to flakiness), Cushcraft R5 (best of the three, but still had blown traps with only 100 W output), and have a brand new R7000 in the basement (where it's been for three years).

Verticals antennas are supposedly better for DX, due to a lower take off angle, but even so, a resonant dipole at 1/2 wave or more in height will do just as well.

I now run a 30 meter resonant dipole, a 20 meter resonant dipole, and a 136 foot 80 meter resonant dipole that I can match on all bands with a transmatch. None of 'em higher than 25 feet. I plan to string up a 40 meter resonant dipole as soon as the snow melts off the roof. At that height, only the 20m and 30m are optimal.

While I can't say I've worked much 80 meter DX from my QTH in Connecticut (but I have worked some), I've done well on 40, 30, and 20. My logs for January show France, England, Northern Ireland, Spain, Azores, Romania, Galapagos Island, Cayman Islands, Ukraine, Finland, Czech Rep., Mexico, Greece, Germany, Belarus, Macedonia, Guadeloup, Bulgaria, Croatia, and more. Often on less than 25 watts output, some on as little as 4 watts. Easy DX, to be sure, nothing rare, but all a lot of fun! Besides, when you first start out, any rare DX you get is more a matter of luck than equipment and operating ability.

On the VHF/UHF side, a simple home built vertical ground plane does the job. Or spend $75 on a commercial vertical.

With the money you save, buy a good (not MFJ!) transmatch (most call 'em antenna tuners) with a good balun. Once you see what I wire can do, you'll want to use twin lead and ladder line to make your wires really sing.

Don't waste your money on complicated wide-band or multiband dipoles that utilize traps. They're expensive, prone to mechanical and electrical problems, and are usually inefficient on any freq except the very highest for which they're designed.

With one exception ... the W9INN antennas have extremely good user reviews on www.eham.net. And they ain't cheap.

Good luck, enjoy the HF radio, and good DX!

73 de Dennis KD1JT

2737. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 01:28:26 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95ssnq$4o7$0@208.206.142.95>
Source record: 170711

Reg Edwards wrote:
>
> It seems the storm in a teacup is still raging.
>
> There is no optimum length of line or cable to be wound on a 1-to-1 current
> balun. Just get a lot of turns on the core. It matters very little what a
> lot of turns means. In some cases zero turns are satisfactory. But at
> 1.9MHz, on a lump of ferrite, 9 or 10 turns are good enough. That's if you
> really need a balun of course.
>
> Just limit the length of the winding to no more than 1/8th of a wavelength
> at the highest operating frequency.
>
> On the other hand, if everybody took THAT common sense viewpoint, there
> would be nothing for the annual handbook and monthly magazine authors to
> review or write about. Technical editors would have difficuly in justifying
> their salaries. Amateur radio newsgroups would lapse into oblivion. Great
> unemployment in would ensue.

Reg, OM, cease and desist! Whatta ya trying to do, disenfranchise a
bunch of RF design engineers by letting the word out that it's only
another version of an RF choke, and if its inductance is big enough,
that's generally good enough? And the fact that it 'balances' is merely
a characteristic but userful side feature?
Horrors, man, keep it up and you may even get the 'average ham' to
start thinking a little for himself...

Dick

2738. butternut vertical mounting quandry

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 01:34:23 UTC
From: Doug <n0hqn@yahoo.com>
Message-ID: <95st30$jm4$1@nnrp1.deja.com>
Source record: 170713

Hi, all....

Am THIS close to purchasing the HFV9 but have some mounting concerns. I've read the Bencher PDF files--good stuff, BTW. I'd like to ground mount the vertical to take best advantage of a good radial system, but don't necessarily want to plant it squarely in the middle of the back yard. Has anyone mounted thier vertical closer to the house without severe detuning problems (oh, say 6 feet away from metal siding)?

Otherwise I was considering the old mast next to the house and anchored to the eave idea, with the antenna base up about 10 feet. That's fine-problem solved, right? But now how about the radial system? Don't really care to have radials on the roof.

Any input would be GREATLY appreciated!

Doug--- n0hqn

Sent via Deja.com
http://www.deja.com/

2739. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 01:37:32 UTC
From: "Mark S. Holden" <msholden@ct2.nai.net>
Message-ID: <3A81F85C.88783B46@ct2.nai.net>
Source record: 170712
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Ian Jackson wrote:

> In article <3A801B8A.92B302FA@ct2.nai.net>, Mark Holden
> <msholden@ct2.nai.net> writes
>
> >Actually, the value of a preselector depends greatly on how close you are to
> >transmitters, and the radio you're going to use.
> >
> >When I was considering a preselector, I was advised it would probably
> >degrade my signal because I'm several miles from strong transmitters, and my
> >radio is a miltary one that already has considerable front end filtering.
> >
>
> I can't really agree with this advice, Mark.
>
> With a mediocre receiver, a preselector with the 'correct' circuit can:
> a) Give you better front-end selectivity (to prevent the receiver RF and
> mixer stages from getting hammered by strong signals well off
> frequency).
> b) Ensure that the receiver input is tuned 'spot-on' to wanted signal
> (without it, the reactance of the antenna may cause the receiver input
> tuned circuit to be pulled off-frequency, especially if the antenna is
> pretty long).
> c) Sometimes provide some degree of better impedance matching between
> the antenna and the receiver input (but note that this is not really an
> essential requirement for good reception in most cases).
>
> With a really 'good' receiver, I really can't see why a preselector
> would 'degrade' your signals. Even when the antenna system is (by
> itself) 'OK for the receiver', all a good passive preselector would do
> is introduce an small (and negligible) insertion loss. It may be un-
> necessary, but it should not 'degrade' your signals.

While you say you disagree with me, your answer seems to support my belief the value of a preselector depends in part on the receiver you're using.

I was told with my radio, and my location, a preselector would provide no benefit, and reduce my ability to receive weak signals. So I didn't buy one.

2740. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 01:55:07 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95su9r$8ta$0@208.206.142.95>
Source record: 170714

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "You speak on banal generalities and claim them to be fully
> comprehensive facts."
>
> Morse code is obsolescent in amateur radio and already obsolete
> elsewhere.
> That is the truth without obfuscation. Can`t say the same for Dick
> Carroll`s obtuse statements.

Let's enumerate a few other well known items that are obsolescent and obsolete but are still in widespread daily use-

Piston engined aircraft
Amplitude modulated radio
Single Sideband radio
packet radio
Frequency modulated radio
gasoline powered internal combustion engines
coal fired electric generating power plants
Analog TV
Boeing B52H bomber
F16 fighter aircraft

This list could go on and on, but I think the point is well enough made.
Obsolesense or becoming obsolete does nothing to detract from the utility nor the functionability of a system or device, it just means that later technical developments have made that system or device something less than the optimal choice in most settings where cost and availability are not major factors. So it is with radiotelegraphy, the simplest, most easily implemented radio communications mode yet devised. Any device that will generate an RF carrier can be on-off keyed encoding Morse code to send a radio message.

There are indeed any number of more advanced communciations systems available, some of them mentioned above, who are themselves obsolescent or obsolete, but which are not generally considered to be, and which are still in widespread common use.
So long as radio amateurs use Morse on radiotelegraphy at a rate anywhere approaching a small percentage of that in current use, it is of no consequence whatever that it falls in the same category.

So again, your assertions are so much vaporous personal opinion. As Cecil says, opinions are hung on the back of everyone, and you've got

yours, too. But that is just what it is - your opinion.

73, Dick W0EX

2741. Re: Loop antenna results

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 01:57:14 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A81FCF9.67FB115C@cybatek.fsnet.co.uk>
Source record: 170621

Hi Max!

Is your design of loop scalable for 160m ?
If so, I'd like to receive some pictures and construction information from you please.

Thanks!

MikeT ...
M0AWS.

"Max Donoghue (VE3TMT)" wrote:

> Finally finished construction of my small transmitting loop antenna. Using a
> vacuum variable cap 450 pf @ 7.5KV allows me to tune 40-10m. Antenna will
> actually tune down to 4.8 MHz. At resonance SWR is unmeasureable on my
> TS450S. First contact running 50 watts was a fellow in Buffalo (about 350
> miles) on 40m with a 57 report. Not bad considering the antenna was still in
> my basement about 3 feet below ground. If anyone is interested in
> constructing one themselves I can provide pictures and a list of the
> materials I used in building mine. My total cost including the cap (I got a
> great deal, thanks John!) was about $150 Canadian, compared with the MFJ
> loops which sell for over $650 here! Maybe now I can enjoy some good HF.
>
> 73,
>
> Max

2742. DK3 MOBILE HF ANTENNA QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 02:06:35 UTC
From: Ed Lyons <elyons@sympatico.ca>
Message-ID: <3A81FE3C.D2277C5B@sympatico.ca>
Source record: 170715

I am in the interest on building the DK3 Hf mobile antenna. I have all the plans how to make it. Anyways, the question I have is the loading coil form is made of 1 1/2" skep 40 PVC pipe white. Does it have to be the color white??
The reason I ask is that my local supplier have the plumbing black sked 40 an I found the plastic conduit grey sked 40 for electrical.The white would have to be ordered.

Now I was told that for the black PVC it has pigments of metal to form the black color and could cause a change in the inductance of the coil. Is this true???

Thanks in advance.

VE3EJL

--
Ed Lyons

2743. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 02:18:12 UTC
From: richardharrison@webtv.net
Message-ID: <19967-3A8201E4-39@storefull-115.iap.bryant.webtv.net>
Source record: 170718

Steve, K4YZ wrote:
"We don`t have any allocations at 500 MHz---."

That`s called rounding. For illustration, I thought 500 MHz was close enough to an ATV frequency. You can scale the results to any frequency you like. We started with microwave frequencies used with satellites.

The most popular high-gain microwave antenna is the parabolic reflector type which is illuminated at its focus.

Parabolic antenna gain depends on its size in wavelengths. The gain is proportional to the square of the dish diameter divided by the wavelength. There are constants and efficiency factors needed for the actual gain number.

A typical 6-ft dish antenna has a gain of 38 db at 6 GHz.

A 36-ft dish has a gain of 38 db at 1 GHz.
The wavbelength was 6x the 6 GHz wavelength and the dish diameter was 6x the the 6 GHz diameter, so the quotient of the dish diameter divided by the wavelength is the same in either case, giving the same gain at 1 GHz or 6 GHz.

A 3-ft dish has a gain of 38 db at 12 GHz.

A 6-ft dish has a gain of 44 db at 12 GHz,
4x the gain of a 3-ft dish or 6 db moere than the gain of a 3-ft dish.

As for yagi antennas, the ARRL Antenna Book has gain versus boom-length charts. A 1-meter boom at 500 MHz would be 1.6 wavelengths. The charts indicate this might producre a 13 db gain.

This exercise is just to give an idea of the antenna gains that are achieved with these antennas.

Best regards, Richard Harrison, KB5WZI

2744. 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 02:21:21 UTC
From: Frizz <none@none.com>
Message-ID: <95svlmnmi1@bob.news.rcn.net>
Source record: 170716

OK, I have one of these little things from a long time ago when I could only really listen to CB:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1211275066

Would it be at all possible to rip the existing antenna out and build one for 2 meters into it? The reason I want to do this is that I have this same antenna mounted on the side of my window of my house, painted to match the outside of it, and it is perfectly hidden from everyone (this is a plus since I can't have any outdoor antennas). Would this be an easy project or would this body be too short? I am currently running a discone in my attic but a crappy satellite and cable television install has left me unable to use any of my radios until I can re-run and unscrew-up what the cable and satellite guys did due to TVI. This antenna looks perfect and already has a nice out-of-the-way mounting space. Can I do it? Any suggestions are welcome. Thanks and 73~~!!!

KG4IVT At H O T M A I L dot C O M

2745. Re: Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 02:35:24 UTC
From: lbratche <lbratche@swbell.net>
Message-ID: <mAng6.96$bZ4.7505@nnrp1.sbc.net>
Source record: 170717

If you are limited to a vertical, I'd suggest the Butternut HF6V. I was limited to either a vertical or an attic dipole and after much research settled on the Butternut. I have never been sorry of the purchase. I worked many DX countries with great reports. If you are worried about durability, don't be. It survives severe winds here in Arkansas and even the great ice storm during December. You can check out review on the Butternut and other antennas at www.eham.com . Granted, a long dipole might be cheaper and as good, and a yagi would be great. However, there is times when the dipole or yagi just can't be installed.

Larry

"jm" <jmacfarl@visi.com> wrote in message
news:O60g6.4954$77.111215@ruti.visi.com...
> Hello antenna guru's. I have just purchased a Yaesu FT-847 radio. I would
> like advice on a good multiband vertical antenna for the HF bands (perhaps
> 10-80). I have seen posts regarding the Gap Titan and the Cushcraft R8 -
> though assume there are also others. I am very fresh at this hobby (have
> only used local FM in the past). What would you guys stick $200-$400 into
if
> you were to buy a single HF antenna? Thanks for your advice!
>
> jmacfarl@visi.com
>
>

2746. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 02:46:35 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A82088B.7A870549@IEEE.org>
Source record: 170619

Dick Carroll wrote:
> So again, your assertions are so much vaporous personal opinion. As
> Cecil says, opinions are hung on the back of everyone, and you've got
> yours, too. But that is just what it is - your opinion.

If Richard truly considers CW obsolete then, for him, it is obsolete.
What is wrong with live and let live? Why can't you and I use CW and
allow Richard to avoid using CW if he so chooses?
--
http://www.mindspring.com/~w6rca

2747. Please help, Need SWR Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 03:16:21 UTC
From: Binton Hutapea <binton@centrin.net.id>
Message-ID: <sBAg6.13639$K6.107270@news>
Source record: 170620
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Hello,
Can you help me please to find out SWR meter? Frequency range (1500 - 1700)MHz. Impedance 50 Ohms. If have, use N-type connector. I will accept new or used meter, analog or digital, depends on price.
I don't need Signal Generator included on that meter. Just only SWR Meter I need. I do not know what manufacture name.
I use for measure/build antenna will work at that frequency.
Please help me, maybe you can send the information to me by email : binton@centrin.net.id .

Thank you very much.
Binton H

2748. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 04:11:11 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <95t66r$b7f$1@slb3.atl.mindspring.net>
Source record: 170622

Hey folks after cogitating for a while, on what Cecil said, "It's simply an RF choke for the common mode", I think I have figgered it out.

The effect that would most tend to reduce the common mode rejection of a "two in hand" wound current balun is...

ta da... "intra-winding" stray capacitance! Similar to the "self-capacitance" of a common inductor or RF choke.

I say "intra-winding" capacitance rather than "inter-winding" capacitance because it would be the "turn to turn" capacitance of the transmission line pair of conductors, rather than the capacitance from conductor to conductor of the transmission line, that would tend to reduce the effectiveness of the choke.

And so.. just as with the design of RF chokes, i.e. where often their windings are grouped into "pies", spread out on a former to reduce the inter turn stray capacitance, by creating a series connection of physically separated smaller chokes, then the windings on a "two in hand" choke balun should be spaced out to reduce that same intra-winding capacitance.

And probably just trying to achieve higher and higher inductive reactance by throwing on more and more turns becomes counterproductive for increasing common mode rejection.

Now I have come to convince myself that probably the best way of increasing the common mode rejection of choke baluns [current or transmission line baluns] is to series connect several smaller ones, with fewer turns, spread out along the transmission line being "choked" rather than trying to achieve all of the common mode rejection in one big lump with one compact component.

Of course Reg will chime in and say that "one is good enough for ham radio work" and he is right, but I wanted to try to understand the first principals better.

Now... it seems that common mode rejection for both conventional transformers and transmission line transformers is really ultimately limited by the secondary effects of stray capacitances and is not really [ultimately] limited or controlled by magnetizing inductance or the ratio of magnetizing to leakage inductance.

What a revelation! Stray capacitance is the ultimate limitation for both kinds of baluns.

And that... after a sufficient magnetizing inductance is achieved [i.e.a critical number of turns] for either a current or voltage balun design, that adding to the magnetizing inductance by increasing the number of turns will

only increase the inter or intra winding capacitance and so ultimately reducing the common mode rejection of the balun.

Now thinking about a conventional transformer balun, it potentially has the advantage of the use of a Faraday screen between the windings as a possible way to reduce the effect of interwinding capacitance, while a Faraday screen would be all but impossible on the current or two in hand transformer. Problem is where to connect "the ground" on the Faraday screen. Especially if the voltage blaun is way up in the air at the feedpoint of an antenna!

However, another way of increasing the common mode rejection of a conventional transformer/voltage balun is the "cascading" of conventional transformers. Each transformer that is cascaded adds more inter-winding capacitance in series, with the common mode path and adding caps in series reduces the total capacitance.

Cascade connections of voltage baluns will put the inter-winding capacitances of both voltage transformers in series thus increasing the common mode rejection.

And so... putting current baluns [i.e. RF choke "pies"] in series will allow a decrease in intra-winding capacitance and an increase in common mode rejection, while putting conventional voltage baluns in cascade will achieve a similar objective by reducing the overall inter-winding capacitance.

Whew... after all of that "splaining" it comes down to the fact that both types of baluns voltage and transmission line which are both, based upon primary parameters derived from "magnetics" are ultimately limited in their common mode rejection performance only by secondary parameters of stray "capacitance".

There seems to be "the hand of God" in that physical result. The two balun techniques are not really that different! Both are limited by capacitance.

And for the transmission line common mode reductions applications the current, or two in hand, balun is probably the surperior technique because to a first order the larger interwinding capacitance gets "absorbed" into the transmission line's distributed capacitance, and it is only the "smaller" intra-winding capacitance that affects its common mode rejection. While for the voltage balun the larger inter-winding capacitance is the dominant effect.

One type of balun is limited by inter-winding capacitance and the other is limited by intra-winding capacitance. And inter-winding capacitance will always be larger than intra-winding capacitance simply because of the physical "lay up" of the winding technique. And so the current balun will likely be a superior or more effective design than the voltage balun for this antenna feedline application, i.e. more common mode rejection in a smaller less complex package.

More dB's of common mode rejection per dollar for a current balun than for a voltage balun.

And... if one doesn't fix the problem add serveral more in series!

Which we all knew anyway...

As Reg would say, "a tempest in a teapot".

But I'm happy because, even though many before me have figured this out, "now I know"... stray capacitance limits the ultimate common mode performance, but...

Consistent with the title of this thread, it is probably the leakage inductance of the balun which causes the antenna element to be shorter than expected... sorry for the topic drift folks...

Happy balun winding...

-Peter K1PO

"Dick Carroll" <dixie@townsqr.com> wrote in message news:95ssnq$4o7$0@208.206.142.95...
>
>
> Reg Edwards wrote:
> >
> > It seems the storm in a teacup is still raging.
> >
> > There is no optimum length of line or cable to be wound on a 1-to-1 current
> > balun. Just get a lot of turns on the core. It matters very little what a
> > lot of turns means. In some cases zero turns are satisfactory. But at
> > 1.9MHz, on a lump of ferrite, 9 or 10 turns are good enough. That's if you
> > really need a balun of course.
> >
> > Just limit the length of the winding to no more than 1/8th of a wavelength
> > at the highest operating frequency.
> >
> > On the other hand, if everybody took THAT common sense viewpoint, there
> > would be nothing for the annual handbook and monthly magazine authors to
> > review or write about. Technical editors would have difficuly in justifying
> > their salaries. Amateur radio newsgroups would lapse into oblivion. Great
> > unemployment in would ensue.
>
>
> Reg, OM, cease and desist! Whatta ya trying to do, disenfranchise a
> bunch of RF design engineers by letting the word out that it's only
> another version of an RF choke, and if its inductance is big enough,
> that's generally good enough? And the fact that it 'balances' is merely
> a characteristic but userful side feature?

> Horrors, man, keep it up and you may even get the 'average ham' to
> start thinking a little for himself...
>
> Dick

2749. Re: Ground Mounts for Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 04:15:37 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <95t6vu$1eqh$1@nntp1.ba.best.com>
Source record: 170623

Hi "Timmins" -

Please accept a (somewhat belated) Thank You for your input!
I think we're going to do something similar to what you did.

73, Ed W6LOL

"Timmins" <n3ddy@yahoo.com> wrote in message
news:Hk6f6.2$K77.239@newsfeed.slurp.net...
> I mounted a Butternut HF6v (26') on a 8' section of 1" pipe driven about
6'
> into the ground...using 4 stainless steel hose clamps... the u-bolts were
> not nearly as secure. ..when the neighbor kids would leave it alone, it
> worked well.....and a WHOLE lot cheaper. Stood up to wind for 4 years...
> still would but I moved... and sold the antenna. Cut the end of the pipe
> you are going to drive in at a 45 degree angle with a hacksaw, it'll drive
a
> WHOLE lot easier....
>
> de N3DDY
>
> "Janice and Ed Senior" <senior@best.com> wrote in message
> news:95hv6p$2kf4$1@nntp1.ba.best.com...
> Hi - I am looking for a suitable ground mount for a
> light-weight vertical antenna.
>
> The antenna is 25' tall, and weighs about 20 lb.
> It will go on a base mast about 12' tall. Base mast
> might be anything from TV mast to 1-1/2" galvanized.
>
> Ideally, I'd like the whole thing to be strong enough
> to be self-supporting. (The antenna section is.)
>
> All I have come up with so far is the Gap "Quick Mount,"
> which is a basic, light-duty tilt-over.
>
> I know there are other items out there, such as tilt-overs
> with cable winches (probably overkill for this). But I can't
> locate any of them on the net; and HRO just gives me blank
> stares.
>
> Does anyone have any suggestions for suitable hardware,
> and where to find it?
>
> Thanks and 73, Ed W6LOL

>
>
>
>

2750. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 05:45:12 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <95tbp8$bt3$0@208.207.71.156>
Source record: 170624

Cecil wrote:
>
> Dick Carroll wrote:
> > So again, your assertions are so much vaporous personal opinion. As
> > Cecil says, opinions are hung on the back of everyone, and you've got
> > yours, too. But that is just what it is - your opinion.
>
> If Richard truly considers CW obsolete then, for him, it is obsolete.
> What is wrong with live and let live? Why can't you and I use CW and
> allow Richard to avoid using CW if he so chooses?

I have no problem whatever with that. Trouble is, he's trying to make
the call for us all.

2751. Re: DK3 MOBILE HF ANTENNA QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 08:09:34 UTC
From: n8blk@aol.com
Message-ID: <20010208030934.22779.00001580@nso-fa.aol.com>
Source record: 170625

In article <3A81FE3C.D2277C5B@sympatico.ca>, Ed Lyons <elyons@sympatico.ca>
writes:

> Now I was told that for the black PVC it has pigments of metal to form
>the black color and could cause a change in the inductance of the coil.
>Is this true???
>
>Thanks in advance.

It's probably true, and I note that unless you have the latest version from
W6AAQ, you may want to spend $5 for the plans from him. You can of course use
other plastics, but be sure they don't have RF problems.
-art clemons-

2752. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 09:21:52 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <k+2B$CAwUmg6Ew2U@invest.fsbusiness.co.uk>
Source record: 170644
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Mark,
> Don't they test random samples of this stuff before they
>sell it? MK
No they don't.

I used to work at a coaxial cable importers here in the UK.

the 'Italian' manufacturer initially sent us over a selection of
different grades as samples. From memory they were poor to very poor to
some stuff I wouldn't give my grandmother.

The final question they asked via fax was "Tell us what you would like
printed on the outside of the cable!"

I'll leave that last one up to your imagination.

Buy Andrews.

Phil G4ZOW

2753. Re: Loop antenna results

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 10:01:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95tqn8atu1@uranium.btinternet.com>
Source record: 170626

Mike, download program MAGLOOP4 from website below. Covers all regular shapes from triangle to circle, all bands from MF to VHF, capacitor pF, capacitor working volts, size of coupling loop, efficiency, etc.

Download in a few seconds. Not zipped up. Run immediately. User friendly. No hidden charges.

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Mike Tatum <miket@cybatek.fsnet.co.uk> wrote in message news:3A81FCF9.67FB115C@cybatek.fsnet.co.uk...
> Hi Max!
>
> Is your design of loop scalable for 160m ?
> If so, I'd like to receive some pictures and construction information from you
> please.
>
> Thanks!
>
> MikeT ...
> M0AWS.
>
> "Max Donoghue (VE3TMT)" wrote:
>
> > Finally finished construction of my small transmitting loop antenna. Using a
> > vacuum variable cap 450 pf @ 7.5KV allows me to tune 40-10m. Antenna will
> > actually tune down to 4.8 MHz. At resonance SWR is unmeasureable on my
> > TS450S. First contact running 50 watts was a fellow in Buffalo (about 350
> > miles) on 40m with a 57 report. Not bad considering the antenna was still in
> > my basement about 3 feet below ground. If anyone is interested in
> > constructing one themselves I can provide pictures and a list of the
> > materials I used in building mine. My total cost including the cap (I got a
> > great deal, thanks John!) was about $150 Canadian, compared with the MFJ

> > loops which sell for over $650 here! Maybe now I can enjoy some good HF.
> >
> > 73,
> >
> > Max
>
>

2754. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 10:13:12 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95trdl$c71$1@uranium.btinternet.com>
Source record: 170627

Hello Cecil, what is the desired impedance to the common mode currents ?

In ohms, R+jX or Z Theta, please.

Reg.
==========
Cecil wrote
> One needs enough turns to present the desired impedance to
> the common mode currents. There are formulas for such.
> --
> http://www.mindspring.com/~w6rca

2755. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 10:27:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95ts8r$7cu$1@neptunium.btinternet.com>
Source record: 170628

Dick, thanks for raising me from the black depths of depression. I was beginning to think I've been wasting my time on this newsgroup.

Reg

2756. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 10:42:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A82781A.8FF2EFF@eznec.com>
Source record: 170629

Sorry I don't have time just now for a lengthy response. But don't forget the useful maxim "If you can't fix it, feature it." If the choke is primarily inductive (as opposed to resistive, which many are), capacitance can be used to resonate the choke to form a parallel resonant circuit. The result is a choke with higher -- perhaps much higher -- impedance than you'd have without the capacitance, but only over a narrower band of frequencies. This principle is used for the "air core" baluns made from coiled transmission line you'll find described in the _ARRL Handbook_.

The objective is to get an adequately high common mode impedance to reduce the common mode current to a sufficiently low value over whatever frequency range is required. How you get there is of little consequence to the end result. The salient figure of merit is the common mode impedance.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Hey folks after cogitating for a while, on what Cecil said, "It's simply an
> RF choke for the common mode", I think I have figgered it out.
>
> The effect that would most tend to reduce the common mode rejection of a
> "two in hand" wound current balun is...
>
> ta da... "intra-winding" stray capacitance! Similar to the
> "self-capacitance" of a common inductor or RF choke.
> . . .

2757. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 12:33:01 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95u4blkar2@lure.pipex.net>
Source record: 170630

"Bob Millerwrote ...
> "Gary Peach" <xcg34@dial.pipex.com> wrote:
> >"Bob Miller wrote
> >> Jim <arnoldjimjim@hotmail.com> wrote:
...
> >either the Hma Bands or conversely the Broadcast bands. Meeting the
criteria
> >of performing reasonably over such a wide spectrum is a daunting
prospect.
>
> Daunting prospect? With that, I disagree.

But I'm right aren't I Bob? :)

> There's just not a lot of
> difference, receiving, with a miscellaneous-length long wire or dipole
> versus a dipole tuned perfectly to the frequency. Maybe the resonant
> antenna will have an advantage of 1 or 2 S-units, maybe not.

The main consideration is height.
Though not accurate as a generality for a beginner perhaps you are justified in saying this, however I've wasted enough hours on bad AEs over the years to not wish that upon a new comer. It is worth spending a bit of time on string up a good AE and not accepting the first thing that happens.

But I will agree that any antenna is better than No aerial. That having a go is infinitely preferable to sitting on your hands.

> The original poster seemed confused

Aren't we all :)

> by all of the conflicting
> information he'd gathered on antennas, and I was trying to steer him
> to something simple. A long wire, indoors or out. A misc.-length
> dipole. A Radio Shack swl'ers wire dipole. Something like that.

Yes Bob that's laudable and I agree with you, however I do not want to see the myth that any old bit of wet string will do for receiving whereas you have to take extra care for a transmitting Aerial. The fact is that if you make a mistake on either AE you will pay a penalty, it's just that if you have a bit of power around your attention will be drawn to the mistake in a salutory way.
With a poor AE intended for receiving you will just waste many hours chasing that elusive DX that you can't hear because the AE just ain't no B good. :)

I've tuned up a steel veranda fence to transmit before now and got out OK,
but it wasn't that great for receiving.

> Yes, there are noise considerations, and problems with front end
> overload on the less expensive shortwave receivers, but you've got to
> start some place, and an odd length of wire, indoors or out, or a
> Radio Shack wire dipole for swl'ers, options like that would be about
> as good a way to go, and if there are problems, then you at least have
> a starting point.

A bit of time spent making a simple preselection tuner of even just one
section is probably worth while. Never the less I agrre with you that
getting started regardless is the MOST important thing.

Isn't it funny, when I smoked I wanted others to share my misery by handing
my fags around, when I drank I handed the booze around, does that mean that
because we are hooked on Ham radio that it will be good for everyone else?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2758. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 12:42:23 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95u4bnkar3@lure.pipex.net>
Source record: 170632
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Volker Tonn [odo]" wrote ...
> doug schrieb:
> > is a tuner the same as the rf gain control? thanks, doug
>
> No.
> RF-gain control is used to only decrease *all* the power coming from the
> antenna. This is used to prevent frontend overload (mostly recomended on
the
> "cheaper" radios below US$1000 ;-)) and to lower the overall noisefloor
to
> get a slightly better signal to noise ratio.

Reducing RF gain does not lower noise floor,
it raises it.

The apparent improvement in S/N is because you can
only see the stronger signals,
which by virtue of their greater strength
already have a better S/N ratio

> A tuner is used to match the impedance of the antenna to the input
impedance of
> the RX (most commonly 50 Ohms on PL- or RCA- connectors).

An ATU will match the impedence, however what is required for reception is a
tuneable passband filter. Preferably at least three sections for Ham Band
use.

> This is for giving
> best performance on a specific frequency to prevent loss on weak signals.
> Using an antenna not resonant to your specific frequency you may have a
better
> signal reading on a S-meter and a little decrease on other (out of band)
> signals. So it gives you a better sensitivity and selectivity in some
cases.

The bigger reading on the S-Meter will most probably be due to all the extra
noise that is coming in the front end, not due to any increase in signal
level.

Remember S-Meters indicate SIGNAL AND NOISE not just signal.

> Using a tuner on a TX is just another theme :-)

Oh! Who composed it? :)

Having said all of that the answer to the original enquirer is still NO

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2759. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 12:45:04 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <95u4bpkar4@lure.pipex.net>
Source record: 170631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Mark S. Holden" wrote
> I was told with my radio, and my location, a preselector would provide no
> benefit, and reduce my ability to receive weak signals. So I didn't buy
one.

Before accepting the advice of a salesman;
ensure that they are qualified to give it.
That they don't have an axe to grind.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2760. Re: Please help, Need SWR Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 12:54:45 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A8296CA.BA8D1545@GTE.net>
Source record: 170633
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Binton Hutapea wrote:

> Hello,
> Can you help me please to find out SWR meter? Frequency range (1500 -
> 1700)MHz. Impedance 50 Ohms. If have, use N-type connector. I will accept
> new or used meter, analog or digital, depends on price.
> I don't need Signal Generator included on that meter. Just only SWR Meter I
> need. I do not know what manufacture name.
> I use for measure/build antenna will work at that frequency.
> Please help me, maybe you can send the information to me by email :
> binton@centrin.net.id .
>
> Thank you very much.
> Binton H

Look for a directional coupler for that range - they show up all the time on
EBay.

Dale W4OP

2761. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 13:05:12 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <rpiCOj3SQNECe86t+9VfMr2bVbx0@4ax.com>
Source record: 170634

"Gary Peach" <xcg34@dial.pipex.com> wrote:

Gary, you're right. And I'm right.

I think we're both saying more or less the same thing, but our
philosophies are a bit different.

I notice Radio Shack is now selling the Alpha Delta swl antennas,
which are very nice and pick up signals quite well. The original
poster might do well to just get one of those at his/her local Radio
Shack, assuming he has the space to string up an outdoor antenna.

Enough said... have a good day...

Bob
k5qwg

>
>"Bob Millerwrote ...
>> "Gary Peach" <xcg34@dial.pipex.com> wrote:
>> >"Bob Miller wrote
>> >> Jim <arnoldjimjim@hotmail.com> wrote:
>...
>> >either the Hma Bands or conversely the Broadcast bands. Meeting the
>criteria
>> >of performing reasonably over such a wide spectrum is a daunting
>prospect.
>>
>> Daunting prospect? With that, I disagree.
>
>But I'm right aren't I Bob? :)
>
>> There's just not a lot of
>> difference, receiving, with a miscellaneous-length long wire or dipole
>> versus a dipole tuned perfectly to the frequency. Maybe the resonant
>> antenna will have an advantage of 1 or 2 S-units, maybe not.
>
>The main consideration is height.
>Though not accurate as a generality for a beginner perhaps you are justified
>in saying this, however I've wasted enough hours on bad AEs over the years
>to not wish that upon a new comer. It is worth spending a bit of time on
>string up a good AE and not accepting the first thing that happens.
>
>But I will agree that any antenna is better than No aerial. That having a go
>is infinitely preferable to sitting on your hands.
>

>> The original poster seemed confused
>
>Aren't we all :)
>
>> by all of the conflicting
>> information he'd gathered on antennas, and I was trying to steer him
>> to something simple. A long wire, indoors or out. A misc.-length
>> dipole. A Radio Shack swl'ers wire dipole. Something like that.
>
>Yes Bob that's laudable and I agree with you, however I do not want to see
>the myth that any old bit of wet string will do for receiving whereas you
>have to take extra care for a transmitting Aerial. The fact is that if you
>make a mistake on either AE you will pay a penalty, it's just that if you
>have a bit of power around your attention will be drawn to the mistake in a
>salutory way.
>With a poor AE intended for receiving you will just waste many hours chasing
>that elusive DX that you can't hear because the AE just ain't no B good. :)
>
>I've tuned up a steel veranda fence to transmit before now and got out OK,
>but it wasn't that great for receiving.
>
>> Yes, there are noise considerations, and problems with front end
>> overload on the less expensive shortwave receivers, but you've got to
>> start some place, and an odd length of wire, indoors or out, or a
>> Radio Shack wire dipole for swl'ers, options like that would be about
>> as good a way to go, and if there are problems, then you at least have
>> a starting point.
>
>A bit of time spent making a simple preselection tuner of even just one
>section is probably worth while. Never the less I agrre with you that
>getting started regardless is the MOST important thing.
>
>Isn't it funny, when I smoked I wanted others to share my misery by handing
>my fags around, when I drank I handed the booze around, does that mean that
>because we are hooked on Ham radio that it will be good for everyone else?

2762. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 14:43:17 UTC
From: richardharrison@webtv.net
Message-ID: <11514-3A82B085-7@storefull-114.iap.bryant.webtv.net>
Source record: 170640

Reg wrote:
"In some cases zero turns are satisfactory."

Why wouldn`t the W2DU ferrite bead balun be preferred? It presents a high impedance to prevent antenna current access to the coax exterior over the entire h-f range.

If you don`t want to put a balun at the dipole feedpoint, why not make a parallel resonant circuit of the coax exterior by whatever reactance must be added at ground level?

Reg already suggested using a 1/4-wave (or odd multiples thereof) for a feedline, and making sure there was a good ground at the radio. That will work, but it is centered on a single frequency. If you add a tuning mechanism for the exterior of the coax, you should be able to adjust the line to produce a high impedance at the antenna feedpoint and thus reject feeding current from the antenna into the coax`s exterior. For convenience, you would do the tuning at ground level.

The tuned coax exterior should not affect the differential mode operation of the feedline.

Best regards, Richard Harrison, KB5WZI

2763. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 14:43:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95ub98$6k9$1@plutonium.btinternet.com>
Source record: 170635

Roy Lewallen wrote
> reduce the common mode current to a sufficiently low value over whatever
> frequency range is required.
==========
Roy, what is a sufficiently low value and how do you know when you've got it
?

Reg

2764. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 14:48:27 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A82B1BB.573B0ABE@IEEE.org>
Source record: 170636

Reg Edwards wrote:
> Hello Cecil, what is the desired impedance to the common mode currents ?
> In ohms, R+jX or Z Theta, please.

My balun/choke is close to my transmitter. Without the choke, the impedance seen looking back down the outside of the coax braid is very, very low. The impedance referenced to ground seen looking into the ladder-line is somewhere below about 60 ohms. So the common mode impedance at the choke needs to be at least 200 ohms or more. Inductive reactance is preferable but resistive will do. There's a formula for the number of turns given the desired inductance and the AL (mh/1000T) constant for the ferrite toroid. Note that what I am trying to prevent is conducted common mode currents. Inducted common mode currents are somewhat unpredictable and are best dealt with by a good mechanical layout of the antenna system.

A problem arises when the impedance seen looking into the ladder-line is high because it is difficult to get enough choking impedance. That's one reason I feed my antenna systems at a current maximum point.
--
http://www.mindspring.com/~w6rca

2765. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 14:54:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A82B310.B18B476A@IEEE.org>
Source record: 170638

Reg Edwards wrote:
> Dick, thanks for raising me from the black depths of depression. I was
> beginning to think I've been wasting my time on this newsgroup.

Reg, I'm sure if anyone applies engineering equations to your rules-of-thumb, they will find them adequate. Rules-of-thumb fine-tuned over many trials are often just as good as engineered designs and sometimes better if the engineer ignored an important parameter or two.
--
http://www.mindspring.com/~w6rca

2766. VX-5R antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 14:57:17 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a82b39d$0$35015$44a10c7e@news.net-link.net>
Source record: 170637

Anyone used the Madol (now Comet) tri-band 6/146/446 antenna and if so, how do you like it over the so called "convenient and inovative" 3 piece Yaesu antenna? Does any one make a 6 meter HT antenna (that works) with a SMA connector?

2767. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 15:00:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A82B470.5047FB38@IEEE.org>
Source record: 170639

Dick Carroll wrote:
>
> Cecil wrote:
> > If Richard truly considers CW obsolete then, for him, it is obsolete.
> > What is wrong with live and let live? Why can't you and I use CW and
> > allow Richard to avoid using CW if he so chooses?
>
> I have no problem whatever with that. Trouble is, he's trying to make
> the call for us all.

Richard is trying to keep you and me from using CW?????
Exactly how is he going to manage that?
--
http://www.mindspring.com/~w6rca

2768. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 15:23:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A82B9E6.C130B820@IEEE.org>
Source record: 170641

Richard Harrison wrote:
>
> Reg wrote:
> "In some cases zero turns are satisfactory."
>
> Why wouldn`t the W2DU ferrite bead balun be preferred?

I've measured some of them and they tend to have a low
impedance/cost ratio compared to a single toroid with
multiple turns. (The square of the turns is more effective
when the turns don't equal one. :-)
--
http://www.mindspring.com/~w6rca

2769. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 15:32:20 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <95vfo7$74k@news-central.tiac.net>
Source record: 170666
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <mzrpRAAOjwg6Ew2s@g3ohx.demon.co.uk>, "Ian Jackson"
<ianjackson@g3ohx.demon.co.uk> wrote:

> And what I still say, Mark, is that the correct type of preselector MAY
> not give you any benefit, but it should certainly NOT reduce your
> ability to receive anything. On average, a preselector will improve
> things to some extent most of the time, and NEVER make things worse.

No. Unless you have overload or signal transfer problems, a preselector
never helps.

The preselector may not hurt signal quality *if* you spend the time to
tune it carefully. On the other hand, it negates the most important
advantage that modern equipment has over the classic stuff: frequency
agility. With a modern receiver you can rapidly check propagation over a
wide range of frequencies, ID using parallel frequencies, find the best
parallel frequency for your favorite program *right now*, and jump to a
different one when interfence suddenly pops up. A preselector gets in the
way of all this. With interval signals on most stations reduced to less
than a minute these days, you don't have time to waste tuning in: you'll
miss the start of your program.

If local MW stations are an overload concern, a high pass filter is an
effective solution.

You've got to find the signal to hear it. Once you've found it, a
preselector may not hurt, but it definitely gets in the way of finding it.

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

2770. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 15:47:25 UTC
From: richardharrison@webtv.net
Message-ID: <7321-3A82BF8D-29@storefull-115.iap.bryant.webtv.net>
Source record: 170643

Cecil wrote:
"Richard is trying to keep you and me from using CW?"

Of course not. I may want to use CW myself and don`t want any inhibitions.

Dick Carroll`s problem it seems is that he believes CW can only survive if amateurs are forced to learn CW to gain access to some ham bands. He seems to have no confidince in the attractiveness of the CW mode itself.

Best regards, Richard Harrison, KB5WZI

2771. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 16:04:37 UTC
From: Carol <carolcoxnospammersplease@aol.qxnospam.com>
Message-ID: <3A82C396.127BB245@aol.qxnospam.com>
Source record: 170642

Hi,

You need to change the length of the whip and most important,
remove the matching coil and replace it with the proper type.
The antenna is not built for 146 Mhz.

Try this link: http://www.cebik.com

Got to technicals page, page down to 2meter antenna
find half square for 2 m.

You can build the for $5.00 or less, uses coax feed,
no matching needed.

You also could make a 1/4 wave antenna with a so239
connector and some copper wire but the above half sq.
is better in gain and directional.

Give it a try.

73 carol

Frizz wrote:

> OK, I have one of these little things from a long time ago when I could only
> really listen to CB:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1211275066
>
> Would it be at all possible to rip the existing antenna out and build one
> for 2 meters into it? The reason I want to do this is that I have this same
> antenna mounted on the side of my window of my house, painted to match the
> outside of it, and it is perfectly hidden from everyone (this is a plus
> since I can't have any outdoor antennas). Would this be an easy project or
> would this body be too short? I am currently running a discone in my attic
> but a crappy satellite and cable television install has left me unable to
> use any of my radios until I can re-run and unscrew-up what the cable and
> satellite guys did due to TVI. This antenna looks perfect and already has a
> nice out-of-the-way mounting space. Can I do it? Any suggestions are
> welcome. Thanks and 73~~!!!
>
> KG4IVT At H O T M A I L dot C O M

2772. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 16:40:41 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <95ui69$n4p$1@agate.berkeley.edu>
Source record: 170645
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

In rec.radio.amateur.antenna Mark Keith <nm5k@wt.net> wrote:

> But I wonder? Don't they test random samples of this stuff before they
> sell it? MK

Whether they do or don't, let's say samples looked OK. In any case,
if the first shipment was bad, the second shipment should have NEVER
been bad, since upon replacing bad cable they should have hand checked
every inch of the replacement, to ensure that there wouldn't be a
problem.

The main issue is not that the first shipment was bad, but that the
second shipment was bad, too.

--

2773. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 17:38:08 UTC
From: Mark Holden <msholden@ct2.nai.net>
Message-ID: <3A82D980.190E1AA6@ct2.nai.net>
Source record: 170646
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Gary Peach wrote:

>
> Before accepting the advice of a salesman;
> ensure that they are qualified to give it.
> That they don't have an axe to grind.

I'll agree, but I wouldn't limit it to advice from salesmen.

I got into this thread when someone gave what seemed like an overly broad endorsement of preselectors.

I'm sure the person who made that post has had great luck with preselectors, as they do serve a purpose. On the other hand, if you don't have the problems they're designed to solve, they won't help you.

Regards,

Mark

2774. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 17:39:33 UTC
From: richardharrison@webtv.net
Message-ID: <11513-3A82D9D5-51@storefull-114.iap.bryant.webtv.net>
Source record: 170647

Cecil wrote:
"I`ve measured some of them (W2DU baluns) and they tend to have a low impedance / cost ratio."

Thanks. That makes sense. As Cecil implies, inductance is proportional to the square of the number of coil turns. A piece of coax through a core has only one turn.

Best regards, Richard Harrison, KB5WZI

2775. WANTED: Chelcom HFV1 antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 17:56:15 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A82DDBF.751C7A6E@cybatek.fsnet.co.uk>
Source record: 170649

Does anyone have one of these antennas lying around not being used ?
Fancy parting with it for some cash ???

I'm in Ipswich Suffolk, UK ... any offers ?

Please reply direct to miket@cybatek.fsnet.co.uk

Cheers!

MikeT ...

2776. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 18:04:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A82DFC7.DC912A2A@IEEE.org>
Source record: 170648

Richard Harrison wrote:
>
> Cecil wrote:
> "I`ve measured some of them (W2DU baluns) and they tend to have a low
> impedance / cost ratio."
>
> Thanks. That makes sense. As Cecil implies, inductance is proportional
> to the square of the number of coil turns. A piece of coax through a
> core has only one turn.

Actually, I have come to realize that is less than a turn. To be one turn,
as defined by Amidon, the wire needs to form a 360 degree loop with
one wire through the core. The difference between a straight-through
wire and one 360 degree loop is considerable.
--
http://www.mindspring.com/~w6rca

2777. Re: Tree Limb Trimming Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 19:17:50 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A82EFAB.F218E7FD@bellatlantic.net>
Source record: 170650

If you're a lousy shot, just get a bigger gun. A bazooka
comes to mind ...

KG4FGN wrote:

> Just wanted to say thanks for all the ideas. By far the safest and cheapest
> idea is the wire saw. I had pretty much decided on this, but thought I'd ask
> folks who'd been there before. The "NRA" tip was cute, but I'm a lousy shot
> so I'll go the safe route....
>
> Thanks again,
>
> Robert / KG4FGN
>
> "KG4FGN" <kg4fgn@mindspring.com> wrote in message
> news:94mgnr$6am$1@slb0.atl.mindspring.net...
> > Howdy,
> >
> > I just put up a new really tall antenna on top of my garage.The top of the
> > antenna is brushing up against some limbs of a tree whose branches
> overhang
> > my garage. The branch itself is really high up, far too high for me to get
> > with a ladder, even using one of those saws on a stick I've seen in the
> > garden stores.
> >
> > Anyone have any ideas on how to trim a limb that is high up? I can't
> afford
> > one of those professional services, so it has to be an inexpensive do it
> > yourself idea.
> >
> > Thanks,
> >
> > Robert / KG4FGN
> >
> >

2778. Re: New loop models

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 19:22:59 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A82F0DF.9F4553F2@bellatlantic.net>
Source record: 170651

Donaly wrote:

> Hi, Peter,
> what is a fraction of an infinity? What do you get
> when you divide infinity by, say, five?

You get one fifth. Hopefully, after you drink it, you'll
be in a better frame of mind to tackle the math.

>
>
> 73
>
> Tom Donaly KA6RUH

2779. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 19:57:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A82FA0C.4187AFCC@eznec.com>
Source record: 170652

That's exactly correct. Except that depending on the core type and frequency, the impedance can be more resistive than inductive. But the impedance, regardless of angle, follows the same rule of increasing as the square of the number of turns.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Cecil wrote:
> "I`ve measured some of them (W2DU baluns) and they tend to have a low
> impedance / cost ratio."
>
> Thanks. That makes sense. As Cecil implies, inductance is proportional
> to the square of the number of coil turns. A piece of coax through a
> core has only one turn.
>
> Best regards, Richard Harrison, KB5WZI

2780. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 20:07:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A82FC65.6EA7FB4C@eznec.com>
Source record: 170653

A sufficiently low value is one which is low enough that you don't have whatever problems you're intending the balun to prevent. If you don't know what some of these could be, I suggest taking a look at "Baluns: What They Do and How They Do It" in the ARRL Antenna Compendium, Vol. 1. You know you've got it when the problems are cured. This is the same basic approach I take to all engineering problems.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy Lewallen wrote
> > reduce the common mode current to a sufficiently low value over whatever
> > frequency range is required.
> ============================
> Roy, what is a sufficiently low value and how do you know when you've got it
> ?
> ---
> Reg

2781. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 20:18:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A82FEFC.53BA61E5@eznec.com>
Source record: 170654

I think people like the W2DU type balun because of its ease of construction and mechanical simplicity. This seems true particularly of people running high power. At levels of up to a couple of hundred watts, you can wind a few turns of RG-174 on a ferrite toroid and have an excellent all-band balun, and that's what I do. But the RG-8 crowd can't do this. To make a balun with a toroid, they have to use parallel wires with good insulation. I'm not sure it's necessary, but Sevick uses such materials as Teflon tubing and tape in some of the designs in _Transmission Line Transformers_. Some people would understandably rather throw some money at the problem and slip some beads over an existing RG-8 size feedline to have a balun in a minute or two rather than scrounge up the materials for a toroid balun, figure out a way to mount it, weatherproof it, and apply connectors. I don't use W2DU baluns myself because I don't need to, but I understand their appeal.

Roy Lewallen, W7EL

Cecil wrote:
>
> Richard Harrison wrote:
> >
> > Reg wrote:
> > "In some cases zero turns are satisfactory."
> >
> > Why wouldn`t the W2DU ferrite bead balun be preferred?
>
> I've measured some of them and they tend to have a low
> impedance/cost ratio compared to a single toroid with
> multiple turns. (The square of the turns is more effective
> when the turns don't equal one. :-)
> --
> http://www.mindspring.com/~w6rca

2782. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 20:19:11 UTC
From: richardharrison@webtv.net
Message-ID: <19509-3A82FF3F-88@storefull-117.iap.bryant.webtv.net>
Source record: 170655

Cecil wrote:
"The difference between a straight-through wire and one 360 degree loop is considerable."

I would expect that but I haven`t measured it. I do believe displacement current completes many circuits containing no physical circuit. The current amplitude and core excitation are probably reduced by capacitive reactance in the displacement path.

Best regards, Richard Harrison, KB5WZI

2783. Re: attic antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 20:50:08 UTC
From: temporary0191398@aol.com
Message-ID: <20010208155008.05805.00000096@ng-md1.aol.com>
Source record: 170656

You might try a horizontal loop. I have had reasonable luck with a 15 meter full wave loop (about 11 ft per side) mounted horizontally in my attic. It is corner fed with coax. It works better than I thought it would on 15. With a tuner it is not too bad on 10, and is a little worse on 20. However, the price is right.

One additional item. My antenna fried the electronic thermostat for the furnace, since there was a lot of coupling from the antenna to house wiring. On the new thermostat, I used a toroid to keep RF from coming into the box.

--Wayne
W5GIE

2784. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 20:59:58 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <mzrpRAAOjwg6Ew2s@g3ohx.demon.co.uk>
Source record: 170658
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <3A81F85C.88783B46@ct2.nai.net>, Mark S. Holden
<msholden@ct2.nai.net> writes
>
>
>Ian Jackson wrote:
>
>> In article <3A801B8A.92B302FA@ct2.nai.net>, Mark Holden
>> <msholden@ct2.nai.net> writes
>>
>> >Actually, the value of a preselector depends greatly on how close you are to
>> >transmitters, and the radio you're going to use.
>> >
>> >When I was considering a preselector, I was advised it would probably
>> >degrade my signal because I'm several miles from strong transmitters, and my
>> >radio is a miltary one that already has considerable front end filtering.
>> >
>>
>> I can't really agree with this advice, Mark.
>>

<snip>

>>
>> With a really 'good' receiver, I really can't see why a preselector
>> would 'degrade' your signals. Even when the antenna system is (by
>> itself) 'OK for the receiver', all a good passive preselector would do
>> is introduce an small (and negligible) insertion loss. It may be un-
>> necessary, but it should not 'degrade' your signals.
>
>While you say you disagree with me, your answer seems to support my belief the
>value of a preselector depends in part on the receiver you're using.
>
>I was told with my radio, and my location, a preselector would provide no
>benefit, and reduce my ability to receive weak signals. So I didn't buy one.
>
>

And what I still say, Mark, is that the correct type of preselector MAY
not give you any benefit, but it should certainly NOT reduce your
ability to receive anything. On average, a preselector will improve
things to some extent most of the time, and NEVER make things worse.

Ian.

2785. Patch antennas for 1.7 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 21:16:24 UTC
From: Frank Van Hooft <frank_van_hooft@spectrumsignal.com>
Message-ID: <95v1t6$3ra$1@wedge.sfu.ca>
Source record: 170657
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Hi all,

I'd like to build a patch antenna (or array thereof) for satellite reception at 1.7 GHz. I don't have room for a dish. Does anyone have any pointers to information on how to do such a thing?

Thanks!

Frank. VE7HVF
frank_van_hooft@spectrumsignal.com

2786. Cobwebb Antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 22:47:21 UTC
From: simon lupton <simon@luptons.freeserve.co.uk>
Message-ID: <966c63$rh6$1@news7.svr.pol.co.uk>
Source record: 170421

Hi,

Can anyone point me in the right direction to find out more on the Cobwebb?
Has anyone used one before?

--
Best regards

Simon
http://www.221100.co.uk

-ın-
-

2787. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 23:15:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95v991$61$1@neptunium.btinternet.com>
Source record: 170659

Cecil wrote
> Reg Edwards wrote:
> > Hello Cecil, what is the desired impedance to the common mode currents
?
> > In ohms, R+jX or Z Theta, please.
>
> My balun/choke is close to my transmitter. Without the choke, the
impedance
> seen looking back down the outside of the coax braid is very, very low.
> The impedance referenced to ground seen looking into the ladder-line is
> somewhere below about 60 ohms. So the common mode impedance at the choke
> needs to be at least 200 ohms or more. Inductive reactance is preferable
> but resistive will do. There's a formula for the number of turns given the
> desired inductance and the AL (mh/1000T) constant for the ferrite toroid.
> Note that what I am trying to prevent is conducted common mode currents.
> Inducted common mode currents are somewhat unpredictable and are best
> dealt with by a good mechanical layout of the antenna system.
==========
Cecil, waffle, waffle, in other words, you don't know.

Reg.

2788. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 23:23:16 UTC
From: rwclark@seanet.com
Message-ID: <3a832576.782395234@news.seanet.com>
Source record: 170660

On Thu, 08 Feb 2001 12:04:55 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Harrison wrote:
>>
>> Cecil wrote:
>> "I`ve measured some of them (W2DU baluns) and they tend to have a low
>> impedance / cost ratio."
>>
>> Thanks. That makes sense. As Cecil implies, inductance is proportional
>> to the square of the number of coil turns. A piece of coax through a
>> core has only one turn.
>
>Actually, I have come to realize that is less than a turn. To be one turn,
>as defined by Amidon, the wire needs to form a 360 degree loop with
>one wire through the core. The difference between a straight-through
>wire and one 360 degree loop is considerable.

Hi Cecil,

Shame on you. A toroid with ANY conductor through it has satisfied
the one turn requirement and this simply because it is not a
requirement. The physics of it is that a flux line must be broken by
the media, there is no 360, 350, 180, or 90 degree requirement. This
was rendered into core memory decades ago without any ambiguities of
partial turns.

There are other reasons for having the shortest length for the turn
like absolute inductance, coupling and leakage (presuming there are
more than one turn), but these reasons are not numerically related to
"complete" turns.

In the literature of transformers (both BALUNs and standard power
supply cores) there is no such thing as a partial turn except as
expressed as a ratio such as 2:1.5 which could only be realized by,
for instance, 4 turns (or wire penetrations of the core) seeing 3
turns (or wire penetrations of the core). I would like to see an
argument (not a fantasy) that supports that this could also be
satisfied with 2 turns seeing 1.5 turns - in other words, for a toroid
show me the math and your references. I would be most interested in a
mathematical solution expressed with a non-integral number of turns.

73's
Richard Clark, KB7QHC

2789. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 23:24:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <95v9q7$12n$1@neptunium.btinternet.com>
Source record: 170661

> If the coax feeder is 1/4-wavelength long and the braid is properly
grounded
> at the bottom end there will be a very high impedance at the top and very
> little current will flow into the braid.
>
> Will this prevent radiation from the feeder just as the choke balun is
> intended to do?
==========
Why have none of the experts, antenna designers, and old wives answered this
question ? Its been here for several days.

Reg, G4FGQ

2790. Re: UHF Bowtie - DIY?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-08 23:39:42 UTC
From: richardharrison@webtv.net
Message-ID: <12352-3A832E3E-95@storefull-111.iap.bryant.webtv.net>
Source record: 170662

Jim Lill wrote:
"I am still looking for the angle on the bowtie (flat planar type)."

I gave you the angle in an example from Arnold Bailey`s "TV And Other Receiving Antennas". The projected angle was 60 degrees. That will do for flat bowties too. I`ve seen examples that had angles between 40 degrees and 60 degrees, but it isn`t critical.

On page 657 of Henney`s "Radio Engineering Handbook" is Fig. 36-o. This is a flat bowtie. I don`t have a protractor, but the sides of the triangular halves of the dipole form near equilateral triangles. That would make the angles 60 degrees each. On very close scrutiny, the angles at the feedpoint might be a couple of degrees or less larger than the the other two angles.

Here is what Henney (actually Ed Laport was the author of the antenna section of the book) says: "Figure 36-n is an example of a dipole, capable of many variations, where linear conductors are replaced by plane sheets of selected shapes for obtaining special characteristics.

In all of these forms of electric dipoles, bandwidth can be increased by increasing the radiator cross section when the application is associated with wide-band systems."

Best regards, Richard Harrison, KB5WZI

2791. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 00:39:46 UTC
From: "mkelly@powerup.com.au" <mkelly@powerup.com.au>
Message-ID: <3A833C52.DC0E5F7@powerup.com.au>
Source record: 170663

IIRC there was an article, years ago, about using one as
a 5/8 wave antenna on 2m. It involved pulling off the coil
cover and stretching the coil (I think!)

Trouble is - as I found out) not all of them can have the
coil cover slipped off easily as some are moulded right
on to the coil and you run the risk of ruining the whole deal.

The one here that worked was from RShack and had a grey
fluted coil cover. Lots of help. I know. I know! :-)

GL

Murray

Frizz wrote:
>
> OK, I have one of these little things from a long time ago when I could only
> really listen to CB:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1211275066
>
> Would it be at all possible to rip the existing antenna out and build one
> for 2 meters into it? The reason I want to do this is that I have this same
> antenna mounted on the side of my window of my house, painted to match the
> outside of it, and it is perfectly hidden from everyone (this is a plus
> since I can't have any outdoor antennas). Would this be an easy project or
> would this body be too short? I am currently running a discone in my attic
> but a crappy satellite and cable television install has left me unable to
> use any of my radios until I can re-run and unscrew-up what the cable and
> satellite guys did due to TVI. This antenna looks perfect and already has a
> nice out-of-the-way mounting space. Can I do it? Any suggestions are
> welcome. Thanks and 73~~!!!
>
> KG4IVT At H O T M A I L dot C O M

--
****
* Murray Kelly vk4aok mailto://mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

2792. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 00:44:04 UTC
From: richardharrison@webtv.net
Message-ID: <19509-3A833D54-106@storefull-117.iap.bryant.webtv.net>
Source record: 170665

Reg wrote:
"Why have none of the experts, antenna designers, and old wives not answered this question?"

I don`t claim to be any of the above but offered an opinion anyway. I said a 1/4-wave coax grounded at the bottom would offer a high impedance to current feed from the inside to the outside surface of the coax at the top.

On Thu. Feb. 8, 2001, 8:43am Central U.S. time I wrote:
"Reg already suggested using a 1/4-wave (or odd multiples thereof) for a feedline, and making sure there was a good ground on the radio."

I presumed why this would be beneficial would be understood, given the discussion of baluns.

Best regards, Richard Harrison, KB5WZI

2793. Re: How many dBs makes a 3-element ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 00:59:46 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <95vfis$iae3e$1@ID-20128.news.dfncis.de>
Source record: 170664

Roughly 7.5dbi.

--
714 Sandpile,
The Mad Dog wavin' good bye
"TruckDrivingMan" <tansorg@cs.tu-berlin.de> wrote in message
news:95ptud$91f$05$1@news.t-online.com...
> Can anybody tell me how much gain approximately a 3-element yagi for 10m
has
> ? The reflektor-dipol distance is 2 m and the dipol-director distance 1 m
>
> TIA
> Tom
>
>

2794. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 01:58:31 UTC
From: k1bqt@aol.com
Message-ID: <20010208205831.16970.00000108@ng-mj1.aol.com>
Source record: 170668

Hi Reg--

> If the coax feeder is 1/4-wavelength long and the braid is properly grounded at the bottom end there will be a very high impedance at the top and very little current will flow into the braid.<

Is your Guiness going flat? Who on here HASN'T acknowleged that ("properly" being the operant term).

> Will this prevent radiation from the feeder just as the choke balun is intended to do?<

Of course and your point well taken. It's still a matter of critical timing vs. who-the-hell-cares feedline length (or an academic point vs. real-world engneering practice).

>Why have none of the experts, antenna designers, and old wives answered this question ? Its been here for several days.<

Don't be petulant! My kW station sits atop a glacial sand moraine, not a moist black-dirt UK garden-spot. Do you really think those two entities rest at the same potential? The local turf has the conductivity of fine chinaware.

73

Rick K1BQT

2795. Re: Patch antennas for 1.7 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 02:45:17 UTC
From: AnonMn@netscape.net
Message-ID: <3a835994.851792@news>
Source record: 170569
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Some design information is available at
http://www.engineering.usu.edu/ece/faculty/furse/TUTORIAL/libra/patch/sld001.htm
Ken K5MBV

On Thu, 8 Feb 2001 13:16:24 -0800, "Frank Van Hooft"
<frank_van_hooft@spectrumsignal.com> wrote:

>Hi all,
>
>I'd like to build a patch antenna (or array thereof) for satellite
>reception at 1.7 GHz. I don't have room for a dish. Does anyone have
>any pointers to information on how to do such a thing?
>
>Thanks!
>
>Frank. VE7HVF
>frank_van_hooft@spectrumsignal.com
>
>

2796. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 02:47:37 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A835A49.57692DF9@IEEE.org>
Source record: 170571

Reg Edwards wrote:
> > If the coax feeder is 1/4-wavelength long and the braid is properly grounded
> > at the bottom end there will be a very high impedance at the top and very
> > little current will flow into the braid.
> >
> > Will this prevent radiation from the feeder just as the choke balun is
> > intended to do?
> ================================
> Why have none of the experts, antenna designers, and old wives answered this
> question ? Its been here for several days.

What kind of antenna is the 1/4WL feeder tied to?
--
http://www.mindspring.com/~w6rca

2797. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 02:51:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A835B47.F311BAC0@IEEE.org>
Source record: 170572

Richard Harrison wrote:
>
> Reg wrote:
> "Why have none of the experts, antenna designers, and old wives not
> answered this question?"
>
> I don`t claim to be any of the above but offered an opinion anyway. I
> said a 1/4-wave coax grounded at the bottom would offer a high impedance
> to current feed from the inside to the outside surface of the coax at
> the top.

In fact, that is extremely similar in function to the (would you believe?)
Bazooka Balun!
--
http://www.mindspring.com/~w6rca

2798. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:01:19 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A835D7F.6652@bellsouth.net>
Source record: 170570

That bumper sticker is the reverse of one I received from Spruill Chevrolet 10 years ago. The original was "Friends Don't Let Friends Drive Fords".

Just as an aside, I left Ford in 1973 never to return for 2 reasons:

1. My 1972 Mustang kept causing me to be "Found on Road DEAD" and it taught me how to spell F-O-R_D backwards: Driver Returning On Foot!

2. Engine noise difficult to cure. We used to listen to the AM broadcast radio and you could tell there was a Ford passing by due to the noise in the receiver. No LIE!

I quickly returned to Chevrolet where I found reliable transport AND I often could install an HF radio without doing ANYTHING about ignition noise! Just today, I finally got around to installing an Icom 706 MKIIG in my 1993 Lumina Z34. NO ignition noise, no "funny" effects on the ECM, and receiver as quiet as a mouse except for the atmospheric noise inherent to HF frequencies. I NEVER had a Ford like that. They ALWAYS had so much ignition buzz, the radio was almost unusable without a few hours spent curing the blasted thing. My other car is a 1987 Chevy Celebrity wagon I bought new. It now has 199,000+ miles on it and still runs fine. Engine/tranny has NEVER had a major failure, never has been opened, only has had routine maintenance. I have had an HF radio in it since new. Again, NO noise! I just installed the radio and did the usual grounding.

Now let me see: What vehicle is mentioned on the radio newsgroups more than any other for ignition/fuel pump interference? If you guessed FORD you are right! Just my opinion, of course, but I'll take a Chevy/GMC any day over a Ford!

73

Jerry

Jim Rodenkirch wrote:
>
> Bumper sticker of all Bumper stickers seen often here in South Carolina
> that's related to this thread: "Friends don't let friends drive Chevys"
>
> Change Chevy to GMC and no foul!
>
> P.S. I drive a F-250 with the Power Stroke Diesel.
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A588B3F.8D748EFB@IEEE.org...

> > "Peter O. Brackett" wrote:
> > > Hmm... doesn't look like an F-150, maybe a Ram? What?
> >
> > GMC, the most electrically noiseless vehicle I have ever owned.
> >
> > > Cec, do you remove the tailgate on the pick-up to reduce em losses or is
> it
> > > to reduce wind and gasoine losses? Or perhaps both?
> >
> > Yep, both. Something for nothing. :-) Wonder if anyone makes a
> > fiberglas replacement tailgate?
> > --
> > http://www.mindspring.com/~w6rca

2799. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:14:54 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8360AE.84DB6E20@IEEE.org>
Source record: 170573

Reg Edwards wrote:
>
> Cecil wrote
> > Reg Edwards wrote:
> > > Hello Cecil, what is the desired impedance to the common mode currents
> ?
> > > In ohms, R+jX or Z Theta, please.
> >
> > My balun/choke is close to my transmitter. Without the choke, the
> impedance
> > seen looking back down the outside of the coax braid is very, very low.
> > The impedance referenced to ground seen looking into the ladder-line is
> > somewhere below about 60 ohms. So the common mode impedance at the choke
> > needs to be at least 200 ohms or more. Inductive reactance is preferable
> > but resistive will do. There's a formula for the number of turns given the
> > desired inductance and the AL (mh/1000T) constant for the ferrite toroid.
> > Note that what I am trying to prevent is conducted common mode currents.
> > Inducted common mode currents are somewhat unpredictable and are best
> > dealt with by a good mechanical layout of the antenna system.
> ==========
> Cecil, waffle, waffle, in other words, you don't know.

I know for my antenna system, Reg, because I designed it that way.
I don't know for yours. If you can wind a near-lossless balun with
negligible impedance to differential currents and with a megohm of
reactance to common-mode currents then it will work with almost any
antenna system.

The required choking impedance depends on the antenna system design.
It is impossible to design a balun for some antenna systems. I
design my antenna systems so the balun is easy to design, i.e. my
balun always works into a resistive impedance between 25 ohms and
100 ohms.
--
http://www.mindspring.com/~w6rca

2800. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:23:45 UTC
From: woofle@my-deja.com
Message-ID: <95vnrq$6v$1@nnrp1.deja.com>
Source record: 170574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <95rkm0$k28@news-central.tiac.net>,
"John Doty" <jpd@w-d.org> wrote:
> In article <3A80CBD0.AB709B4E@IEEE.org>, "Cecil"
<Cecil.A.Moore@ieee.org>
> wrote:
>
> > Dick Carroll wrote:
> >> I'm saying that you slam them with no experience whatever from
which
> >> to derive a true functional evaluation.
> >> ...
> > But you said they perform better than I think. Do they? If so, they
must
> > violate the laws of physics.
> >...
>
> No, Dick's using a different performance criterion than you are.
>
> Exactly what the criterion is, I can't say. The challenge to the
theorist
> in a case like this is to figure out what the user's criterion really
is.
>
> An antenna for somewhat shorter wavelengths, Smithsonian's "Multiple
> Mirror Telescope" of the 1970's was an engineering failure: the
> laser/actuator system that was supposed to hold the mirrors in
alignment
> never worked properly. Or was it? In fact, the telescope was an
incredible
> success! Its lightweight structure provoked much less air turbulence
in
> its immediate vicinity than a conventional structure. The result was
> images that were better than expected, despite the failure of the
active
> alignment system. Rather than deny this, telescope designers learned
that
> their performance criteria needed revision. The current generation of
very
> large telescopes could not have been built without this insight.
>

Good example of how the fastest way to success is through failure. :)
Our culture is so focused on winning and success that we forget

that failure can be the best and fastest teacher, if you're able
to set aside your ego and and really learn *why* you/it failed.
If it makes you feel better, don't call it a "failure", call it a
"prototype." :)

-- Ross

> --

> | John Doty "You can't confuse me, that's my job."
> | Home: jpd@w-d.org
> | Work: jpd@space.mit.edu
>

Sent via Deja.com
http://www.deja.com/

2801. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:29:28 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A836418.4B2A6971@IEEE.org>
Source record: 170576

Richard Clark wrote:
> Shame on you. A toroid with ANY conductor through it has satisfied
> the one turn requirement and this simply because it is not a
> requirement. The physics of it is that a flux line must be broken by
> the media, there is no 360, 350, 180, or 90 degree requirement. This
> was rendered into core memory decades ago without any ambiguities of
> partial turns.

I thought so too, Richard, until I measured it. Let's say we have a
toroid with a one inch by one inch cross section. A 360 degree loop
is in contact with the toroid for five inches. A straight through run
is in contact with the toroid for one inch. Exposing the field to
five inches of ferrite apparently has a greater effect than exposing the
field to one inch of ferrite. The FB-77-1024 core does not meet the
inductance spec unless a 360 degree loop is used. I know, I tested it
and was amazed that conventional wisdom, as I understood it, was wrong.
--
http://www.mindspring.com/~w6rca

2802. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:32:58 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <42SDOkO9Pa6TVOrglLqkPJW99ROw@4ax.com>
Source record: 170575

"Gary Peach" <xcg34@dial.pipex.com> wrote:

>

>
>Reducing RF gain does not lower noise floor,
>it raises it.
>
>The apparent improvement in S/N is because you can
>only see the stronger signals,
> which by virtue of their greater strength
> already have a better S/N ratio

Another way to look at it: if you're tuned into a strong signal,
reducing the RF gain reduces the accompanying static, but leaves the
stong signal sounding nicer. At least, that is my practical
experience.

Bob
k5qwg
>

2803. window tint & thru-glass antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:41:21 UTC
From: Randon Loeb <rloebusenet@cticonsulting.net>
Message-ID: <3A8366E1.C5D5915E@cticonsulting.net>
Source record: 170667
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

I have very dark window tint all over my car windows, and would like to use a through-the-glass antenna from radioshack. the instructions say to avoid this (i.e. use a non-tinted area), i'm wondering how much of a difference it will really make? should i pursue another route? do you have such an antenna going through tint and its ok? car is 97 corvette coupe, any other ideas on how to mount are appreciated.
please email me too.
rloebusenet@cticonsulting.net
thanks.

2804. Re: Followup on bad coax from Radio Works

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 03:46:47 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <95vp77mjf2@bashir.peak.org>
Source record: 170578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

In rec.radio.amateur.antenna June <junebugnospammers@juneco.com> wrote:
: NO on e I know of inspects every cm of coax on a spool before
: it is sold to a customer.

Some do. It is possible to purchase certified coax, in any length you desire. Of course you pay a nice premium for it.

I believe Andrews is one of the suppliers who will do so. You could check their web page to see if there is any mention there.

But this is only a test of the electrical characteristics - not for such problems as slits or holes in the outer covering.

--
Bill Nelson (billn@peak.org)

2805. Re: window tint & thru-glass antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 04:00:10 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6A8D579.E20%stewartx@sccoast.net>
Source record: 170577
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Randon Loeb at rloebusenet@cticonsulting.net wrote:

> I have very dark window tint all over
> my car windows, and would like to
> use a through-the-glass antenna from
> radioshack. the instructions say
> to avoid this (i.e. use a non-tinted
> area), i'm wondering how much of a
> difference it will really make?
> should i pursue another route? do you
> have such an antenna going through tint
> and its ok? car is 97 corvette coupe,
> any other ideas on how to mount are
> appreciated.

The issue is the TYPE of tinted glass, Randon. You cannot use a glass-mount antenna with passivated glass that has been impregnated with metal (plain tinted glass works fine with these antennas).

How can you tell the difference between normal tinted glass and passivated glass? Look around the edge of the glass for the manufacturer's stamp. Once you locate it, look for words that have to do with ultraviolet rays or the sun (solar, solarglare, solarclear, solarcool, sunshield, sunscreen, soft-ray, eze-cool, or similar words). If you find such words, you probably cannot use a glass-mount with this metal impregnated passivated glass.

If you want to be absolutely sure, you can always test the glass with a capacitance meter, or have someone else (radio or cellphone store) check the glass for you.

Luckily, on most vehicles, it is only the lightly tinted windshield and two tinted front windows (driver and passenger) that have passivated glass - the darker tinted windows in the rear of the vehicle are usually made of cheaper, not passivated, glass.

By the way, if any glass on your vehicle is passivated, the windshield almost certainly will be also, even if it doesn't specifically say so (some manufacturer's don't stamp the windshield for some reason).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

2806. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 04:13:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A836E75.133ECD72@IEEE.org>
Source record: 170579

Jerry Oxendine wrote:
> 1. My 1972 Mustang kept causing me to be "Found on Road DEAD" and it
> taught me how to spell F-O-R_D backwards: Driver Returning On Foot!

I heard FORD stands for Fix Or Replace Daily.

> I quickly returned to Chevrolet where I found reliable transport AND
> I often could install an HF radio without doing ANYTHING about ignition
> noise!

My '96 GMC1500 pickup is the RF quietest vehicle I have ever owned.
I can hardly tell by listening to my IC706 when I shut the engine off.
Only problem is when I key up on 40m, the speedometer goes full scale.
--
http://www.mindspring.com/~w6rca

2807. What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 04:53:13 UTC
From: jason_hsu@my-deja.com
Message-ID: <95vt3n$48h$1@nnrp1.deja.com>
Source record: 170580

I realize that this is a dumb newbie question, but I don't fully understand antenna resonance.

I know that is issue is separate from SWR, as SWR only applies to the impedance match between the antenna and transceiver. I know that you can have a low SWR in spite of a nonresonant antenna (because the radiation, ground, and conductive resistance of the antenna add up to 50 ohms) or a high SWR in spite of a resonant antenna (like a 1/2 wavelength vertical antenna without the appropriate matching for the stratospheric antenna resistance).

Does antenna resonance affect radiation resistance and thus affect antenna efficiency? Exactly what happens when you try to transmit on 10m with an antenna resonant for 20m? Or vice versa? Is there a measurement for resonance analogous to antenna efficiency or SWR?

Can anyone explain this concept for me? I know the formulas, but I don't have a grasp of it.

--
Jason Hsu, AG4DG
jason_hsu@@@@@@@@@@@@@planetmail.com
http://www.bigfoot.com/~jason_hsu/

Sent via Deja.com
http://www.deja.com/

2808. HF/VHF vertical coexist?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 05:22:41 UTC
From: David Mueller <dmuel@voyager.net>
Message-ID: <3a837ec7$0$30007$1dc9550c@news.corecomm.net>
Source record: 170581

Currently have a Diamond Dualbander VHF on roof 19' tall. I am getting ready to mount a butternut hf9v up there also. They will be about 8-10' apart. any thoughts on interaction?. Will have the radials up there to.

Dave Mueller KB9POU

2809. Re: Details on why ground plane is needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 05:46:53 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A83844D.4A9B@wt.net>
Source record: 170582

jason_hsu@my-deja.com wrote:
>
> I know that a ground plane is needed for a 1/4 wavelength monopole
> antenna. I'm trying to gain a good understanding of why this ground
> plane is needed.
>
> 1. Exactly why won't the antenna perform if you don't have a ground
> plane? I know that the ground plane is needed to provide a conductive
> path back to the antenna. But why is this conductive path necessary?
> And what happens to the RF if this ground plane is not present?

Depends on the earth qualities. If the earth is poor, your actual reflection may be quite a ways below the surface of the earth and traveling though a lossy medium. Not too good. With radials you are controling the ground losses, which you must do if you want the 1/4 antenna to have the efficiency near what you would have with a 1/2 wave antenna.

> 2. If the antenna is shortened through loading schemes (capacity hats,
> loading coils, etc.), is the size of the ground plane required also
> smaller? Does a shorter antenna have a different near-field and far-
> field radiation pattern than a full size antenna?

Some say you only need the radials as long as the radiator, but I'd rather still have 1/4 wave or longer radials if I had my choice. If you don't have much wire, it's better to concentrate at the base with more short radials than a few long ones. But if I had many of them, I'd just as soon they be full length. If the antenna is elevated, they must be kept at the same 1/4 wave length. Or at least be a length to show a low impedance at the frequency being used. I've used 3/4 wave radials before. They need to be resonant to work properly. The ground system becomes more critical the shorter the antenna. As usual, no free lunch..:(If you try to skimp with a shorter radiator, you have to make up for it in the radial system if you want near equal performance. The ground losses will overshadow the coil losses usually.

> 3. How exactly does ground conductivity matter? It seems to me that
> there would be a VERY high resistance between the antenna and a point
> in the far field of the antenna.

We pondered this a few weeks ago. Seems to me being we can't do much about the ground conductivity at a distance, not really much use worrying about it. The main effect of lossy earth being a cancellation of the lower angles. I can only control whats in my yard. Much of what you want to know you would be better off to find a few good books to look at. There is much more to all this than can be covered in NG posts.

MK
--
http://web.wt.net/~nm5k

2810. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 05:59:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A83875A.BD4@wt.net>
Source record: 170583

Bob Miller wrote:
>
> "Gary Peach" <xcg34@dial.pipex.com> wrote:
>
> >
>
> >
> >Reducing RF gain does not lower noise floor,
> >it raises it.
> >
> >The apparent improvement in S/N is because you can
> >only see the stronger signals,
> > > which by virtue of their greater strength
> > > already have a better S/N ratio
>
> Another way to look at it: if you're tuned into a strong signal,
> reducing the RF gain reduces the accompanying static, but leaves the
> stong signal sounding nicer. At least, that is my practical
> experience.
>
> Bob
> k5qwg
> >

Dunno, but I kind of think the preselectors get a bad name when used with preamps. IE: "active preselectors and antennas". Some of these can use quite a bit of gain and can trash the front end of an already good receiver. But seems to me a preselector used on it's own should be ok. Or at least , shouldn't really hurt anything, and normally should help if an outside signal is a problem. But I don't think the s/n ratio would change much unless the preselector was curing an outside signal problem. If the undesired signal quit, there shouldn't be much difference. I don't use any here, except for the ones built into some of my radios. IE: TS830, drake receivers etc which use a preselector control. I found out a long time ago on the drakes, the quickest way to trash one out was add a 20 db preamp. I once made one to try it. It worked fine, but ruined the receiver overall. Too many images etc. And it didn't help the s/n ratio at all really. Just pumped up the s meter. MK
--
http://web.wt.net/~nm5k

2811. Re: HF/VHF vertical coexist?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 06:09:09 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A838985.4ADF@wt.net>
Source record: 170584

David Mueller wrote:
>
> Currently have a Diamond Dualbander VHF on roof 19' tall. I am getting
> ready to mount a butternut hf9v up there also. They will be about 8-10'
> apart. any thoughts on interaction?. Will have the radials up there to.
>
> Dave Mueller KB9POU

They will interact. Enough to be a problem? Maybe, maybe not. Depends on
the band used. Most bands you probably will be ok. You might try
grounding the unused one if a problem comes up. MK
--
http://web.wt.net/~nm5k

2812. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 06:33:04 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A838F20.26CB@wt.net>
Source record: 170585

jason_hsu@my-deja.com wrote:
>
> I realize that this is a dumb newbie question, but I don't fully
> understand antenna resonance.
>
> I know that is issue is separate from SWR, as SWR only applies to the
> impedance match between the antenna and transceiver. I know that you
> can have a low SWR in spite of a nonresonant antenna (because the
> radiation, ground, and conductive resistance of the antenna add up to
> 50 ohms) or a high SWR in spite of a resonant antenna (like a 1/2
> wavelength vertical antenna without the appropriate matching for the
> stratospheric antenna resistance).
>
> Does antenna resonance affect radiation resistance and thus affect
> antenna efficiency?

No. Not the way I see it. Resonance of the antenna has little to do with efficiency. But! Many times some of the easiest ways to have an efficient system with the commmon feedlines used these days is with a resonant antenna. But thats not the antennas fault, but rather the feedlines we use just happening to have about the same impedance of a dipole for instance. It's hard to beat the efficiency of a dipole fed with good coax. It has more loss than ladder line, but needs no tuner and the tuner losses that go along to work with a 1/2 wave dipole.

Exactly what happens when you try to transmit on
> 10m with an antenna resonant for 20m? Or vice versa? Is there a
> measurement for resonance analogous to antenna efficiency or SWR?

A 20m dipole on 10m will be two half waves in phase and has a high feed impedance about the same as the 1/2 wl vertical you mentioned. This antenna is very efficient as long as you don't waste power in the feedline before it gets to the antenna. The efficiency is more feeding related than resonance. The antenna has gain over a dipole. "about 1.5 -2 db worth broadside". But it won't have gain over anything except a dummy load if you turn the rf into heat in the feedline as in would be the case doing this using coax.
A 10m dipole used on 20m will show a large capacitive reactance. Again, if you can get power to the antenna, it will be quite efficient. But usually in most cases you will turn much rf into heat in the tuner used to match such a setup. Or at least when using ladder line and the common T net tuners. You can get a coil quite warm doing this with high power.
>
> Can anyone explain this concept for me? I know the formulas, but I
> don't have a grasp of it.

Don't feel bad, I probably don't either. Mk
--
http://web.wt.net/~nm5k

2813. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 06:59:30 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8393D7.2451@wt.net>
Source record: 170586

Cecil wrote:
>
> Jerry Oxendine wrote:
> > 1. My 1972 Mustang kept causing me to be "Found on Road DEAD" and it
> > taught me how to spell F-O-R_D backwards: Driver Returning On Foot!
>
> I heard FORD stands for Fix Or Replace Daily.

Hummm, some of my most reliable cars have been fords. But then again I have had reliable chevy's, and mopars too. I have a 68 ford F250 I drive the most these days. It's quite reliable with it's old 300 six and 4 speed. But I also have a chevy monte carlo which has never left me standed once yet. So for me, both have been ok. I had a 1960 ford falcon that was like a timex. You couldn't kill that car. Also had a 1967 LTD with a 390 that was fairly bulletproof. But I do have to say, some of the new ford stuff has been kinda funky. Some of the transmissions are junk for one thing. IE: mustangs,tauruses, etc, had alot of these problems.
>
> > I quickly returned to Chevrolet where I found reliable transport AND
> > I often could install an HF radio without doing ANYTHING about ignition
> > noise!
>
> My '96 GMC1500 pickup is the RF quietest vehicle I have ever owned.
> I can hardly tell by listening to my IC706 when I shut the engine off.
> Only problem is when I key up on 40m, the speedometer goes full scale.

My chevy is pretty quiet radio wise. I just recently installed the mobile setup on the ford, and seems ok so far. A little ignition noise, but I think I can filter that out. It's not too bad. Or at least hasn't kept me from talking. I put new wires on it not too long ago. Probably need a filter kit. Being a 68, it has points, not solid state ignition. I mounted my antenna right behind the back window in the center of the truck. Seems to work pretty well. I've tried it on 75 and 40 meters and was doing fine. I'm also using a 706G now. I had to retire my trusty 730. Or at least until I can find a basket case to get the part I need.
MK
--
http://web.wt.net/~nm5k

2814. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 07:00:49 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9606a9$kn1$3@lure.pipex.net>
Source record: 170587
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Mark Holden" wrote ...
> Gary Peach wrote:
> > Before accepting the advice of a salesman;
> > ensure that they are qualified to give it.
> > That they don't have an axe to grind.
>
> I'll agree, but I wouldn't limit it to advice from salesmen.

[:-)>

> I got into this thread when someone gave what seemed like an overly broad
> endorsement of preselectors.
>
> I'm sure the person who made that post has had great luck with
preselectors, as
> they do serve a purpose. On the other hand, if you don't have the
problems
> they're designed to solve, they won't help you.

Right Mark, most of the Black Boxes now sport a step attenuator in the front end to attenuate the noise, most of which is due to the extremely wide pass band of their front ends.
The cost of providing a proper preselector in the I/P circuit to the Receiver would not only raise the selling price of the set above the ideal market price the penalty in box volume would probably also be unacceptable.

Consider this for one of the top line RX
Only the names have been changed to protect the innocent. :)
This is fairly typical of what you can readily buy today.

Table 1
| RX I/P bandwidth
| f lo | f hi | BW | BW dB | Av f | Q
1 | 0.5 | 1.6 | 1,100,000 Hz | 60.4 dB | 1,050,000 Hz | 0.955
2 | 1.6 | 2.5 | 900,000 Hz | 59.5 dB | 2,050,000 Hz | 2.278
3 | 2.5 | 3.5 | 1,000,000 Hz | 60.0 dB | 3,000,000 Hz | 3.000
4 | 3.5 | 5.5 | 2,000,000 Hz | 63.0 dB | 4,500,000 Hz | 2.250
5 | 5.5 | 7.5 | 2,000,000 Hz | 63.0 dB | 6,500,000 Hz | 3.250
6 | 7.5 | 10.5 | 3,000,000 Hz | 64.8 dB | 9,000,000 Hz | 3.000
7 | 10.5 | 14.5 | 4,000,000 Hz | 66.0 dB | 12,500,000 Hz | 3.125
8 | 14.5 | 21.5 | 7,000,000 Hz | 68.5 dB | 18,000,000 Hz | 2.571
8 | | | | | |
9 | 21.5 | 30 | 8,500,000 Hz | 69.3 dB | 25,750,000 Hz | 3.029
9 | | | | | |

Table 2
| -.. ..--- . .-.. .-.. HAM BANDS -.. ..--- . .-.. .-.. |
| f lo | f hi | BW | BW dB | Av f | Q
1 |
2 | 1.8 | 2 | 200,000 Hz | 53.0 dB | 1,900,000 Hz | 9.5
3 | | | | | |
4 | 3.5 | 3.8 | 300,000 Hz | 54.8 dB | 3,650,000 Hz | 12.2
5 | 7 | 7.1 | 100,000 Hz | 50.0 dB | 7,050,000 Hz | 70.5
6 | 10.1 | 10.15 | 50,000 Hz | 47.0 dB | 10,125,000 Hz | 202.5
7 | 14 | 14.35 | 350,000 Hz | 55.4 dB | 14,175,000 Hz | 40.5
8 | 18.068 | 18.168 | 100,000 Hz | 50.0 dB | 18,118,000 Hz | 181.2
8 | 21| 21.45 | 450,000 Hz | 56.5 dB | 21,225,000 Hz | 47.2
9 | 24.89 | 24.99 | 100,000 Hz | 50.0 dB | 24,940,000 Hz | 249.4
9 | 28 | 29.7 | 1,700,000 Hz | 62.3 dB | 28,850,000 Hz | 17.0

Table 3
| Degradation
|
2 | 6.5 dB
|
4 | 8.2 dB
5 | 13.0 dB
6 | 17.8 dB
7 | 10.6 dB
8 | 18.5 dB
8 | 11.9 dB
9 | 19.3 dB
9 | 7.0 dB

The first table shows the I/P filter Bandwidth
The second table outlines the HF Ham Bands
The third table shows the degradation of the I/P noise bandwidth.

Note that on 18 MHz and 24 Mhz the excess noise at the front end is nearly
20 dB over what it would be if you had an Rx specially designed to just
cover those Ham bands.
No wonder that you require a pad at the front end.
Having struggled to get the gain you then throw it away. :(

You will notice the effect if you listen to 20 m regularly that there are
some days when you might think that the band is dead, absolutely flat.

You put in 10 or 20 dB of attenuation and there are plenty of signals on
the band.

The Rx has been completely overloaded by the noise available in the
extended/excessive bandwidth of a general coverage Rx compared to a Rx
specifically designed for Ham bands only.

When I say noise in this context I include any signals that you do not wish
to listen to.
i.e. strong short-wave broadcast transmissions, strong machine
transmissions, any strong signal that can contribute power to the front end

semiconductors.

noise is the weeds of Radio ... REM is that grammatical?
weed: any plant that you do not want.

Of course adding a pad reduces the excess noise, but it also reduces the signals that you would like to listen to.
The use of a tuneable filter that can be set up around the segment of the spectrum that you are interested in will reject the excess noise *without* attenuating the wanted signals by more than a dB (provided the filter is correctly designed and tuned.)
Looking at row 7 in each table which covers the 20 m band there is a possible 10.6 dB to be gained by using a preselection AE filter.

If you are only interested in say the Machine sector of 20 m then there is even more to be gained from a bandpass filter directly at the AE.

In this context using a filter is like using a selective weed killer, using an attenuator is analogous to using a flame thrower.

:) 73 :) de
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2815. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 07:29:48 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9606ab$kn1$4@lure.pipex.net>
Source record: 170588
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"John Doty" wrote ...
> Ian Jackson wrote:
> > And what I still say, Mark, is that the correct type of preselector MAY
> > not give you any benefit, but it should certainly NOT reduce your
> > ability to receive anything. On average, a preselector will improve
> > things to some extent most of the time, and NEVER make things worse.

I agree with that assertion

> No. Unless you have overload or signal transfer problems, a preselector
> *never* helps.

Where are your facts to support such an assertion?
DEMONSTRATION please.
please see my related post under this subject heading

> The preselector may not hurt signal quality *if* you spend the time to
> tune it carefully.

Well! that goes without saying to anyone that knows why they have bought and
fitted such a device. duh!

>On the other hand, it negates the most important
> advantage that modern equipment has over the classic stuff: frequency
> agility.

Which is a fat lot of use if you can't actually hear anything.
What about all that good DX below S1 that is perfectly readable once you
clean up the noise and out of band interfering signals [QRM]

>With a modern receiver you can rapidly check propagation over a
> wide range of frequencies,

Not if you can't hear the weak signals because they are drowned out by
excess noise and out of band strong signals.

> ID using parallel frequencies, find the best
> parallel frequency for your favorite program *right now*, and jump to a
> different one when interfence suddenly pops up. A preselector gets in the
> way of all this. With interval signals on most stations reduced to less
> than a minute these days, you don't have time to waste tuning in: you'll
> miss the start of your program.

You are talking 30 dB communication margins, not typical threshold DX
working that most Hams will really be interested in. Why don't you just buy
a mobile phone instead, that way you can also have selective calling.

> If local MW stations are an overload concern, a high pass filter is an
> effective solution.

That is certainly a very good measure. However it is not only MW broadcast
that is a problem, any strong broadcast station will cause problems,
suddenly populating the ham bands with all sorts of wonderful signals. ;(

> You've got to find the signal to hear it. Once you've found it, a
> preselector may not hurt, but it definitely gets in the way of finding it.

You certainly won't find it if it is:
a. below the noise
b. attenuated out of existence.

73 Gary7SLL
Bullshit may baffle brains, but Peaches thrive on fertilizer.
Thanks for the good meal.

> --
> | John Doty "You can't confuse me, that's my job."
> | Home: jpd@w-d.org
> | Work: jpd@space.mit.edu

2816. MFJ ? Vectronics ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 07:37:21 UTC
From: Richard Friedman <rchrd@rchrd.com>
Message-ID: <3A839E2E.396DB702@rchrd.com>
Source record: 170589

```
MFJ has a 6 band vertical, MFJ-1796 listed for $209.95.
Vectronics has the very same looking antenna,
http://www.vectronics.com/vectronics/antennas/vec896.html
for 199.95.

Which is it? Is MFJ reselling Vectronics, or the other way around.

Regardless, I've been hearing that MFJ verticals should be avoided.
Especially in windy places. What do you think?

--
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
| Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |
| ï¿½ Information Architect, Technical Communications, Sun Microsystems |
| ï¿½ Instructor, Univ California Berkeley Extension |
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
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2817. Re: window tint & thru-glass antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 10:38:43 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <960he4$j1lo4$1@ID-20128.news.dfncis.de>
Source record: 170590
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna

Theorecitally you could cut a small square in the tint the size of the
capacitive coupler,
this is the part that attaches to the inside of the window.
But like the other gentleman said if you special impregnated glass it would
work to no avail anyway.
Thru-glass antennas are not very efficient nor is any other antenna that
uses
a capacitive coupling such as a magnet mount.
If youre serious about the system i would suggest doing what other vette
owners do,
attach a piece of flat bar or angle iron to the frame (the frame is the
counterpoise)
that extends beyond the rear of the car and attach the antenna there.
The Firestik antenna company has a Corvette section just for people like
you.
http://www.firestik.com
Good luck driver.....

--
714 Sandpile,
The Mad Dog wavin' good bye
"Randon Loeb" <rloebusenet@cticonsulting.net> wrote in message
news:3A8366E1.C5D5915E@cticonsulting.net...
>
> I have very dark window tint all over my car windows, and would like to
> use a through-the-glass antenna from radioshack. the instructions say
> to avoid this (i.e. use a non-tinted area), i'm wondering how much of a
> difference it will really make? should i pursue another route? do you
> have such an antenna going through tint and its ok? car is 97 corvette
> coupe, any other ideas on how to mount are appreciated.
> please email me too.
> rloebusenet@cticonsulting.net
> thanks.

2818. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 11:45:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <960l6g$8qc$1@neptunium.btinternet.com>
Source record: 170591

It's not a dumb question. It's probably the best question to ask about antennas.

Any length of wire, straight or bent, has inductance L and capacitance C. L and C are distributed along the length but have equivalent lumped values.

Using lumped values, think of a dipole antenna as an inductance and a capacitance and a resistance R all in series across a voltage generator. (The end of a transmission line from the transmitter). The resistance is the radiation resistance. Behaviour is similar to any other LCR tuned circuit.

Inductive reactance increases with frequency. Capacitative reactance decreases.

The antenna is at resonance at the frequency where the capacitative and inductive reactances are equal and cancel out. The impedance across the generator is then at a minimum and is equal to the radiation resistance. The antenna current is at a maximum.

The input impedance changes rapidly with frequency but the radiation resistance remains fairly constant. As with any other tuned circuit the sharpness of tuning depends on Q, the ratio of inductive reactance to resistance. Q = XL/R and for a full size HF half-wave dipole Q is between 6 and 10.

Because L and C are actually distributed along the wire length there are many resonant frequencies known as harmonics. These are related to the fundamental in the ratios 2/1, 3/1, 4/1 . . . . etc.

An antenna will still radiate highly efficiently when driven at a frequency way off resonance. Practically all the power which is fed into it will be radiated. Input power has nowhere to go except out into the universe. Only for very short antennas is the radiation resistance less than the wire resistance.

The only problem with non-resonant antennas, because of their high input reactance, is getting them to accept power. It is necessary either to insert a voltage step-up transformer between generator and antenna, or tune out the high input reactance with another lumped component, L or C. Or there may be several variable components in the form of an L, T or Pi network to cover several frequency bands. It is the loss in the transmission line and tuning components which may give cause for concern.

SWR measurements are made to check that the resistive load on the transmitter is at the value it was designed for, usually 50-ohms.

****

Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

<jason_hsu@my-deja.com> wrote in message news:95vt3n$48h$1@nnrp1.deja.com...
> I realize that this is a dumb newbie question, but I don't fully
> understand antenna resonance.
>
> I know that is issue is separate from SWR, as SWR only applies to the
> impedance match between the antenna and transceiver. I know that you
> can have a low SWR in spite of a nonresonant antenna (because the
> radiation, ground, and conductive resistance of the antenna add up to
> 50 ohms) or a high SWR in spite of a resonant antenna (like a 1/2
> wavelength vertical antenna without the appropriate matching for the
> stratospheric antenna resistance).
>
> Does antenna resonance affect radiation resistance and thus affect
> antenna efficiency? Exactly what happens when you try to transmit on
> 10m with an antenna resonant for 20m? Or vice versa? Is there a
> measurement for resonance analogous to antenna efficiency or SWR?
>
> Can anyone explain this concept for me? I know the formulas, but I
> don't have a grasp of it.
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com
> http://www.deja.com/

2819. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 12:13:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <960n0aajc1@neptunium.btinternet.com>
Source record: 170592

Rick wrote -

> Don't be petulant!

I confess I'm approaching my second childhood.

> My kW station sits atop a glacial sand moraine, not a
> moist black-dirt UK garden-spot. Do you really think those two entities
rest
> at the same potential? The local turf has the conductivity of fine
chinaware.

At my last QTH the sandy soil was 2 mS. At my present QTH the garden dirt is around 20 mS. I can manage quite well with no more than a half dozen short radials.

But chinaware is a pretty good insulator. Your ground losses are probably less then mine.

Reg.

2820. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 12:33:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <960o14bvl1@slb7.atl.mindspring.net>
Source record: 170593

Jason:

Resonance and resonant frequency is a widespread physical phenomena which applies to many areas of mechanics, dynamics, and physics, including antennas.

Resonant frequency is the "natural" frequency of vibration of something. i.e. the resonant frequency of a guitar string is the natural frequency at which it vibrates when you pick it. The resonant frequency of an LC tank is the natural frequency at which electrons "vibrate" or slosh back and forth between the L and the C when it is "hit" by an electrical impulse. The resonant frequency of an antenna [a distributed electrical structure] is the natural frequency at which electrons will "slosh" back and forth from "end to end" when it is hit by an electrical impulse.

Now any physical system, guitar string, LC tank, antenna, etc... can be made to vibrate at frequencies other than its' natural or resonant frequency. With a transmitter driving it, one can readily "drive" electrons to slosh back and forth on an antenna structure at any frequency, not just at it's resonant frequency. "It's just a little more tricky to drive or "force" a system to vibrate at frequencies other than it's natural or resonant frequency.

And so a "resonant" antenna is one that is being driven at it's resonant frequency or natural frequency of vibration.

This resonance phenomenal has very little to do with the radiation efficiency of an antenna. Or with the energy storage capability of any system capable of vibration. Systems that vibrate, are simply systems that are temporarily storing energy in different forms between in cycles. i.e. on one portion of the cycle the energy is in kinetic form and on the next portion of the cycle the energy is in potential form, and the process repeats continuously even at frequencies far from resonance if so driven.

Radiation is not a function of the frequency of vibration per se, but rather is caused by the acceleration and deceleration of electric charges. i.e. the change in velocity of those charges, not the actual frequency of vibration.

Radiant energy or RF is given off, and so extracts some small fraction of the stored energy, whenever electric charges are accelerated or decelerated. An antenna can easily be made to radiate energy efficiently when the electrons on the antenna structure are driven to slosh back and forth at frequencies offset from its' natural or resonant frequency. i.e. the non-resonant antenna can be made to radiate just as well as the resonant antenna. All you have to do is cause acceleration and deceleration of the

electrons. Radiation will occur because of the accleration and deceleration regardless of the frequency of "sloshing" back and forth. The electrons sloshing back and forth, at whatever frequency, on the antenna structure will radiate simply because they are being accelerated and decelerated. Now one has to admit that, coaxing those electrons to slosh at other than their natural sloshing frequency requires some additional techniques, i.e. feed line matching, etc...

Whether an antenna is operated at resonance or not is simply a function of the way in which you try to "force" or drive the antenna's electrons to slosh back and forth. Once the electrons are made to "slosh" back and forth on the antenna structure, their accelerations will result in radiant energy even if it is not the "natural" or un-driven frequency of sloshing!

In other words, the feeding method, feedline impedance, use of antenna tuner, etc... will require some attention if you operate "off resonance", while "on resonance" less attention needs to be paid to the driving of the vibrations. Just as with anything that is capable of vibrating, you can "coax" an antenna to vibrate at almost any frequency with the appropriate "driving" method...

And so... a "resonant" antenna is one that is operated at it's natural frequency, while a non-resonant antenna is not. Resonant or not has very little, if anything, to do with radiation efficiency.

-Peter K1PO

. <jason_hsu@my-deja.com> wrote in message
news:95vt3n$48h$1@nnrp1.deja.com...
> I realize that this is a dumb newbie question, but I don't fully
> understand antenna resonance.
>
> I know that is issue is separate from SWR, as SWR only applies to the
> impedance match between the antenna and transceiver. I know that you
> can have a low SWR in spite of a nonresonant antenna (because the
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> 50 ohms) or a high SWR in spite of a resonant antenna (like a 1/2
> wavelength vertical antenna without the appropriate matching for the
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> Does antenna resonance affect radiation resistance and thus affect
> antenna efficiency? Exactly what happens when you try to transmit on
> 10m with an antenna resonant for 20m? Or vice versa? Is there a
> measurement for resonance analogous to antenna efficiency or SWR?
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> Can anyone explain this concept for me? I know the formulas, but I
> don't have a grasp of it.
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> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/

>
>
> Sent via Deja.com
> http://www.deja.com/

2821. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 12:39:41 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <960oe5rde1@slb0.atl.mindspring.net>
Source record: 170594

Cecil:

[snip]
> multiple turns. (The square of the turns is more effective
> when the turns don't equal one. :-)
> --
> http://www.mindspring.com/~w6rca
[snip]

Now there's a man who understands inductance!

Best,

-Peter K1PO

2822. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 13:19:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A83EE6B.C8FCBC3D@IEEE.org>
Source record: 170595

Reg Edwards wrote:
>
> All that's needed is a ferrite rod or ring wound with twin, multi-strand, 18
> gauge speaker wire. This has Zo roughly 150 ohms.
>
> Optimum Zo for the winding is the geometric mean of the two terminations.
> For example, Sqrt(50*450) = 150 ohms.

Yes, but most 450 ohm line carries a high SWR. So the two terminations
are NOT 50 and 450 ohms. With a high SWR, it is guaranteed that the
impedance looking into the 450 ohm feedline will NOT be 450 ohms.

I design my systems so the second impedance termination is between 25
and 100 ohms, closer to 50 ohms than anything else. Thus, for my antenna
system designs, the Z0 of the feedline used for winding the choke should
be close to SQRT(50*50) = 50 ohms.
--
http://www.mindspring.com/~w6rca

2823. Re: CFA ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 13:31:35 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <XiSg6.291103$hD4.70669422@news1.rdc1.mi.home.com>
Source record: 170596

A test mast ????
I thought you just set them on the ground.

William Lee

"M.J.Powell" <mike@pickmere.demon.co.uk> wrote in message
news:uZQJMDAyVcg6Ew0E@pickmere.demon.co.uk...
> In article <95s7t7nof1@nnrp2.phx.gblx.net>, Christopher Trask
> <ctrask@primenet.com> writes
> >William Lee <n5wrx@home.com> wrote:
> >: So .... what is up with the CFA antennas?
> >: Have they ever been developed to the point of retail sales for amatuer
use?
> >:
> >
> > Evereything that I know that has been published is listed in the
> >technical bibliography on the subject on my web page at:
> >
> > http://www.primenet.com/~ctrask
> >
> >There is a lot of activity going on at present. The Italian RAI replaced
> >a vertical with one, and it worked well enough that the vertical was
> >removed, or so the engineer says in the interview in Radio World
recently.
> >There are two under construction in Brazil, a couple here in the US, and
> >more in Europe. The Isle of Man installation is about to undergo (or
> >maybe already undergoing) testing after being delayed.
>
> The I.o.M. installation was refused planning permission recently, Chris.
> I believe they are now looking for another site, still in the I.o.M.
>
> A test mast is being constructed near Cosford in the UK midlands.
> Engineers from BBC, Merlin, Crown will be invited to inspect and monitor
> tests. Frequency probably 972 kc/s.
>
> Mike
> --
> M.J.Powell

2824. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 13:40:34 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A83F352.B3C77D89@mwci.net>
Source record: 170597

Peter O. Brackett wrote:

> And so... a "resonant" antenna is one that is operated at it's natural
> frequency, while a non-resonant antenna is not. Resonant or not has very
> little, if anything, to do with radiation efficiency.

The antenna itself is often not resonant and does not need to be. It is the total "system" that is resonant. For example, suppose the xmtr sees a pure 50 + j0 ohms looking into the coax. The system is resonant, even if the system has moderate losses. The system includes impedance transforming LC networks, lumped and linear. There are no reactive volt-amperes being delivered to the coax and there are no reflections at the sending end of the coax. The radiated power is maximum.

Bill W0IYH

2825. Re: MFJ ? Vectronics ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 13:45:29 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3a83f4ca$0$1511$2a0ee87e@news.tdin.com>
Source record: 170598

```
MFJ owns Vectronics.

Mark

"Richard Friedman" <rchrd@rchrd.com> wrote in message
news:3A839E2E.396DB702@rchrd.com...
> MFJ has a 6 band vertical, MFJ-1796 listed for $209.95.
> Vectronics has the very same looking antenna,
> http://www.vectronics.com/vectronics/antennas/vec896.html
> for 199.95.
>
> Which is it? Is MFJ reselling Vectronics, or the other way around.
>
> Regardless, I've been hearing that MFJ verticals should be avoided.
> Especially in windy places. What do you think?
>
>
> --
> -=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-=-=-=
> | Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA
http://www.rchrd.com |
> | . Information Architect, Technical Communications, Sun
Microsystems |
> | . Instructor, Univ California Berkeley Extension
|
> -=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
-=-=-=
```

2826. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 13:57:12 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A83F738.75A93C60@mwci.net>
Source record: 170599

William E. Sabin wrote:

> Peter O. Brackett wrote:
>
> > And so... a "resonant" antenna is one that is operated at it's natural
> > frequency, while a non-resonant antenna is not. Resonant or not has very
> > little, if anything, to do with radiation efficiency.
>
> The antenna itself is often not resonant and does not need to be. It is the
> total "system" that is resonant. For example, suppose the xmtr sees a pure 50 +
> j0 ohms looking into the coax. The system is resonant, even if the system has
> moderate losses. The system includes impedance transforming LC networks, lumped
> and linear. There are no reactive volt-amperes being delivered to the coax and
> there are no reflections at the sending end of the coax. The radiated power is
> maximum.
>
> Bill W0IYH

Correction:

The correct resistance may be some value other than 50 ohms, but the reactance is zero. There may be a reflection on the line, causing the input resistance to be other than 50 ohms, but if it pure resistance then the system is resonant and radiation is max, if the xmtr can deliver the prescribed watts to that value of resistance.

Bill W0IYH

2827. KLM 13 el 2m beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 13:58:07 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3a83f7bb$0$1498$2a0ee87e@news.tdin.com>
Source record: 170600

I have gotten a used KLM (I am told) 2m beam from a friend, but have no documentation. The boom is about 23 feet long; there are 11 passive elements made of small diameter aluminum rod. There are 2 active elements made of aluminum tubing with some sort of phasing (small diamter coax loop and aluminum strips) between them.

I'm looking for identification, and if possible documentation on this antenna. One of the passive elements is broken, but it shouldn't be too hard to find replacement rod. The insulators that hold the driven elements are broken and need to be replaced. With KLM out of business, is there any chance of finding replacements? If not, I don't think it would be too hard to fabricate something, but I'd like the documentation to see how everything is supposed to go together.

73,
Mark, N8ME

2828. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 14:43:15 UTC
From: richardharrison@webtv.net
Message-ID: <28302-3A840203-6@storefull-111.iap.bryant.webtv.net>
Source record: 170602

Richard Clark wrote:
"A toroid with ANY conductor through it has satisfied the one turn requirement and this is simply because there isn`t a requirement."

That`s right. We remember the memory cores most computers used in the beginning with their myriad of tiny doughnuts having a criss-cross of wires strung through them, each making a single pass. It took a sum of excitations for enough magnetizing force to flip the polarity of a core.

But, Cecil measured reaction from passing a wire straight through a toroid as opposed to wrapping it around a toroid. The wrap produced a bigger reaction. The wrap must have been better coupled to the core.

We use clamp-on a-c ammeters and know to split the wires apart and clamp around one or the other. It`s calibrated that way and we have a complete conductive circuit with all parts located well within a tiny fraction of a wavelength.

B. Whitfield Griffith, Jr. says in "Radio-Electronic Transmission Fundamentals":
Figure 27-6 shows a conductor which passes through a metal ring. Current flows in the ring in the direction indicated by the current arrows, and the total value of this current over the entire circumference of the ring is equal to the current in the conductor. The direction in which the current in the ring is flowing is known as the "toroidal" direction; a toroid is something shaped like the surface of a doughnut.

Radio-frequency currents naturally tend to follow the path which has the lowest inductive reactance. For this reason, the "going" and "return" currents tend to stay as close to each other as possible, so that the loop around which the current flows encloses the smallest possible area."

The above means a wire straight through a toroid can impart or receive the energy to or from the core. Wrapping around may actually increase the exchange. I wonder if the first complete turn around a core is more effective than subsequent turns?

Best regards, Richard Harrison, KB5WZI

2829. tuner help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 15:04:04 UTC
From: rdalton1 <rdalton1@postoffice.swbell.net>
Message-ID: <YFTg6.351$hA1.246479@nnrp3.sbc.net>
Source record: 170601

I't been years since I've built an antenna tuner(forgotten how)Anyone have a schematic
for one?Prefer six meters,but any basic schematic would be greatly appreciatedThanks.....
Richard kc5gjy

2830. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 15:47:08 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <0iUg6.1929$Pg3.136731@bgtnsc06-news.ops.worldnet.att.net>
Source record: 170603

<jason_hsu@my-deja.com> wrote in message news:95vt3n$48h$1@nnrp1.deja.com...
> I realize that this is a dumb newbie question, but I don't fully
> understand antenna resonance.
>
> I know that is issue is separate from SWR, as SWR only applies to the
> impedance match between the antenna and transceiver. I know that you
> can have a low SWR in spite of a nonresonant antenna (because the
> radiation, ground, and conductive resistance of the antenna add up to
> 50 ohms) or a high SWR in spite of a resonant antenna (like a 1/2
> wavelength vertical antenna without the appropriate matching for the
> stratospheric antenna resistance).
>

Jason:

These are excellent questions!

As many have already stated, an antenna is resonant when the reactive component of its feedpoint or input impedance is zero. In this case, the antenna feedpoint impedance is purely resistive. A linear dipole will have many resonant frequency points if you measure or calculate impedance as a function of frequency. In a free space situation, a linear dipole will exhibit its first resonant frequency at a point where the dipole is approximately 1/2 wavelength long. Theoretically, its resonant resistance would be approximately 73 ohms. If you were to increase the operating frequency, there would be other resonant frequency points but the resonant resistance would be much higher.

Your statement on SWR is correct, SWR is simply a measure of the impedance mismatch of the antenna feedpoint impedance with respect to the characteristic impedance of the feedline.

>
> Does antenna resonance affect radiation resistance and thus affect
> antenna efficiency? Exactly what happens when you try to transmit on
> 10m with an antenna resonant for 20m? Or vice versa? Is there a
> measurement for resonance analogous to antenna efficiency or SWR?
>
> Can anyone explain this concept for me? I know the formulas, but I
> don't have a grasp of it.
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>

>
> Sent via Deja.com
> http://www.deja.com/

The antenna resonance does not "affect" the antenna efficiency. The antenna efficiency is a function of the loss in the antenna structure. Efficiency can be determined from knowing the antenna's radiation resistance and its loss resistance, both determined at the antenna feedpoint. The total feedpoint resistance is equal to the radiation resistance plus the loss resistance. The total power delivered to an antenna is a direct function of the antenna's feedpoint impedance8: Power = |I|^2 R. Knowing the total feedpoint resistance (Rt) and the total feedpoint radiation resistance (Rr), the efficiency is simply equal to Rr/Rt. The power delivered to Rr is the power radiated Pr = |I|^2 Rr. A dipole antenna near 1/2 wavelength long will have a radiation efficiency (Pradiated/Pdelivered) near 95 - 98%. As the operating frequency is lowered, the antenna becomes smaller wrt the wavelength and the total feedpoint resistance decreases and the feedpoint reactance increases. This significantly increases the impedance mismatch between the feedline and the antenna making power delivery to the antenna a problem. Less total power is delivered to the antenna as SWR increases, assuming the total forward power arriving at the antenna remains constant. At the same time, as frequency is lowered, the loss resistance becomes a larger component of the total feedpoint resistance and the antenna efficiency decreases. These two factors are the significant problems with reducing antenna size: Delivering power to the antenna becomes a problem while at the same time, radiation efficiency decreases.

2831. Stacked 5 eleme

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 16:36:16 UTC
From: Christopher Wade Davis <shag931@ficom.net>
Message-ID: <3A841C7B.9130C0ED@ficom.net>
Source record: 170604

Need info for the old High Gain stacked 5 element beam

2832. Re: What is antenna resonance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 17:14:14 UTC
From: richardharrison@webtv.net
Message-ID: <28301-3A842566-29@storefull-111.iap.bryant.webtv.net>
Source record: 170605

Jason Hsu wrote:
"I don`t fully understand resonance."

We all have knowledge gaps.

Zero reactance, that is a balance between an antenna`s inductance and its capacitance, is resonance.

An antenna`s resonance depends on its size, configuration, and environment.

SWR is due to reflected energy. A matched dummy load produces no reflection. There are traveling-wave antennas (usually long) which do their things on the way to and from a dummy load, and these usually have no standing waves.

A 1/2-wavelength antenna has a large SWR on the antenna itself. The wave fed the antenna exhausts its guiding conductor at its end before the wave itself is exhausted. There is energy remaining in the incident wave to be reflected as a return wave. The interaction of incident and reflected waves produces a standing wave on the antenna as it would on a transmission line. Hopefully the loss of energy to free-space is larger in the antenna than in a transmission line.

Confirmation of the conditions causing SWR is had from the impedance variations at the antenna drivepoint caused by modifications at the open-circuit ends of the antenna.

SWR on the antenna is more a phenomenon than a problem for solution. SWR on a transmission line is a problem we might like to manage.

Conductive (copper loss) resistance in an antenna is rarely a problem, even if the conductor may be a steel tower. Loss resistance should be small as compared with the radiation resoistance. Ground return loss can be a big loser, but should be made small by design. The power fed to an antenna is spent on useful load and losses in proportion to their resistances. Keep the losses low.

An end-fed 1/2-wave antenna has a high drivepoint resistance. Whether it has reactance or not depends on whether it is really resonant.

!/2-wave is not the only resonant length. There are any number of frequencies of resonance for the same piece of wire. They are harmonically related. At the lowest of these (and all the others) the reactance becomes zero at the feedpoint. This repeats at twice the frequency, three times the frequency, etc.

Electrically, a 1/4-wave and electrically, a !/2-wave are shorter in a wire than their physical free-space lengths. How much shorter depends on diameter to length ratio of the antenna wire, and to a phenomenon called end effect (due to that open-circuit at the wire-end, again). Ed Laport gives tables for shortening due to length to diameter ratio (his way is upside down for me) in "Radio Antenna Engineering".

Stratospheric antenna radiation resistance is not a world-shaking problem. It may be inconvenient, but a simple parallel resonant circuit can be designed to include the high-resistance radiator and do very well.

Feedpoint resistance is a tangential factor in antenna loss. The key point is the ratio between load resistance and loss resistance. Keep it big.

What happens when you transmit on twice the frequency an antenna was designed for? It depends on the original design. For sure, the radiation pattern will change, and unless the antenna is of the traveling-wave type, the drivepoint impedance will change too.

At a harmonic frequency an antenna may again be resonant, that is it has no reactance at its terminals. But, if a 1/4-wave vertical is to become a 1/2-wave vertical, it will need to be fed more voltage and less current to radiate the same power.

Best regards, Richard Harrison, KB5WZI

2833. Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 17:40:29 UTC
From: dmensing@my-deja.com
Message-ID: <961a2b$9ij$1@nnrp1.deja.com>
Source record: 170606

I want to mount my Hamstick HF antenna on my 1995 Dodge Caravan and am looking for suggestions. As I see it there are 3 main choices:

(1) Attach a ball mount somewhere on the side of the van. (What is the best location for such a mount?)

(2) Use a multi magnet mount on the roof of the van. (This will put the antenna very high. Good for RX/TX, bad for bridges and trees.)

(3) Use a gutter mount. (Same plus and minus as (2) above.)

I am leaning towards (1) but am timid about drilling into the body of the van. Also, I'm really not sure of the best location for the ball mount. (Left or right side, high or low, toward the rear or further up the side of the van.)

I'd like to hear from anyone who has experience with HF antenna mounts on a Caravan.

Thanks, Dave, N2PSH

Sent via Deja.com
http://www.deja.com/

2834. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 18:02:43 UTC
From: BamBam <kl0an@my-deja.com>
Message-ID: <961bbr$ap2$1@nnrp1.deja.com>
Source record: 170607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

My gawd.. I got a headache trying to decipher this code..

One word.. SPELLCHECK!!

In article <95hd5jsdb1@news.efn.org>,
mike@efn.org wrote:
> HI
> i ues a Screwdriver off the back of my moble home it works very will
> it stick up pass the top of the roof it is only up abt. 6ft. of the
> grownd so i can take it down for use on the VAN . i thank one of the
> reason it work so good is the hold moble home is the grownd plan steel
skin.
> to take off just undo power plug (power for tunning Ant.) amd lift off
> I thank you would need some kind of grownd plan a long wire or some
> thing
>
> In article <9528eagcs1@nnrp1.deja.com>, jason_hsu@my-deja.com
says...
> >
> >Some of the questions I have include:
> >1. Can I use one if I only have 8 feet of clearance on the small
patio
> >(8 feet wide, 8 feet tall, 6 feet wide) outside my sliding door? Is
it
> >possible to mount the antenna at a slant? I want to hear about any
> >creative solutions from you.
> >2. What type of mount/tripod would be appropriate? (I don't have a
> >railing.)
> >3. How quickly can I assemble and disassemble the antenna? (For
> >stealth and security reasons, I need to remove the antenna when I am
> >not operating.)
> >4. Which versions (original DK-3, ElectraSlide, etc.) of the
> >Screwdriver are most appropriate for me? What advantages do the more
> >expensive versions have over the original? Can some versions (like
the
> >D&K KH-600 HF MOBILE ANTENNA) really operate on 160m?
> >
> >SOME BACKGROUND:
> >I am seriously considering a Screwdriver antenna for operating HF
from
> >my ground floor apartment (no big trees or bushes close enough to
> >conceal wires and keep them out of the way of people or dogs passing
> >by). A mobile antenna would be less cumbersome to work with than a
big

> >wire antenna. The Screwdriver seems to be the best antenna for me.
> >
> >I have had modest success with Hamsticks I am borrowing, but I know
> >that Screwdrivers are more efficient. Also, Screwdrivers are multi-
> >band and are easier to tune (due to the automatic tuning aspect).
Has
> >anyone used a Screwdriver antenna for non-mobile operation?
> >
> >I was considering a Texas Bugcatcher, but I am not sure about the
> >quality of the version from Texas Radio Products, and the version
from
> >GLA Systems is too expensive. Screwdriver antennas are almost as
> >efficient, and several versions sell for near or below $200.
> >
> >--
> >Jason Hsu, AG4DG
> >jason_hsu@@@@@@@@@@planetmail.com
> >http://www.bigfoot.com/~jason_hsu/
> >
> >
> >Sent via Deja.com
> >http://www.deja.com/
>
>

--
Don't Sweat the Petty Things.
Don't Pet the Sweaty Things.

Sent via Deja.com
http://www.deja.com/

2835. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 18:12:43 UTC
From: "R. Steve McKamey, P.E." <mckameys@issi-hsv.com>
Message-ID: <HrWg6.13969$fk2.499506@e3500-chi1.usenetserver.com>
Source record: 170609

Mobile mag mount CB antennas are generally base loaded so you would have to extract the loading coil from the base and run the whip directly to the connector or feed line. The next thing you would have to do is trim it to 5/8, 1/2, or 1/4 wave for your design frequency (most broadband 2m antennas use 146.000 MHz). It is not an impossible job but messy if the base doesn't want to come apart easily. A more common conversion is CB to 10 meters. Here you only have to cut the antenna length down a bit.

Good Luck & 73

Steve (KQ4BM)
"Frizz" <none@none.com> wrote in message
news:95svlmnmi1@bob.news.rcn.net...
> OK, I have one of these little things from a long time ago when I could
only
> really listen to CB:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1211275066
>
> Would it be at all possible to rip the existing antenna out and build one
> for 2 meters into it? The reason I want to do this is that I have this
same
> antenna mounted on the side of my window of my house, painted to match the
> outside of it, and it is perfectly hidden from everyone (this is a plus
> since I can't have any outdoor antennas). Would this be an easy project
or
> would this body be too short? I am currently running a discone in my
attic
> but a crappy satellite and cable television install has left me unable to
> use any of my radios until I can re-run and unscrew-up what the cable and
> satellite guys did due to TVI. This antenna looks perfect and already has
a
> nice out-of-the-way mounting space. Can I do it? Any suggestions are
> welcome. Thanks and 73~~!!!
>
> KG4IVT At H O T M A I L dot C O M
>
>

2836. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 18:22:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A84355A.A82BE47B@IEEE.org>
Source record: 170608

dmensing@my-deja.com wrote:
> I am leaning towards (1) but am timid about
> drilling into the body of the van. Also, I'm
> really not sure of the best location for the ball
> mount. (Left or right side, high or low, toward
> the rear or further up the side of the van.)

Best place for the ball mount would be dead center of the
top of the van.
--
http://www.mindspring.com/~w6rca

2837. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 19:11:35 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A8440E7.AE6C5E97@oio.net>
Source record: 170610

Dave,
Another laternative would be to mount the Hamstick
on the rear bumper using a mast to get it above the roof
line. Not the 'best' way of doing it, but still a good
alternative. It would also give you some means of
adjusting how high above the van it extends...
'Doc

2838. Re: Details on why ground plane is needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 19:17:06 UTC
From: richardharrison@webtv.net
Message-ID: <15284-3A844232-21@storefull-113.iap.bryant.webtv.net>
Source record: 170611

Jason Hsu wrote:
"It seems to me that there would be a VERY high resistance between an antenna and a point in the far field of the antenna."

You recall that resistance through matter is equal to its length times its resistivity divided by its cross-sectional area.

The distance from an antenna is a radius. At high frequencies, the earth`s crust is only shallowly penetrated by a radio wave. Out to a certain radial distance the h-f conductor takes the form of a big pie crust centered around the antenna. The thickness is more or less uniform depending on some variation in soil conductivity within the crust.

As an approximation we can say that a circumference of constant depth grows at two times pi times the radius, this is the same as pi times the diameter. Our soil cross section grows at the rate of 2pi times the radius.

Our conductance is growing more than 6 times faster than the distance from our antenna. In a short distance, the measured resistance to any point at any distance from the antenna would be very nearly the same, no matter how far away. This is one reason you soon hit a point of diminishing returns in extending antenna ground radials.

Best regards, Richard Harrison, KB5WZI

2839. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 20:19:36 UTC
From: atkes@imap1.asu.edu
Message-ID: <961jco$3l0$1@news.asu.edu>
Source record: 170612

Reg Edwards (g4fgq.regp@btinternet.com) wrote:
: > If the coax feeder is 1/4-wavelength long and the braid is properly
: grounded
: > at the bottom end there will be a very high impedance at the top and very
: > little current will flow into the braid.
: >
: > Will this prevent radiation from the feeder just as the choke balun is
: > intended to do?
: ================================
: Why have none of the experts, antenna designers, and old wives answered this
: question ? Its been here for several days.
: ----
: Reg, G4FGQ

Reg,

I am not in one of the listed categories, but the answer is no. That is, with or without a choke balun, tuning the outside of the feedline to be resonant at the driving frequency is asking for feedline radiation. Even with no current at the feedpoint end of the outside of the coax, any unbalanced fields on any part of the feedline will induce currents in the feedline and since it is resonant it will respond substantially. A more sensible arrangement is a choke balun and a nonresonant length feedline. If you really must feed your antenna your way, I would suggest an additional choke balun at the point where the coax is connected to your high quality ground.

73 Kevin w9cf

2840. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 20:38:16 UTC
From: rwclark@seanet.com
Message-ID: <3a843bf3.853688669@news.seanet.com>
Source record: 170613

On Thu, 08 Feb 2001 21:29:28 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> Shame on you. A toroid with ANY conductor through it has satisfied
>> the one turn requirement and this simply because it is not a
>> requirement. The physics of it is that a flux line must be broken by
>> the media, there is no 360, 350, 180, or 90 degree requirement. This
>> was rendered into core memory decades ago without any ambiguities of
>> partial turns.
>
>I thought so too, Richard, until I measured it. Let's say we have a
>toroid with a one inch by one inch cross section. A 360 degree loop
>is in contact with the toroid for five inches. A straight through run
>is in contact with the toroid for one inch. Exposing the field to
>five inches of ferrite apparently has a greater effect than exposing the
>field to one inch of ferrite. The FB-77-1024 core does not meet the
>inductance spec unless a 360 degree loop is used. I know, I tested it
>and was amazed that conventional wisdom, as I understood it, was wrong.

Hi Cecil,

Whenever someone describes having empirical results that go against
"conventional wisdom," it is in fact the empirical method that was at
fault.

For instance, to get a full 360 Degree wrap "could" involve the wire
penetrating the core twice. And yes, this would alter the observed
(expected, but naively so) results AND support "conventional wisdom."
That is, if the wire's 360 path starts in passing through the core, it
necessarily must end passing through the core once again. If on the
other hand the pass through the core starts at the 180 degree mark
(rather than the 0 degree mark), there would be only one penetration
of the core. You have not elaborated enough detail for me to
distinguish between the two.

Hence, I must judge that the confounding of "conventional wisdom" runs
a 50% chance of being an example of "conventional wisdom" proven.
Empirical results do not in and of themselves constitute proof of
anything without examining the method. I have calibrated many
Standard Inductors used expressly for these applications. There is
very little variation in the results when they are correctly applied.
Can the quality of the results vary dramatically? Yes, and these are
perfect opportunities to learn how you failed to observe the
limitations and usage constraints. None of this presents a failure of
the "conventional wisdom" however.

73's
Richard Clark, KB7QHC

2841. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 21:12:05 UTC
From: Skipp has repeaters too <skipp@pilot.ucdavis.edu>
Message-ID: <961mf5ppt1@woodrow.ucdavis.edu>
Source record: 170614

Yes, you can rebuild a CB base loaded coil up to a two meter 5/8 wave antenna as descibed in many a handbook and the ARRL Publication "FM & Repeaters for the Radio Amateur."

It would only be a task for the real experimenter. I did one once and everything you change effects everything else. You use only the original coil form and whip, hoping the whip is long enough.

A much better bet would be to use a 6 meter base loaded quarter wave antenna. Many scanner and 6 meter 1/4 wave antennas will work as 5/8 - 3/4 wave on 2 meters with little or no mods. I found one once that worked both places without any changes... 6 and 2 meters sold as a scanner receive antenna from Antenna Specialists.

Hope that helps

cheers
skipp@pilot.ucdavis.edu

http://sonic.ucdavis.edu check out my amatuer radio pages.

: Frizz <none@none.com> wrote:
: OK, I have one of these little things from a long time ago when I could only
: really listen to CB:
: http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1211275066

: Would it be at all possible to rip the existing antenna out and build one
: for 2 meters into it? The reason I want to do this is that I have this same
: antenna mounted on the side of my window of my house, painted to match the
: outside of it, and it is perfectly hidden from everyone (this is a plus
: since I can't have any outdoor antennas). Would this be an easy project or
: would this body be too short? I am currently running a discone in my attic
: but a crappy satellite and cable television install has left me unable to
: use any of my radios until I can re-run and unscrew-up what the cable and
: satellite guys did due to TVI. This antenna looks perfect and already has a
: nice out-of-the-way mounting space. Can I do it? Any suggestions are
: welcome. Thanks and 73~~!!!

: KG4IVT At H O T M A I L dot C O M

2842. smashed longwire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 21:15:39 UTC
From: sjwoodr@my-deja.com
Message-ID: <961mlh$lq7$1@nnrp1.deja.com>
Source record: 170616

My father wishes to use a longwire antenna for QRP HF operation. My understanding is that most of the RF is carried on the outer edge of the anteanna. If this wire is smashed down through a window sill, what will the effect be on his transmission? Also, are there any concerns about RF in the shack from this antenna? His ground will be a 15-20 foot wire to a 8-foot grounding rod.

--steve, n9xbj

Sent via Deja.com
http://www.deja.com/

2843. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 21:22:10 UTC
From: richardharrison@webtv.net
Message-ID: <24999-3A845F82-45@storefull-115.iap.bryant.webtv.net>
Source record: 170618

Kevin, W9CF wrote:
"---tuning the outside of the feedline to be resonant at the driving frequency is asking for feedline radiation."

Any unbalanced fields, as you say, on any part of the feedline will induce currents in the feedline.

It is clearly excitable at its resonant frequency but should be short on excitation. The feedline is cross-polarized to avoid interaction with the radiator already.

I never tried Reg`s proposition but would expect no problems. So, there will be some feedline re-radiation. How much? I wouldn`t expect enough to worry about. I base that opinion on using many dipoles driven directly with coax with no balun at all which worked perfectly for my purposes, no feedback, no r-f burns, no reduction in radio range of significance, no deleterious effects at all.

Best regards, Richard Harrison, KB5WZI

2844. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 21:26:47 UTC
From: Mark Holden <msholden@ct2.nai.net>
Message-ID: <3A846097.D6262CF6@ct2.nai.net>
Source record: 170615
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

I haven't had the kind of problem you suggest is likely, but cost wasn't much of a consideration when they designed my Harris. It was built for Uncle Sam, and I'm told when it was new, it was slightly more expensive than a new Cadillac.

2845. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 21:27:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8460DE.17660CE2@IEEE.org>
Source record: 170617

Richard Clark wrote:
> You have not elaborated enough detail for me to
> distinguish between the two.

Here's what I said, Richard:

"... To be one turn, as defined by Amidon, the wire needs to form a
360 degree loop with one wire through the core. The difference between
a straight-through wire and one 360 degree loop is considerable."

> Hence, I must judge that the confounding of "conventional wisdom" runs
> a 50% chance of being an example of "conventional wisdom" proven.

Nope, read it again - "one wire through the core".

> None of this presents a failure of the "conventional wisdom" however.

I said it was a failure of conventional wisdom *as understood by me*.
Anybody want to perform the experiment and report back here?

With the 360 degree loop, five times as much wire is in contact with
the toroid as when the wire is run straight through. According to
my measurements, there is a difference. I used an FB-77-1024 core
in series with a 50 ohm resistor.
--
http://www.mindspring.com/~w6rca

2846. Wefax reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:10:24 UTC
From: monicadobbs@my-deja.com
Message-ID: <961ps8omf1@nnrp1.deja.com>
Source record: 170521

Hi

Does anyone have any tips on reducing interference on wefax reception. I am using an FRG-100, Wellbrook active loop antenna and WXSat. The antenna is connected using URM76 Low Capacitance cable. Wherever I position everything I seem to get a lot of interference. Could it be either the receiver not being up to it or the cable? I am new to all this so sorry if i'm being thick! Any help greatly appreciated.

Regards
Monica

Sent via Deja.com
http://www.deja.com/

2847. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:21:55 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A846D83.3E2C@bellsouth.net>
Source record: 170519

mkelly@powerup.com.au wrote:
>
> IIRC there was an article, years ago, about using one as
> a 5/8 wave antenna on 2m. It involved pulling off the coil
> cover and stretching the coil (I think!)
>
> Trouble is - as I found out) not all of them can have the
> coil cover slipped off easily as some are moulded right
> on to the coil and you run the risk of ruining the whole deal.

>
> The one here that worked was from RShack and had a grey
> fluted coil cover. Lots of help. I know. I know! :-)
>
> GL
>
> Murray
*
> **********

2848. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:23:22 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A846DDA.441C@bellsouth.net>
Source record: 170520

mkelly@powerup.com.au wrote:
>
> IIRC there was an article, years ago, about using one as
> a 5/8 wave antenna on 2m. It involved pulling off the coil
> cover and stretching the coil (I think!)
>
> Trouble is - as I found out) not all of them can have the
> coil cover slipped off easily as some are moulded right
> on to the coil and you run the risk of ruining the whole deal.

HA HA! Tell me about it! I DID ruin a coil trying to get the cover
off! LOL!

Jerry
K4KWH

>
> GL
>
> Murray

> **********

2849. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:24:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <961qkk$r4i$1@plutonium.btinternet.com>
Source record: 170524

Hi Cecil,

You do what everybody else does. You mess about until something works. And practically anything will work if you throw enough RF power at it. Then you sit down with a pencil and paper for a few minutes and concoct some story about what you think is happening. Imagination is a marvellous thing.

And EUREKA !

you've solved it. ;o)

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A83EE6B.C8FCBC3D@IEEE.org...
> Reg Edwards wrote:
> >
> > All that's needed is a ferrite rod or ring wound with twin,
multi-strand, 18
> > gauge speaker wire. This has Zo roughly 150 ohms.
> >
> > Optimum Zo for the winding is the geometric mean of the two
terminations.
> > For example, Sqrt(50*450) = 150 ohms.
>
> Yes, but most 450 ohm line carries a high SWR. So the two terminations
> are NOT 50 and 450 ohms. With a high SWR, it is guaranteed that the
> impedance looking into the 450 ohm feedline will NOT be 450 ohms.
>
> I design my systems so the second impedance termination is between 25
> and 100 ohms, closer to 50 ohms than anything else. Thus, for my antenna
> system designs, the Z0 of the feedline used for winding the choke should
> be close to SQRT(50*50) = 50 ohms.
> --
> http://www.mindspring.com/~w6rca

2850. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:26:19 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <f8_g6.1023$8o4.137461@monger.newsread.com>
Source record: 170522

"Ian Jackson" <ianjackson@g3ohx.demon.co.uk> wrote in message
news:yImcPPAH0bf6Ewff@g3ohx.demon.co.uk...
> In article <jtcf6.12375$mA1.768025@bgtnsc06-news.ops.worldnet.att.net>,
> AMDX <AMDX@worldnet.att.net> writes
> > I'll bet Ian says al u min i um and spells smolder- s m o u l d e r.
;-)
> >
> > And another thing, we got rid of Clinton, when are you going to get
> >rid of
> >those silly wigs.
> >
> >
> >--
> >Mike Knowlton
> >Panama City Fl.
> >
> >
> Yes, more like 'allum-minny-um'. I spell 'colour' and 'labour' with a
> 'u', and there are two Ls in 'traveller'. I pronounce 'solder' as it is
> spelt (not 'sodder').

So did we 50 years ago <:-))

Roger (K8RI)

> As for wigs, I think that they are really mainly used for ceremonial
> appearences (I presume you are talking legal).
> However, I often prefer the American spelling of 'analyzer' and similar
> words (with a 'z').
> 73,
> Ian.
>
>

2851. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:32:10 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A846FEA.46C5@bellsouth.net>
Source record: 170523

Cecil,

You run a screwdriver, right? Get one of those ferrite cores from Radio Shack and wind 6 turns around a 1-1/2" dowel right at the antenna. I had the same trouble on the old wagon. This stopped it.

Jerry
K4KWH

Cecil wrote:
>
> Jerry Oxendine wrote:
> > 1. My 1972 Mustang kept causing me to be "Found on Road DEAD" and it
> > taught me how to spell F-O-R_D backwards: Driver Returning On Foot!
>
> I heard FORD stands for Fix Or Replace Daily.
>
> > I quickly returned to Chevrolet where I found reliable transport AND
> > I often could install an HF radio without doing ANYTHING about ignition
> > noise!
>
> My '96 GMC1500 pickup is the RF quietest vehicle I have ever owned.
> I can hardly tell by listening to my IC706 when I shut the engine off.
> Only problem is when I key up on 40m, the speedometer goes full scale.
> --
> http://www.mindspring.com/~w6rca

2852. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:41:34 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A84721E.6BD2@bellsouth.net>
Source record: 170525

Mark Keith wrote:
>
But I do have to say, some of
> the new ford stuff has been kinda funky. Some of the transmissions are
> junk for one thing. IE: mustangs,tauruses, etc, had alot of these
> problems.

A few months after I bought my '87 Chevy, my pastor bought an '87 Taurus. He had trouble from the git-go. My Chevy just kept going. He had trouble for the life of the car. I told him one day when he was telling me all the trouble he had had with his Ford to jack it up and put a Chevy under it. LOL! When he was about to trade/buy another car, I mentioned that my car had had NO problems nor had it stranded me EVER. I thought, as disgusted as he sounded, surely he wouldn't make the same mistake. He bought a '96 Taurus! LOL! Guess what happened. Two trannies, fuel pump, radiator leak and various other problems that left him walking. He said, well I guess you're gonna tell me 'I told you so'. I just shrugged my shoulders--what could I say? I just said to just look at my old Chevy--170,000+ (at that time) and still going. I don't *think* he'll make that mistake again. LOL!

73

Jerry
K4KWH
> >.
> MK
> --
> http://web.wt.net/~nm5k

2853. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:44:18 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <6p_g6.293325$hD4.70870006@news1.rdc1.mi.home.com>
Source record: 170526

Dave, use a trailer hitch and make a bracket to elevate the antenna's base
base to at least 1/2 way up the car body but away from it about 12 inches.
This would be easy to remove and leave no holes in the body. A fancy one
would even fold or tilt rearward to allow opening the rear door.

William Lee

<dmensing@my-deja.com> wrote in message news:961a2b$9ij$1@nnrp1.deja.com...
> I want to mount my Hamstick HF antenna on my 1995
> Dodge Caravan and am looking for suggestions. As
> I see it there are 3 main choices:
>
> (1) Attach a ball mount somewhere on the side of
> the van. (What is the best location for such a
> mount?)
>
> (2) Use a multi magnet mount on the roof of the
> van. (This will put the antenna very high. Good
> for RX/TX, bad for bridges and trees.)
>
> (3) Use a gutter mount. (Same plus and minus as
> (2) above.)
>
> I am leaning towards (1) but am timid about
> drilling into the body of the van. Also, I'm
> really not sure of the best location for the ball
> mount. (Left or right side, high or low, toward
> the rear or further up the side of the van.)
>
> I'd like to hear from anyone who has experience
> with HF antenna mounts on a Caravan.
>
> Thanks, Dave, N2PSH
>
>
> Sent via Deja.com
> http://www.deja.com/

2854. Re: smashed longwire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 22:45:18 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <2q_g6.293329$hD4.70870679@news1.rdc1.mi.home.com>
Source record: 170527

If the window seal is non-conductive there is no effect.

William Lee

<sjwoodr@my-deja.com> wrote in message news:961mlh$lq7$1@nnrp1.deja.com...
> My father wishes to use a longwire antenna for QRP HF
> operation. My understanding is that most of the RF is
> carried on the outer edge of the anteanna. If this
> wire is smashed down through a window sill, what will
> the effect be on his transmission? Also, are there
> any concerns about RF in the shack from this antenna?
> His ground will be a 15-20 foot wire to a 8-foot
> grounding rod.
>
> --steve, n9xbj
>
>
> Sent via Deja.com
> http://www.deja.com/

2855. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 23:10:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <961tcabom1@nntp9.atl.mindspring.net>
Source record: 170528

Reg:

Tsk, tsk Reg... there you go again, Cecil baiting!

I perceive that Cecil is a bit more of an engineer than your assesment. He messes about in the real world using the scientific method not simply imagination.

Perhaps unlike your own mathematical musings and algorithmic programming.

Perhaps within your "free" software you are simply adjusting the outputs of your programs to match some measurements, e.g a "table look up", and since the algorithms used by your programs are hidden from us mere mortals, those internal mathematical machinations perhaps really have no internal basis for our faith in their accuracy.

At least Cecil posts pictures of his antennas for us all to see, while you do not post the source code for your free programs. The uninitiated might be led to think that your programs are also the results of "imagination".

Sorry to be so iconoclastic, but... it's a valid question, how about sharing some of your programmed wisdom with us?

An engineer is a person who can do for a dollar [pound] what anyone one else would need 10 dollars to accomplish.

Now back to baluns...

I wonder, since in my prior posts on this thread wherein I was musing in a rambling fashion about current versus voltage baluns, I considered inductances, and capacitances, but no losses, either winding or core.

If one were to consider winding and core losses, in addition to inductances and capacitances, then what is the best design for a balun, two in hand or separate windings? Voltage or current balun, and why?

i.e. which design yeilds the highest common mode rejection, with the least power losses, per dollar [or pound] expended?

=Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:961qkk$r4i$1@plutonium.btinternet.com...
> Hi Cecil,
>
> You do what everybody else does. You mess about until something works. And
> practically anything will work if you throw enough RF power at it. Then you

> sit down with a pencil and paper for a few minutes and concoct some story
> about what you think is happening. Imagination is a marvellous thing.
>
> And EUREKA !
>
> you've solved it. ;o)
>
> --
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A83EE6B.C8FCBC3D@IEEE.org...
> > Reg Edwards wrote:
> > >
> > > All that's needed is a ferrite rod or ring wound with twin,
> multi-strand, 18
> > > gauge speaker wire. This has Zo roughly 150 ohms.
> > >
> > > Optimum Zo for the winding is the geometric mean of the two
> terminations.
> > > For example, Sqrt(50*450) = 150 ohms.
> >
> > Yes, but most 450 ohm line carries a high SWR. So the two terminations
> > are NOT 50 and 450 ohms. With a high SWR, it is guaranteed that the
> > impedance looking into the 450 ohm feedline will NOT be 450 ohms.
> >
> > I design my systems so the second impedance termination is between 25
> > and 100 ohms, closer to 50 ohms than anything else. Thus, for my antenna
> > system designs, the Z0 of the feedline used for winding the choke should
> > be close to SQRT(50*50) = 50 ohms.
> > --
> > http://www.mindspring.com/~w6rca
>
>

2856. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 23:28:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A847D00.362B466E@IEEE.org>
Source record: 170529

Reg Edwards wrote:
> You do what everybody else does. You mess about until something works. And
> practically anything will work if you throw enough RF power at it. Then you
> sit down with a pencil and paper for a few minutes and concoct some story
> about what you think is happening. Imagination is a marvellous thing.

That's not what is happening, Reg. I very deliberately feed my antenna systems at a current maximum point while ensuring that the impedance seen at the current maximum point is neither too high nor too low. I will not use an antenna system with a system feedpoint impedance less than 25 ohms or greater than 100 ohms which limits my 50 ohm SWR to less than 2:1 and makes my balun/choke function easy to design.

I am the only ham I know of who goes to such lengths in using the approach I use. That approach has been reasoned out over many years. Please try to understand. Here's an email I received today and is a typical one of many.

****
I just read your article on the No Tuner antenna, and the chart for the current maximum points for ladder line was most interesting. I have not seen this presented this way before. Excellent. ... The length of the feeders and current relationship that you talk about is excellent. ... Very nice article, and the ladder line is the only way to go.
****
--
http://www.mindspring.com/~w6rca

2857. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 23:39:39 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A847FBB.7E2C0942@IEEE.org>
Source record: 170530

Jerry Oxendine wrote:
> You run a screwdriver, right? Get one of those ferrite cores from Radio
> Shack and wind 6 turns around a 1-1/2" dowel right at the antenna. I
> had the same trouble on the old wagon. This stopped it.

Are you talking about the coax or the screwdriver motor wires?
--
http://www.mindspring.com/~w6rca

2858. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 23:55:51 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Js%g6.551$vV4.3907@newsfeed.slurp.net>
Source record: 170531

.. Richard suggests a good experiment that I used to demonstrate induction and turns-ratios at mains frequencies to my students:

Clamp your c-o ammeter around the conductor in the usual way. Note reading. Use a toaster or heater or other large current-draw load.

Wrap the conductor around the clamp one turn. Note reading.

Ditto 2 turns. Et cetera.

Report to us your results.

--

73, Dave, K3BHJ

2859. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-09 23:55:51 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Rt%g6.553$vV4.4187@newsfeed.slurp.net>
Source record: 170532

.. Richard suggests a good experiment that I used to demonstrate induction and turns-ratios at mains frequencies to my students:

Clamp your c-o ammeter around the conductor in the usual way. Note reading. Use a toaster or heater or other large current-draw load.

Wrap the conductor around the clamp one turn. Note reading.

Ditto 2 turns. Et cetera.

Report to us your results.

--

73, Dave, K3BHJ

2860. Re: Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 00:00:19 UTC
From: Alex Malyava <alex@malyava.com>
Message-ID: <nw%g6.13180$1%2.668230@sjc-read.news.verio.net>
Source record: 170533

"Rudy Marcelletti" <rudym@net-link.net> wrote in message
news:3a6c4e6c$0$35019$44a10c7e@news.net-link.net...
> What is the best way to make a short, multi band dipole to cover at least
10
> through 40 meters, and possibly 80 meters. I plan to feed at center with
> 450 window line direct to MFJ 986 line flattener.

Hi guyz !
Do you have any idea or links about short, no longer than 5+5 meters,
multiband dipole to cover at least 10m and 20m ? The 10-15-20 solution is
better ... What about 10-12-15-17-20 ?
I want to use it indoor and sometime outdoor ...
I guess it gonna be dipole with traps or set of parallel dipols or some
wide-band dipole ...

Alex US4LNE / W7

2861. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 00:43:31 UTC
From: rwclark@seanet.com
Message-ID: <3a847970.869429633@news.seanet.com>
Source record: 170534

On Fri, 09 Feb 2001 15:27:58 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> You have not elaborated enough detail for me to
>> distinguish between the two.
>
>Here's what I said, Richard:
>
>"... To be one turn, as defined by Amidon, the wire needs to form a
>360 degree loop with one wire through the core. The difference between
>a straight-through wire and one 360 degree loop is considerable."
>
>> Hence, I must judge that the confounding of "conventional wisdom" runs
>> a 50% chance of being an example of "conventional wisdom" proven.
>
>Nope, read it again - "one wire through the core".
One wire can go through the core many times. I presume you mean one
wire through the core once, this was the initial ambiguity.
>
>> None of this presents a failure of the "conventional wisdom" however.
>
>I said it was a failure of conventional wisdom *as understood by me*.
>Anybody want to perform the experiment and report back here?
>
>With the 360 degree loop, five times as much wire is in contact with
>the toroid as when the wire is run straight through. According to
>my measurements, there is a difference. I used an FB-77-1024 core
>in series with a 50 ohm resistor.

Hi Cecil,

Your objections are well taken, and I offer my apologies for the
misread.

As I now see it, this is not an issue of turns completed in terms of
toroidal properties (the "conventional wisdom" of standard magnetic
linked transformer windings), but rather the loss mechanism of a
ferrite media acting as a resistive component of a Z finding. This,
of course, mimics the toroidal properties that are sensitive to turns
count (when we are trying to determine the L, and by extension Xl) in
that turn counts squared multiply the loss, but the variations you are
exploring are probably less in the L (and by extension the Xl) than
they are in the R.

You are still holding your cards too close to the vest, why don't you tell us what the values are for a straight wire v. complete turn wire? This time I made an effort to look at your postings and find no data. Is it in the standard R +/- jX format , or simply a Z? If simply the Z; then, yes, you do need others to conduct the experiment.

73's
Richard Clark, KB7QHC

2862. test

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 03:24:50 UTC
From: N5NUG <n5nug@ix.netcom.com>
Message-ID: <3A84B482.E7AD91DB@ix.netcom.com>
Source record: 170535

```
test
--
Edward A. Goodman 214-505-6835 (cel) 214-352-4623 (off) ICQ 31510047
URL http://home.ix.netcom.com/~n5nug/index.html
```

2863. Re: VX-5R antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 04:07:01 UTC
From: ik7565@erols.com
Message-ID: <3A84BE65.9AC816F5@erols.com>
Source record: 170536

The MH-510 is a nice antenna but a little long (20") to be hanging off
your belt. I don't notice much difference except on 70cm where there's
about 3db of gain.

73 de KG4JLK

Rudy Marcelletti wrote:
>
> Anyone used the Madol (now Comet) tri-band 6/146/446 antenna and if so, how
> do you like it over the so called "convenient and inovative" 3 piece Yaesu
> antenna? Does any one make a 6 meter HT antenna (that works) with a SMA
> connector?

2864. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 05:01:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A84CB47.5B9AB65E@IEEE.org>
Source record: 170537

Richard Clark wrote:
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote:
> >Nope, read it again - "one wire through the core".

> One wire can go through the core many times. I presume you mean one
> wire through the core once, this was the initial ambiguity.

Human communications is surely strange. I would have bet that statement
was unambiguous. :-)

> You are still holding your cards too close to the vest, why don't you
> tell us what the values are for a straight wire v. complete turn wire?

Because I ran the experiment about a year ago and I don't remember the
values. Seems the impedance ratio was about three to one. I'll try to
perform the measurements again this weekend and post the results.
--
http://www.mindspring.com/~w6rca

2865. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 05:14:46 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <db6EOiEEkmdNAv2nwmMoMAsMLjhA@4ax.com>
Source record: 170538

On Fri, 09 Feb 2001 15:27:58 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> You have not elaborated enough detail for me to
>> distinguish between the two.
>
>Here's what I said, Richard:
>
>"... To be one turn, as defined by Amidon, the wire needs to form a
>360 degree loop with one wire through the core. The difference between
>a straight-through wire and one 360 degree loop is considerable."
>
>> Hence, I must judge that the confounding of "conventional wisdom" runs
>> a 50% chance of being an example of "conventional wisdom" proven.
>
>Nope, read it again - "one wire through the core".
>
>> None of this presents a failure of the "conventional wisdom" however.
>
>I said it was a failure of conventional wisdom *as understood by me*.
>Anybody want to perform the experiment and report back here?
>
>With the 360 degree loop, five times as much wire is in contact with
>the toroid as when the wire is run straight through. According to
>my measurements, there is a difference. I used an FB-77-1024 core
>in series with a 50 ohm resistor.

Hi Cecil,

Measured testing:

Fair-Rite 2643540001
Height: 1.125 in.
OD: .5625 in.
ID: 0.25 in.
Frequency: 20 MHz
Test Loop Z: 0 + j18
Test Loop through core Z: 135 + j90

specie unknown:
Height: 0.285 in.
OD: .1.14 in.
ID: 0.74 in.
Frequency: 20 MHz
Test Loop Z: 0 + j18

Test Loop through core Z: 11.2 + j40
Modified Test Loop through core Z: 11.5 + j38

the "Test Loop" consisted of 4 in. of #12 copper wire on a test adapter (which presents a residual inductance). The stiff wire presented a stable physical reference for the first test. The length allowed for testing the two divergent core types while meeting the requirements of the first test.

I first tested for proximal effects by varying the distance between a loose wound conductor passing through the core, and the core ID. I did this with both samples.

I then tested for a tightly wound turn (as opposed to the very loosely turned one above) using a shorter length of #16 copper wire for the second sample.

The results indicate very little variability in the first test for proximal effects. That is, the wire can pierce the core at radius 0 or at radius ID with little difference. Shortening the wire loop into a tight turn lead to less reactance and more resistance. However the difference between the two tests is barely out of the statistical noise.

73's
Richard Clark, KB7QHC

2866. Re: 2m from CB antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 05:25:37 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A84D0D1.915@wt.net>
Source record: 170539

Frizz wrote:
>
> OK, I have one of these little things from a long time ago when I could only
> really listen to CB:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1211275066
>
> Would it be at all possible to rip the existing antenna out and build one
> for 2 meters into it? The reason I want to do this is that I have this same
> antenna mounted on the side of my window of my house, painted to match the
> outside of it, and it is perfectly hidden from everyone (this is a plus
> since I can't have any outdoor antennas). Would this be an easy project or
> would this body be too short? I am currently running a discone in my attic
> but a crappy satellite and cable television install has left me unable to
> use any of my radios until I can re-run and unscrew-up what the cable and
> satellite guys did due to TVI. This antenna looks perfect and already has a
> nice out-of-the-way mounting space. Can I do it? Any suggestions are
> welcome. Thanks and 73~~!!!
>
> KG4IVT At H O T M A I L dot C O M

You can make the 2m from a cb antenna no problem, but you may have
trouble with that type of antenna at the house. It requires a good
ground plane to function properly. You might be better off making a 1/2
wave antenna instead. It requires no radials to function as the 5/8
does. But I have made a 2m 5/8 from a cb antenna. I slid the fluted
covering off and replaced the many windings with a coil for 2m. It ended
up only needing maybe 4-5 turns. Wasn't too big a deal, but does take a
little prying to get the cover loose on the type that will let you slide
it off. if you are trying to reduce TVI, a 5/8 ant with a poor radial
system is the last thing you want. The decoupling of the coax to the
antenna is poor. You want a well decoupled antenna that is well away
from the other feedlines. The TVI you have now is likely fundimental
overload which is fed to the tv on the shield of the coax leading to it.
MK
--
http://web.wt.net/~nm5k

2867. help HIGAIN DISCOVERER 7-1 40 METER ROTATABLE DIPLOE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 05:59:12 UTC
From: cf NI4L <cfox007@bellsouth.net>
Message-ID: <3A84D8B0.6CBE97C0@bellsouth.net>
Source record: 170540

hi
Does anyone have a manual for this rotatable dipole?
i need to know thw length for each for 40 meters.
If you are running one how does it preform? just picked up a used one
today. want to get it in the air and try it.
thanks chris ni4l

2868. stacking a 40 meter rotatoable dipole above a 6 elm 10 mtr beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 06:02:46 UTC
From: cf NI4L <cfox007@bellsouth.net>
Message-ID: <3A84D986.7027E179@bellsouth.net>
Source record: 170541

stacking a 40 meter rotatoable dipole above a 6 elm 10 mtr beam
what would be the minuim distance i could get by with?

2869. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 06:09:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A84DB2A.D4DB9F2D@eznec.com>
Source record: 170542

Thanks, Richard, for running the experiment. Your results mirror my experience.

I imagine that you'd start seeing the effect Cecil refers to if you used a very low permeability core, like type 2 or 6 powdered iron. In the extreme, as relative permeability approaches one, the core doesn't have any effect, so you'd definitely see an increase. But not with most ferrites.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> Hi Cecil,
>
> Measured testing:
>
> Fair-Rite 2643540001
> Height: 1.125 in.
> OD: .5625 in.
> ID: 0.25 in.
> Frequency: 20 MHz
> Test Loop Z: 0 + j18
> Test Loop through core Z: 135 + j90
>
> specie unknown:
> Height: 0.285 in.
> OD: .1.14 in.
> ID: 0.74 in.
> Frequency: 20 MHz
> Test Loop Z: 0 + j18
> Test Loop through core Z: 11.2 + j40
> Modified Test Loop through core Z: 11.5 + j38
>
> the "Test Loop" consisted of 4 in. of #12 copper wire on a test
> adapter (which presents a residual inductance). The stiff wire
> presented a stable physical reference for the first test. The length
> allowed for testing the two divergent core types while meeting the
> requirements of the first test.
>
> I first tested for proximal effects by varying the distance between a
> loose wound conductor passing through the core, and the core ID. I
> did this with both samples.
>
> I then tested for a tightly wound turn (as opposed to the very loosely

> turned one above) using a shorter length of #16 copper wire for the
> second sample.
>
> The results indicate very little variability in the first test for
> proximal effects. That is, the wire can pierce the core at radius 0
> or at radius ID with little difference. Shortening the wire loop into
> a tight turn lead to less reactance and more resistance. However the
> difference between the two tests is barely out of the statistical
> noise.
>
> 73's
> Richard Clark, KB7QHC

2870. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 08:56:55 UTC
From: "John D. Farr" <johnfarr@ro.com>
Message-ID: <zm7h6.651$4p.31621@e3500-chi1.usenetserver.com>
Source record: 170543

Dave: I attached a piece of angle between two of the bumper bolts and mounted a ball mount at the left hand corner of the van so the antenna has a 270 degree view of the world. I use a hustler, but I don't see why it wouldn't work for a hamstick if you can put it on a mast. I use no spring on the bottom and guy the mast with 1/8 inch nylon cord merely looped over the antenna and tied inside the rear door. I have a spring between the mast and the resonator, but I'm thinking about removing it. The 80m resonator wobbles pretty bad at high speeds. I use a quick disconnect on the bottom of the mast for easy removal at car washes and parking garages The rear door is completely accessible this way and the antenna can be viewed with the left had rearview mirror. Later vans do not have bolts showing like mine, but I don't know what year they changed. gl, John KC4ZXX

<dmensing@my-deja.com> wrote in message news:961a2b$9ij$1@nnrp1.deja.com...
> I want to mount my Hamstick HF antenna on my 1995
> Dodge Caravan and am looking for suggestions. As
> I see it there are 3 main choices:
>
> (1) Attach a ball mount somewhere on the side of
> the van. (What is the best location for such a
> mount?)
>
> (2) Use a multi magnet mount on the roof of the
> van. (This will put the antenna very high. Good
> for RX/TX, bad for bridges and trees.)
>
> (3) Use a gutter mount. (Same plus and minus as
> (2) above.)
>
> I am leaning towards (1) but am timid about
> drilling into the body of the van. Also, I'm
> really not sure of the best location for the ball
> mount. (Left or right side, high or low, toward
> the rear or further up the side of the van.)
>
> I'd like to hear from anyone who has experience
> with HF antenna mounts on a Caravan.
>
> Thanks, Dave, N2PSH
>
>
> Sent via Deja.com
> http://www.deja.com/

2871. Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 11:07:58 UTC
From: ke4qkn@aol.com
Message-ID: <20010210060758.03934.00000500@ng-mi1.aol.com>
Source record: 170544

Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the hobby. I am considering a lifetime membership but would like to hear some opinions from others first.

Mark
KE4QKN
EM60

"Hell, Columbus thought Cuba was China!!!" - Tully Mars

2872. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 11:58:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A852D00.5DCE2FB1@eznec.com>
Source record: 170545

The lossier the coax, the lower the SWR. Imagine if the coax has a great deal of loss. You send a signal down it and only a small fraction of the signal you send gets to the end. Only a small fraction of any reflected signal makes it back. So you see almost no reflected signal at the input, even if the output is badly mismatched. For example, if the SWR is, say, 1.7:1 at the load, you'll see 1.5:1 at the input if your cable has 1.1 dB loss, and 1.2:1 if your cable has 4.5 dB loss.

If the cable has just 3 dB loss, you'll never see more than 3:1 SWR at the input, even if the output is completely open or short. With 6 dB, you'll never see more than 1.67:1, and at 10 dB, never more than 1.22:1. A sufficiently long piece of coax makes a fine dummy load.

Another thing that can affect the apparent SWR is a mismatch between the impedance of the cable and the impedance of the SWR meter. The Z0 of cable is often quite a bit different than its nominal value. I've measured RG-58 at over 60 ohms, so a difference as small as you're seeing could easily be due to differences in cable impedance. (When this happens, changing the cable length can also change the indicated, but not the actual, SWR in addition to the normal lowering effect of lengthening I mentioned.)

Unless you have a truly precision piece of measuring equipment, I wouldn't put too much faith in the measurements. And certainly 1.2 is 1.5 are nothing to be concerned about. Reducing it to a perfect 1:1 won't make any performance difference you'll be able to detect.

Roy Lewallen, W7EL

Craig wrote:
>
> I've put up a 75Mhz-800MHz discone and fed it with new RG-213
> terminating with a Type N-connector, however, on both 2 Meters and
> 70cm I'm getting an SWR of 1:1.5. As an experiment, I replaced it
> with RG-58 (of shorter length) terminating with a PL-259 connector,
> and the SWR dropped down to less than 1:1.2.
>
> I'm stumped as to why the lower loss RG-213 is behaving this way at
> 70cm and would be grateful for any advice.
>
> Craig ZL2WCG

2873. Re: smashed longwire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 12:27:31 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a8533b4_2@news.cybertours.com>
Source record: 170546

<sjwoodr@my-deja.com> wrote in message news:961mlh$lq7$1@nnrp1.deja.com...
> My father wishes to use a longwire antenna for QRP HF
> operation. My understanding is that most of the RF is
> carried on the outer edge of the anteanna. If this
> wire is smashed down through a window sill, what will
> the effect be on his transmission? Also, are there
> any concerns about RF in the shack from this antenna?
> His ground will be a 15-20 foot wire to a 8-foot
> grounding rod.
>
> --steve, n9xbj

Hi Steve,
Running the wire under the window sill will have no appreciable affect on antenna performance, as long as the window is not metal framed , such as aluminum.
There will be RF in the Shack on some bands for sure with this set up. and the best way to get rid of it on those bands is to attatch a 1/4 wire to the ground post of the tuner for that band.

73 Dave KC1DI/qrp

2874. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 12:56:57 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <963dqn$v87$1@nnrp1.deja.com>
Source record: 170548

In article <3A836E75.133ECD72@IEEE.org>,
Cecil <Cecil.A.Moore@IEEE.org> wrote:
> Jerry Oxendine wrote:
> > 1. My 1972 Mustang kept causing me to be "Found on Road DEAD" and it
> > taught me how to spell F-O-R_D backwards: Driver Returning On Foot!
>
> I heard FORD stands for Fix Or Replace Daily.
>
> > I quickly returned to Chevrolet where I found reliable transport AND
> > I often could install an HF radio without doing ANYTHING about
ignition
> > noise!
>
> My '96 GMC1500 pickup is the RF quietest vehicle I have ever owned.
> I can hardly tell by listening to my IC706 when I shut the engine off.
> Only problem is when I key up on 40m, the speedometer goes full scale.
> --
> http://www.mindspring.com/~w6rca
>

I had a FORD and for me it stood for Fast On Race Day.
K9SL

Sent via Deja.com
http://www.deja.com/

2875. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 14:02:52 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <9aia8t8q0e8uimf78r430rv79s383441bn@4ax.com>
Source record: 170549

Depends a lot on your current age, but it was a very good deal for me.
I bought a lifetime membership in 1977 for around $250. That would
only cover 7 years at the current rate. You know the annual rate has
to continue to increase with time. Just do the math for your own
situation.

73, Dick - W6CCD

On 10 Feb 2001 11:07:58 GMT, ke4qkn@aol.com (Texas Rangers Fan Since
1972) wrote:

>Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the
>hobby. I am considering a lifetime membership but would like to hear some
>opinions from others first.
>
>Mark
>KE4QKN
>EM60
>
>
>
>
>
>"Hell, Columbus thought Cuba was China!!!" - Tully Mars

2876. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 14:18:59 UTC
From: Ed Juge/NM <ed_juge@zianet.com>
Message-ID: <3a8556f0.0@oracle.zianet.com>
Source record: 170551

Agreed.... I bought back in the 70's and it was a great deal for me. It's sooooo nice just to have QST show up every month.

I was completely inactive for about 10 years and regret having tossed the mags without even looking at them. But I now have lifetime subscriptions to ARRL, QCWA and WorldRadio. One less expense to worry about when I retire.

Ed, W5EJ

"Texas Rangers Fan Since 1972" <ke4qkn@aol.com> wrote in message news:20010210060758.03934.00000500@ng-mi1.aol.com...
> Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the
> hobby. I am considering a lifetime membership but would like to hear some
> opinions from others first.
>
> Mark
> KE4QKN
> EM60
>
>
>
>
>
> "Hell, Columbus thought Cuba was China!!!" - Tully Mars

2877. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 14:34:46 UTC
From: njradiodude@aol.com
Message-ID: <20010210093446.26133.00000268@ng-cd1.aol.com>
Source record: 170550

Hi Dave,

Back in November, I rented a Ford Windstar for a family vacation. I used the HamSticks for 75/80m, 40, 17, 15, and 10m. You made a good choice. I bought Diamond (I forget the model name and number) heavy-duty universal mount with the 3/8ths X 24 TPI female receptical. It's a good, solid mount, and as long as you're certain you have a good RF ground at the place you install it, you'll be in business. I mounted mine on the rearward-most cargo door at the (aft) end (I own pick-ups and dont' know what the back door is called. Hey, it's the back door!) I checked for good continuity of this body panel and found it acceptible. The back door of the Windstar has so much power schtuff, I was not suprised. With a decent VSWR on each band, from my Icom751a at 100w, I routinely worked from Cape Cod, Mass into 8 and 9 land on 75/80 during the day, at least 1/2 the country at night (in between all the arguing children on that band), and similar results on 40m both day and night. Ten and 17 meters were pretty much like hamming from home during the day...if there was propagation and I could hear something, I could work it. I worked Europe in the mid morning, North, South and Central America all day, and into the far East before the bands shut down an hour or so after local sunset. The Diamond mount does not mar or blemish the paint, has set screws on the under side of the mount that once installed, a little dab of silicone will prevent any oxidation. The supplied co-ax is the thin teflon type and did not affect the weather strippings ability to keep out water. Of course, there will be purists out there (and they are not wrong) who will say that the only the optimum place would be dead center of the vehicle and as low to the ground as possible, especially for low band operation, but for casual (albeit permanent) operation, optimumimity is not always practical. Sometimes, just slapping on an antenna and playing with it until you get a good ground and a good VSWR reading, is just as rewarding as a severe case of optimuminality...just make certain (regardless of what you decide to get), that you have a serious RF ground. This will increase your level of optimumlisticness. The HamSticks are a great choice for those of us who just can't justify the expense of a screwdriver-type to our spouces or even to ourselves. The Diamond mount is solid and did not move a bit, nor did the HamStick mounted to it even at highway speed (75-90mph, conditions permitting of course). No, I'm not a stockholder in either company, I just bought the darned things and happen to be very happy with them. The mount was (I think) around $60.00, but I think it to be well worth it. It's bound to last for years and can go from car to car to car, rental, leased, whatever.

Good luck.

Tom KB2FIK
NJRadioDude@aol.com
Bloomfield, New Jersey

2878. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 14:58:19 UTC
From: richardharrison@webtv.net
Message-ID: <21453-3A85570B-4@storefull-117.iap.bryant.webtv.net>
Source record: 170552

Roy Lewallen wrote:
"In the extreme as relative permeability approaches one, the core doesn`t have any effect, so you`d definitely see an increase. But not with most ferrites."

Roy must be right. A core that doesn`t have any effect is the same as air. A one-turn loop in air has more inductance than a straight wire.

Using a low permeability core, Cecil should see more inductance with a 360-degree wrap of the core than he would in passing the wire straight through. As Roy said, high-permeability cores are another story, and should be able to collect the magmnetic flux caused by current in the wire.

Best regards, Richard Harrison, KB5WZI

2879. Re: KLM 13 el 2m beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 15:53:27 UTC
From: "Adam T. Cately" <atcately@bright.net>
Message-ID: <3A8563F7.BF156E89@bright.net>
Source record: 170547

Mark - sounds like a Cushcraft 215-WB antenna - I've had four of
these over the years, and your description sounds just like it.
Cushcraft is still in business, but may not have parts for this anymore,
as they changed to the 13B2 to replace this antenna some years ago. I
have a manual I could scan for you, but you'll still have to check with
Cushcraft to see if the elements are available.

If all else fails, you could make your own replacement, and it WILL
work - maybe not to perfect spec, but it would work...been there, done
that, too...

Mark Erbaugh wrote:
>
> I have gotten a used KLM (I am told) 2m beam from a friend, but have no
> documentation. The boom is about 23 feet long; there are 11 passive
> elements made of small diameter aluminum rod. There are 2 active elements
> made of aluminum tubing with some sort of phasing (small diamter coax loop
> and aluminum strips) between them.
>
> I'm looking for identification, and if possible documentation on this
> antenna. One of the passive elements is broken, but it shouldn't be too hard
> to find replacement rod. The insulators that hold the driven elements are
> broken and need to be replaced. With KLM out of business, is there any
> chance of finding replacements? If not, I don't think it would be too hard
> to fabricate something, but I'd like the documentation to see how everything
> is supposed to go together.
>
> 73,
> Mark, N8ME
--

- Adam - KB8MDF

2880. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 16:21:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A856A6D.4AA1D274@IEEE.org>
Source record: 170554

Richard Clark wrote:
> The results indicate very little variability in the first test for
> proximal effects. That is, the wire can pierce the core at radius 0
> or at radius ID with little difference. Shortening the wire loop into
> a tight turn lead to less reactance and more resistance. However the
> difference between the two tests is barely out of the statistical
> noise.

You're right, Richard. When I ran the earlier experiment, I must have looped the coax through the core differently than I had intended. As you point out, one can do a 360 degree loop through a core with either the wire passing through the core once or twice. I thought I performed the experiment by passing it through the core once. I apparently passed it through the core twice by mistake. Senility strikes again.

So I am back to my original question. Amidon says that an FT-77-1024 has a "typical 'Z' of 166 ohms for one turn at 25MHz". I measure 28 ohms for one turn at 25MHz. Why the six to one difference between typical and actual?
--
http://www.mindspring.com/~w6rca

2881. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 16:30:45 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a856caf.30404238@news.aepnet.com>
Source record: 170553

On Fri, 09 Feb 2001 22:09:46 -0800, Roy Lewallen <w7el@eznec.com> wrote:

Tsk tsk, Richard. As you would say, "Shame on you." For someone with such a flair with words, you should know that toroid, or more properly 'toroidal', inductors may have an air "core."

I once had a toroid core sample kit from somebody (Ferrite, I think) that included in the mix, some plastic "toroids." I can guarantee that there was a difference in inductance between a straight wire passing through the hole and a wire wrapped around the form.

As Roy says, it all depends on the permeability as to whether or not the shape of the "turn", or the spacing between multiple turns has an effect on the inductance.

Just think, if a straight wire through a plastic donut had the same inductance as one wrapped around the donut, we wouldn't need baluns. The infinite number of little donuts delivered with the coax (the jacket) would be all we needed <g>.

Wes Stewart N7WS

>Thanks, Richard, for running the experiment. Your results mirror my
>experience.
>
>I imagine that you'd start seeing the effect Cecil refers to if you used
>a very low permeability core, like type 2 or 6 powdered iron. In the
>extreme, as relative permeability approaches one, the core doesn't have
>any effect, so you'd definitely see an increase. But not with most
>ferrites.
>
>Roy Lewallen, W7EL
>
[snip]

2882. Re: Patch antennas for 1.7 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 16:31:17 UTC
From: Cees Slager <cslager@xs4all.nl>
Message-ID: <963qe3ecv1@news1.xs4all.nl>
Source record: 170555
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Hi Frank (yoyr name sound very Dutch)

Look at this page for all the info you will need :
http://www.odyseus.clara.co.uk/patch.htm

Cees

"Frank Van Hooft" <frank_van_hooft@spectrumsignal.com> schreef in bericht
news:95v1t6$3ra$1@wedge.sfu.ca...
> Hi all,
>
> I'd like to build a patch antenna (or array thereof) for satellite
> reception at 1.7 GHz. I don't have room for a dish. Does anyone have
> any pointers to information on how to do such a thing?
>
> Thanks!
>
> Frank. VE7HVF
> frank_van_hooft@spectrumsignal.com
>
>

2883. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 16:59:42 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a85737a.32143305@news.aepnet.com>
Source record: 170556

On Sat, 10 Feb 2001 10:21:01 -0600, Cecil <Cecil.A.Moore@IEEE.org> wrote:

[snip]
>
>So I am back to my original question. Amidon says that an FT-77-1024
>has a "typical 'Z' of 166 ohms for one turn at 25MHz". I measure 28
>ohms for one turn at 25MHz. Why the six to one difference between
>typical and actual?
>--
>http://www.mindspring.com/~w6rca

Are you measuring |Z| or the "R" part of 28 +j164

Wes

2884. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 17:04:36 UTC
From: jeraa2tNO@ma.ultranet.com.invalid
Message-ID: <3a857363.1554377@news.rcn.com>
Source record: 170557

I got one of those diamond van hatch mounts (model 400-3/8) and
mechanically it's fine. I position it right above the tail light lense
with 4 set screws. I can remove it easily. It's high enough that the
loading coil on the 40M hamstick is above the roof level and not too
high to be a problem with trees etc..
I have a balun in line. I did have trouble with the thin coax on the
mount flexing too much and breaking the shield. Might want to secure
it to the mount with a ty wrap to stop the flexing.
Get good signal report considering..and I can remove it when the XYL
wants her van back.

Jerry AA2T

2885. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 17:41:32 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A857D4C.50D648CD@IEEE.org>
Source record: 170562

Wes Stewart wrote:
> >So I am back to my original question. Amidon says that an FT-77-1024
> >has a "typical 'Z' of 166 ohms for one turn at 25MHz". I measure 28
> >ohms for one turn at 25MHz. Why the six to one difference between
> >typical and actual?
>
> Are you measuring |Z| or the "R" part of 28 +j164

I'm using an MFJ-259B so it's only ballpark but it shows 28+j0
--
http://www.mindspring.com/~w6rca

2886. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 17:45:10 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t8avhpq311dn07@corp.supernews.com>
Source record: 170559

I used the hamstick with a 3-mag mount dead center of the van roof, but I found that there was no place/way to easily ground it (the mag mount doesn't give you a ground through the paint!) and matching the hamstick was difficult. And worse yet, the wind noise at freeway speed was induced through the mag mount to the roof and into the cabin, driving you nuts with a "wishy-whistle" sound, for lack of a better description.

I now have a license-plate mount, which I reinforced with extra bolts, and can mount the hamstick to it. It has a solid ground to the car via the bolts and the hamstick and the hamsticks resonate great. I am now using an old multiband (40, 30, 17, 10) Spider antenna on the license plate mount with a single fishing line forward to the luggage rack to take some pressure off the mount at freeway speed. It works great.

Greg, N6GK

<dmensing@my-deja.com> wrote in message news:961a2b$9ij$1@nnrp1.deja.com...
> I want to mount my Hamstick HF antenna on my 1995
> Dodge Caravan and am looking for suggestions. As
> I see it there are 3 main choices:
>
> (1) Attach a ball mount somewhere on the side of
> the van. (What is the best location for such a
> mount?)
>
> (2) Use a multi magnet mount on the roof of the
> van. (This will put the antenna very high. Good
> for RX/TX, bad for bridges and trees.)
>
> (3) Use a gutter mount. (Same plus and minus as
> (2) above.)
>
> I am leaning towards (1) but am timid about
> drilling into the body of the van. Also, I'm
> really not sure of the best location for the ball
> mount. (Left or right side, high or low, toward
> the rear or further up the side of the van.)
>
> I'd like to hear from anyone who has experience
> with HF antenna mounts on a Caravan.
>
> Thanks, Dave, N2PSH
>
>
> Sent via Deja.com

> http://www.deja.com/

2887. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 17:49:21 UTC
From: k1bqt@aol.com
Message-ID: <20010210124921.24793.00000306@ng-mb1.aol.com>
Source record: 170560

>...capacitance can be used to resonate the choke to form a parallel resonant circuit. The result is a choke with higher -- perhaps much higher -- impedance than you'd have without the capacitance, but only over a narrower band of frequencies.
See my Tech Note in QEX (Sept/Oct or Nov/Dec--can't remember which) for a short article on "Trap-Baluns". These are cheap to build and present a very high common-mode impedance for single-band antennas.

Rick K1BQT

2888. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 17:50:39 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a857f6a.35199294@news.aepnet.com>
Source record: 170561

On 9 Feb 2001 20:19:36 GMT, atkes@imap1.asu.edu wrote:

>Reg Edwards (g4fgq.regp@btinternet.com) wrote:
>: > If the coax feeder is 1/4-wavelength long and the braid is properly
>: grounded
>: > at the bottom end there will be a very high impedance at the top and very
>: > little current will flow into the braid.
>: >
>: > Will this prevent radiation from the feeder just as the choke balun is
>: > intended to do?
>: ================================
>: Why have none of the experts, antenna designers, and old wives answered this
>: question ? Its been here for several days.
>: ----
>: Reg, G4FGQ
>
>
>Reg,
>
>I am not in one of the listed categories, but the answer is no. That
>is, with or without a choke balun, tuning the outside of the feedline
>to be resonant at the driving frequency is asking for feedline
>radiation. Even with no current at the feedpoint end of the outside of
>the coax, any unbalanced fields on any part of the feedline will induce
>currents in the feedline and since it is resonant it will respond
>substantially. A more sensible arrangement is a choke balun and a
>nonresonant length feedline. If you really must feed your antenna your
>way, I would suggest an additional choke balun at the point where the
>coax is connected to your high quality ground.
>
>73 Kevin w9cf

Kevin,

Let me play Devil's advocate here (sorry Reg).

If we ignore the problem of achieving an adequate ground for a moment, the literature (Terman 3rd edition Figure 14-28 for example) is replete with examples of 1/4 wavelength stub and sleeve baluns.

For certain, these are a bit different from tuning the coax itself, but they operate on the same idea, so are they any less likely to be inadvertent radiators?

Isn't it always the case that symmetry is required, i.e. the line should be normal to the plane of the radiator? Coupling after the balun would seem to be

just as likely and detrimental if symmetry isn't maintained, regardless of the type of balun.

Even your "more sensible arrangement" requires a non-resonant line which might be difficult on a multiband system. Isn't a "planned" resonance better than an "unplanned" resonance?

Don't get me wrong; I use a ferrite sleeve balun on my wire dipole, so I'm a believer in that approach. On the other hand, I use a non-resonant combination stub/balun (infinite) balun on my HB Yagi and it most definitely requires symmetry for its operation.

Once again; just playing Devil's advocate.

Wes Stewart, N7WS

2889. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 18:00:50 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A8581D1.218845B6@ix.netcom.com>
Source record: 170563

Hi Mark -- sure wished I had opted for ARRL Life Membership 25 years ago -- would have saved a pile of greenstamps. But Hams come and go into the hobby, so be fairly certain you will have a Life Long" interest. Many benefits - insurance, bureaus if you are or get into DXing, great articles on all aspects of the hobby. Also on the internet there is "ARRL Members Only access" -- wow what a wealth of info one can gain access to there.
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
====================

Texas Rangers Fan Since 1972 wrote:

> Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the
> hobby. I am considering a lifetime membership but would like to hear some
> opinions from others first.
>
> Mark
> KE4QKN
> EM60
>
> "Hell, Columbus thought Cuba was China!!!" - Tully Mars

2890. Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 18:33:35 UTC
From: Michael Gilbert <mgilbert@execpc.com>
Message-ID: <3a858940$0$7165$272ea4a1@news.execpc.com>
Source record: 170564

Ok, now that I have the attention of someone that I can trust...here is the question.
I like to listen to AM radio but I cant receive a good signal. I thought asking someone with more advanced skills would be my best bet. Where I live it is kind of low and quite a few miles from any large town.What kind of antenna would work the best?

Thanks all!

Michael

2891. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 18:44:46 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3a857eed_4@news1.prserv.net>
Source record: 170558

It was the single best investment I ever made. (And I made it as a
"Charter" Life Member --- more than a few years ago.)

Bill Ogden
W2WO

2892. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 19:01:42 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <J3mFOke8GfhvaLgEaRltPwfs93GJ@4ax.com>
Source record: 170565

On Sat, 10 Feb 2001 16:30:45 GMT, nospam_n7ws@arrl.net (Wes Stewart)
wrote:

>On Fri, 09 Feb 2001 22:09:46 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>
>
>Tsk tsk, Richard. As you would say, "Shame on you." For someone with such a
>flair with words, you should know that toroid, or more properly 'toroidal',
>inductors may have an air "core."
>
>I once had a toroid core sample kit from somebody (Ferrite, I think) that
>included in the mix, some plastic "toroids." I can guarantee that there was a
>difference in inductance between a straight wire passing through the hole and a
>wire wrapped around the form.
>
>As Roy says, it all depends on the permeability as to whether or not the shape
>of the "turn", or the spacing between multiple turns has an effect on the
>inductance.
>
>Just think, if a straight wire through a plastic donut had the same inductance
>as one wrapped around the donut, we wouldn't need baluns. The infinite number
>of little donuts delivered with the coax (the jacket) would be all we needed
><g>.
>
>
>Wes Stewart N7WS
>

Hi Wes,

I responded to the nature of toroids in the statement:
>"...The difference between
>a straight-through wire and one 360 degree loop is considerable."
I speculated the variability observed was not in the difference of
straight wire to tightly wrapped wire, but rather how the turn was
formed on each occasion.

I then presented evidence of how there was no variability that was a
function of tight or loose wrapping of a single turn of 360 degrees.
At some rhetorical level, the loose wrap must qualify as an extended
straight wire.

Lest the readership forget, in a practical world "a straight-through
wire" is not sufficiently described to compare to a 360 degree loop of
wire. ANY measurement of that straight wire has a partial loop buried
in the results. Many measuring devices have leads at least doubling

the length of that measured "straight wire." For the best of all worlds that half hidden loop represents +100% error.... it can only get worse. You cannot determine the characteristics without a circuit, the circuit carries with it irreducible lead inductance and stray capacitance.

This may seem like splitting hairs, but when you get into the scale of error as compared to the scale of measurement; then these hairs are the size of Sequoias. It is the practical implementation of the theoretical straight wire that is forcing this peculiar state of affairs.

73's
Richard Clark, KB7QHC

2893. Re: Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 19:13:58 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <3A8592B6.78ABC607@cmcorp.com>
Source record: 170566

Michael Gilbert wrote:

> Ok, now that I have the attention of someone that I can trust...here is the
> question.
> I like to listen to AM radio but I cant receive a good signal. I thought
> asking someone with more advanced skills would be my best bet. Where I live
> it is kind of low and quite a few miles from any large town.What kind of
> antenna would work the best?

Rule # 1 Make it as HIGH as you can.
Rule # 2 Make it as LONG as you can.

(A dipole at 1,000 KHz is 468 Feet long!)

>
>
> Thanks all!
>
> Michael

--
*
| __O Thomas C. Sefranek tcs@cmcorp.com
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

2894. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 19:38:20 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <lJGFOjJoB5SoqebEw0GqzfaTSZ1E@4ax.com>
Source record: 170567

On Sat, 10 Feb 2001 11:41:32 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Wes Stewart wrote:
>> >So I am back to my original question. Amidon says that an FT-77-1024
>> >has a "typical 'Z' of 166 ohms for one turn at 25MHz". I measure 28
>> >ohms for one turn at 25MHz. Why the six to one difference between
>> >typical and actual?
>>
>> Are you measuring |Z| or the "R" part of 28 +j164
>
>I'm using an MFJ-259B so it's only ballpark but it shows 28+j0

Hi Cecil,

Your report of j0 gives me some concern. I have several
manufacturer's kits (60 - 100 styles and materials) and I typically
calibrate their characteristics against my 4 inch loop at 20 MHz.

For every measure I find reactance.

One bead measures 0 + j8 (# 61 material)
and is representative of the extreme outlier
at the other end I have a tube that presents 135 + j90 (# 43 material)
and to confound there are some with 45 - j20 (# 77 material)

My measurements show these patterns of reactance are repeatable and
correlatable to materials across bulk-constant forms.

Another matter as to your expectation
FT-77-1024 or FB-77-1024?
is with # 77 material, the chart indicates at 25 MHz a Z of ~28 Ohms
presuming FB's form factor this should be multiplied by 3.7

Your measure (aside from my concern) looks like it is for one standard
bead of material # 77.

73's
Richard Clark, KB7QHC

2895. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:02:35 UTC
From: atkes@imap1.asu.edu
Message-ID: <9646orcpa1@news.asu.edu>
Source record: 170568

Wes Stewart (nospam_n7ws@arrl.net) wrote:
snip
: Let me play Devil's advocate here (sorry Reg).

: If we ignore the problem of achieving an adequate ground for a moment, the
: literature (Terman 3rd edition Figure 14-28 for example) is replete with
: examples of 1/4 wavelength stub and sleeve baluns.

: For certain, these are a bit different from tuning the coax itself, but they
: operate on the same idea, so are they any less likely to be inadvertent
: radiators?

: Isn't it always the case that symmetry is required, i.e. the line should be
: normal to the plane of the radiator? Coupling after the balun would seem to b
e
: just as likely and detrimental if symmetry isn't maintained, regardless of the
: type of balun.

: Even your "more sensible arrangement" requires a non-resonant line which migh,
: be difficult on a multiband system. Isn't a "planned" resonance better than an
: "unplanned" resonance?

: Don't get me wrong; I use a ferrite sleeve balun on my wire dipole, so I'm a
: believer in that approach. On the other hand, I use a non-resonant combinatio
n
: stub/balun (infinite) balun on my HB Yagi and it most definitely requires
: symmetry for its operation.

: Once again; just playing Devil's advocate.

: Wes Stewart, N7WS

Wes,

The difference is that the resonant part of the sleeve balun is shielded
from external fields. My problem with the set up that Reg mentioned is
that it is specifically designed to have a high Q resonant wire in the
vicinity of the antenna. A low Q resonant wire or a nonresonant wire
will not make much of a problem, however Reg's set up needs the high
Q resonance to give a large impedance to work as a balun. That is, either
you have good choking action because of the high Q resonance and therefore
a likelihood that you will excite this resonance with any small asymmetry,
or you have poor choking action because you have no high Q resonance.

Certainly maintaining symmetry is important to keep from coupling the
outside of the feedline for any system, but you will have to maintain
symmetry to a much higher degree to keep the current on the outside of

a high Q resonant line at the same low level as you would with a more normal feedline arrangement.

The usual current balun gives a large impedance for currents running from the inside to the outside of the shield. One way to make this high impedance is to use a sleeve balun, which essentially places a shorted quarter wave line in series from the inside of the original shield to the outside of the sleeve. The exposed part is the outside of the sleeve balun and the rest of the feedline, and this is not normally a high Q resonant circuit.

As an aside, it's perhaps amusing to notice that if you filled a sleeve balun with ferrite, you would get a high impedance with a much shorter sleeve. You then might notice that the outside of the sleeve isn't doing very much. Removing it gives a W2DU balun. I suspect that for vhf work, including a shield on the outside of the W2DU balun might make its effect more reproducible, but I haven't used one at VHF and haven't thought much about it. You could also put a capacitor across the inner and outer shield and get somewhat higher rejection at some frequencies by resonating the parallel inductance.

73 Kevin w9cf

2896. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:12:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A85A0C1.E91C1875@eznec.com>
Source record: 170469

The difference between S6 and "30 dB" over S9 on my Icom 730 (40 meters, preamp out) is 29.8 dB. So If I assumed that it was 50 dB, I'd be wrong by more than 20 dB, or about the gain of a 50 (yes, 50) element or so Yagi.

Even so, it would hard to make an antenna that's 30 dB down from someone else's in all directions and angles. That would mean an efficiency of 0.1%. A 30 dB difference between your signal and someone else's is probably due to the other station being in the direction of a null from your antenna. Obviously not all stations can be in nulls, but you might also be radiating most of your energy in a useless direction such as straight up. I'm very admittedly biased, but I'd use an antenna modeling program to see what's going on. Again admittedly biased, I suggest downloading the free EZNEC demo from http://eznec.com. With it, you can pretty quickly see what you'd need to get the signal going in the directions you want, and give you quantitative comparisons of different configurations.

Roy Lewallen, W7EL

30 dB is still

motorhomer wrote:
>
> I use the antenna for all bands 80-10Meters. When I say 50 db down I was
> thinking about 20 and 15 meters primarily. I am about 50 db down on
> these bands
> compared to others in my area. Maybe my meter is incorrect. I will
> be listening
> to a QSO and the person in my area will give the other operator a
> 30 over
> report and I will only receive him with a S6 or so. I know that the
> antenna will
> not play like the beams on towers which is probably what I am
> comparing it to. I
> am just looking for more ideas on how to get a better signal in and
> out.
>
> Thanks for any info
>
> Steve K9SL
>
> Sent via Deja.com
> http://www.deja.com/

2897. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:15:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A85A163.1AF427C4@eznec.com>
Source record: 170470

Mark Keith wrote:
>
> motorhomer wrote:
> >
> > I use the antenna for all bands 80-10Meters. When I say 50 db down I was
> > thinking about 20 and 15 meters primarily. I am about 50 db down on
> > these bands
> > compared to others in my area. Maybe my meter is incorrect. I will
> > be listening
> > to a QSO and the person in my area will give the other operator a
> > 30 over
> > report and I will only receive him with a S6 or so. I know that the
> > antenna will
> > not play like the beams on towers which is probably what I am
> > comparing it to. I
> > am just looking for more ideas on how to get a better signal in and
> > out.
> >
> > Thanks for any info
> >
> > Steve K9SL
>
> Sounds like it's acting as a high angle radiator on the high bands. I
> noticed this problem using a LL fed 80 m dipole camping one time. I
> tried the antenna on 10m and it was the pits. I think you are seeing
> about the same problem. Can you string up a 2nd 20 meter dipole
> somewhere? I bet you would see a big difference on 20m using a 1/2 wl
> compared to the 80m dipole. On 10m , as far as I'm concerned a good
> elevated vertical is the best way to go if you can't use a beam. I've
> never really liked dipoles on that band too much. With the vertical on
> 10m, your local coverage will be much better, and dx good too without
> wasting power at high angles. A cb antenna will work fine. I use a
> homebrew 1/2 wl vertical here at the moment for 10m. It's only 20 ft up,
> and does ok. BTW, if you did put up a 2nd 20m dipole, if you also fed it
> with LL,it would work ok on 15-12-10m. I bet better than the 80m
> antenna. Actually a 30m dipole fed with LL will do a good job on all the
> high bands. Would be a EDZ on 12m. Has a bit of gain. A 20m dipole about
> the same, except on 10m, you would have two half waves in phase. MK
> http://web.wt.net/~nm5k

But remember that any antenna having gain has it only in some directions
in the expense of others. The more gain, the narrower the range of
angles over which it has gain, and the wider range of angles over which
it's weaker than a lower gain antenna. Going for maximum gain is often a

mistake with an antenna you can't rotate, unless there's only a particular direction or direction(s) you want to communicate with.

Roy Lewallen, W7EL

2898. Re: smashed longwire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:29:34 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a85a4af_2@news.cybertours.com>
Source record: 170471

"KC1DI" <elbc@pivot.net> wrote in message
news:3a8533b4_2@news.cybertours.com...
>
> <sjwoodr@my-deja.com> wrote in message news:961mlh$lq7$1@nnrp1.deja.com...
> > My father wishes to use a longwire antenna for QRP HF
> > operation. My understanding is that most of the RF is
> > carried on the outer edge of the anteanna. If this
> > wire is smashed down through a window sill, what will
> > the effect be on his transmission? Also, are there
> > any concerns about RF in the shack from this antenna?
> > His ground will be a 15-20 foot wire to a 8-foot
> > grounding rod.
> >
> > --steve, n9xbj
>
> Hi Steve,
> Running the wire under the window sill will have no appreciable affect on
> antenna performance, as long as the window is not metal framed , such as
> aluminum.
> There will be RF in the Shack on some bands for sure with this set up. and
> the best way to get rid of it on those bands is to attatch a 1/4 wire to
the
> ground post of the tuner for that band.
>
> 73 Dave KC1DI/qrp
Correction should read 1/4 wave wire.

2899. Re: Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:35:11 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <96491b$vr7$1@slb2.atl.mindspring.net>
Source record: 170472

The random wire or dipole antenna is the usual response to this question. They do work but is generally not a very good way to go. The problem with these types of antennas is that they take up much more space than most people have and they are basically omnidirectional and non tunable. This often causes problems. The better way to go is a small tunable loop. They are directional so you can null out interference and tunable to reject adjacent frequency stations that may interfere with what you are trying to listen to. Radio Shack sells one that does a good job. The cat.# is 156-1853.
--
CW
KC7NOD
"Thomas C. Sefranek" <tcs@cmcorp.com> wrote in message news:3A8592B6.78ABC607@cmcorp.com...
>
>
> Michael Gilbert wrote:
>
> > Ok, now that I have the attention of someone that I can trust...here is the
> > question.
> > I like to listen to AM radio but I cant receive a good signal. I thought
> > asking someone with more advanced skills would be my best bet. Where I live
> > it is kind of low and quite a few miles from any large town.What kind of
> > antenna would work the best?
>
> Rule # 1 Make it as HIGH as you can.
> Rule # 2 Make it as LONG as you can.
>
> (A dipole at 1,000 KHz is 468 Feet long!)
>
> >
> >
> > Thanks all!
> >
> > Michael
>
> --
> *
> | __O Thomas C. Sefranek tcs@cmcorp.com
> |_-\<,_ Amateur Radio Operator: WA1RHP
> (*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

>
> http://hamradio.cmcorp.com/inventory/Inventory.html
> http://www.harvardrepeater.org
>
>

2900. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:41:24 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A85A774.8D97B54A@IEEE.org>
Source record: 170475

Richard Clark wrote:
> Your report of j0 gives me some concern.

Yep, I got 'F' material and '77' material mixed up. The
#77 reads R=32 and X=11 Gotta get those cataracts fixed.

> FT-77-1024 or FB-77-1024?

It's FB-77-1024 and the Amidon brochure says that bead
has a 'Z' of 166 ohms but it doesn't.
--
http://www.mindspring.com/~w6rca

2901. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:41:49 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A85A78D.6D80AAB5@IEEE.org>
Source record: 170474

Richard Clark wrote:
> Your report of j0 gives me some concern.

Yep, I got 'F' material and '77' material mixed up. The
#77 reads R=32 and X=11 Gotta get those cataracts fixed.

> FT-77-1024 or FB-77-1024?

It's FB-77-1024 and the Amidon brochure says that bead
has a one turn 'Z' of 166 ohms but it doesn't.
--
http://www.mindspring.com/~w6rca

2902. bad tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 20:47:48 UTC
From: pedrordz@swbell.net
Message-ID: <3a85a886.20571659@news.swbell.net>
Source record: 170473

Have a question about tv reception, I have an outside antenna
any position I directed does not matter still have bad rececption can
anybody have an idea getting better reception?

Than ks

2903. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 21:28:40 UTC
From: jeraa2tNO@ma.ultranet.com.invalid
Message-ID: <3a85b242.3266475@news.rcn.com>
Source record: 170476

On Sat, 10 Feb 2001 09:45:10 -0800, "Greg Knapp"
<gknapp@freshrain.org> wrote:

>I used the hamstick with a 3-mag mount dead center of the van roof, but I
>found that there was no place/way to easily ground it (the mag mount doesn't
>give you a ground through the paint!) and matching the hamstick was
>difficult.
**Note, if you have one of those optional temp/compass overhead units,
the mag mounts will eventually cause an error code on the system and
it will cost you $$$'s for a new controller board...
JR AA2T

2904. Re: Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 21:30:42 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <964c4d$ivn6l$1@ID-20128.news.dfncis.de>
Source record: 170477

I really should'nt reply since i'm no (EXPERT) but here is some friendly
advice
from a Amateur.
A directional or beam antenna would increase your receive signal strength
by several db's.
Depending on the RF gain or signal multiplication factor of the antenna
would
determine how strong distant stations are received.
Like the other gentlemen said height plays a very important role in
reception,
remember that RF radiation tends to drift skyward from the transmitting
antenna
at an angle less than 20degrees perpendicular to the radiating element.
Try using a signal amplifier or receive preamp.

--
714 Sandpile,
The Mad Dog wavin' good bye
"Michael Gilbert" <mgilbert@execpc.com> wrote in message
news:3a858940$0$7165$272ea4a1@news.execpc.com...
> Ok, now that I have the attention of someone that I can trust...here is
the
> question.
> I like to listen to AM radio but I cant receive a good signal. I thought
> asking someone with more advanced skills would be my best bet. Where I
live
> it is kind of low and quite a few miles from any large town.What kind of
> antenna would work the best?
>
> Thanks all!
>
> Michael
>
>

2905. 137 Mhz antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 21:43:39 UTC
From: Ambrogio <ambrogiorbl@tin.it>
Message-ID: <fCih6.13485$ep3.385324@twister1.tin.it>
Source record: 170478

Good morning:
I amnsearching for a proven project for a quadrifilar antenna for apt
reception.
Any help ?
Thank you for the collaboration: IW2FVO
AMBROGIO ambrogiorbl@tin.it

2906. Re: SWR variations: RG-213 and RG-58 feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 21:55:23 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <964dcb$7lj$5@bashir.peak.org>
Source record: 170479

```
: I've put up a 75Mhz-800MHz discone and fed it with new RG-213
: terminating with a Type N-connector, however, on both 2 Meters and
: 70cm I'm getting an SWR of 1:1.5. As an experiment, I replaced it
: with RG-58 (of shorter length) terminating with a PL-259 connector,
: and the SWR dropped down to less than 1:1.2.
:
: I'm stumped as to why the lower loss RG-213 is behaving this way at
: 70cm and would be grateful for any advice.
```

The most likely possibility is that either your coax or antenna does not have a 50 ohm impedance at the measured frequency. In that case, the N connector might act as an impedance bump and cause the mismatch.

A type N connector is constant impedance by design over a wide frequency range. This is not true with a PL259 connector. Coax also varies a bit from the nominal rated impedance.

Neither the 1.5:1 or 1.2:1 mismatch is enough to worry about.

--
Bill Nelson (billn@peak.org)

2907. Re: bad tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 22:07:43 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <964e3f$7lj$6@bashir.peak.org>
Source record: 170482

Pedro Rodriguez Jr. <pedrordz@swbell.net> wrote:
: Have a question about tv reception, I have an outside antenna
: any position I directed does not matter still have bad rececption can
: anybody have an idea getting better reception?

There are a number of things that can be tried - not necessary in the
best order. Unfortunately, without some test equipment, it is impossible
to guess which would be best - if any.

1) Install a better antenna.
2) Check connections at the antenna and TV to make sure they are good.
3) Add an amplifier at the antenna (not at the TV).
4) If you are using twin lead - change to 72 ohm coax (will require
an impedance converting balun at the antenna and possibly at the TV.
5) Increase the antenna height.
6) Move the antenna to a different location - sometimes even a move
of a foot or two makes a big difference.
7) Try a different TV - to make sure it isn't defective.
8) Replace the coax/twinlead - to make sure they are not defective.
9) Subscribe to either a cable service or to a satellite service.

--
Bill Nelson (billn@peak.org)

2908. Ladder Line center insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 22:13:37 UTC
From: John <jh-lewis@swbell.net>
Message-ID: <J1jh6.18$ZO2.3904@nnrp1.sbc.net>
Source record: 170480

I'm looking for a center insulator to use with my G5RV antenna I want to build - the last one I had was a triangle insulator made of gray plastic, but I can't seem to locate it now on the web - I'm not really interested in the Ladder Lock...

Any help?

Thanks!

Jerry

2909. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 22:13:40 UTC
From: richardharrison@webtv.net
Message-ID: <21453-3A85BD14-7@storefull-117.iap.bryant.webtv.net>
Source record: 170483

Kevin, W9CF wrote:
"My problem with the set up that Reg mentioned is that it is specifically designed to have a high Q resonant wire in the vicinity of the antenna."

The same thing is done all the time with microwaves. The 1/4-wave metal posts supporting antenna and transmission line conductors are called "metal insulators".

Best regards, Richard Harrison, KB5WZI

2910. Re: Ladder Line center insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 22:32:12 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3a85c0e0_3@news.iglou.com>
Source record: 170481

That would be RadioWork's Ladder Lock at:
http://www.radioworks.com/cinsul.html

John wrote in message ...
>I'm looking for a center insulator to use with my G5RV antenna I want to
>build - the last one I had was a triangle insulator made of gray plastic,
>but I can't seem to locate it now on the web - I'm not really interested in
>the Ladder Lock...
>
>Any help?
>
>Thanks!
>
>Jerry
>
>
>
>

2911. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 23:00:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A85C7FE.68EFB7F7@eznec.com>
Source record: 170484

I continue to be puzzled by this. If it annoys you to copy weak signals, why do you respond to them? And is it ok to have a weak signal if you run 100 watts, or is anything less than 1.5 KW (or more?) unfair to the other guy? What if I'm running 1.5 KW into a very poor antenna? Is that unfair?

Roy Lewallen, W7EL

W4JLE wrote:
>
> The only problem with QRP is that you put the onus on the person at the
> other end to dig YOUR signal out of the noise for YOUR enjoyment.
>
> --
> Fred W4JLE NHI#1001

2912. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 23:41:19 UTC
From: k1bqt@aol.com
Message-ID: <20010210184119.26112.00000306@ng-cd1.aol.com>
Source record: 170485

>The same thing is done all the time with microwaves. The 1/4-wave metal posts supporting antenna and transmission line conductors are called "metal insulators".<

Exactly! When the groundplane is well defined, there's no problem with Reg's concept.

Rick K1BQT

2913. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-10 23:44:10 UTC
From: k1bqt@aol.com
Message-ID: <20010210184410.26112.00000307@ng-cd1.aol.com>
Source record: 170486

>The only problem with QRP is that you put the onus on the person at the other end to dig YOUR signal out of the noise for YOUR enjoyment.<

Is it possible the only problem with QRP is that you aren't interested in it?

Rick K1BQT

2914. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 00:10:03 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <964l8n$1eq$1@slb4.atl.mindspring.net>
Source record: 170487

Rick:

"Ground", it's nice when you have it where you want it... but, heh, heh... it's never where you want it.

And, speaking of "conventional baluns", if you could find a good place to "ground" a Faraday screen placed between the primary and secondary of a voltage balun you could get pretty good common mode rejection out of the thing.

The problem is that, according to Murphy's Law, "ground" is always inconveniently some distance [usually not a negligible fraction of a wavelength] away from where it's needed!

-Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20010210184119.26112.00000306@ng-cd1.aol.com...
> >The same thing is done all the time with microwaves. The 1/4-wave metal posts
> supporting antenna and transmission line conductors are called "metal
> insulators".<
>
> Exactly! When the groundplane is well defined, there's no problem with Reg's
> concept.
>
> Rick K1BQT

2915. Re: Details on why ground plane is needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 00:15:37 UTC
From: bcolenso@aol.com
Message-ID: <20010210191537.17700.00000531@ng-da1.aol.com>
Source record: 170488

<<<<<<<<<<<<<<
I know that a ground plane is needed for a 1/4 wavelength monopole antenna.
I'm trying to gain a good understanding of why this ground plane is needed.
>>>>>>>>>>>>>>>

I'm certainly no guru, but maybe looking at it this way may help.

Take your typical 1/2 wave dipole in free space. Now, turn it 90 degrees so that it is vertical. You now have an omni-directional antenna with an impedence of 75 ohms, and you need to run the feed line straight out to the side. Now, if you split the bottom of the antenna up the middle and fan them out, you now have a 1/4 wave vertical, and the feed line can come up from the bottom. With the radials at 90 degrees, the impedence is about 30 ohms. At about 45 degrees the impedence is 50 ohme, and no matching network is needed.

If I remember correctly, radials need to be 5% longer than 1/4 wave.

Bob
KD8WU

Remove the obvious when responding by e-mail

U of M GO BLUE !!!

2916. Re: VX-5R antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 00:19:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A85DA83.D24A7475@eznec.com>
Source record: 170489

I can't recommend one to buy, but I can suggest one to avoid. Earlier this year I bought a Diamond RHA627 50/144/430 MHz antenna. It has a BNC connector but comes with an SMA adapter. I can't find a frequency on any of the three bands or anywhere else where it's not very noticeably worse than the stock VX-5R antenna, despite being considerably longer. It was a total waste of money.

Roy Lewallen, W7EL

ik7565@erols.com wrote:
>
> The MH-510 is a nice antenna but a little long (20") to be hanging off
> your belt. I don't notice much difference except on 70cm where there's
> about 3db of gain.
>
> 73 de KG4JLK
>
> Rudy Marcelletti wrote:
> >
> > Anyone used the Madol (now Comet) tri-band 6/146/446 antenna and if so, how
> > do you like it over the so called "convenient and inovative" 3 piece Yaesu
> > antenna? Does any one make a 6 meter HT antenna (that works) with a SMA
> > connector?

2917. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 00:54:58 UTC
From: k1bqt@aol.com
Message-ID: <20010210195458.21786.00000390@ng-cr1.aol.com>
Source record: 170490

>The problem is that, according to Murphy's Law, "ground" is always inconveniently some distance [usually not a negligible fraction of a wavelength] away from where it's needed!<

I agree. It's possible that what you think is "proper" may be nothing more than a whopper".

Rick K1BQT

2918. Re: HF Mobile Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 01:04:30 UTC
From: Brendan Minish <bminish@oceanfree.net>
Message-ID: <6hob8t41eet6fb1f67smol0aid8iif9j7k@4ax.com>
Source record: 170492

On Tue, 6 Feb 2001 19:07:41 -0500, "John (KB3CDF)"
<murphman@erols.com> wrote:

>Howdy:
>Anyone ever use the DK3 Screwdriver antenna made by Mel Woody?

Dunno about MEl's copy of the DK3 but I run an original DK3 made By
Don Johnson W6AAQ and I am really happy with it, it's solidly made and
a real good performer, it also has a couple of nice features like the
milled in Z-match (no need for a matching transformer) and the end
stop clutch. It's also cheaper than most (any?) of the copies at $150.
I bought mine at
http://www.hamradiotoys.com/dk3.htm
and it took about 2 weeks to arrive here In Ireland. I can Highly
recommend Don's

>Let me know what you think.

Buy the original version from Don, that's what I think!

73's De Brendan Minish EI6IZ

--
Brendan Minish
The reply address works but
This will get to me faster
bminish at eircom dot net

2919. Re: Cushcraft Angst...Is It Me?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 01:21:11 UTC
From: Martin Walker <mbwalker@netonecom.net>
Message-ID: <3a85e8a0$0$82346$45beb828@newscene.com>
Source record: 170491

No, it's not just you Tom. I had a similar response from them when trying to purchase a replacement part for a Chushcraft mobile antenna that was still being produced at the time. They basically told me to find what I needed locally as if they didn't want to be bothered. I'll certainly thick twice before buying one of their products again.

Martin
KC8CFP

NJRadioDude <njradiodude@aol.com> wrote in message
news:20010206145718.22909.00000260@ng-fy1.aol.com...
> I've had an R7 for about 4 years now, and although considered a glorified
dummy
> load by some, I've had no problems and have enjoyed very decent success
with
> it.
>
> Apparently, I recently fried the Impedance Matching Assembly, which
manifested
> itself with the same exact very high SWR on all bands. I e-mailed the tech
> support division of Cushcraft and explained the problem as well as a
fairly
> detailed description of my usual operating practices and equipment.
>
> I inquired if the problem I was experiencing was something they had dealt
with
> before, and what, if any ideas they had to either fix or replace the unit.
The
> response I got back was quite obviously from someone who was (maybe)
> over-worked, under-paid, and who had no interest in customer satisfaction,
> almost as if being the person responding to e-mails was a punishment
position.
>
> I was informed the problem I was having was most likely due to what I had
> described, and that they did not have replacement parts. They did,
however,
> suggest I go to eBay or QTH.com. Their response was not signed, and was
> seemingly way too short. Essentially, 'your antenna is not working, and we
> really don't care. We have no parts for you. You must replace it with the
next
> generation of our fine products.'
>
> I've dealt with a number of ham-related companies in the past, and all
were
> very helpful and really seemed to care about customer satisfaction. This

person
> at Cushcraft, who sent a response of less than 20 words, really got me
bothered
> to the point where I'm considering replacing my R7 with a similar model
from
> one of their competitors, not that this will break the company, but I
think the
> Cushcraft people will be just fine without my money.
>
> Is this type of customer (lack of) service typical for these folks, or did
I
> just catch one of their less caring employees on a less than good day?
Anyone
> else have a bad Cushcraft story to tell? Was this an isolated incident, or
are
> these folks generally like this once they have your money and you have
their
> aluminum up in the air?
>
> Just curious.
>
> Venting and blowing steam in New Jersey, de
> Tom KB2FIK
> NJRadioDude@aol.com

2920. Re: Ladder Line center insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 02:06:25 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A85F3A1.5DC96A32@oio.net>
Source record: 170493

John wrote:
>
> I'm looking for a center insulator to use with my G5RV antenna I want to
> build - the last one I had was a triangle insulator made of gray plastic,
> but I can't seem to locate it now on the web - I'm not really interested in
> the Ladder Lock...
>
> Any help?
>
> Thanks!
>
> Jerry

John/Jerry,
Why not make one? What would it take, 2-3 dollars
worth of plexiglass? Hit the hardware store...
'Doc

2921. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 02:07:10 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A85F3CE.55A@pacbell.net>
Source record: 170494

Cecil wrote:
>
> Richard Clark wrote:
> > Your report of j0 gives me some concern.
>
> Yep, I got 'F' material and '77' material mixed up. The
> #77 reads R=32 and X=11 Gotta get those cataracts fixed.
>
> > FT-77-1024 or FB-77-1024?
>
> It's FB-77-1024 and the Amidon brochure says that bead
> has a one turn 'Z' of 166 ohms but it doesn't.
> --
> http://www.mindspring.com/~w6rca

Cecil, I just looked up the FB-77-1024 impedance in the Amidon book and they give it as being 25 ohms at 25 Mhz with the wire making only one pass through the core. Must be a typo somewhere.

Tom Donaly KA6RUH

2922. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 04:14:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A86119D.FAF45E39@eznec.com>
Source record: 170495

Even an ideal voltage balun will create common mode current if it's presented with a load that isn't perfectly balanced with respect to ground (the "cold" side of the input). Fundamentally, the perfect voltage balun forces equal voltages on each side of the output to ground. If the load impedances on each side aren't identical, this results in unequal currents in the two sides. It's easy to show with simple nodal analysis that the difference current ends up as common mode current.

The classical 1:1 voltage balun has three windings. Two of them are connected like a current balun. The third, or tertiary, winding effects the voltage balance. If the loads on the two sides of the output are identical, the tertiary winding carries no current, so it doesn't do anything in that case. So from the standpoint of common mode current, the tertiary winding does nothing at best, and at worst it produces common mode current.

These are not the result of any imperfections, but occur even if the transformer is perfect.

For more discussion about this, see "Baluns: What They Do and How They Do It", in the _ARRL Antenna Compendium_, Vol. 2.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Rick:
>
> "Ground", it's nice when you have it where you want it... but, heh, heh...
> it's never where you want it.
>
> And, speaking of "conventional baluns", if you could find a good place to
> "ground" a Faraday screen placed between the primary and secondary of a
> voltage balun you could get pretty good common mode rejection out of the
> thing.
>
> The problem is that, according to Murphy's Law, "ground" is always
> inconveniently some distance [usually not a negligible fraction of a
> wavelength] away from where it's needed!
>
> -Peter K1PO
>
> "Rick Littlefield" <k1bqt@aol.com> wrote in message
> news:20010210184119.26112.00000306@ng-cd1.aol.com...
> > >The same thing is done all the time with microwaves. The 1/4-wave metal

> posts
> > supporting antenna and transmission line conductors are called "metal
> > insulators".<
> >
> > Exactly! When the groundplane is well defined, there's no problem with
> Reg's
> > concept.
> >
> > Rick K1BQT

2923. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 04:20:58 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A86132A.AE865F03@IEEE.org>
Source record: 170496

Donaly wrote:
> Cecil, I just looked up the FB-77-1024 impedance in the Amidon
> book and they give it as being 25 ohms at 25 Mhz with the wire
> making only one pass through the core. Must be a typo somewhere.

I'm looking at the chart on page 18 of their brochure entitled
"Iron Powder and Ferrite Coil Forms. What book are you looking in?
--
http://www.mindspring.com/~w6rca

2924. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 04:31:12 UTC
From: jeffreys@cyburban.com
Message-ID: <3a861485$0$82357$45beb828@newscene.com>
Source record: 170497

Without sounding crass, how long do you expect to live?

Its priced about 20X a one year rate. So if you plan on being into radios and alive for 20 more years, its well worth it.

Also locks in prices today!

--jeffrey

In article <20010210060758.03934.00000500@ng-mi1.aol.com>, ke4qkn@aol.com says...
>
>Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the
>hobby. I am considering a lifetime membership but would like to hear some
>opinions from others first.
>
>Mark
>KE4QKN
>EM60
>
>
>
>
>
>"Hell, Columbus thought Cuba was China!!!" - Tully Mars

2925. effect of paint pegment onantenna performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 04:32:24 UTC
From: michael3475@my-deja.com
Message-ID: <9654kp$96n$1@nnrp1.deja.com>
Source record: 170499

Effect of paint pigment on Antenna performance...

Does anyone have data or experience regarding the effect of
paint pigments on antenna performance?

Sent via Deja.com
http://www.deja.com/

2926. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 04:37:16 UTC
From: atkes@imap1.asu.edu
Message-ID: <9654tsfeg1@news.asu.edu>
Source record: 170498

Richard Harrison (richardharrison@webtv.net) wrote:
: Kevin, W9CF wrote:
: "My problem with the set up that Reg mentioned is that it is
: specifically designed to have a high Q resonant wire in the vicinity of
: the antenna."

: The same thing is done all the time with microwaves. The 1/4-wave metal
: posts supporting antenna and transmission line conductors are called
: "metal insulators".

: Best regards, Richard Harrison, KB5WZI

Richard,

Apparently I'm not being clear since I agree with you, but that is not the situation I was addressing.

If you are careful to not excite the resonant line or in the microwave case, the "metal insulators" with common mode currents you can of course use them. However to use Reg's set up as a balun, you need to make the outside of the feedline resonant just like those metal insulators and therefore you must be much more careful than otherwise about induced current. For example in the microwave case, correct me if I'm wrong, these supports run perpendicular to the conductors. That way they aren't excited. They aren't run partially parallel to the conductors or they would have the problem I am talking about.

I may have missed it, but I thought Reg was replacing a general current balun with his setup. If you specialize, for example, to a half wave horizontal dipole 1/4 wavelength up over perfect ground with the feedline dropped vertically to the ground, then I agree that Reg's method works. Hams often feed antennas that are not well balanced, and often the feedline is dressed so that it can pick up energy from the antenna. In this case you want to suppress both the current from the inside of the shield to the outside, and the induced currents from the antenna fields on the feedline. Reg's set up solves one problem, but exacerbates the second if it exists. A normal current balun solves the first and does not change the second.

73 Kevin w9cf

2927. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 04:52:20 UTC
From: kelly@dvol
Message-ID: <3a861803.187837581@news2.dvol.com>
Source record: 170500

On 10 Feb 2001 11:07:58 GMT, ke4qkn@aol.com (Texas Rangers Fan Since
1972) wrote:

>Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the
>hobby. I am considering a lifetime membership but would like to hear some
>opinions from others first.
>
>Mark
>KE4QKN
>EM60
>
It's an investment decision based on life expectancies. If you expect
to be around for 15 or more years it'll pay off. Which is not the
whole story of course but that's one way of looking at it.
>
Brian w3rv

2928. Re: effect of paint pegment onantenna performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 05:31:59 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <fn8c8t8v3ji9ug89aags7ptn6fq3m3oscr@4ax.com>
Source record: 170431

michael3475@my-deja.com
shared these priceless pearls of wisdom:

->Effect of paint pigment on Antenna performance...
->
->Does anyone have data or experience regarding the effect of
->paint pigments on antenna performance?

We've been involved with the design and installation of antennas inside the wings of "plastic" (i.e. fiberglass-resin) airplanes for many years. We have had reports, now over 20 years old, that there is a German brand of paint that had measurable effects on aircraft painted with that paint, but I haven't had any information on this particular unnamed and rumored brand for twenty years.

Other than that, paint on a plastic airplane seems to affect the operation of these antennas (75-350 MHz.) not in the least.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

2929. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 06:03:18 UTC
From: richardharrison@webtv.net
Message-ID: <12494-3A862B26-120@storefull-114.iap.bryant.webtv.net>
Source record: 170501

Kevin, W9CF wrote:
"They aren`t run partially parallel to the conductors or they would have the problem I am talking about." (1/4-wave metal supports)

Agreed. The question is the size of the problem. If the feedline is perpendicular to its dipole for a 1/4-wavelength before becoming not equidistant from both sides of the dipole, it`s not going to pick up a lot of r-f.

If odd multiples of a 1/4-wavelength are used for a coax transmission line well grounded at the radio, that line is going to reject most energy directly fed from inside the coax to its outside surface.

A lot of coax radiation doesn`t hurt anything anyway. A low dipole doesn`t have much of a directional pattern. Many users would just as soon have an "L-antenna" or an "inverted-V", so a little pattern corruption from feedline radiation may be inconsequential or beneficial. As long as r-f isn`t annoying anybody in the shack there may be no problem.
Best regards, Richard Harrison, KB5WZI

2930. How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 06:16:51 UTC
From: bummer-radio@licensing.org
Message-ID: <goodbye@goodbye>
Source record: 170502
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

I find I can no longer support the ARRL by being a member. What's the best way to cancel a membership?

TNX 73 de Smiley

2931. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 06:33:08 UTC
From: Buzzsaw <"Catch Me."@edu.com>
Message-ID: <965bke$ko7$0@dosa.alt.net>
Source record: 170503
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Buy a CB....

"smiley o'riley" <bummer-radio@licensing.org> wrote in message
news:goodbye@goodbye...
>
> I find I can no longer support the ARRL by being a member. What's the
best
> way to cancel a membership?
>
> TNX 73 de Smiley

2932. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 06:56:27 UTC
From: "M. Schneider" <markinokla@juno.com>
Message-ID: <UPqh6.44$sp6.208@newsfeed.slurp.net>
Source record: 170504
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Try writing them a nice letter stating, due to diminished mental ability resulting in your involuntary commitment to a state mental hospital, that you are no longer able to function as a reasoning amateur radio operator, so would they please cancel your membership and return any refund so you can pay for the electro-shock treatments. I'm sure the League will be very understanding.

73,
Mark

"smiley o'riley" <bummer-radio@licensing.org> wrote in message news:goodbye@goodbye...
>
> I find I can no longer support the ARRL by being a member. What's the best
> way to cancel a membership?
>
> TNX 73 de Smiley

2933. 4-Sale-New Motorola 1/4 Wave VHF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 07:33:24 UTC
From: WB7LCS@RecRadioSwap.com
Message-ID: <3a863ff4.38799309@netnews.worldnet.att.net>
Source record: 170505

For auction at:
http://www.2wayradioauction.com/cgi-bin/auction.cgi?antennas&982476544

Motorola HAD4008 VHF (150-160 MHZ) Antenna Kit. Brand New! Complete with 1/4 antenna, chrome nut, and antenna cable. Requires 3/4" hole for mounting.

'73

2934. painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 07:36:13 UTC
From: Helene Maxwell <rkasten@ix.netcom.com>
Message-ID: <965go0sgi1@nntp9.atl.mindspring.net>
Source record: 170506

I'm putting up a vertical HF antenna among some trees and would like to spray paint it so it isn't
particularly visible, but don't know how significantly this may affect its performance.
Do you know? Please respond to: rkasten@ix.netcom.com Thanks!

2935. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 08:18:20 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <965hscicd1@news.hawaii.edu>
Source record: 170507
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

```
smiley o'riley <bummer-radio@licensing.org> wrote:
>I find I can no longer support the ARRL by being a member. What's the best
>way to cancel a membership?
>TNX 73 de Smiley

0 2 4 6 8 10
/
/
/
/
/
/
/
/
TROLL-O-METER
(courtesy K0HB)

Jeff KH6O
```

2936. Re: 137 Mhz antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 08:38:59 UTC
From: Martien <martien@martpeeters.tmfweb.nl>
Message-ID: <965jd0$86h$1@azure.nl.gxn.net>
Source record: 170508

look at
http://www.odyseus.clara.co.uk/antennas.htm

Ambrogio <ambrogiorbl@tin.it> schreef in berichtnieuws
fCih6.13485$ep3.385324@twister1.tin.it...
> Good morning:
> I amnsearching for a proven project for a quadrifilar antenna for apt
> reception.
> Any help ?
> Thank you for the collaboration: IW2FVO
> AMBROGIO ambrogiorbl@tin.it
>
>

2937. What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 09:33:37 UTC
From: jdhl <jdhl@verio.com>
Message-ID: <R%sh6.13303$1%2.689409@sjc-read.news.verio.net>
Source record: 170509

What antenna is the best AM radio antenna?

Regards,

jdhl

2938. Re: Ladder Line center insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 10:09:44 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a8664ed_2@news.cybertours.com>
Source record: 170510

I Think that the one at :
http://emtech.steadynet.com/grabber.htm
hope this Helps 73 Dave kc1di

"John" <jh-lewis@swbell.net> wrote in message
news:J1jh6.18$ZO2.3904@nnrp1.sbc.net...
> I'm looking for a center insulator to use with my G5RV antenna I want to
> build - the last one I had was a triangle insulator made of gray plastic,
> but I can't seem to locate it now on the web - I'm not really interested
in
> the Ladder Lock...
>
> Any help?
>
> Thanks!
>
> Jerry
>
>
>
>

2939. tuner help needed (part 2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 12:53:06 UTC
From: rdalton1 <rdalton1@postoffice.swbell.net>
Message-ID: <RWvh6.925$ur5.248604@nnrp2.sbc.net>
Source record: 170512

Thanks for the lack of response,should have known better than to ask for help here.

2940. Re: effect of paint pegment onantenna performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 13:01:34 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A868D2E.306DAB35@dialpoint.net>
Source record: 170511

Depends on the antenna and paint. If the antenna is metal and is painted where there is no loading coils or traps and the paint does not bridge over the feed point then it will have no noticable effect. At a very high frequency it might have the effect of lowering the resonating frequency a very slight ammount, but still probably not noticable in every day use.

If the antenna is enclosed in a fiberglass encloser and it is painted with a paint that has metal particals in it, then there will be some effect on the antenna.

michael3475@my-deja.com wrote:
>
> Effect of paint pigment on Antenna performance...
>
> Does anyone have data or experience regarding the effect of
> paint pigments on antenna performance?
>

2941. Re: HF Mobile Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 13:06:33 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <t7wh6.298540$hD4.71895340@news1.rdc1.mi.home.com>
Source record: 170513

Don's DK3 is good but High Sierra HS-1500 is better.
http://www.hsantennas.com/info/
It comes with ALL the parts. You do not need to run around looking for
something to make a coil cover from. It also has a great finish and mounting
brackets are available.

William Lee

"Brendan Minish" <bminish@oceanfree.net> wrote in message
news:6hob8t41eet6fb1f67smol0aid8iif9j7k@4ax.com...
> On Tue, 6 Feb 2001 19:07:41 -0500, "John (KB3CDF)"
> <murphman@erols.com> wrote:
>
> >Howdy:
> >Anyone ever use the DK3 Screwdriver antenna made by Mel Woody?
>
> Dunno about MEl's copy of the DK3 but I run an original DK3 made By
> Don Johnson W6AAQ and I am really happy with it, it's solidly made and
> a real good performer, it also has a couple of nice features like the
> milled in Z-match (no need for a matching transformer) and the end
> stop clutch. It's also cheaper than most (any?) of the copies at $150.
> I bought mine at
> http://www.hamradiotoys.com/dk3.htm
> and it took about 2 weeks to arrive here In Ireland. I can Highly
> recommend Don's
>
> >Let me know what you think.
>
> Buy the original version from Don, that's what I think!
>
> 73's De Brendan Minish EI6IZ
>
>
> --
> Brendan Minish
> The reply address works but
> This will get to me faster
> bminish at eircom dot net

2942. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 13:23:31 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <og4d8t0f1s36noul62tme44qpa9ujkfpd2@4ax.com>
Source record: 170514

On Sun, 11 Feb 2001 09:33:37 GMT, "jdhl" <jdhl@verio.com> wrote:

>What antenna is the best AM radio antenna?
>
>Regards,
>
>jdhl
>

The one that KFI has down in Orange County, CA.

W7TI

2943. Kenwood MA-5 multi-elements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 13:30:30 UTC
From: mikew@sentex.net
Message-ID: <3a8892f2.212600820@news.sentex.net>
Source record: 170515

Has anyone ever tried using "multiple elements" on an MA-5 similar to how Hustler does with a VP-1 Tri-Band adapter on their coils? I can't see why it shouldn't work (as long as you use some good guy lines to stabilize it) I'd appreciate any feedback , thanks
Mike VE3MKY

2944. Re: tuner help needed (part 2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 14:44:44 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A86A55C.5D7D264A@hiwaay.net>
Source record: 170516

rdalton- I must have missed your first (?) post. When was your request
sent? I will try to go see it. Sorry you feel put off.
Bill-W4BSG

rdalton1 wrote:
>
> Thanks for the lack of response,should have known better than to ask for
> help here.

2945. Re: tuner help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 15:02:49 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A86A999.992A1B56@hiwaay.net>
Source record: 170517

Richard-
The simplest answer is to refer you to any of several books on amateur radio. (amateurs are almost the only class of users that need general purpose tuners). The ARRL handbook and Antenna books would be high on the list. The Houston library probably has copies. Since MFJ makes MANY tuners,and has their manuals on-line, try going to www.mfjenterprises.com, to see general info on typical units.

The classic tuner circuit is a "T", with the top bar consisting of two variable capacitors in series from the transmitter to the antenna, with an inductor from the center connection between the capacitors and ground (the post of the "T"). for most HF tuners, the capacitors are about 250 max, but for 6M, they would be less.

The successful use of a tuner will depend on having a way to measure the outgoing and return signals. Most modern tuners incorporate a bridge and two meters for this. However, there may be a way built into your tranceiver to do this.

I hope this is a start on getting an answer.

Bill-W4BSG

rdalton1 wrote:
>
> I't been years since I've built an antenna tuner(forgotten how)Anyone have a
> schematic
> for one?Prefer six meters,but any basic schematic would be greatly
> appreciatedThanks.....
> Richard kc5gjy

2946. FA: Dentron 3KW antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 15:32:25 UTC
From: David <k4zzr@gate.net>
Message-ID: <B6AC1AB5.76A%k4zzr@gate.net>
Source record: 170420

LAST DAY!! For Auction on Ebay:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1213151770

2947. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 15:37:07 UTC
From: awmd95@aol.com
Message-ID: <20010211103707.16159.00000486@ng-cu1.aol.com>
Source record: 170518

Its called the dx sloper and its available at
hro ham radio outlet in anahiem california,atlanta ga,portland ore.hamradio.com
is the web address.

2948. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 15:39:53 UTC
From: awmd95@aol.com
Message-ID: <20010211103953.16159.00000487@ng-cu1.aol.com>
Source record: 170419

it will notaffect it any way as long as its non
conductive paint.the end connected to the coaxial cable should not be painted.

2949. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 16:11:04 UTC
From: k1bqt@aol.com
Message-ID: <20010211111104.16996.00000417@ng-mj1.aol.com>
Source record: 170422

> don't know how significantly this may affect its performance.<

A while ago, I spray painted PVC pipe with Ultra-Flat Black Krylon and tested in my microwave oven to see if it would become lossy and heat due to the addition of the pigment. I discovered the treated PVC sample didn't heat anymore than an identical sample of untreated PVC.

If painted PVC isn't affected by high power at 2 GHz, your HF antenna likely won't be affected by non-metallic spray paint.

Rick K1BQT

2950. Re: Kenwood MA-5 multi-elements?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 17:00:39 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A86C537.605DC4F9@oio.net>
Source record: 170423

Mike,
The MA-5 does work well, but it also has a few characteristics
of all fibreglass antennas. Namely, they all tend to eventually
'break' because of the beating they take from tree branches.
I would suggest using any other 'bumper mount' except kenwood's.
Their mount just isn't worth what it costs. Kenwood has one of the
'best' springs I think I've ever seen, HUGE! Probably not worth
it's cost, but will hold a '48 Desoto without too much 'sway' to it.
(You still need a 'guy', though)
The MA-5 isn't the 'best' mobile antenna on 80-40 meters, sort of
a narrow bandwidth, but if you don't move around too much, not a
problem. Like anything from Kenwood, you 'pay' a lot for the 'name.
Guess it depends on what's available.
'Doc

2951. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 17:05:00 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A86C63C.C03E137E@oio.net>
Source record: 170424

Helene Maxwell wrote:
>
> I'm putting up a vertical HF antenna among some trees and would like to spray paint it so it isn't
> particularly visible, but don't know how significantly this may affect its performance.
> Do you know? Please respond to: rkasten@ix.netcom.com Thanks!

Helene,
Painting shouldn't make much difference if the paint is
non-conductive. Don't paint the feedpoint junction, or the
trap junctions (if any).
'Doc

2952. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 17:15:47 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <GseGOmV6wITlm=7C026XeD0jrMZL@4ax.com>
Source record: 170425

On Sat, 10 Feb 2001 18:07:10 -0800, Donaly <dtdonaly@pacbell.net>
wrote:

>Cecil wrote:
>>
>> Richard Clark wrote:
>> > Your report of j0 gives me some concern.
>>
>> Yep, I got 'F' material and '77' material mixed up. The
>> #77 reads R=32 and X=11 Gotta get those cataracts fixed.
>>
>> > FT-77-1024 or FB-77-1024?
>>
>> It's FB-77-1024 and the Amidon brochure says that bead
>> has a one turn 'Z' of 166 ohms but it doesn't.
>> --
>> http://www.mindspring.com/~w6rca
>
>Cecil, I just looked up the FB-77-1024 impedance in the Amidon
>book and they give it as being 25 ohms at 25 Mhz with the wire
>making only one pass through the core. Must be a typo somewhere.
>
>Tom Donaly KA6RUH
>

Hi Tom,

You need to read the fine print. The value you are reading off the chart(?) or out of a table(?) is the value normalized to one standard size of bead. The form factor for the FB-77-1024 is 3 to 4 times that value (and is labeled something like Z factor). The properties are dependant upon bulk, and Cecil's core is bigger (3 to 4 times so) than the average bead that is used as a reference by Amidon.

This is why I speculated that Cecil measured a bead, and got his notes mixed as that reading being for the core discussed here. (Otherwise, Cecil, your analyzer is one sick puppy - my guess is that you have miss-identified the material).

73's
Richard Clark, KB7QHC

2953. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 17:48:03 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A86D052.AE8CD017@ix.netcom.com>
Source record: 170426

Helene
Painted my R-7000 vertical with a mottled camouflage green, non conductive paint. No problems. In fact
worked a station in Armenia the other night -- brag brag. Keep paint away from the trap junctions and
critical feed points.

In the Navy, they once sent me to the Paint Locker for some invisible camouflage paint, never could find
it! But could use some now -- HOA here.

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
RF gotta go somewhere!
==========

> Helene Maxwell wrote:
> >
> > I'm putting up a vertical HF antenna among some trees and would like to spray paint it so it isn't
> > particularly visible, but don't know how significantly this may affect its performance.
> > Do you know? Please respond to: rkasten@ix.netcom.com Thanks!

2954. Transmitter protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 17:56:24 UTC
From: jm <jmacfarl@visi.com>
Message-ID: <cnAh6.250$k7.50367@ruti.visi.com>
Source record: 170427

I am new to this - so help me out even if this is a dumb question please. I just got a Yaesu FT-847 radio. I currently have a 2 meter antenna. The back of the radio has 4 antenna connectors. I am interested in connecting my 2 meter antenna to one of the 4 connectors on the back of the radio. I would like to protect the radio from me accidently transmitting to the wrong antenna port. Is it possible for me to get a triplexer and a single dummy load and connect the remaining three open antenna out jacks to the single dummy load via the triplexor? To add another small twist - one of the open antenna out ports is a type "N" not a type "M". is there a simple adapter i can get if the triplexer only has type "M" connectors? Please set me striaght if this is way off base. Thanks!

jmacfarl@visi.com

2955. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 17:56:53 UTC
From: richardharrison@webtv.net
Message-ID: <22903-3A86D265-40@storefull-111.iap.bryant.webtv.net>
Source record: 170430

Helene Maxwell wrote:
"I`m putting up a vertical HF antenna among some trees and would like to spray paint it so it isn`t particularly visible, but don`t know how significantly this may affect performance."

Among trees may affect performance depending on proximity, size and density of the trees.

Tower painting is better done with brush, roller, old sock, etc., than by spraying unless this is done in a special facility.

Painted antennas usually perform the same as unpainted antennas when both are new. If the paint protects the conductive surface of a radiator, it may perform better than would a corroded radiator.

Look around. Nearly all AM broadcast towers are required by the FAA to be painted distinctively according to their regulations to reduce air navigation hazards. Performance difference due to painting isn`t worth mention.

For microwaves, no performance penalty from painting is usually significant. You almost never see an unpainted microwave dish., and there is no specification for non-conductive paint. The smooth dish reflecting surface underneath the paint must be conductive anyway. and paint isn`t thick enough to change the dish geometry or performance. The dish won`t be thrown into a microwave oven, and if it were, its behavior would be the same with or without paint, if any practical purpose were served by inserting the radio dish in an oven.

Best regards, Richard Harrison, KB5WZI

2956. Re: tuner help needed (part 2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 18:08:52 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A86D534.543C9184@dialpoint.net>
Source record: 170428

For simple answers like this you should invest in the Handbook put out
by the ARRL at
arrl.org.

rdalton1 wrote:
>
> Thanks for the lack of response,should have known better than to ask for
> help here.

2957. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 18:15:15 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a86d6a7.68260593@news.aepnet.com>
Source record: 170429

On 10 Feb 2001 20:02:35 GMT, atkes@imap1.asu.edu wrote:

>
>
>Wes Stewart (nospam_n7ws@arrl.net) wrote:
>snip
>: Let me play Devil's advocate here (sorry Reg).
>
>: If we ignore the problem of achieving an adequate ground for a moment, the
>: literature (Terman 3rd edition Figure 14-28 for example) is replete with
>: examples of 1/4 wavelength stub and sleeve baluns.
>
>: For certain, these are a bit different from tuning the coax itself, but they
>: operate on the same idea, so are they any less likely to be inadvertent
>: radiators?
>
>: Isn't it always the case that symmetry is required, i.e. the line should be
>: normal to the plane of the radiator? Coupling after the balun would seem to b
>e
>: just as likely and detrimental if symmetry isn't maintained, regardless of the
>: type of balun.
>
>: Even your "more sensible arrangement" requires a non-resonant line which migh,
>: be difficult on a multiband system. Isn't a "planned" resonance better than an
>: "unplanned" resonance?
>
>: Don't get me wrong; I use a ferrite sleeve balun on my wire dipole, so I'm a
>: believer in that approach. On the other hand, I use a non-resonant combinatio
>n
>: stub/balun (infinite) balun on my HB Yagi and it most definitely requires
>: symmetry for its operation.
>
>: Once again; just playing Devil's advocate.
>
>: Wes Stewart, N7WS
>
>Wes,
>
>The difference is that the resonant part of the sleeve balun is shielded
>from external fields. My problem with the set up that Reg mentioned is
>that it is specifically designed to have a high Q resonant wire in the
>vicinity of the antenna. A low Q resonant wire or a nonresonant wire
>will not make much of a problem, however Reg's set up needs the high
>Q resonance to give a large impedance to work as a balun. That is, either

>you have good choking action because of the high Q resonance and therefore
>a likelihood that you will excite this resonance with any small asymmetry,
>or you have poor choking action because you have no high Q resonance.

Kevin,

I may be a bit dense but I've never let that stop me<g>. If I understand Reg's proposed situation (I note that he has been conspicuously absent since pleading for comments) he has a line only 1/4 wavelength long from the feed point to ground.

I believe we all agree that the purpose for using the balun in the first place is to prevent part of the differential current inside the coax from becoming common-mode current on the outside of the line. Therefore, however it is implemented, it should (does) present a high impedance to the common-mode current while not messing around with the differential current.

For the sake of discussion if we accept that the differential-mode current is independent of the goings on on the outside of the cable we should be able to do away with it and replace it with an ideal generator at the feedpoint of the antenna.

So now there is for example, a quarter wavelenth high, half-wave long horizontal wire, center-fed with an ideal generator and a vertical quarter wavelength coaxial structure symmetrically placed under the feed point and grounded on the bottom end.

The center conductor of this structure is the original coax braid and the outer conductor is the balun sleeve.

If I understand what your are saying (always a dubious proposition) this structure is less likely to radiate if excited than if the sleeve was removed.

I may be wrong but I believe the answer is that there will be no difference.

You may argue with justification that this is a very contrived situation. So let's remove the ground and make the cable a random length. The result is unpredictable but does it ever matter whether the sleeve is there or not? I don't believe that it does.

If the line structure is asymmetrically placed, there will be coupling to the line regardless of the method used to prevent that portion of the common-mode current that results from the transmission line current. Sleeve, bead, or whatever, it makes no difference.

What the world needs is coax with a ferrite-loaded jacket.

Wes Stewart N7WS

>
>Certainly maintaining symmetry is important to keep from coupling the
>outside of the feedline for any system, but you will have to maintain
>symmetry to a much higher degree to keep the current on the outside of
>a high Q resonant line at the same low level as you would with a more

>normal feedline arrangement.
>
>The usual current balun gives a large impedance for currents running
>from the inside to the outside of the shield. One way to make this high
>impedance is to use a sleeve balun, which essentially places a shorted
>quarter wave line in series from the inside of the original shield to
>the outside of the sleeve. The exposed part is the outside of the
>sleeve balun and the rest of the feedline, and this is not normally a
>high Q resonant circuit.
>
>As an aside, it's perhaps amusing to notice that if you filled a sleeve
>balun with ferrite, you would get a high impedance with a much shorter
>sleeve. You then might notice that the outside of the sleeve isn't doing
>very much. Removing it gives a W2DU balun. I suspect that for vhf work,
>including a shield on the outside of the W2DU balun might make its
>effect more reproducible, but I haven't used one at VHF and haven't
>thought much about it. You could also put a capacitor across the inner
>and outer shield and get somewhat higher rejection at some frequencies
>by resonating the parallel inductance.
>
>73 Kevin w9cf

2958. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 18:47:52 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A86DE58.1699@bellsouth.net>
Source record: 170432

Tom,

Just my opinion, but regarding your inability to justify the expense of a screwdriver, I couldn't help noticing that you obviously have $160 invested in your mount plus the antennas ($60 + $20 X 5 hamsticks). For an additional $50 you could've found a screwdriver that, in its most basic form, would outperform those hamsticks by a significant margin. That's just an observation, not a criticism. Of course, you also have the "spouse" factor to deal with as most of us do, or have had.

In my case, I found the extra $50 to be well worth the money in terms of the added performance and the convenience of not having to change antennas every time I want to change bands. If you can persuade the spouse and get hold of the plans ($5), you can build a screwdriver for quite a bit less. With scrounged tubing and PVC forms, it can be done for as little as $40.00 if you have access to a lathe. I make mine out of black Nylon because it is less brittle, resistant to UV rays, and handles about as much power as you want to throw at it.

Jerry
K4KWH

NJRadioDude wrote:
>
> Hi Dave,
>
> Back in November, I rented a Ford Windstar for a family vacation. I used the
> HamSticks for 75/80m, 40, 17, 15, and 10m. You made a good choice. I bought
> Diamond (I forget the model name and number) heavy-duty universal mount with
> the 3/8ths X 24 TPI female receptical. It's a good, solid mount, and as long as
> you're certain you have a good RF ground at the place you install it, you'll be
> in business. I mounted mine on the rearward-most cargo door at the (aft) end (I
> own pick-ups and dont' know what the back door is called. Hey, it's the back
> door!) I checked for good continuity of this body panel and found it
> acceptible. The back door of the Windstar has so much power schtuff, I was not
> suprised. With a decent VSWR on each band, from my Icom751a at 100w, I
> routinely worked from Cape Cod, Mass into 8 and 9 land on 75/80 during the day,
> at least 1/2 the country at night (in between all the arguing children on that
> band), and similar results on 40m both day and night. Ten and 17 meters were
> pretty much like hamming from home during the day...if there was propagation
> and I could hear something, I could work it. I worked Europe in the mid
> morning, North, South and Central America all day, and into the far East before
> the bands shut down an hour or so after local sunset. The Diamond mount does
> not mar or blemish the paint, has set screws on the under side of the mount
> that once installed, a little dab of silicone will prevent any oxidation. The

> supplied co-ax is the thin teflon type and did not affect the weather
> strippings ability to keep out water. Of course, there will be purists out
> there (and they are not wrong) who will say that the only the optimum place
> would be dead center of the vehicle and as low to the ground as possible,
> especially for low band operation, but for casual (albeit permanent) operation,
> optimumimity is not always practical. Sometimes, just slapping on an antenna
> and playing with it until you get a good ground and a good VSWR reading, is
> just as rewarding as a severe case of optimuminality...just make certain
> (regardless of what you decide to get), that you have a serious RF ground. This
> will increase your level of optimumlisticness. The HamSticks are a great choice
> for those of us who just can't justify the expense of a screwdriver-type to our
> spouces or even to ourselves. The Diamond mount is solid and did not move a
> bit, nor did the HamStick mounted to it even at highway speed (75-90mph,
> conditions permitting of course). No, I'm not a stockholder in either company,
> I just bought the darned things and happen to be very happy with them. The
> mount was (I think) around $60.00, but I think it to be well worth it. It's
> bound to last for years and can go from car to car to car, rental, leased,
> whatever.
>
> Good luck.
>
> Tom KB2FIK
> NJRadioDude@aol.com
> Bloomfield, New Jersey

2959. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 18:48:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A86DE74.C970CF70@IEEE.org>
Source record: 170435

Richard Clark wrote:
> This is why I speculated that Cecil measured a bead, and got his notes
> mixed as that reading being for the core discussed here. (Otherwise,
> Cecil, your analyzer is one sick puppy - my guess is that you have
> miss-identified the material).

Well, the shipment from Amidon was labeled FB-77-1024. I suspect someone screwed up on the brochure. In the text, they say the typical 'Z' is given for one "turn" but the illustration shows one "loop" with the wire going through the core two times. For what it's worth, the alleged FB-77-1024 measures 32+j11 ohms for one wire on my MFJ-259B. A T-200A-2 iron powder core measures 13+j16 ohms for one wire. All at 25MHz.
--
http://www.mindspring.com/~w6rca

2960. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 18:48:30 UTC
From: richardharrison@webtv.net
Message-ID: <22068-3A86DE7E-57@storefull-115.iap.bryant.webtv.net>
Source record: 170440

Bill Turner, W7TI wrote:
"The one that KFI has down in Orange County, CA. (is the best AM radio antenna)".

My records show KFI as a non-directional 50-KW station on 640 KHz.

KFI`s antenna is excellent for its frequency and purpose. It would receive Ames, Akron, Norman, St. John`s, and Cuba, perhaps, on 640 KHz. It would also do well on the rest of the broadcast frequencies. It doesn`t have to be resonant. But, hooked to a broadcast receiver in place of the KFI transmitter, most of the time it would likely hear a noise jumble on 640 KHz.

A better antenna for a listener is probably a tuned rotatable loop that can be adjusted for the favored direction and frequency.

Best regards, Richard Harrison, KB5WZI

2961. Re: Transmitter protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 18:59:25 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A86E10D.81D6F240@dialpoint.net>
Source record: 170433

I am not familiar with that particular radio, but if there is a
triplexer made that covers the bands that come out of the back , then
you can use one dummy load and the triplexer.

The type M connectors don't seem correct either. Are you referring to
the connectors as being a so-239 ?

jm wrote:
>
> I am new to this - so help me out even if this is a dumb question please. I
> just got a Yaesu FT-847 radio. I currently have a 2 meter antenna. The back
> of the radio has 4 antenna connectors. I am interested in connecting my 2
> meter antenna to one of the 4 connectors on the back of the radio. I would
> like to protect the radio from me accidently transmitting to the wrong
> antenna port. Is it possible for me to get a triplexer and a single dummy
> load and connect the remaining three open antenna out jacks to the single
> dummy load via the triplexor? To add another small twist - one of the open
> antenna out ports is a type "N" not a type "M". is there a simple adapter i
> can get if the triplexer only has type "M" connectors? Please set me
> striaght if this is way off base. Thanks!
>
> jmacfarl@visi.com

2962. Re: HF Mobile Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:01:52 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A86E1A0.613F@bellsouth.net>
Source record: 170434

William Lee wrote:
>
> Don's DK3 is good but High Sierra HS-1500 is better.
LOL! So are mine! I make mine with Nylon (no PVC at all) and #14 wire for higher Q. Up to 3" dia. 700 watts on the 2" and full legal limit on the 3 incher. Coil covers are supplied as well as switches and matching. Now, I use a separate coil that has a feature to allow for adaptability to different kinds of Quick Mounts. If one is not going to use a Quick Connect, the coil is simply screwed onto the mount and the antenna mounts to the top of the coil. If one is going to use the excellent Quick Connects sold by Henry Allen (and me because I know the inventor! LOL!), then the brass inserts are removed from the ends and the coil is simply slid over the bottom stud. Why no "toroids"? They seem to give trouble on the upper bands whereas the simple coil easily provides a good feedpoint impedance everywhere. And if your situation changes, it is very easy to just change the tap.

Jerry
K4KWH

Somebody suggested I should use Delrin, but upon consulting my plastics supplier, I discovered that Delrin is brittle and subject to breakage whereas the Nylon is VERY tough and, while stout, has a little "give" in it. It also handles UV very well---especially the black Nylon.

2963. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:04:57 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A86E259.4B67@bellsouth.net>
Source record: 170436

Do it on the coax itself. My speedometer used to run all over the place
and I wound 6 turns of the coax on a small form right at the antenna.
This stopped that as well as my rear window defogger light glowing while
transmitting. I suppose the antenna was coupling with the rear fogger
wires until I did this.

Jerry
K4KWH

Cecil wrote:
>
> Jerry Oxendine wrote:
> > You run a screwdriver, right? Get one of those ferrite cores from Radio
> > Shack and wind 6 turns around a 1-1/2" dowel right at the antenna. I
> > had the same trouble on the old wagon. This stopped it.
>
> Are you talking about the coax or the screwdriver motor wires?
> --
> http://www.mindspring.com/~w6rca

2964. Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:10:44 UTC
From: Frizz <none@none.com>
Message-ID: <966ntu$4h0$1@bob.news.rcn.net>
Source record: 170437

Well, thanks to all that replied about my CB antenna question but I have yet another one. I currently am running a discone in my attic for 2m and because of the way the cable and satellite lines were run, I interfere with them both and can't really do anything about it until I am able to re-run those cables when it warms up. However, I want to try and build a dipole in my attic in hopes of correcting this TVI problem. First off, will this do it? Or am I just going to be stuck in the same boat with the interference problems? Second, I have read about how wire diameter affects the resonance of the dipole. What are some recommended diameters or lengths for those different diameters on 2 meters? Any help is appreciated. THanks!

KG4ivt

2965. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:14:27 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A86E493.17EA37AE@mwci.net>
Source record: 170439

Wes Stewart wrote:

> What the world needs is coax with a ferrite-loaded jacket.

Place a bead every 12 inches or so. Alternate between type 43 and type 77 to get maximum frequency coverage and to de-resonate along the entire length of the braid. I have done something very similar to this, using 12 feet of RG58 between xmtr and tuner and 5 inch bead spacing. It reduces braid RF conduction from tuner to xmtr by 12 to 18 dB, 3.5 to 29 MHz (measured).

Bill W0IYH

2966. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:16:43 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A86E51B.1BD2@bellsouth.net>
Source record: 170438

>
> I had a FORD and for me it stood for Fast On Race Day.
> K9SL
>
> Sent via Deja.com
> http://www.deja.com/

Well,

That's fine and I am happy you have had success with Fords. Not all of them are "bad". My Dad drove Fords from 1940 until 1984. When the dealer convinced him to drive a 1980 Buick Limited, it seemed to have taken the letters "LTD" out of his vocabulary! He STILL drives Buicks. I don't "hate" Fords, I just couldn't get them to work for me. But I do fondly remember some of Daddy's Fords--like our '65 Galaxie 500 that was completely faithful and was smoothe as silk. I was 17 years old when the car was new and I can still "smell" that scent of it--that new car smell.

Now as to the "fast" thing, I might argue with you there! LOL! I had some mighty quick 327/350 Chevys in my day. LMAO!

Best,

Jerry
K4KWH

2967. Re: Hamstick on Dodge Caravan

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:41:14 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3A86EADA.EA699BDB@bloomer.net>
Source record: 170441

Where are the plans available from? I might want to give one a try on
my Ranger. The Outbacker on my Astro van is awesome, but I don't want
to spend another $300 for one and I'm not particularily keen on having
to swap it from vehicle to vehicle.

Scott
N0EDV

Jerry Oxendine wrote:
>
> Tom,
>
> Just my opinion, but regarding your inability to justify the expense of
> a screwdriver, I couldn't help noticing that you obviously have $160 in-
> vested in your mount plus the antennas ($60 + $20 X 5 hamsticks). For
> an additional $50 you could've found a screwdriver that, in its most
> basic form, would outperform those hamsticks by a significant margin.
> That's just an observation, not a criticism. Of course, you also have
> the "spouse" factor to deal with as most of us do, or have had.
>
> In my case, I found the extra $50 to be well worth the money in terms of
> the added performance and the convenience of not having to change anten-
> nas every time I want to change bands. If you can persuade the spouse
> and get hold of the plans ($5), you can build a screwdriver for quite a
> bit less. With scrounged tubing and PVC forms, it can be done for as
> little as $40.00 if you have access to a lathe. I make mine out of black
> Nylon because it is less brittle, resistant to UV rays, and handles
> about as much power as you want to throw at it.
>
> Jerry
> K4KWH
>
> NJRadioDude wrote:
> >
> > Hi Dave,
> >
> > Back in November, I rented a Ford Windstar for a family vacation. I used the
> > HamSticks for 75/80m, 40, 17, 15, and 10m. You made a good choice. I bought
> > Diamond (I forget the model name and number) heavy-duty universal mount with
> > the 3/8ths X 24 TPI female receptical. It's a good, solid mount, and as long as
> > you're certain you have a good RF ground at the place you install it, you'll be
> > in business. I mounted mine on the rearward-most cargo door at the (aft) end (I
> > own pick-ups and dont' know what the back door is called. Hey, it's the back
> > door!) I checked for good continuity of this body panel and found it
> > acceptible. The back door of the Windstar has so much power schtuff, I was not

> > suprised. With a decent VSWR on each band, from my Icom751a at 100w, I
> > routinely worked from Cape Cod, Mass into 8 and 9 land on 75/80 during the day,
> > at least 1/2 the country at night (in between all the arguing children on that
> > band), and similar results on 40m both day and night. Ten and 17 meters were
> > pretty much like hamming from home during the day...if there was propagation
> > and I could hear something, I could work it. I worked Europe in the mid
> > morning, North, South and Central America all day, and into the far East before
> > the bands shut down an hour or so after local sunset. The Diamond mount does
> > not mar or blemish the paint, has set screws on the under side of the mount
> > that once installed, a little dab of silicone will prevent any oxidation. The
> > supplied co-ax is the thin teflon type and did not affect the weather
> > strippings ability to keep out water. Of course, there will be purists out
> > there (and they are not wrong) who will say that the only the optimum place
> > would be dead center of the vehicle and as low to the ground as possible,
> > especially for low band operation, but for casual (albeit permanent) operation,
> > optimumimity is not always practical. Sometimes, just slapping on an antenna
> > and playing with it until you get a good ground and a good VSWR reading, is
> > just as rewarding as a severe case of optimuminality...just make certain
> > (regardless of what you decide to get), that you have a serious RF ground. This
> > will increase your level of optimumlisticness. The HamSticks are a great choice
> > for those of us who just can't justify the expense of a screwdriver-type to our
> > spouces or even to ourselves. The Diamond mount is solid and did not move a
> > bit, nor did the HamStick mounted to it even at highway speed (75-90mph,
> > conditions permitting of course). No, I'm not a stockholder in either company,
> > I just bought the darned things and happen to be very happy with them. The
> > mount was (I think) around $60.00, but I think it to be well worth it. It's
> > bound to last for years and can go from car to car to car, rental, leased,
> > whatever.
> >
> > Good luck.
> >
> > Tom KB2FIK
> > NJRadioDude@aol.com
> > Bloomfield, New Jersey

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

2968. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:52:37 UTC
From: atkes@imap1.asu.edu
Message-ID: <966qi5ktr1@news.asu.edu>
Source record: 170442

Wes Stewart (nospam_n7ws@arrl.net) wrote:
: Kevin,

: I may be a bit dense but I've never let that stop me<g>. If I understand Reg's
: proposed situation (I note that he has been conspicuously absent since pleading
: for comments) he has a line only 1/4 wavelength long from the feed point to
: ground.

: I believe we all agree that the purpose for using the balun in the first place
: is to prevent part of the differential current inside the coax from becoming
: common-mode current on the outside of the line. Therefore, however it is
: implemented, it should (does) present a high impedance to the common-mode
: current while not messing around with the differential current.

: For the sake of discussion if we accept that the differential-mode current is
: independent of the goings on on the outside of the cable we should be able to do
: away with it and replace it with an ideal generator at the feedpoint of the
: antenna.

: So now there is for example, a quarter wavelenth high, half-wave long
: horizontal wire, center-fed with an ideal generator and a vertical quarter
: wavelength coaxial structure symmetrically placed under the feed point and
: grounded on the bottom end.

: The center conductor of this structure is the original coax braid and the outer
: conductor is the balun sleeve.

: If I understand what your are saying (always a dubious proposition) this
: structure is less likely to radiate if excited than if the sleeve was removed.

: I may be wrong but I believe the answer is that there will be no difference.

: You may argue with justification that this is a very contrived situation. So
: let's remove the ground and make the cable a random length. The result is
: unpredictable but does it ever matter whether the sleeve is there or not? I
: don't believe that it does.

: If the line structure is asymmetrically placed, there will be coupling to the
: line regardless of the method used to prevent that portion of the common-mode
: current that results from the transmission line current. Sleeve, bead, or
: whatever, it makes no difference.

: What the world needs is coax with a ferrite-loaded jacket.

: Wes Stewart N7WS

I agree that the behavior of the outside of the line is independent of
whether the sleeve is there or not. The choking action will typically

be better in the usual sleeve balun if the sleeve is there since the impedance of the shorted 1/4 wave line making up the balun part will typically be higher. The picture I had from Reg's description was an off center fed random wire with the feedline arbitrarily placed; apparently this isn't the picture anyone else had. As others have said here, for a half wave length dipole with a reasonably perpendicular feedline, the impedance of the 1/4 wave length wire, making up the dipole, hooked to the shield side often is low enough compared impedance of the outside of the feedline that no balun is needed at all for reasonable performance.

Let me try to design a Reg style balun for a VHF yagi. I have a driven element matched to 50 ohms and requiring balanced feed. I connect the coax to the feedpoint, and I need to produce a ground 1/4 wave length away. The simplest way I can think of is to put a set of 1/4 wave radials extending out from the feedline one 1/4 wave length below. I think we all will agree that a generally better design bends these 1/4 wave radials back up along side the coax shield, and connects them together, to produce a sleeve balun. That is cheaper, mechanically simpler, does not radiate, and does not expose the resonant part to external fields. As it stands we have built a 1/4 wave ground plane antenna on the bottom of our yagi. Now the ground plane is vertically polarized, and as far as direct connection is concerned, it is end driven and therefore will not couple much to our yagi, so this will probably work OK as far as keeping the feedline current low. However if the antenna were not so symmetric, you have designed a resonant section which will increase the pickup from any vertically polarized field. I agree that in this case the outside of the coax would in any case be excited, but if it is not explicitly built to be resonant at the driving frequency you have a lot more chance of the induced current being small.

73 Kevin w9cf

2969. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 19:52:46 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn98drcd.6ov.QSB@animas.frontier.net>
Source record: 170443
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

```
On Sun, 11 Feb 2001 06:16:51 GMT, smiley o'riley scribbled:
>
>I find I can no longer support the ARRL by being a member. What's the best
>way to cancel a membership?

Start by trolling in rec.radio.amateur.policy *only*.
rec.radio.amateur.antenna doesn't need this banality.
(It has enough of its own -- regrettably.)

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK
```

2970. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 21:17:09 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3A87016A.F91F76F@sympatico.ca>
Source record: 170444

I think this thread has failed to differentiate between painting a metal antenna and painting a radome (including a PVC pipe with the radiators inside).

I have seen many airborne, shipboard and ground radomes, or antenna covers, with "DO NOT PAINT" warnings prominently displayed. I presume there are sound reasons for this and have previously seen the microwave oven test recommended as a simple test for radome materials.

This is far from my area of expertise, but just to add another question since this group seems to harbour a good collection of genuine exeperts, I have noted that large radomes (with do not paint notices) are sometimes made of many sections assembled with large numbers of metal bolts. I assume the bolts do not significantly affect the performance?

Dave.

Richard Harrison wrote:
>
> Helene Maxwell wrote:
> "I`m putting up a vertical HF antenna among some trees and would like to
> spray paint it so it isn`t particularly visible, but don`t know how
> significantly this may affect performance."
>
> Among trees may affect performance depending on proximity, size and
> density of the trees.
>
> Tower painting is better done with brush, roller, old sock, etc., than
> by spraying unless this is done in a special facility.
>
> Painted antennas usually perform the same as unpainted antennas when
> both are new. If the paint protects the conductive surface of a
> radiator, it may perform better than would a corroded radiator.
>
> Look around. Nearly all AM broadcast towers are required by the FAA to
> be painted distinctively according to their regulations to reduce air
> navigation hazards. Performance difference due to painting isn`t worth
> mention.
>
> For microwaves, no performance penalty from painting is usually
> significant. You almost never see an unpainted microwave dish., and
> there is no specification for non-conductive paint. The smooth dish
> reflecting surface underneath the paint must be conductive anyway. and
> paint isn`t thick enough to change the dish geometry or performance. The
> dish won`t be thrown into a microwave oven, and if it were, its behavior

> would be the same with or without paint, if any practical purpose were
> served by inserting the radio dish in an oven.
>
> Best regards, Richard Harrison, KB5WZI

2971. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 21:34:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A87054F.DFEE7280@eznec.com>
Source record: 170445

The last Amidon merchandise I purchased (a few years ago) contained cores of a different material than marked on the package. I have no idea how widespread this problem is, but I can say for sure it happened once. As I recall, it was something like type 43 instead of 77. Sure enough, your reading indicates type 43 or something similar. Type 43 has a Q of one (R = X) between 10 and 20 MHz; above this it becomes more resistive. But type 77 hits this point at more like 1 MHz, so at 25 MHz, you won't see much reactance compared to its resistance. I suggest poking one of the cores with an ohmmeter as another check. If you read infinite, it's not 77.

With these ferrite cores, a single turn reading gives a good idea of the Q of the material itself, and you'll see roughly the same Q for any reasonable number of turns. I don't think this is the case for the low-permeability powdered iron cores, though. You can get much better Q with type 2 material than your measurement indicates. I think your reading might show so much loss just because the low permeability core isn't doing much with a single turn. For the powdered iron core, it would probably be better to use several turns -- say, 5 -- then divide the impedance by the square root of the number of turns to infer an impedance per turn squared. There's also the possibility that the measurements aren't very good. Try measuring a piece of wire and a direct short. The only analyzer I've used, an early Autek, had quite a bit of residual series inductance. If your analyzer does, you'd be better off measuring several turns with the ferrite material also, just to make the fixed error smaller with respect to the measured value.

Roy Lewallen, W7EL

Cecil wrote:
>
> Richard Clark wrote:
> > This is why I speculated that Cecil measured a bead, and got his notes
> > mixed as that reading being for the core discussed here. (Otherwise,
> > Cecil, your analyzer is one sick puppy - my guess is that you have
> > miss-identified the material).
>
> Well, the shipment from Amidon was labeled FB-77-1024. I suspect someone
> screwed up on the brochure. In the text, they say the typical 'Z' is
> given for one "turn" but the illustration shows one "loop" with the wire
> going through the core two times. For what it's worth, the alleged
> FB-77-1024 measures 32+j11 ohms for one wire on my MFJ-259B. A
> T-200A-2 iron powder core measures 13+j16 ohms for one wire. All
> at 25MHz.
> --

> http://www.mindspring.com/~w6rca

2972. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 21:41:58 UTC
From: etagg <etagg@twcny.rr.com>
Message-ID: <GGDh6.120121$o91.12287832@typhoon.nyroc.rr.com>
Source record: 170446
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

just stop
"smiley o'riley" <bummer-radio@licensing.org> wrote in message
news:goodbye@goodbye...
>
> I find I can no longer support the ARRL by being a member. What's the
best
> way to cancel a membership?
>
> TNX 73 de Smiley

2973. Re: tuner help needed (part 2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 21:46:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A87084F.89F33855@eznec.com>
Source record: 170447

You posted your question on Feb. 9. On Feb 11 (UTC), Bill, W4BSG
responded with what appeared to be a polite and helpful response. Just
what sort of service do you expect from the volunteers on this group?
Sir? <sound of heels clicking>

Roy Lewallen, W7EL

rdalton1 wrote:
>
> Thanks for the lack of response,should have known better than to ask for
> help here.

2974. Need Help with a MFJ-1432 Antenna "Ruff Rider Hyper Gain"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 22:25:22 UTC
From: Chris McGowan <c279m@yahoo.com>
Message-ID: <mjEh6.1011$z5.205479@news1.news.adelphia.net>
Source record: 170449

I got this antenna from a friend who got it from someone else, you know the drill, for free you can't complain. Anyways when I got the antenna it was in pieces and from what I see in the MFJ catalog and on the web, I believe that I have it assembled in the right order. Problem is that regardless of how I adjust all the set screws, I can not get better then 2.1 on 2 meters and 2.3 on 70cm on any part of the band.

Here is how I have it assembled:
1. First section is the thickest radiator adjusted to 11.25" in length.
2. Next comes a trap 3 5/8" long x 1/2 wide at it's widest point
3. Next is the next smallest radiator at a tuned length of 11.25"
4. I cant tell if the next piece is a trap or what. It's gray with a small black stripe in the center.2.25" long x 3/8" wide. I don't see it in any of the pictures I look at.
5. The next radiator is the same diameter as the last at 5.75" in length.
6. Then another trap at 4.5" long x 1/2" wide.
7. Finally is the last radiator with a static tip, 16.5" long.

Please keep in mind that the measured lengths are not the cut lengths, just were the radials go into the traps.

If someone else has this antenna could you provide me with the following:

*The order in which the antenna is assembled. This includes if you can measurements of each of the parts.
*What kind of SWR readings to you get on each band.

My ultimate plan is to get this working as a temporary base antenna with some radials for a new apartment location until I get time, permission, and resources to setup a base antenna.

BTW, when I tested the SWR, it was on a trunk mount on my car where I currently run a diamond antenna with a low, 1.3 or less swr.

Thanks
Chris
KC2GLX

2975. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 22:27:00 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A8711B4.EBA0C3B4@dialpoint.net>
Source record: 170448

Radomes if painted have to be painted with paint that will not affect the microwaves. It is just easier for them to print 'do not paint' on them than it is to give more details about what kind of paint to use.

The big microwave dish type antennas are using the dish to reflect the waves to and from the focus point just as a big searchlight does. The bolts do effect the anternna gain by covering up some of the radiation path. It is just that it is not enough covered up to make much differance. Calculate the ammount of square feet in the reflector and the total area of the bolts and you will see the percentage is not that great.

Dave Holford wrote:
>
> I think this thread has failed to differentiate between painting a metal
> antenna and painting a radome (including a PVC pipe with the radiators
> inside).
>
> I have seen many airborne, shipboard and ground radomes, or antenna
> covers, with "DO NOT PAINT" warnings prominently displayed. I presume
> there are sound reasons for this and have previously seen the microwave
> oven test recommended as a simple test for radome materials.
>
> This is far from my area of expertise, but just to add another question
> since this group seems to harbour a good collection of genuine exeperts,
> I have noted that large radomes (with do not paint notices) are
> sometimes made of many sections assembled with large numbers of metal
> bolts. I assume the bolts do not significantly affect the performance?
>
>

2976. Repeater antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 22:38:43 UTC
From: "Ralph E. Decker" <Rdecker@lvcablemodem.com>
Message-ID: <B6AC5473.1BDC%Rdecker@lvcablemodem.com>
Source record: 170451

Hello all,

I am looking for a replacement 440 Mhz HAM repeater antenna for a non-hostile (high wind/snow) environment.

I have used the Diamond 500 in the past (I used the 2 meter side of the antenna for a remote base)

I would like to go to a single band antenna and have been debating on the Diamond F-718A or the Hustler G6.

Does anyone have any words of wisdom on these, or other antennas?

I don't want to spend the $$ on a station master.

Thanks in advance.

Ralph

2977. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 22:41:55 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A871533.D33EC477@dialpoint.net>
Source record: 170450

You might be stuck with the cable interferance if the antenna is very close to the TV coax lines. YOu should not be causing problems with the cable if they are using a good grade of cable and their connections are ok. Two meters will cause some problems with chanels 17 to 19 on cable as they are using those chanels that correspond to the 2 meter band. If you can get 20 or 30 feet of seperation between the antenna you should not cause problems on other frequencies. If you are sure it is comming in on the cable, they have to clean up their equipment.

The diameter of the wire , number 20 or even if you use 3/4 inch copper tubing will have very little practical effect on most dipoles. While it will have some effect , it will tend to make the antenna shorter than the caculated length as the element diameter gets larger.

When making beams it is important to make the diameters the same as calculated. This seems to be the direct opposit from what I said above. That is because for most simple home built antennas you just cut them long and trim them after they are installed for the lowest SWR. To make beams work efficiently there are many complex calculations to be done and it is hard to vary them for the best gain in a cut and try method.

Frizz wrote:
>
> Well, thanks to all that replied about my CB antenna question but I have yet
> another one. I currently am running a discone in my attic for 2m and
> because of the way the cable and satellite lines were run, I interfere with
> them both and can't really do anything about it until I am able to re-run
> those cables when it warms up. However, I want to try and build a dipole in
> my attic in hopes of correcting this TVI problem. First off, will this do
> it? Or am I just going to be stuck in the same boat with the interference
> problems? Second, I have read about how wire diameter affects the resonance
> of the dipole. What are some recommended diameters or lengths for those
> different diameters on 2 meters? Any help is appreciated. THanks!
>
> KG4ivt

2978. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 23:10:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96763m$95i$1@slb3.atl.mindspring.net>
Source record: 170452

Folks:

A good question to ask, since the recipes for the various magnetic "materials" are often secrets, nd proprietary to their owners/manufacturers, is what exactly is the makeup of the various materials and what are the manufacturing controls used to ensure consistency.

e.g.

Ho, exactly does one manufacture type 77 material or any other such esoterically coded material?

What are the constituents, what is the grind/fineness of each, what is the binder used,and it's properties, how is the baking time controlled, etc...?

Who knows???

Then, when the material is cast into it's final "ceramic-like" form, how is it's manufacture "traceable" by we consumers?

I am sure that suppliers like Amidon begin with the best of intentions when it comes to quality control, but what exactly is their record, do they have SPC "Statistical Process Control" data to support their specifications, etc...??

What?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3A87054F.DFEE7280@eznec.com...
> The last Amidon merchandise I purchased (a few years ago) contained
> cores of a different material than marked on the package. I have no idea
> how widespread this problem is, but I can say for sure it happened once.
> As I recall, it was something like type 43 instead of 77. Sure enough,
> your reading indicates type 43 or something similar. Type 43 has a Q of
> one (R = X) between 10 and 20 MHz; above this it becomes more resistive.
> But type 77 hits this point at more like 1 MHz, so at 25 MHz, you won't
> see much reactance compared to its resistance. I suggest poking one of
> the cores with an ohmmeter as another check. If you read infinite, it's
> not 77.
>
> With these ferrite cores, a single turn reading gives a good idea of the
> Q of the material itself, and you'll see roughly the same Q for any
> reasonable number of turns. I don't think this is the case for the
> low-permeability powdered iron cores, though. You can get much better Q
> with type 2 material than your measurement indicates. I think your

> reading might show so much loss just because the low permeability core
> isn't doing much with a single turn. For the powdered iron core, it
> would probably be better to use several turns -- say, 5 -- then divide
> the impedance by the square root of the number of turns to infer an
> impedance per turn squared. There's also the possibility that the
> measurements aren't very good. Try measuring a piece of wire and a
> direct short. The only analyzer I've used, an early Autek, had quite a
> bit of residual series inductance. If your analyzer does, you'd be
> better off measuring several turns with the ferrite material also, just
> to make the fixed error smaller with respect to the measured value.
>
> Roy Lewallen, W7EL
>
> Cecil wrote:
> >
> > Richard Clark wrote:
> > > This is why I speculated that Cecil measured a bead, and got his notes
> > > mixed as that reading being for the core discussed here. (Otherwise,
> > > Cecil, your analyzer is one sick puppy - my guess is that you have
> > > miss-identified the material).
> >
> > Well, the shipment from Amidon was labeled FB-77-1024. I suspect someone
> > screwed up on the brochure. In the text, they say the typical 'Z' is
> > given for one "turn" but the illustration shows one "loop" with the wire
> > going through the core two times. For what it's worth, the alleged
> > FB-77-1024 measures 32+j11 ohms for one wire on my MFJ-259B. A
> > T-200A-2 iron powder core measures 13+j16 ohms for one wire. All
> > at 25MHz.
> > --
> > http://www.mindspring.com/~w6rca

2979. CobWebb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 23:25:47 UTC
From: Richard <2e0avf@talk21.com>
Message-ID: <967726$b4b$1@uranium.btinternet.com>
Source record: 170453

Hello

I am thinking about using a CobWebb antenna in my garden. Can anyone give me some information about this antenna and its performance please.

Thanks

Richard

2980. Re: CobWebb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-11 23:39:40 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A8722BB.5FBC47E@ix.netcom.com>
Source record: 170454

Hi Richard -- see URL's:
http://users.nbn.net/~tbowman/cobweb.htm
http://www.g3tpw.ukgateway.net/Page2CobWebbIntroduction.htm
http://www.g3tpw.ukgateway.net/Page7FAQs.htm
http://www.egroups.ie/message/GQRP/523
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========

Richard wrote:

> Hello
>
> I am thinking about using a CobWebb antenna in my garden. Can anyone give me
> some information about this antenna and its performance please.
>
> Thanks
> Richard

2981. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 00:12:51 UTC
From: Harvey <harveyworld@aolnoapammers.com>
Message-ID: <3A872A89.627FE7F3@aolnoapammers.com>
Source record: 170456

Please check ARRL, I believe there is a payment plan so you can
send in over time or one time paymen.t

73

Texas Rangers Fan Since 1972 wrote:

> Is it worth it? I enjoy ham radio so much I dont ever see myself leaving the
> hobby. I am considering a lifetime membership but would like to hear some
> opinions from others first.
>
> Mark
> KE4QKN
> EM60
>
> "Hell, Columbus thought Cuba was China!!!" - Tully Mars

2982. FS: New Ham IV rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 00:22:26 UTC
From: Tom Stack <wq5j@airmail.net>
Message-ID: <2FABCA9905A23D7A.C5EF8DDD8DF91D3D.BF1E619E38B064B0@lp.airnews.net>
Source record: 170455

Have brand new in the box Ham IV rotor .... $350 plus shipping ....

thanks, Tom, WQ5J, Weatherford, TX

wq5j@airmail.net

2983. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 01:23:40 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <uTeHOvN95Xo64id7WnpZ369Eo2JG@4ax.com>
Source record: 170457

"Frizz" <none@none.com> wrote:

>Well, thanks to all that replied about my CB antenna question but I have yet
>another one. I currently am running a discone in my attic for 2m and
>because of the way the cable and satellite lines were run, I interfere with
>them both and can't really do anything about it until I am able to re-run
>those cables when it warms up. However, I want to try and build a dipole in
>my attic in hopes of correcting this TVI problem. First off, will this do
>it? Or am I just going to be stuck in the same boat with the interference
>problems? Second, I have read about how wire diameter affects the resonance
>of the dipole. What are some recommended diameters or lengths for those
>different diameters on 2 meters? Any help is appreciated. THanks!
>
>KG4ivt
>

Since a 2 meter dipole is only about 38 or 39 inches long, why not
just build one out of ordinary 14-ga. wire or lamp cord, connect it to
your coax, and, yes, you could put it in the attic, but you could also
just tape it to your window, wall or whatever -- try to get it away
from your TV coax. If you're only trying to hit local repeaters, that
may be all you need.

The thickness of the wire should have little practical effect on the
length of the dipole legs.

Bob
k5qwg

2984. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 01:54:39 UTC
From: richardharrison@webtv.net
Message-ID: <3065-3A87425F-72@storefull-116.iap.bryant.webtv.net>
Source record: 170459

A high-level modulated r-f power amplifier is a mixer for r-f and audio. Some r-f received by the transmitting antennas gets mixed in with the locally produced r-f. The received energy is so much less than the desired energy being transmitted that it is hardly noticed.

During adjustment of our 790 KHz directional array, we often could hear KABC in Los Angeles, almost 2000 miles from Houston.

More importantly, we could also hear KTRH, 50-KW, just 20 miles and 50-KHz away at 740-KHz. It not only appeared in our bridge receiver. We could hear KTRH when we were unmodulated and turned-up the volume on our monitoring amplifier. It appeared in the noise and distortion on our measuring equipment but it was always more than 50 db below our fully modulated level, and that was the maximum allowable.

Those extraneous carriers and noises get modulated at very low levels and transmitted as carrier noise. The station`s transmitting antennas are also receiving.

Best regards, Richard Harrison, KB5WZI

2985. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 02:00:20 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8743B4.64152FC4@IEEE.org>
Source record: 170458

Roy Lewallen wrote:
> The last Amidon merchandise I purchased (a few years ago) contained
> cores of a different material than marked on the package. I have no idea
> how widespread this problem is, but I can say for sure it happened once.
> As I recall, it was something like type 43 instead of 77. Sure enough,
> your reading indicates type 43 or something similar.

The dimensions are correct for FB-77-1024 not for FB-43-1020. The only
other #77 material I have are FT-82-77 toroids which are much smaller
than the FB-77-1024. The side to side resistance on the alleged FT-82-77
is 300k while the side to side resistance on the smaller cross section
FT-82-77 is 30k. Should the bigger core have the smaller resistance?
Two of the FT-82-77 toroids with one turn through them read 23+j0.
Guess I need to contact Amidon about this.
--
http://www.mindspring.com/~w6rca

2986. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 02:34:57 UTC
From: richardharrison@webtv.net
Message-ID: <1289-3A874BD1-98@storefull-112.iap.bryant.webtv.net>
Source record: 170460

Ralph Mowery wrote:
"Radomes if painted have to be painted with paint that will not affect microwaves."

Yes. A radome should be transparent to microwaves. It is usually just a protector in the microwave path.

An explosion in the microwave population has required a lot more "high performance" disjhes. These have shields to screen parabolas and parabolic section reflectors from undesired signals.

Some dish antennas are fitted with cylindrical extension shields so that they look more like arc-lamps.

Other high performance antennas have so much shielding that they look like giant scoops.

The dishes resembling arc-lamps often have a membrane stretched over the open end of the barrel. Like the radome, you don`t use conducting paint on the cover membrane.

Best regards, Richard Harrison, KB5WZI

2987. Re: Need Help with a MFJ-1432 Antenna "Ruff Rider Hyper Gain"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 03:16:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A8755A9.DAFA81A8@oio.net>
Source record: 170461

Chris,
Why not ask MFJ for a manual? They're on the internet,
and usually have manuals for everything they sell.
'Doc

2988. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 03:22:24 UTC
From: richardharrison@webtv.net
Message-ID: <10785-3A8756F0-66@storefull-113.iap.bryant.webtv.net>
Source record: 170462

Frizz wrote:
"I want to try to build a dipole in my attic in hopes of correcting this TVI problem."

First line of defense is separation between the interfering and interfered devices.

You lose 22 db in the first wavelength of travel from a radiator and 6 more db every time you double the distance thereafter,

For a quick and dirty dipole try the "coaxial".
For 2m, strip 19 inches of jacket from one end of a piece of your favorite type of flexible coax, and discard it. Skin back the exposed shield over the remaining jacket, exposing about 19 inches of insulated inner-conductor.

The exposed insulated inner-conductor and the skinned-back shield now comprise a 1/2-wave dipole. Put an appropriate coax connector on the other end of the cable and you are ready to try it out.

Find a place for the antenna that works and causes the least interference.

Best regards, Richard Harrison, KB5WZI

2989. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 04:33:30 UTC
From: motorhomer <motorhomer@my-deja.com>
Message-ID: <967p2q$81q$1@nnrp1.deja.com>
Source record: 170463

In article <3A86E51B.1BD2@bellsouth.net>,
joxendi@bellsouth.net wrote:
> >
> > I had a FORD and for me it stood for Fast On Race Day.
> > K9SL
> >
> > Sent via Deja.com
> > http://www.deja.com/
>
> Well,
>
> That's fine and I am happy you have had success with Fords. Not all
of
> them are "bad". My Dad drove Fords from 1940 until 1984. When the
> dealer convinced him to drive a 1980 Buick Limited, it seemed to have
> taken the letters "LTD" out of his vocabulary! He STILL drives
Buicks.
> I don't "hate" Fords, I just couldn't get them to work for me. But I
> do fondly remember some of Daddy's Fords--like our '65 Galaxie 500
that
> was completely faithful and was smoothe as silk. I was 17 years old
> when the car was new and I can still "smell" that scent of it--that
> new car smell.
>
> Now as to the "fast" thing, I might argue with you there! LOL! I
> had some mighty quick 327/350 Chevys in my day. LMAO!
>
> Best,
>
> Jerry
> K4KWH
>

Jerry,
My 69 Ford ate chivys for breakfast. LMAOOL!

Sent via Deja.com
http://www.deja.com/

2990. FS: 6 Meter Antenna. KLM 50-52-11.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 05:12:57 UTC
From: Eric Schumacher <WB6KCN@pacbell.net>
Message-ID: <thKh6.6073$y03.394844@news.flash.net>
Source record: 170464

Eleven elements on a 30 foot boom. Gain 14.0 dbd, 3db points 21 degrees, weight 27 lbs. Removed from service in sunny SO CA and carefully dissasembled. Includes all stainless hardware and three new spare insulators to replace two cracked ones. Includes balun made from RG-142. Pictures available. $150 Eric wb6kcn@pacbell.net

2991. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 10:17:08 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <968hbk$e96$1@lure.pipex.net>
Source record: 170465
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Mark Holden" wrote
> I haven't had the kind of problem you suggest is likely, but cost wasn't much of
> a consideration when they designed my Harris. It was built for Uncle Sam, and
> I'm told when it was new, it was slightly more expensive than a new Cadillac.

I am unfamiliar with the circuit details of this particular set, however I would hazard a guess that it has a built in AE selectivity circuit.

All of the old Valve/Tube sets had Tuned AE sections and the selectivity of the set was appropriate to the band being listened to.

This approach was dropped somewhere along the line when Semiconductor receivers became available in volume.

A big mistake dropping that front end selectivity, witnessed by all the argument about IMD etc.

The manufacture that wants to be seen as head of the market will need to reintroduce the tuned front end.
If the Kenwood R-5000 for instance had an integrated tuned front end it would be a world beater. Having to manually tune the preselector when changing bands is a bind.
The ideal set would have a front end preselector that tracked the tuning.

Probably the only thing that has stopped them doing it is the cost and the increase in box size.
Certainly an additional RF amp is the very last thing that is required.
a typical mixer has a noise temperature of 2,500°K equivalent to 10 dB noise figure. in order to reduce the noise temperature of any set a bit of gain ahead of the mixer is needed. 20 dB (x 100) reduces the noise temperature to 25°K
This is ridiculously low on the HF bands that have a sky temperature range of

Frequency ~|~ T sky
2,000,000,000 Hz ~|~ 4 °K
1,000,000,000 Hz ~|~ 25 °K
500,000,000 Hz ~|~ 159 °K
250,000,000 Hz ~|~ 1,005 °K
125,000,000 Hz ~|~ 6,340 °K
62,500,000 Hz ~|~ 40,000 °K
31,250,000 Hz ~|~ 252,383 °K

15,625,000 Hz ~|~ 1,592,429 °K
7,812,500 Hz ~|~ 10,047,546 °K
3,906,250 Hz ~|~ 63,395,728 °K
1,953,125 Hz ~|~ 400,000,000 °K
976,563 Hz ~|~ 2,523,829,378 °K

A range on the HF Ham Bands from 250°K to 400 Million Degrees Kelvin
So an RF amplifier will only overload the set on bands up to 18 MHz.

Below this Frequency a straight Mixer type front end can be used without any degradation. That is probably why direct conversion sets are so good on 20 m The Kit by GW4BWE RC14 Direct Conversion Receiver is a prime example that you don't need excessive technology to listen on 20m.

I have converted an RC14 into a panoramic display, (ideal for contesting), and it is every bit as sensitive as the R-1000, R-5000.

Below 18 MHz a direct AE to Mixer with gradually decreasing IF gain until it is less by 40 to 50 dB less at 160 m . You only require sufficient gain to amplify the noise to sufficient amplitude to make the detector operate correctly with it's maximum dynamic range. The ideal level for diodes to operate at is -22 dBm for the noise power into it. This fits nicely onto the characteristic curve of the majority of commercially available diodes.

More gain just takes up useful dynamic range.

Remember you can NOT improve upon the Signal to Noise Ratio at the output terminal of the AE (Antenna).

It is pointless to add more gain than is required; in fact it is self defeating.

The biggest advantage to a receiver it to remove from the input signal, noise and adjacent channel signals, that can cause problems when amplified to mix with other signals within the IF of the set producing all sorts of birdies and ghost signals.

Match the gain of your set to the purpose to which it is to be applied.

Example,
SSB voice on 160 m in 2.4 kHz band width.

Input Noise is KTB
Doing it in DeciBel form; like real Engineers do it. ;)

-198.6 dBm/ °K/Hz (Boltzmann's Constant in Log Form)
86 dB °K = 10 log(400,000,000°K)
34 dB Hz = 10 log(2.4 kHz receiver bandwidth)
adding gives
-79 dBm of noise at the front end.

We want -22 dBm into the detector for the noise floor of the receiver.
Required IF gain is

(-79) - (-22) = 57 dB of Gain required between AE and Detector.

Most commercial Communications receivers will have at least 90 dB of IF gain because doing the same sum for 10 m the input noise power is 32 dB less than on top band.
So to receive 28 MHz properly we need 57 + 32 = at least 89 dB of IF gain.

The designer will make the gain a bit more to give him a margin for the AGC circuit etc and the fact that the Mixer has about 10 dB insertion loss and other considerations.

They seem to wind up with IF gains available of between 100 dB and 110 dB (and even more?)

Add 20 dB RF gain in front of the Mixer to improve the noise temperature (Noise Figure) and the set is grossly overloaded on top band (160 m).

An available gain of 130 dB when only 57dB is required to do the job.

We need to loose some 60 dB of Gain.
The manufactures fit an attenuator that will loose up to 30 dB of that gain at the front end.

What is ideal is to set that attenuator equal to the gain of the RF Amplifier and use the RF gain control to cut back the IF gain by the remaining over gain value.

One way to find that set point for the RF gain is:
Put RF Gain at minimum.

Increase the AF gain until you can just hear the noise from the set.

Now increase the RF gain until that noise just doubles.

Reduce the AF gain to a comfortable listening level where the noise is JUST perceptible.

At this setting you can get no more performance out of the set by changing the settings.

At this point you desperately need the preselector filter between the set and the AE in order to reduce the out of Band noise contribution.

At this point you can increase the RF gain a little to restore the noise to a comfortable listening point.

If there is any rare DX out there and your AE is capable of delivering enough signal the the set will certainly hear it when set up this way.

If you have performed this procedure on a quite Sky Noise day or time of day you will need to either decrease the RF gain if the noise level is higher or you can increase the RF gain a little if you are listening on a quieter day / time than when you set-up the set.

Leave the AE attenuator setting alone to be equal to the gain of the RF amplifier.
Mathematical refutations only please. :)

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2992. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 10:23:43 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <968hbm$e96$2@lure.pipex.net>
Source record: 170467

"AC6V" wrote ...
> In the Navy,
> they once sent me to the Paint Locker for some invisible camouflage paint,
> never could find it.

While you're there ask them for a long stand for me, please.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2993. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 11:03:21 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <968hbo$e96$3@lure.pipex.net>
Source record: 170468

"Dave Holford" wrote ...
> I have seen many airborne, shipboard and ground radomes, or antenna
> covers, with "DO NOT PAINT" warnings prominently displayed. I presume
> there are sound reasons for this and have previously seen the microwave
> oven test recommended as a simple test for radome materials.

In my long career in electronics one of my tasks was to aberration correct the radomes of missiles; as the phase shift through what was primarily an aerodynamic shape bent the RADAR beam by having differential phase shift.

In order to perform this task a detailed profile of the microwave delay through the dielectric material was made.
From the punched paper tape so produced the radom was then mounted on a spray rig and dielectric varnish was applied one layer at a time to the thin dielectric areas.
Up to 15 coats were applied at a session to produce an electrically uniform phase front through the Radom.

If any element of a proposed antenna system is phase sensitive then any sort of paint will cause some phase change.
Obviously the amount of phase change will be proportional to the thickness of the paint film, the dielectric constant of the paint when dry and the wavelength of operation.

At 9mm a coat of paint say ten tho thick = 0.03 wavelength.

At the frequencies used by most Hams the fraction of a wavelength represented by a coat of paint (less than 0.001") will be considerably less. Those working in the millimetric region will be only to well aware of the problems that materials can cause.

Any material will have three properties the permativity, permeability, resistivity.

Water is a good example:
It has a dielectric constant of 80 or greater and a loss tangent of 0.3

It's presence in food stuffs makes the Microwave oven a practicable device. The loss tangent is responsible for converting the microwaves into heat and transforming the water into steam which is trapped within the food, this cooks the food.

Many paints will have a high permativity, but a low loss tangent, probably much lower than water.

I would expect therefore more degradation due to rain than due to most paints unless they had been deliberately loaded with materials such as

Carbon Dags.
A colloid, [fine powder], of carbon in a suspension fluid [sticky stuff].

When the dried resistivity of the paint is 377 Ohms per square then you have an Ideal Radio Absorbent Material [RAM]. This is the stuff that is painted upon stealth aircraft, applied to towers and structures that produce unwanted Radar echoes.

Generally speaking many paints will not have any effect, but I wouldn't take it for granted, especially if you happen to pick up some very old paints loaded with lead etc.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2994. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 11:21:04 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <968hbp$e96$4@lure.pipex.net>
Source record: 170466

"Roger Halstead wrote
> "Ian Jackson" wrote ...
> > AMDX <AMDX@worldnet.att.net> writes
> > >Mike Knowlton
> > Yes, more like 'allum-minny-um'. I spell 'colour' and 'labour' with a
> > 'u', and there are two Ls in 'traveller'. I pronounce 'solder' as it is
> > spelt (not 'sodder').
>
> So did we 50 years ago <:-))

I think that I used the pronunciation "sodder" during the reign of queen
Thatcher; quite a lot actually, religiously at least once a day.

Now it would be nice to pronounce it "SOLD HER"

Any of you Yanks want her?
going cheap $0.02 ; will make special price reduction for a quick sale.

Of course the correct pronunciation of the name of this useful workshop
material is as the later, but drop the 'H'.
It is slovenly to drop the 'L'; besides, I want her to suffer. REM
'L' = HELL

I hope that this bit of nonsense will prompt you to use this word carefully
and with respect; and don't catch your clothes on the soddering iron.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

2995. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 12:37:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A87D910.E0597EB0@eznec.com>
Source record: 170369

Amidon is a retailer; they don't manufacture cores (as far as I know). They used to, and I believe still do, sell ferrites manufactured by Fair-Rite Corporation, and powdered irons by MicroMetals. Both these manufacturers provide extensive infomation about their products on request, and have it posted on their web sites. The last time I looked at Amidon's offerings, it looked like they also have a few Magnetics parts. This is also a reputable manufacturer that provides good and detailed information.

Ferrite manufacturing is indeed proprietary, so I doubt you'll get detailed information about the manufacturing process. (I've seen a presentation of the general process, although with certain key details omitted, and it's quite interesting. It struck me as being as much an art as a science.) However, if your application requires statistical data or other special information, I'm sure either vendor would be glad to accommodate you for an appropriate charge.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Folks:
>
> A good question to ask, since the recipes for the various magnetic
> "materials" are often secrets, nd proprietary to their owners/manufacturers,
> is what exactly is the makeup of the various materials and what are the
> manufacturing controls used to ensure consistency.
>
> e.g.
>
> Ho, exactly does one manufacture type 77 material or any other such
> esoterically coded material?
>
> What are the constituents, what is the grind/fineness of each, what is the
> binder used,and it's properties, how is the baking time controlled, etc...?
>
> Who knows???
>
> Then, when the material is cast into it's final "ceramic-like" form, how is
> it's manufacture "traceable" by we consumers?
>
> I am sure that suppliers like Amidon begin with the best of intentions when
> it comes to quality control, but what exactly is their record, do they have
> SPC "Statistical Process Control" data to support their specifications,
> etc...??

>
> What?
>
> -Peter K1PO

2996. Re: Why does a BALUN shorten antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 12:45:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A87DAD6.EEAEABD7@eznec.com>
Source record: 170370

Fair-Rite sells cores of the same dimensions made from several different materials. So the dimensions won't tell you what material the core is made from. Amidon could have ordered the wrong thing, gotten the wrong cores from their vendor, or mixed up cores from their stock.

I'd expect a larger core to have smaller bulk resistance, but wouldn't be surprised if it doesn't vary quite a bit from lot to lot. I don't believe bulk resistance is well controlled. About the only thing I'd say for sure is that neither of the cores is type 43 or a lower permeability material, and if they're Fair-Rite cores, both are 70 series. For a given size core, I'd expect all the 70 series ferrites to show roughly similar impedances at 25 MHz.

23 + j0 is more like what I'd expect from type 77 at 25 MHz, instead of the nearly equal R and X you reported earlier.

Roy Lewallen, W7EL

Cecil wrote:
>
> Roy Lewallen wrote:
> > The last Amidon merchandise I purchased (a few years ago) contained
> > cores of a different material than marked on the package. I have no idea
> > how widespread this problem is, but I can say for sure it happened once.
> > As I recall, it was something like type 43 instead of 77. Sure enough,
> > your reading indicates type 43 or something similar.
>
> The dimensions are correct for FB-77-1024 not for FB-43-1020. The only
> other #77 material I have are FT-82-77 toroids which are much smaller
> than the FB-77-1024. The side to side resistance on the alleged FT-82-77
> is 300k while the side to side resistance on the smaller cross section
> FT-82-77 is 30k. Should the bigger core have the smaller resistance?
> Two of the FT-82-77 toroids with one turn through them read 23+j0.
> Guess I need to contact Amidon about this.
> --
> http://www.mindspring.com/~w6rca

2997. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 13:11:31 UTC
From: "Steven J Robeson", K4YZ <k4yz@my-deja.com>
Message-ID: <968ne0tus1@nnrp1.deja.com>
Source record: 170371
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <goodbye@goodbye>,
bummer-radio@licensing.org (smiley o'riley) wrote:

>I find I can no longer support the ARRL by being a member. What's
>the best way to cancel a membership?

You might try a .45 caliber automatic in the mouth. It's about as
effective as this troll.

--
"It Could Be That Your Life's Only Meaning Is To Serve As A Warning To
Others Of How Bad It Could REALLY Be!"

"Just Remember...An Amateur Built The Ark, Engineers Built The Titanic"

PLEASE SEND PRIVATE E MAIL COMMENTS TO K4YZ@AOL.COM. RESPONSES TO THE
DEJA MAY OR MAY NOT BE RETRIEVED IN A TIMELY FASHION.

Sent via Deja.com
http://www.deja.com/

2998. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 13:58:39 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <z_Rh6.1139$4f.4316643@news1.mia>
Source record: 170372

You all is contracted as y'all.
Bill Manley

Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote in message 'less' and
'fewer'...
>
> ENOUGH! This is hammerchewer radjio, and not a linguistic inquisition.
.
.
.
> 73 t'yall!
> Ian.
>

2999. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 14:11:27 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <968quf$i5d$1@news-central.tiac.net>
Source record: 170373
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <9606ab$kn1$4@lure.pipex.net>, "Gary Peach"
<xcg34@dial.pipex.com> creatively opined:

>"John Doty" wrote ...
> > ID using parallel frequencies, find the best parallel frequency for
> > your favorite program *right now*, and jump to a different one when
> > interfence suddenly pops up. A preselector gets in the way of all
> > this. With interval signals on most stations reduced to less than a
> > minute these days, you don't have time to waste tuning in: you'll miss
> > the start of your program.
>
> You are talking 30 dB communication margins, not typical threshold DX
> working that most Hams will really be interested in.

Sometimes. But I'm also talking about situations in which there are two or three parallel frequencies, in different bands, with two out of three words intelligible on the best one, but which one is best changes from minute to minute. How are you going to cope with that with a preselector in the way? I'm talking about trying to ID a station below the threshold of intelligibility, where if they put on music I can check to see if it's the same tune on a parallel frequency (you can follow a tune at lower S/N than that required to understand voice). How can you switch back and forth fast enough with a preselector in the way?

Ham radio is not SWL, and ham radio technique is often not optimum for SWL. The original question was about "SW" antennas, so I assume it was about SWL.

> Why don't you just buy a mobile phone instead, that way you can also
> have selective calling.

Please, no insults. You are apparently not interested in SWL, and therefore don't understand much about its techniques, but some of us find it far more interesting than ham radio.

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

3000. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 14:32:20 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <968s5k$l9$1@news-central.tiac.net>
Source record: 170374
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <9606a9$kn1$3@lure.pipex.net>, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>Right Mark, most of the Black Boxes now sport a step attenuator in the
>front
> end to attenuate the noise, most of which is due to the extremely wide
> pass band of their front ends. The cost of providing a proper
> preselector in the I/P circuit to the Receiver would not only raise the
> selling price of the set above the ideal market price the penalty in box
> volume would probably also be unacceptable.

But the most expensive receivers have the fanciest front end attenuators and the least front end selectivity (the $4000 WJ HF-1000 has a "wide open" front end). Engineering for high dynamic range requires expensive expertise and sophisticated test equipment. Front end selectivity is a cheaper substitute, just cookbook engineering (and it doesn't work if the interfering signal is close in frequency to the signal of interest).

> Note that on 18 MHz and 24 Mhz the excess noise at the front end is
> nearly
> 20 dB over what it would be if you had an Rx specially designed to just
> cover those Ham bands.

Why would an SWL want a receiver especially designed for the ham bands? There's so much more to listen to outside them! :-)

Your analysis assumes (1) that noise that makes it through the front end filters contaminates the signal, and (2) that the quantity of noise is linearly related to the bandwidth. If the system is linear, it is the IF filter bandwidth that counts, not the front end, so (1) is false. If the system is nonlinear (overloaded), (2) is false. (2) is also false if what you call "noise" is, in fact, a few strong narrow band signals (this is the usual cause of overload).

A few days ago, we were debugging the downlink from MIT's HETE satellite ("137.96 MHz: All HETE All the Time") to our Kenya ground station. OK, actually a colleague at Malindi was doing the debugging: we at MIT were just kibitzing over the net. Anyway, our friend at Malindi did the following thing: he set up a simple dipole antenna on a workbench, attached a GaAsFET preamplifier, and fed it to his microwave spectrum analyzer (I think he just wanted assurance that we had turned the transmitter on the satellite on!).

HETE radiates about 250 mW (24 dBm) of low data rate telemetry with a 300 Hz bandwidth. At a range of 1000 km, the "space loss" is 135 dB.

Polarization loss averages another 3 dB. Under free space conditions, we would thus expect to receive -114 dBm. Natural noise density at this frequency is about -141 dBm in a 1 kHz bandwidth according to the CCIR curves: for a bandwidth of 300 Hz, the noise is thus -146 dBm. C/N is thus expected to be 32 dB. While this free space/natural noise analysis is a bit optimistic for a makeshift setup indoors on a bench, nevertheless a strong signal was observed on the spectrum analyzer.

There was no front end filtering in this system: bandwidth was several GHz. According to your method I should therefore increase the noise in the above calculation by ~70 dB. If this had been the case in reality, our satellite would have been completely undetectable, 38 dB below the noise in this setup.

> Having struggled to get the gain you then throw it away. :(

As a designer of high performance signal chains (I designed video chains with 3 electrons RMS noise for NASA's "Chandra" orbiting observatory), I can assure you that getting gain isn't a struggle. Indeed, once you've put in all the amplifiers you need to do the mixing, gating, summing, isolation, limiting, and impedance transformation required in a typical signal chain, the challenge is often getting rid of all the excess gain in ways that don't cause you other problems.

If all you needed was enough gain, you could make a communications receiver with four transistors.

If you have a receiver noise floor 25 dB below the noise density at the frequency of interest (a very common situation on HF), it makes perfect sense to switch in 20 dB of attenuator: it may drastically reduce intermodulation, and the loss of signal has a negligible effect on system sensitivity.

> In this context using a filter is like using a selective weed killer,
> using an attenuator is analogous to using a flame thrower.

Your analogy is misleading. Overload is more like being blinded by glare. An attenuator is like putting on sunglasses, blocking the excess light. A filter is like a sun visor. A preselector? Well, that's like taking a large box, cutting a small hole in it, painting the inside black, and putting it over your head. Peering out throught the hole, you'll see very little glare, and when the hole is aimed just right you may be able to see what you want. I think most people would find this a crude and debilitating way to reduce glare (although it would work). Similarly, a preselector is a crude and debilitating way to reduce overload.

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

3001. Re: Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 15:16:12 UTC
From: pv <verrando@airmail.net>
Message-ID: <5283E7F850E48A22.8812D4CD803CCDDA.1A46BB897B414B15@lp.airnews.net>
Source record: 170375

Ramsey Electronics makes an interesting kit
called a "Signal Magnet" (eyes rolling). Designed for AM b'cast,
it is an amplified,
varactor tuned ferrite loop, with a Faraday shield to reduce
noise. The loop and amp are contained in a PVC
enclosure, with a remote power supply/tuner. The two
are connected with user-supplied 75 ohm coax of any
length using F connectors. (radio shack).
I have one of these if you'd care to discuss it further via email.
Their web address is ramseykits.com
Pete
KD5KNV

3002. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 15:51:38 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <2b1g8tgm80pod9rhur26sok1mrudvh6t38@4ax.com>
Source record: 170376

On Sun, 11 Feb 2001 12:48:30 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Bill Turner, W7TI wrote:
>"The one that KFI has down in Orange County, CA. (is the best AM radio
>antenna)".

<snip>

>A better antenna for a listener is probably a tuned rotatable loop that
>can be adjusted for the favored direction and frequency.
>

Depends on how you define "better". The KFI antenna is a low-angle one due to the presence of an effective ground plane (I presume; haven't personally inspected it). The loop, without a ground plane, is a high-angle antenna and would probably come in second for serious DXing. A rotatable loop does have the advantage of being able to null out interference.

73, Bill W7TI

3003. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 17:00:32 UTC
From: richardharrison@webtv.net
Message-ID: <319-3A8824C0-10@storefull-118.iap.bryant.webtv.net>
Source record: 170380

Bill, W7TI wrote:
"Depends on how you define "better". The KFI antenna is a low-angle one due to an effective ground plane---."

True. No inspection needed. The FCC requires an efficient antenna system. It is a vertical radiator with a good ground system. Broadcasters maximize radiation in a horizontal plane to the extent allowed by economics and regulations.

For "better" reception, signal strength is not as important as signal to interference ratio. At least, Ames, Akron, Norman, St. John`s, and a station in Cuba share the air in and around North America with KFI on 640 KHz. Adjacent channels tend to spill-over into the desired channel in most receivers.

If you are near one of the stations on 640 KHz or one of its adjacent channels, it is likely you will only be able to hear the near station most of the time. At a distance from them, you may be able to pick one from the pack by positioning your loop antenna. The loop will also discriminate against man-made and natural interference in its null directions. KFI`s antenna doesn`t have any null directions.

Best regards, Richard Harrison, KB5WZI

3004. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 17:06:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A88182A.6CC6@wt.net>
Source record: 170377

Frizz wrote:
>
> Well, thanks to all that replied about my CB antenna question but I have yet
> another one. I currently am running a discone in my attic for 2m and
> because of the way the cable and satellite lines were run, I interfere with
> them both and can't really do anything about it until I am able to re-run
> those cables when it warms up. However, I want to try and build a dipole in
> my attic in hopes of correcting this TVI problem. First off, will this do
> it? Or am I just going to be stuck in the same boat with the interference
> problems? Second, I have read about how wire diameter affects the resonance
> of the dipole. What are some recommended diameters or lengths for those
> different diameters on 2 meters? Any help is appreciated. THanks!
>
> KG4ivt

Depends why you have the tvi with the discone. If it's due to overload
from being too close, likely you will have the same problem with the
dipole. I guess you could give it a try, but I wouldn't hold my breath
waiting for the tv to clear. Do you have any other farther away places
to mount the discone in the attic to get away from the other lines? Why
will rerunning the coax help? If they installed something that is not
right, I'd complain to the cable co. and have them fix it. MK
--
http://web.wt.net/~nm5k

3005. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 17:53:41 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <9697u4$t0g$1@news.tribune.com>
Source record: 170378

I am 48.

Allowing for a 3% inflation in dues, and a 5 to 8 % investment rate, I
figured I will break even on the present value when I am 80. I decided to
go for it. Wish I had done it 20 years ago!
KA9CAR

AC6V <ac6v@ix.netcom.com> wrote in message
news:3A8581D1.218845B6@ix.netcom.com...
> Hi Mark -- sure wished I had opted for ARRL Life Membership 25 years
ago --
> would have saved a pile of greenstamps. But Hams come and go into the
hobby, so
> be fairly certain you will have a Life Long" interest. Many benefits -
> insurance, bureaus if you are or get into DXing, great articles on all
aspects
> of the hobby. Also on the internet there is "ARRL Members Only access" --
wow
> what a wealth of info one can gain access to there.
> --
> 73 From Rod AC6V In San Diego
> 700 Ham Topics & 6,000 Links
> http://ac6v.com/
> I Doubt, Therefore I Might Be!!!
> ====================
>
>
> Texas Rangers Fan Since 1972 wrote:
>
> > Is it worth it? I enjoy ham radio so much I dont ever see myself leaving
the
> > hobby. I am considering a lifetime membership but would like to hear
some
> > opinions from others first.
> >
> > Mark
> > KE4QKN
> > EM60
> >
> > "Hell, Columbus thought Cuba was China!!!" - Tully Mars
>
>
>
>
>

3006. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 18:08:14 UTC
From: N5NUG <n5nug@ix.netcom.com>
Message-ID: <3A88268E.ACF101C4@ix.netcom.com>
Source record: 170379

What about the fun and educational quotient? How much is it worth
($$) over the next 32 years?

--

Edward A. Goodman 214-505-6835 (cel) 214-352-4623 (off) ICQ 31510047
URL http://home.ix.netcom.com/~n5nug/index.html

3007. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 18:24:16 UTC
From: pwerfel <pwerfel@epo.hsc.sunysb.edu>
Message-ID: <3A882A4F.B54CAE00@epo.hsc.sunysb.edu>
Source record: 170381
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave
Body handling: Binary attachment payload not displayed: pwerfel.vcf

Dont send them a check the next time they ask for one!

smiley o'riley wrote:

> I find I can no longer support the ARRL by being a member. What's the best
> way to cancel a membership?
>
> TNX 73 de Smiley

[One or more binary attachments are retained only in the source text.]

3008. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 18:30:18 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A882BBA.35FC@bellsouth.net>
Source record: 170382

LOL!

That's OK. Those were the days, eh? That's when we were young. Some-
how going extremely fast just doesn't appeal to me anymore. Now I'm
not averse to cruising at 80 if I can, but I'd get very nervous if I
were to go as fast as I once did. I once drove my Dad's '58 Fairlane
at 120+ and his '65 Galaxie across the Albemarle Sound bridge (2 miles
across) at 100+ (all the little 289 could muster). Not too long ago,
I crossed that same bridge and marveled at how narrow it is. I asked
myself, did I REALLY go 100 mph on THAT bridge?! I shuddered to think of
it! How could I have been so stupid? But, hey, I was 17 and indes-
tructable, right? Mmm, mmm, the things I got away with back then! And
if Daddy had known.....

Hey, I betcha you remember just driving around aimlessly for the sake of
driving--every chance you had, in the car cruising. Buying gas for
18.9 cents per gallon, taking 10 bucks with you and your date to the
movies and a burger at the local drive-in and coming home with change!

One thing on the Ford/Chevy argument while I'm reminiscing. I bought a
new '67 Caprice coupe that year. $3600 list, $74.70 per month. I
bought the 327 heads, manifold/Quadrajet, and put the duals on. And
yes, I had an HF radio in it--I was the only 19 year old with a BIG
Master Mobile antenna. My best girl-chasin' buddy had a '64 Fairlane he
named "Snoopy" and even went so far as to paint the little dog on the
front fenders. He still is a good artist. He swapped out the little
260 CID V8 for a 289 4BBL, did some cam work, exhaust, and a Hurst shif-
ter. Even tho we were buddies, he was going to leave my Caprice in the
dust. One night, leaving the skating rink, the "big" race began. I
was first turning out onto the highway, and Joe whipped out into the
left lane and gunned his Ford. Next, all you could hear was motors
gunning and the distinctive moan of a Quadrajet. Now, my big Chevy was
MUCH heavier than Joe's Fairlane, but imagine his surprise when he
was unable to pass me! He was just able to get his nose beside my door.
We slowed down and tried another rolling start. Same thing. Anyway,
looking back, I don't see how we raced for 8 miles without attracting
the attention of the local constabulary.

Nowadays, I'm more content with powerful ham radios.

73
Jerry
K4KWH

motorhomer wrote:
>

> In article <3A86E51B.1BD2@bellsouth.net>,
> joxendi@bellsouth.net wrote:
> > >
> > > I had a FORD and for me it stood for Fast On Race Day.
> > > K9SL
> > >
> > > Sent via Deja.com
> > > http://www.deja.com/
> >
> > Well,
> >
> > That's fine and I am happy you have had success with Fords. Not all
> of
> > them are "bad". My Dad drove Fords from 1940 until 1984. When the
> > dealer convinced him to drive a 1980 Buick Limited, it seemed to have
> > taken the letters "LTD" out of his vocabulary! He STILL drives
> Buicks.
> > I don't "hate" Fords, I just couldn't get them to work for me. But I
> > do fondly remember some of Daddy's Fords--like our '65 Galaxie 500
> that
> > was completely faithful and was smoothe as silk. I was 17 years old
> > when the car was new and I can still "smell" that scent of it--that
> > new car smell.
> >
> > Now as to the "fast" thing, I might argue with you there! LOL! I
> > had some mighty quick 327/350 Chevys in my day. LMAO!
> >
> > Best,
> >
> > Jerry
> > K4KWH
> >
>
> Jerry,
> My 69 Ford ate chivys for breakfast. LMAOOL!
>
> Sent via Deja.com
> http://www.deja.com/

3009. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 18:30:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A882BDD.7F7ECD59@IEEE.org>
Source record: 170384

Reg Edwards wrote:
> Why don't you just state outright you can paint your antenna any colour you
> like, with any sort of paint you like, and nobody will ever notice the
> slightest difference.

What if the paint had a high carbon content?
--
http://www.mindspring.com/~w6rca

3010. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 18:31:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <969a3l$4lf$1@neptunium.btinternet.com>
Source record: 170383

Garry, I've never read such a load of so-called technical jargon which
should really be classified as rubbish.

Why don't you just state outright you can paint your antenna any colour you
like, with any sort of paint you like, and nobody will ever notice the
slightes difference.

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Gary Peach <xcg34@dial.pipex.com> wrote in message
news:968hbo$e96$3@lure.pipex.net...
>
> "Dave Holford" wrote ...
> > I have seen many airborne, shipboard and ground radomes, or antenna
> > covers, with "DO NOT PAINT" warnings prominently displayed. I presume
> > there are sound reasons for this and have previously seen the microwave
> > oven test recommended as a simple test for radome materials.
>
> In my long career in electronics one of my tasks was to aberration correct
> the radomes of missiles; as the phase shift through what was primarily an
> aerodynamic shape bent the RADAR beam by having differential phase shift.
>
> In order to perform this task a detailed profile of the microwave delay
> through the dielectric material was made.
> From the punched paper tape so produced the radom was then mounted on a
> spray rig and dielectric varnish was applied one layer at a time to the
thin
> dielectric areas.
> Up to 15 coats were applied at a session to produce an electrically
uniform
> phase front through the Radom.
>
> If any element of a proposed antenna system is phase sensitive then any
sort
> of paint will cause some phase change.
> Obviously the amount of phase change will be proportional to the thickness
> of the paint film, the dielectric constant of the paint when dry and the
> wavelength of operation.
>

> At 9mm a coat of paint say ten tho thick = 0.03 wavelength.
>
> At the frequencies used by most Hams the fraction of a wavelength
> represented by a coat of paint (less than 0.001") will be considerably
less.
> Those working in the millimetric region will be only to well aware of the
> problems that materials can cause.
>
> Any material will have three properties the permativity, permeability,
> resistivity.
>
> Water is a good example:
> It has a dielectric constant of 80 or greater and a loss tangent of 0.3
>
> It's presence in food stuffs makes the Microwave oven a practicable
device.
> The loss tangent is responsible for converting the microwaves into heat
and
> transforming the water into steam which is trapped within the food, this
> cooks the food.
>
> Many paints will have a high permativity, but a low loss tangent, probably
> much lower than water.
>
> I would expect therefore more degradation due to rain than due to most
> paints unless they had been deliberately loaded with materials such as
> Carbon Dags.
> A colloid, [fine powder], of carbon in a suspension fluid [sticky stuff].
>
> When the dried resistivity of the paint is 377 Ohms per square then you
have
> an Ideal Radio Absorbent Material [RAM]. This is the stuff that is painted
> upon stealth aircraft, applied to towers and structures that produce
> unwanted Radar echoes.
>
> Generally speaking many paints will not have any effect, but I wouldn't
take
> it for granted, especially if you happen to pick up some very old paints
> loaded with lead etc.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

3011. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 18:37:40 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A882D74.559A9501@IEEE.org>
Source record: 170385

Jerry Oxendine wrote:
> I once drove my Dad's '58 Fairlane
> at 120+ and his '65 Galaxie across the Albemarle Sound bridge (2 miles
> across) at 100+ (all the little 289 could muster).

I once outran three Maricopa Co. deputies on my Kawasaki Z1B. Now
I wonder what would have happened if the chain had broken at 135mph.
That bike redlined at 60mph in first gear with four more gears to go.
--
http://www.mindspring.com/~w6rca

3012. Info Needed: Telrex Christmas tree 5 element monobanders

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 19:42:29 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A883CA4.6FB5A41A@ix.netcom.com>
Source record: 170388

Frank sent me this inquiry -- if you can help -E-Mail him - NOT ME

Frank wrote:
"Hi, I am wondering if you might have any info at all on the Telrex
Christmas tree 5 element
monobandersI own. Owners and assembly manuals would be great. Thanks
Frank Giambrone"

E Mail ka2vti@arrl.net
OR
FRANK GIAMBRONE <fsgiambrone@worldnet.att.net
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

3013. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 20:06:40 UTC
From: richardharrison@webtv.net
Message-ID: <17863-3A884250-88@storefull-116.iap.bryant.webtv.net>
Source record: 170391

Reg wrote:
"Why don`t you just state outright you can paint your antenna any colour you like, with any sort of paint you like, and nobody will ever notice the slightest difference?"

True, but there are exceptions and Gary brought up the radome that may act as a lens which could make a radar cock-eyed. His job was correcting the radar`s vision. Plastic lenses are sometimes used to focus microwaves. For Gary`s purpose, all that was needed from the radome was neutrality.

Another exception to "do as you like" in the USA is the painting and obstruction lighting of tall towers which must meet FAA requirements. Short towers are not regulated, except near airports.

Best regards, Richard Harrison, KB5WZI

3014. Re: VX-5R antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 20:08:38 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a884295$0$30005$44a10c7e@news.net-link.net>
Source record: 170389

That's what I have been told and talked to a friend using one last night.
He was at least 10 miles or so from the 6m repeater and was full quieting.
He lives practically across the street from me and my stock antenna is poor.
I have the other Madol (now Comet) antenna that is soft rubber about 3" long
for 2/440 with SMA and it sure works well for its size and is very
convenient. As Roy Lewellen said, the Diamond he bought was a poor
performer. So was the only Diamond I ever bought. In terms of the VX5R's
receiving performance, I think it has a lot to do with its small size as my
largest hand held radio, which is my old trusty IC-32AT, can hear stuff my
others cannot. Even Alinco DJ-X10 communications receiver does not hear as
well as the Icom, even with the same antenna. Next smaller is FT-50 and it
hears better than VX-5R. I borrowed a little VX1R and it was deaf compared
to the others. VX-5R sure is neat little radio tho!
ik7565@erols.com wrote in message <3A84BE65.9AC816F5@erols.com>...
>The MH-510 is a nice antenna but a little long (20") to be hanging off
>your belt. I don't notice much difference except on 70cm where there's
>about 3db of gain.
>
>73 de KG4JLK
>
>
>Rudy Marcelletti wrote:
>>
>> Anyone used the Madol (now Comet) tri-band 6/146/446 antenna and if so,
how
>> do you like it over the so called "convenient and inovative" 3 piece
Yaesu
>> antenna? Does any one make a 6 meter HT antenna (that works) with a SMA
>> connector?

3015. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 20:11:57 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <d2g969.9vp.ln@mail.specsol.com>
Source record: 170392

Reg Edwards <g4fgq.regp@btinternet.com> wrote:
> Garry, I've never read such a load of so-called technical jargon which
> should really be classified as rubbish.

Reg, if you think what Gary wrote is rubbish, you obviously know nothing
of what's been done with microwaves and RADAR in the the past quarter
century or so.

Radomes have been trimmed for their phase response for a LONG time now; all
of Gary's post is accurate.

A "thin" layer of fiberglass and paint may totally transparent at 1.8 Mhz,
but 18 Ghz is something entirely different.

> Why don't you just state outright you can paint your antenna any colour you
> like, with any sort of paint you like, and nobody will ever notice the
> slightes difference.

At frequencies below microwave, probably true. Since lead paint hasn't been
around (in the US anyway) for decades, most any modern paint is probably OK
at HF.

> --
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp

> **********

> Gary Peach <xcg34@dial.pipex.com> wrote in message
> news:968hbo$e96$3@lure.pipex.net...
>>
>> "Dave Holford" wrote ...
>> > I have seen many airborne, shipboard and ground radomes, or antenna
>> > covers, with "DO NOT PAINT" warnings prominently displayed. I presume
>> > there are sound reasons for this and have previously seen the microwave
>> > oven test recommended as a simple test for radome materials.
>>
>> In my long career in electronics one of my tasks was to aberration correct
>> the radomes of missiles; as the phase shift through what was primarily an
>> aerodynamic shape bent the RADAR beam by having differential phase shift.
>>
>> In order to perform this task a detailed profile of the microwave delay
>> through the dielectric material was made.
>> From the punched paper tape so produced the radom was then mounted on a
>> spray rig and dielectric varnish was applied one layer at a time to the

> thin
>> dielectric areas.
>> Up to 15 coats were applied at a session to produce an electrically
> uniform
>> phase front through the Radom.
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>> If any element of a proposed antenna system is phase sensitive then any
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>> of paint will cause some phase change.
>> Obviously the amount of phase change will be proportional to the thickness
>> of the paint film, the dielectric constant of the paint when dry and the
>> wavelength of operation.
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>> At 9mm a coat of paint say ten tho thick = 0.03 wavelength.
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>> At the frequencies used by most Hams the fraction of a wavelength
>> represented by a coat of paint (less than 0.001") will be considerably
> less.
>> Those working in the millimetric region will be only to well aware of the
>> problems that materials can cause.
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>> Any material will have three properties the permativity, permeability,
>> resistivity.
>>
>> Water is a good example:
>> It has a dielectric constant of 80 or greater and a loss tangent of 0.3
>>
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> device.
>> The loss tangent is responsible for converting the microwaves into heat
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>> transforming the water into steam which is trapped within the food, this
>> cooks the food.
>>
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>> much lower than water.
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>> I would expect therefore more degradation due to rain than due to most
>> paints unless they had been deliberately loaded with materials such as
>> Carbon Dags.
>> A colloid, [fine powder], of carbon in a suspension fluid [sticky stuff].
>>
>> When the dried resistivity of the paint is 377 Ohms per square then you
> have
>> an Ideal Radio Absorbent Material [RAM]. This is the stuff that is painted
>> upon stealth aircraft, applied to towers and structures that produce
>> unwanted Radar echoes.
>>
>> Generally speaking many paints will not have any effect, but I wouldn't
> take

>> it for granted, especially if you happen to pick up some very old paints
>> loaded with lead etc.
>>
>> --
>> Gary7SLL
>> 51 23' 50" N 1 19' 58"W
>> http://www.gary.peach.dial.pipex.com/
>>
>>

Jim Pennino

3016. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 20:12:20 UTC
From: n4jzh@knology.net
Message-ID: <3a88434c.25938195@news.knology.net>
Source record: 170390

On Mon, 12 Feb 2001 18:31:26 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Garry, I've never read such a load of so-called technical jargon which
>should really be classified as rubbish.
>
>Why don't you just state outright you can paint your antenna any colour you
>like, with any sort of paint you like, and nobody will ever notice the
>slightes difference.
>
>--
>**********
>Regards, Reg, G4FGQ
>Free radio design & modelling software
>http://www.btinternet.com/~g4fgq.regp
>
>**********
>
>Gary Peach <xcg34@dial.pipex.com> wrote in message
>news:968hbo$e96$3@lure.pipex.net...
>>
>> "Dave Holford" wrote ...
>> > I have seen many airborne, shipboard and ground radomes, or antenna
>> > covers, with "DO NOT PAINT" warnings prominently displayed. I presume
>> > there are sound reasons for this and have previously seen the microwave
>> > oven test recommended as a simple test for radome materials.
>>
>> In my long career in electronics one of my tasks was to aberration correct
>> the radomes of missiles; as the phase shift through what was primarily an
>> aerodynamic shape bent the RADAR beam by having differential phase shift.
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>> through the dielectric material was made.
>> From the punched paper tape so produced the radom was then mounted on a
>> spray rig and dielectric varnish was applied one layer at a time to the
>thin
>> dielectric areas.
>> Up to 15 coats were applied at a session to produce an electrically
>uniform
>> phase front through the Radom.
>>
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>sort

>> of paint will cause some phase change.
>> Obviously the amount of phase change will be proportional to the thickness
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>> wavelength of operation.
>>
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>> At the frequencies used by most Hams the fraction of a wavelength
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>less.
>> Those working in the millimetric region will be only to well aware of the
>> problems that materials can cause.
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>> resistivity.
>>
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>> It has a dielectric constant of 80 or greater and a loss tangent of 0.3
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>> A colloid, [fine powder], of carbon in a suspension fluid [sticky stuff].
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>> upon stealth aircraft, applied to towers and structures that produce
>> unwanted Radar echoes.
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>> Generally speaking many paints will not have any effect, but I wouldn't
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>> it for granted, especially if you happen to pick up some very old paints
>> loaded with lead etc.
>>
>> --
>> Gary7SLL
>> 51° 23' 50" N 1° 19' 58"W
>> http://www.gary.peach.dial.pipex.com/

>>
>>
>
>
What if Pig's flew Cecil....

Fun is... Pursuing your Dream Not Obtaining it...

3017. RE: Discone Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 20:48:26 UTC
From: alainmv@aol.com
Message-ID: <20010212154826.12352.00000561@ng-fs1.aol.com>
Source record: 170393

I've got a RS discone 10' above the roof; it's been there for almost 2 yrs and has served me well. LAFD/PD are still received well from 160+ miles away. Recently, due to a few wind storms, two radials from the "cone" have been broken off, but scanner performance has not dinimished that I can tell.

What function do the cone radials provide? At what point will signal strength suffer? Does missing adjoining radials (one next to the other) make the antenna more directional?

Lastly, what should I be looking for as a replacement antenna? I monitor mostly 30-50 meg and 150.

Many, many thanks!

Alain @ Palomar Mtn.

3018. FS: Portable "wind-up" multi-band Dipole's.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 20:52:08 UTC
From: ARS--KC8BCR@webtv.net
Message-ID: <16815-3A884CF8-29@storefull-136.iap.bryant.webtv.net>
Source record: 170394
Cross-posted to:
rec.radio.swap,alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

After marketing our wind-up reel antenna for SWL's, several hams have approached us about manufacturing a DIPOLE model. So we've done just that and call it the "YoYo-Tenna Deluxe". We've taken two of our YoYo-Tenna wind-up antennas and combined them into a PL-259 coax fitting. You can add coax...or...just plug it straight into your rig or tuner! 40 ft. per reel, so operation is from 10 thru 40 meters. (One ham suggested "stacking" them...or running them in series to cover 75/80 and 160. I'll leave that up to you guys...) If you want to see what a single reel looks like, please visit our website. - http://qth.com/dwm - Remember, no shipping and handling will be charged on the Deluxe model since you are ordering two...and we give free shipping on two or more YoYo-Tennas. (Total cost - $29.90)

Thanks for your time and 73!

Bill - WA8MEA @ Jackson Co., Michigan QRP Club Station - KC8BCR
http://qth.com/dwm

3019. Re: Ladder Line center insulator

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:05:49 UTC
From: Gene Mason <gmason@airmail.net>
Message-ID: <2F6E66CB96458E60.523C4E10F05AFEB5.122FEC7D503326B6@lp.airnews.net>
Source record: 170386

At your local hardware store, you can obtain plastic 'dry wall corner protector' cost $ 3.00 / 8 ft pieces, cut into 4 " strips use #24 copper, 3 " center holes and make your own, use hot glue gun to permanently hold wire. use scissors to cut , cut lengthwise and into 4 " lenghts, makes enough for 25 ft ladder line. 600 ohm.
Also plastic coat hangers are as good and cheaper, cut into 4 " lengths.

Gene KZ5V
"KC1DI" <elbc@pivot.net> wrote in message
news:3a8664ed_2@news.cybertours.com...
> I Think that the one at :
> http://emtech.steadynet.com/grabber.htm
> hope this Helps 73 Dave kc1di
>
> "John" <jh-lewis@swbell.net> wrote in message
> news:J1jh6.18$ZO2.3904@nnrp1.sbc.net...
> > I'm looking for a center insulator to use with my G5RV antenna I want to
> > build - the last one I had was a triangle insulator made of gray
plastic,
> > but I can't seem to locate it now on the web - I'm not really interested
> in
> > the Ladder Lock...
> >
> > Any help?
> >
> > Thanks!
> >
> > Jerry
> >
> >
> >
> >
>
>

3020. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:06:12 UTC
From: Ian Jackson <ianjackson@g3ohx.demon.co.uk>
Message-ID: <$m$$UNAU5Fi6Ew0K@g3ohx.demon.co.uk>
Source record: 170398

You're right! Actually, it's t'y'all!
Sorry!
Ian.

In article <z_Rh6.1139$4f.4316643@news1.mia>, Bill Manley
<b_manley@bellsouth.net> writes
>You all is contracted as y'all.
>Bill Manley
>
>Ian Jackson <ianjackson@g3ohx.demon.co.uk> wrote in message 'less' and
>'fewer'...
>>
>> ENOUGH! This is hammerchewer radjio, and not a linguistic inquisition.
>.
>.
>.
>> 73 t'yall!
>> Ian.
>>
>
>

3021. Want to build a 6m ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:07:24 UTC
From: JRW <johnrwells@hotmail.com>
Message-ID: <99Zh6.72$Cw2.3027@news1-hme0>
Source record: 170395

Hi

I want to build an antenna made with wire for 6m, centre freq: 51MHz (UK 6m band).

I want to make it so I don't have to keep tuning it, i.e. cut it to the optimum length and I want about 50ohms. I could put up a 1/4 wave vertical piece of wire with some radials or a dipole or inverted V. I would also like to try a Yagi with one reflector, a driven element and one director. How do i calculate the spacings and lengths of each element and how to I calculate the folded radiating element? Oh, and how about a loaded dipole, are they any good and what are the dimensions?

Thanks,

John

3022. Re: Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:09:14 UTC
From: Gene Mason <gmason@airmail.net>
Message-ID: <24EB3FB93891D267.51E8FF23EB3FD766.CA1C5BC8A7C56101@lp.airnews.net>
Source record: 170387

Hi
Have you been to Radio Shack lately? they have a 75 ' copper wire antenna
with 50' feed line, incl insulators and directions. $ 9.95
good luck.
"Michael Gilbert" <mgilbert@execpc.com> wrote in message
news:3a858940$0$7165$272ea4a1@news.execpc.com...
> Ok, now that I have the attention of someone that I can trust...here is
the
> question.
> I like to listen to AM radio but I cant receive a good signal. I thought
> asking someone with more advanced skills would be my best bet. Where I
live
> it is kind of low and quite a few miles from any large town.What kind of
> antenna would work the best?
>
> Thanks all!
>
> Michael
>
>

3023. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:14:53 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <36ng8tk76bikmar4gp9b12pcjfmj6pai7a@4ax.com>
Source record: 170396

I didn't calculate it, but I think you may be low on the 3%. I bought
my membership in September 1977. Cost $240 so dues were $12/yr. Now
they are $34.

Dick - W6CCD

On Mon, 12 Feb 2001 11:53:41 -0600, "KA9CAR" <nospam@nospam.usa>
wrote:

>I am 48.
>
>Allowing for a 3% inflation in dues, and a 5 to 8 % investment rate, I
>figured I will break even on the present value when I am 80. I decided to
>go for it. Wish I had done it 20 years ago!
>KA9CAR
>
>
>
>AC6V <ac6v@ix.netcom.com> wrote in message
>news:3A8581D1.218845B6@ix.netcom.com...
>> Hi Mark -- sure wished I had opted for ARRL Life Membership 25 years
>ago --
>> would have saved a pile of greenstamps. But Hams come and go into the
>hobby, so
>> be fairly certain you will have a Life Long" interest. Many benefits -
>> insurance, bureaus if you are or get into DXing, great articles on all
>aspects
>> of the hobby. Also on the internet there is "ARRL Members Only access" --
>wow
>> what a wealth of info one can gain access to there.
>> --
>> 73 From Rod AC6V In San Diego
>> 700 Ham Topics & 6,000 Links
>> http://ac6v.com/
>> I Doubt, Therefore I Might Be!!!
>> ====================
>>
>>
>> Texas Rangers Fan Since 1972 wrote:
>>
>> > Is it worth it? I enjoy ham radio so much I dont ever see myself leaving
>the
>> > hobby. I am considering a lifetime membership but would like to hear
>some
>> > opinions from others first.

>> >
>> > Mark
>> > KE4QKN
>> > EM60
>> >
>> > "Hell, Columbus thought Cuba was China!!!" - Tully Mars
>>
>>
>>
>>
>>
>

3024. ARRL Yagi Analyzer vs NEC2

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:23:46 UTC
From: Tom Merendino <tmerendi@fore.com>
Message-ID: <3A886272.230B8E6D@fore.com>
Source record: 170397

Hi,

I have run the exact same 7-element Yagi design (858MHz) thru both ARRL's Yagi Analyzer (YA) program (dated 1994) and thru NEC2D (dated 1996). The program environment is Windows NT 4.0. I modeled both runs in free space, with no boom compensation nor taper schedule in either model. Just a plain, simple wire yagi with identical dimensions in each program.

I noted that NEC2D reported feedpoint impedance values about one-half of the feedpoint value reported by ARRL's YA.

I wasn't expecting exact calculation of impedance between the two programs, but I was sort of expecting them to be within, say plus/minus 20% or so - not to be off by 100%.

Does anyone have experience with the impedance accuracy as modeled by these two programs as compared with the actual impedance of the antenna once it is built?

Thanks in advance.

3025. Re: Need Help with a MFJ-1432 Antenna "Ruff Rider Hyper Gain"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:37:05 UTC
From: Chris McGowan <c279m@yahoo.com>
Message-ID: <lAZh6.1160$z5.236675@news1.news.adelphia.net>
Source record: 170399

I've tried that. Send a few emails, no answer.
Called the tech support line and get a different response each time on how
they can't help.

You wonder why people give them a bad rap.
Chris

"'Doc" <w5lz@oio.net> wrote in message news:3A8755A9.DAFA81A8@oio.net...
>
>
> Chris,
> Why not ask MFJ for a manual? They're on the internet,
> and usually have manuals for everything they sell.
> 'Doc

3026. Re: Experts Only

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:37:51 UTC
From: Lamar Owen <lamar.owen@wgcr.org>
Message-ID: <3A8865BF.FC6FD61C@wgcr.org>
Source record: 170400

Michael Gilbert wrote:
>
> Ok, now that I have the attention of someone that I can trust...here is the
> question.
> I like to listen to AM radio but I cant receive a good signal. I thought
> asking someone with more advanced skills would be my best bet. Where I live
> it is kind of low and quite a few miles from any large town.What kind of
> antenna would work the best?

Shielded loop. No contest. Also, any AM broadcast antenna will need
to be vertically polarized -- a horizontal dipole will be very poor. I
was looking at the BE Radio website, as they used to have a very nice
design for one, but I can't seem to find it right off. www.beradio.com
was where it was....
--
Lamar Owen
WGCR Internet (and AM) Radio
1 Peter 4:11

3027. Coaxial choke balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:43:48 UTC
From: kg4ggx@aol.com
Message-ID: <20010212174348.12373.00000574@ng-fs1.aol.com>
Source record: 170401

Hi all
I'm looking for recommendations on a coaxial choke balun for a 6 meter dipole.I plan to make the choke from RG-8X. At this time, I've made one from RG-8X that is 4 feet of coax, 5 turns at about 2.5 inches diameter. How far off am I? Do I need a longer length of coax, more turns, smaller or larger diameter? I'd really like to use an effective choke to keep the feed line from radiating since 6 m seems prone to RFI.
Thanks for all replys.
73 Rob KG4GGX

3028. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 22:58:54 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <6dqg8tcj46ndurpe69shnjlggpnsrlam69@4ax.com>
Source record: 170402

On Mon, 12 Feb 2001 11:00:32 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>For "better" reception, signal strength is not as important as signal to
>interference ratio. At least, Ames, Akron, Norman, St. John`s, and a
>station in Cuba share the air in and around North America with KFI on
>640 KHz. Adjacent channels tend to spill-over into the desired channel
>in most receivers.

I see why we're not in perfect agreement here. I think in terms of DXing very weak, far away signals where signal to noise ratio is most important. You're thinking of listening to relatively strong stations where interference is the main concern. For my preference, a 5/8 wave vertical with good ground plane is near-ideal for BC reception. For yours, the loop is best.

Like I said, it depends on how you define "better". :-)

73, Bill W7TI

3029. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 23:25:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8870E8.46F577CF@eznec.com>
Source record: 170403

Just a point of clarification. Rho in these equations is the magnitude of the reflection coefficient, not the reflection coefficient itself. The reflection coefficient is actually a complex number. Rho is unfortunately used to sometimes represent the (complex) reflection coefficient and sometimes (like here) its magnitude, although some people (me included) prefer to use uppercase gamma for the complex reflection coefficient and lowercase rho for its magnitude.

I know Wes is at least, and probably better, acquainted with this than I am, and the equations are of course just fine. I'm commenting just because I've often seen confusion among the reflection coefficient, its magnitude, and its real part.

Roy Lewallen, W7EL

Wes Stewart wrote:
>
> On Fri, 26 Jan 2001 16:57:31 GMT, carkenord@juno.com wrote:
>
> >If I know forward power, and reflected power.....to and from an
> >antenna system, what is the math formula to calculate SWR?
> >
> > Lee Carkenord KA0FPJ
> >
> >
> >Sent via Deja.com
> >http://www.deja.com/
>
> Calculate the reflection coefficient (rho) as:
>
> rho = sqrt(Pref) / sqrt(Pfwd)
>
> then SWR = (1 + rho) / (1 - rho)
>
> N7WS

3030. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 23:37:15 UTC
From: Rex Hunt <Rex@tizyer.freeserve.co.uk>
Message-ID: <969s39$pt5$1@newsg4.svr.pol.co.uk>
Source record: 170404

doesn't black paint include carbon?
I seem to remember a design for a slim jim 2m antenna by G2BCX ,the design suggested enclosure in a White PVC pipe and warned specifically not to use black pipe because of its carbon content.....G2BCX was an antenna Guru!
RIP

Rex

3031. Re: Horiz vs Vert Polarization Myth?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-12 23:42:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8874CB.7BE3594C@eznec.com>
Source record: 170405

Richard Friedman wrote:
>
> I'm a newbie and am starting to put together a home station for 40-6m dx.
>
> I've been told that two problems with vertical (base) antennas on HF are:
>
> 1. You receive omnidirectional noise, and since most noise is vertically
> polarized the QRM received is much greater than with a directional beam
> antenna.

I don't believe most noise is inherently polarized more one way or the other when it's radiated. But noise which is vertically polarized can propagate a few miles via ground wave, while horizontally polarized noise can't. So you might hear more noise with a vertically polarized antenna than a horizontally polarized one. This would be man-made or perhaps static noise coming from within a few mile radius. Noise and QRM from far away is as likely to be horizontally polarized as vertically, so the polarization of the antenna wouldn't make any difference for these.

> 2. You transmit a vertically polarized signal, so only vertical antennas
> can receive you well. Likewise, you receive vertically polarized
> signals better than horizontally polarized signals. i.e., verticals
> can only talk to verticals.

This is true only for line-of-sight communications. If you're communicating via the ionosphere, troposphere, meteor scatter, and so forth, the polarization is changed in an essentially random manner when the signal reflects or refracts. So there's no inherent advantage to one polarization over the other unless you're doing line-of-sight communication. The laws of physics don't know what we consider to be signals and what we consider to be noise, so noise and QRM from distant sources also arrive randomly polarized.

Vertically and horizontally polarized signals do behave quite differently when reflected from the ground. This causes the pattern of a vertically polarized antenna to be a lot different than the perfect-gound ideal case unless reflection is taking place from salt water. You can find more information about this in the ARRL Antenna Book.

> Both seem plausible but how true are they? I thought I'd ask the experts.
>
> --
> -=
> | Richard Friedman KG6EMF rchrd@rchrd.com Oakland, CA http://www.rchrd.com |

> | ï¿½ Information Architect, Technical Communications, Sun Microsystems |
> | ï¿½ Instructor, Univ California Berkeley Extension |
> -=

Roy Lewallen, W7EL

3032. Mobile HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 00:45:54 UTC
From: dapastaguy <dapastaguy@hotmail.com>
Message-ID: <6t%h6.64209$k8.13888228@typhoon.southeast.rr.com>
Source record: 170407

I am new and looking for a mobile HF antenna to easily mount on a Pontiac Transport van (1997). I read with interest an earlier post about Hamsticks, but want multiband. I saw someone referenced a spider antenna. Are these true multiband, or do you have to swap the coils? My local ham club has suggested a screwdriver, and the expense is not a problem, but the mounting would be a concern. Any suggestions?

3033. Re: Best antenna software?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 00:59:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A88870D.390B0561@eznec.com>
Source record: 170406

EZNEC and NEC-Win use the same basic calculating engine (NEC-2), so should give very similar answers. (A possible exception is when modeling Yagis made from telescoping tubing. EZNEC "corrects" for NEC-2's error by substituting equivalent constant-diameter elements -- see "Stepped Diameter Correction" in the EZNEC manual index. I assume that NEC-Win uses a similar algorithm, but don't know if the implementation is the same.) NEC4WIN95, I believe, uses MININEC as its calculating engine. This can result in dramatically different results in some situations like quads or antennas with low horizontal wires, but results should be very similar in most cases.

Roy Lewallen, W7EL

cajo1@my-deja.com wrote:
>
> Have tryed the demos for EZNEC 3.0 ;NEC-WIN plus+ and NEC4WIN95.
>
> My modelling gives different results.Do they use differnt algoritms?
>
> What to use some,other programs? Or i have to find out the
>
> limitations for eatch program?
>
> Regards from CAY in SWEDEN.
>
> Sent via Deja.com
> http://www.deja.com/

3034. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 01:34:13 UTC
From: tlbryant@my-deja.com
Message-ID: <96a2ul02jlh@enews2.newsguy.com>
Source record: 170410
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <968ne0tus1@nnrp1.deja.com>, k4yz@my-deja.com says...
>
>In article <goodbye@goodbye>,
> bummer-radio@licensing.org (smiley o'riley) wrote:
>
>>I find I can no longer support the ARRL by being a member. What's
>>the best way to cancel a membership?
>
> You might try a .45 caliber automatic in the mouth. It's about as
>effective as this troll.

He could then get a listing in the "silent keys" column for free!

3035. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 02:07:38 UTC
From: richardharrison@webtv.net
Message-ID: <17863-3A8896EA-153@storefull-116.iap.bryant.webtv.net>
Source record: 170409

Bill Turner wrote:
""For my preference, a 5/8 wave vertical with a good ground plane is near ideal for BC reception."

Reciprocity rules, and many a-m broadcasters would say your choice was best for them, too.
They would be just about right so long as they needed 360-degrees of uniform coverage.

An agency I worked for during the cold war operated a European broadcast monitoring station in Germany. It busily recorded many different outlets. It studied and used the information so obtained. The listening post was in a very quiet spot and did the best it could to get clean reception. Multiple tower arrays were phased to enhance reception and place nulls in the directions of intefering stations. These could be quickly readjusted to receive a more fruitful outlet at a different hour.

The multi-tower array wasn`t the best antenna to receive all outlets. Loops with huge ferrite cores and some loops with air-cores were also used. Whatever proved best was used.

I doubt that a non-directional antenna was ever the antenna of choice. Even with a strong signal and little interference a directional would have been chosen just for the insurance.

All the h-f reception was done not only with directional antennas, but with triple diversity as well.

I agree that KFI has a fine non-directional antenna, but for best reception of distant signals your chances are better with a directional antenna.

When I lived in Europe, after midnight when most of the Europeans had signed-off, I used to listen to Edward R. Murrow and the CBS News from WCBS in New York. If WCBS happened to fade, I just rocked the dial a tad to WWL which was carrying the same program in New Orleans. I was using a Beverage antenna with a Hammarlund SP-600. It always gave good results.

The Beverage is a good example of what works. It is inefficient and gives no where near the strongest signals. But, it surely gives a good signal to noise ratio because it is quite directional.

Ther problem with KFI`s antenna as a receiving antenna is that it is very efficient but completely non-directional, except for the null at its zenith.

You usually have plenty of receiver gain, especially if you are fortunate enough to have a "Super Pro". In the broadcast band, the signals are usually competing with atmospheric noise, other external noise, and unwanted signals, not internal receiver noise. So, I still contend that the main worry is signal to noise, not feeble signals.

Best regards, Richard Harrison, KB5WZI

3036. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 02:12:12 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <fJaIOrVjrYs5c4Xugp+MgVvSoc+e@4ax.com>
Source record: 170408

Bill Turner <w7ti@jps.net> wrote:

>On Mon, 12 Feb 2001 11:00:32 -0600 (CST), richardharrison@webtv.net (Richard
>Harrison) wrote:
>
>>For "better" reception, signal strength is not as important as signal to
>>interference ratio. At least, Ames, Akron, Norman, St. John`s, and a
>>station in Cuba share the air in and around North America with KFI on
>>640 KHz. Adjacent channels tend to spill-over into the desired channel
>>in most receivers.
>
>_____
>
>I see why we're not in perfect agreement here. I think in terms of DXing very
>weak, far away signals where signal to noise ratio is most important. You're
>thinking of listening to relatively strong stations where interference is the
>main concern. For my preference, a 5/8 wave vertical with good ground plane is
>near-ideal for BC reception. For yours, the loop is best.

Well, the little Select-A-Tenna broadcast-band AM loop really makes
signals pop out of the noise. The faintest signal will literally jump
out at you with the loop, even when used with a cheap radio.

The main problem is finding dx signals that are relatively in the
clear, and not covered up by local stations.

Bob
k5qwg
>
>Like I said, it depends on how you define "better". :-)
>
>73, Bill W7TI

3037. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 02:36:34 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <S41i6.38$bd.9150@newshog.newsread.com>
Source record: 170411

Welll...If I figured just QST, I've been getting it free for the last 26
years.

Then again, Life Membership back then was $150.

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

"Texas Rangers Fan Since 1972" <ke4qkn@aol.com> wrote in message
news:20010210060758.03934.00000500@ng-mi1.aol.com...
> Is it worth it? I enjoy ham radio so much I dont ever see myself leaving
the
> hobby. I am considering a lifetime membership but would like to hear some
> opinions from others first.
>
> Mark
> KE4QKN
> EM60
>
>
>
>
>
> "Hell, Columbus thought Cuba was China!!!" - Tully Mars

3038. Small loop antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 02:53:32 UTC
From: John Kennedy <jkenned1@rochester.rr.com>
Message-ID: <Mk1i6.127728$o91.13092515@typhoon.nyroc.rr.com>
Source record: 170412

I seem to remember an article about a small loop made of twin lead that could be used as a portable or limited space antenna. I think it was stub tuned. Anyone remember this or have a source of info?
TIA
John, N2LW

3039. Re: All Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 03:00:15 UTC
From: John Kennedy <jkenned1@rochester.rr.com>
Message-ID: <3r1i6.127766$o91.13096035@typhoon.nyroc.rr.com>
Source record: 170413

You never said what radio you use. That makes a huge difference to all advice,

3040. Re: Building a Windom or OCFD info please...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 04:23:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A88B6DA.205A3E59@eznec.com>
Source record: 170415

I know that Jack Belrose, VE2CV, wrote one or more articles in QST on
the topic of OCFDs several (5?) years ago. Maybe someone can point you
to the particular issue(s). I recall that he had a lot of difficulty
preventing feedline radiation, even with a balun. Feedline radiation is
sometimes not a problem, but it sure can complicate matters if you're
trying to duplicate somebody else's system, because the feedline itself
is part of the antenna so has to be duplicated also.

Roy Lewallen, W7EL

Mike wrote:
>
> I am considering building a Windom or an Off Center Fed Dipole. I am looking
> to see if anybody has any practical experience with these or can reccomend a
> source of information. I hare read the Windom/OCFD articles in the current
> edition of the ARRL Antenna Book and the OCFD section in ARRL's More Wire
> Antenna Classics-Vol2. I am planning on cutting it for the 160 meter band
> primarily for use there and on 75 phone. I should be able to hang the feed
> point height of 40 to 45' or so, and maintain a decent flat top
> configuration with reasonable sag.
>
> I am interested on advice on feeding the OFCD. It appears many feed it with
> coax through a 4:1 Balun which provides a better match- sometimes a 1:1 swr
> point, but a 6:1 (sometimes used on commercial models) give a wider
> bandwidth but not always a 1:1 spot. Another version the appears circa
> 1950's is to feed it with twin-lead through a 4:1 balun. Could feeding it
> with a specific length of twin lead or window/ladder enhance vertical
> radiation?- Similar to how the Radiator section of coax on the Carolina
> Windom radiates vertically.
>
> I saw a design in the first volume of ARRL Wire Antenna Classics where the
> builder fed a 40 meter OCFD with ladder line in odd multiple of 1/4 wave
> (allowing for velocity factor) to get it to load on the odd harmonic of 15
> meters as well as the normal (for windom-like arrays) even harmonics. He
> simply had to change from the 4:1 balun to a 1:1 balun to use it on 15
> meters. I am not looking to pick up even harmonic bands, but would be
> interested if the addition of a resonant length of window/ladder line could
> enhane vertical radiation on 160 or 75 (or any other band as a bonus).
>
> Any advice, instructions, or suggestions appreciated. Please post here or
> Email direct. Remove the QRM from my address to email directly.
>
> 73,
> Mike
> KA1DRZ

3041. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 04:42:59 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a88b277.36368508@news.aepnet.org>
Source record: 170416

On Mon, 12 Feb 2001 15:25:28 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Just a point of clarification. Rho in these equations is the magnitude
>of the reflection coefficient, not the reflection coefficient itself.
>The reflection coefficient is actually a complex number. Rho is
>unfortunately used to sometimes represent the (complex) reflection
>coefficient and sometimes (like here) its magnitude, although some
>people (me included) prefer to use uppercase gamma for the complex
>reflection coefficient and lowercase rho for its magnitude.

Roy raises a good point. Tom Bruhns already took me to task for a
somewhat careless use of rho. Although I did define it below, as Roy
and Tom said, it is often used as a complex number.

I too prefer upper case Gamma for the complex number and rho for the
magnitude but unfortunately the literature is full of confusing usage.
Some of the literature was even published by Tom's employer, the
former H-P, now Agilent (how do you pronounce that again?)

My autographed copy of Steve Adam's, book "Microwave Theory and
Applications", published by H-P, shows on page 23:

" |Gamma| = rho "

Similarly, my handy dandy H-P "Reflectometer calculator" sliderule
says that SWR = (1 + rho) / (1- rho) which bears a striking
resemblence to what I wrote below.

But then in H-P's App Note 77-3, "Measurement of Complex Impedance
1-1000 MHZ", it says that rho is a vector quantity and it shows:

SWR = (1 +|rho|) / (1 - |rho|)

Finally, the best reference I have is General Radio's "Handbook of
Microwave Measurements" (out of print but reissued by Gilbert
Engineering) and it says that Gamma is complex and rho isn't.

So I guess the thing to do is do as I did below and define the damned
thing every time you use it<g>.

>
>I know Wes is at least, and probably better, acquainted with this than I
>am, and the equations are of course just fine. I'm commenting just
>because I've often seen confusion among the reflection coefficient, its
>magnitude, and its real part.

You give me far too much credit.

Wes Stewart N7WS
>
>Roy Lewallen, W7EL
>
>Wes Stewart wrote:
>>
>> On Fri, 26 Jan 2001 16:57:31 GMT, carkenord@juno.com wrote:
>>
>> >If I know forward power, and reflected power.......to and from an
>> >antenna system, what is the math formula to calculate SWR?
>> >
>> > Lee Carkenord KA0FPJ
>> >
>> >
>> >Sent via Deja.com
>> >http://www.deja.com/
>>
>> Calculate the reflection coefficient (rho) as:
>>
>> rho = sqrt(Pref) / sqrt(Pfwd)
>>
>> then SWR = (1 + rho) / (1 - rho)
>>
>> N7WS

3042. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 05:21:51 UTC
From: k7itm@aol.com
Message-ID: <20010213002151.27399.00000797@ng-df1.aol.com>
Source record: 170417

Sigh. And I didn't even realize the inconsistency of useage. I had only seen (or at least only realized I had seen) rho used equivalently with Gamma. I apologize for being so uppity about rho...but for sure agree that it's by far best to always define it, with either words or a formula. Thanks for bringing this up, guys. (Now I'm going to slink off and review some of my own references...)

Cheers,
Tom -- K7ITM
(who will likely be posting a bit less for a while, till Google gets its acquisition of Deja straightened out...)

3043. Re: Mobile HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 05:47:31 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A88CA73.221C12BF@oio.net>
Source record: 170319

dapastaguy,
A 'spider' is usually the base part of the antenna with
an adapter that allows you to have 4 resonators instead od
only one. Do they work? Yes, how well depends on how much
trouble you take to tune all of them.
'Doc

3044. Re: Coaxial choke balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 05:50:48 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A88CB38.887C8C22@oio.net>
Source record: 170418

KG4GGX wrote:
>
> Hi all
> I'm looking for recommendations on a coaxial choke balun for a 6 meter
> dipole.I plan to make the choke from RG-8X. At this time, I've made one from
> RG-8X that is 4 feet of coax, 5 turns at about 2.5 inches diameter. How far off
> am I? Do I need a longer length of coax, more turns, smaller or larger
> diameter? I'd really like to use an effective choke to keep the feed line from
> radiating since 6 m seems prone to RFI.
> Thanks for all replys.
> 73 Rob KG4GGX

Rob,
I'd have used a coil diameter of around 6", and 8 turns.
It isn't very critical. Small diameter coils with RG-8x is
asking for problems from conductor migration (center wire
gradually moves to the outer side of the coil, changes
impedances, and can eventually short out).
'Doc

3045. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 06:00:53 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <96aiil$18c$1@208.207.71.146>
Source record: 170320

Bill Turner wrote:
>
> On Sun, 11 Feb 2001 09:33:37 GMT, "jdhl" <jdhl@verio.com> wrote:
>
> >What antenna is the best AM radio antenna?
> >
> >Regards,
> >
> >jdhl
> >
>
> --
>
> The one that KFI has down in Orange County, CA.
>
> W7TI

I dunno, I saw one at Santa Cruz sitting in the middle of what appeared
to be a big salt marsh that looked pretty good.

Dick

3046. Re: Painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 06:37:32 UTC
From: noah824@att.net
Message-ID: <MC4i6.5510$Pg3.436384@bgtnsc06-news.ops.worldnet.att.net>
Source record: 170321

While we're already discussing this subject, I have a quick question about antennas and paint. I have several different VHF & UHF mobile antennas that have a black finish on them. Because of the weather they've been exposed to over the last couple of years here in Michigan, some of the black finish is chipping off. Is there a generic type of spray paint I could get at the hardware store that would be okay to use on the antennas without hurting their TX/RX performance? I know it should be non-metallic, but what specifically should I be looking for in the ingredients?

Thanks,

Noah

3047. WTB: Icom IC-900 Band Module

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 08:58:13 UTC
From: Big Ben <SPAMSUCKSbigbensblazer@yahoo.com>
Message-ID: <fH6i6.2278$jy5.647141@news.uswest.net>
Source record: 170322
Cross-posted to: alabama.birmingham.radio.amateur,alt.radio.amateur.club.taparc,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Our repeater group needs an Icom IC-900 mobile 6 meter band module. If you would like to sell one, please reply by email with your needs or your price and location so you/we can figure shipping. We are in zip 98662 grid CN85.
Thank you,
KC7UIP

3048. Re: Coaxial choke balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 09:35:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A88FFC7.29B7@wt.net>
Source record: 170323

KG4GGX wrote:
>
> Hi all
> I'm looking for recommendations on a coaxial choke balun for a 6 meter
> dipole.I plan to make the choke from RG-8X. At this time, I've made one from
> RG-8X that is 4 feet of coax, 5 turns at about 2.5 inches diameter. How far off
> am I? Do I need a longer length of coax, more turns, smaller or larger
> diameter? I'd really like to use an effective choke to keep the feed line from
> radiating since 6 m seems prone to RFI.
> Thanks for all replys.
> 73 Rob KG4GGX

That might not be too far off. In the arrl ant book they state appx 8
ft-8 turns for 20m. 4 ft-6-8 turns for 10m. "For rg-58, which is nearly
the same size as rg-8x". So I would think appx 3 ft-4to 6 turns might be
fairly close to optimum just by guessing. You are not too far off from
that, and it may be working ok. If you have no problems using it, I
would consider it good enough. MK
--
http://web.wt.net/~nm5k

3049. Re: Want to build a 6m ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 09:46:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A890258.16E3@wt.net>
Source record: 170325

JRW wrote:
>
> Hi
>
> I want to build an antenna made with wire for 6m, centre freq: 51MHz (UK 6m
> band).
>
> I want to make it so I don't have to keep tuning it, i.e. cut it to the
> optimum length and I want about 50ohms.

No problems doing that.
I could put up a 1/4 wave vertical
> piece of wire with some radials or a dipole or inverted V.

Those would work too.
I would also
> like to try a Yagi with one reflector, a driven element and one director.
> How do i calculate the spacings and lengths of each element and how to I
> calculate the folded radiating element?

You can get a table of lengths for NBS yagis in the arrl ant book. Also
you might be able to find on the net. You could even use a modeling
program to calculate one, and also optimize for your specific uses. But
I wouldn't bother with the folded driven element. I prefer a normal
driven element grounded to the boom, and fed with a gamma match, or
whatever. I think the easiest and most rugged way to build.
Oh, and how about a loaded dipole,
> are they any good and what are the dimensions?

I wouldn't bother with that on 6m. You have room for full size. Or
should anyway. I just put up a 6m antenna the other day. It's a base fed
1/2 wave vertical I threw up to be able to try the band. Mainly for fm,
rptr use. I also plan something for SSB/CW. Maybe a yagi. 6m fairly dead
around here on the whole, but was surprised today on 52.525. I keyed up
and ID'ed not expecting any answer, and had a guy actually call back.
Wonders never cease...I've been trying to stir up a little more local
interest in 6m. I'd never worked 6m up until recently when I got a radio
that has the band. Might as well try it and get my moneys worth. MK
--
http://web.wt.net/~nm5k

3050. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 10:00:58 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8905DA.45A9@wt.net>
Source record: 170324

Richard Harrison wrote:

> You usually have plenty of receiver gain, especially if you are
> fortunate enough to have a "Super Pro". In the broadcast band, the
> signals are usually competing with atmospheric noise, other external
> noise, and unwanted signals, not internal receiver noise. So, I still
> contend that the main worry is signal to noise, not feeble signals.
>
> Best regards, Richard Harrison, KB5WZI

I think I would prefer the loop most of the time for AM-BC listening just judging from past use on different radios. I like the abilty to to null stuff out. I got a bonus when I bought a new ic-706 recently. It's a great AM-BC receiver for its size. And real good audio too. It uses a fairly wide 8 kc AM filter which I think really helps the audio. Many ham rigs have too narrow of filters for am use and don't have very good audio. But I've been using the 706 for this lately with my 160-80-40 combo dipoles, and has been doing real well. It's quickly becoming my favorite AM radio. It's also real good to SWL the HF bands. Alas, the longwave is usuable , but nothing to write home about. The lower the freq, the worse it gets. MK
--
http://web.wt.net/~nm5k

3051. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 10:16:55 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A890997.2324@wt.net>
Source record: 170326

Jerry Oxendine wrote:
>
> LOL!
>
> That's OK. Those were the days, eh? That's when we were young. Some-
> how going extremely fast just doesn't appeal to me anymore. Now I'm
> not averse to cruising at 80 if I can, but I'd get very nervous if I
> were to go as fast as I once did. I once drove my Dad's '58 Fairlane
> at 120+ and his '65 Galaxie across the Albemarle Sound bridge (2 miles
> across) at 100+ (all the little 289 could muster). Not too long ago,
> I crossed that same bridge and marveled at how narrow it is. I asked
> myself, did I REALLY go 100 mph on THAT bridge?! I shuddered to think of
> it! How could I have been so stupid? But, hey, I was 17 and indes-
> tructable, right? Mmm, mmm, the things I got away with back then! And
> if Daddy had known.....
>
> Hey, I betcha you remember just driving around aimlessly for the sake of
> driving--every chance you had, in the car cruising. Buying gas for
> 18.9 cents per gallon, taking 10 bucks with you and your date to the
> movies and a burger at the local drive-in and coming home with change!
>
> One thing on the Ford/Chevy argument while I'm reminiscing. I bought a
> new '67 Caprice coupe that year. $3600 list, $74.70 per month. I
> bought the 327 heads, manifold/Quadrajet, and put the duals on. And
> yes, I had an HF radio in it--I was the only 19 year old with a BIG
> Master Mobile antenna. My best girl-chasin' buddy had a '64 Fairlane he
> named "Snoopy" and even went so far as to paint the little dog on the
> front fenders. He still is a good artist. He swapped out the little
> 260 CID V8 for a 289 4BBL, did some cam work, exhaust, and a Hurst shif-
> ter. Even tho we were buddies, he was going to leave my Caprice in the
> dust. One night, leaving the skating rink, the "big" race began. I
> was first turning out onto the highway, and Joe whipped out into the
> left lane and gunned his Ford. Next, all you could hear was motors
> gunning and the distinctive moan of a Quadrajet. Now, my big Chevy was
> MUCH heavier than Joe's Fairlane, but imagine his surprise when he
> was unable to pass me! He was just able to get his nose beside my door.
> We slowed down and tried another rolling start. Same thing. Anyway,
> looking back, I don't see how we raced for 8 miles without attracting
> the attention of the local constabulary.
>
> Nowadays, I'm more content with powerful ham radios.

Less dangerous anyway, unless you stick a finger in an amp..:(..They
just don't make cars like they used to.

My first car was a 65 chevy impala sport sedan that my dad bought new. I got it in about 1973 or so when I first started driving. It was one fast puppy. Had one of the first 396's. The difference in the sport sedan and regular was the lack of a pillar between the front and back side windows. I remember it was quite a head turner at the gas stations when it was new. The 396 rat motor got the gas jocky's attention every time in 1965-66. The 396 excelled at high speed racing. It didn't get warmed up until you hit 100. Then it started sounding and acting like a race car. :) Most had the small block 327's until then. I had quite a few other big blocks in later years, but now drive only 6 bangers. A V6 in my car, and a I6 in my truck. We used to terrorize the freeways in my younger years. I thought nothing of blasting down 610 at 110 mph. But of course in those days, there wasn't near the traffic "or cops" there are now. We used to race all the way across town driving home from work late at night. "My 396 against a mopar 383 a friend had usually. But my fast driving days are long gone. And the weird part is I never got a speeding ticket until I became a slow driving semi old fart. Then I finally got one. I guess justice will prevail... MK

--

http://web.wt.net/~nm5k

3052. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 10:23:24 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A890B1C.273A@wt.net>
Source record: 170327

Cecil wrote:
>
> Jerry Oxendine wrote:
> > I once drove my Dad's '58 Fairlane
> > at 120+ and his '65 Galaxie across the Albemarle Sound bridge (2 miles
> > across) at 100+ (all the little 289 could muster).
>
> I once outran three Maricopa Co. deputies on my Kawasaki Z1B. Now
> I wonder what would have happened if the chain had broken at 135mph.
> That bike redlined at 60mph in first gear with four more gears to go.
> --
> http://www.mindspring.com/~w6rca

Hummmm, I've got this image in my head of the smiling Cecil we all know
from your pictures roaring down a arizona highway on a Z1B at 135 mph
with the deputies in high speed pursuit. They should make a commercial
out of that scenario. Use "born to be wild" as the background
music..:-/. That would be a hoot.. MK
--
http://web.wt.net/~nm5k

3053. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 12:39:39 UTC
From: k3bu@aol.com
Message-ID: <20010213073939.00657.00000757@ng-bj1.aol.com>
Source record: 170328

>
>I once outran three Maricopa Co. deputies on my Kawasaki Z1B. Now
>I wonder what would have happened if the chain had broken at 135mph.
>That bike redlined at 60mph in first gear with four more gears to go.
>--
>http://www.mindspring.com/~w6rca
>
>

I will take my mobile top hat off, you must have seen doppler effect on your
signals!
:-)

Looks like contesting.com is down, no reflectors, virus at work?

Yuri

3054. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 13:16:34 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96bc46$h1f$1@uranium.btinternet.com>
Source record: 170329

The subject matter is painting amateur multiband vertical antennas, operating frequency 1.8 to 30 MHz. This newsgroup is not conducting a seminar on a 30 GHz sideways-looking, terrain-mapping radar for the surface of Mars.

Keeping to the subject, at 29MHz, a coat of paint, 0.002" thick, on a 1" diameter antenna conductor, height = 8.5 feet, will reduce its resonant frequency by less than 0.00018 percent. This is equivalent to a shift in frequency of 52Hz at 29 MHz.

Is this slight difference noticeable ?

Reg

3055. Re: Coaxial choke balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 14:01:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96bene$m90$1@uranium.btinternet.com>
Source record: 170330

Rob, what you are looking for is the self-resonant frequency of a solenoid wound with a conductor as thick as the outside diameter of the coax you intend to use.

A solenoid, 4 inches long, 2 inches former diameter, close-wound with 16 turns of 1/4 inch outside diameter coaxial cable, has a self-resonant frequency of about 50 MHz.

For other dimensions of coil and coax download in a few seconds program SOLNOID2. In addition to the essentials of coil design this program calculates the self-resonant frequency due to parasitic capacitance, and the impedance at the resonant and lower frequencies.

The PVC jacket on coax will cause some uncertainty in the exact resonant frequency but in choke-balun applications this is a relatively unimportant matter.

(Having said all that, I think a 2" diameter ferrite ring filled with loosely-wound coax does a better job. It has a smaller loss, it has a much wider operating bandwidth, it weighs less and is mechanically more convenient to install.)

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

KG4GGX <kg4ggx@aol.com> wrote in message
news:20010212174348.12373.00000574@ng-fs1.aol.com...
> Hi all
> I'm looking for recommendations on a coaxial choke balun for a 6 meter
> dipole.I plan to make the choke from RG-8X. At this time, I've made one
from
> RG-8X that is 4 feet of coax, 5 turns at about 2.5 inches diameter. How
far off
> am I? Do I need a longer length of coax, more turns, smaller or larger
> diameter? I'd really like to use an effective choke to keep the feed line
from
> radiating since 6 m seems prone to RFI.
> Thanks for all replys.
> 73 Rob KG4GGX

3056. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 14:54:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A894A88.4B1D80CC@IEEE.org>
Source record: 170331

Mark Keith wrote:
> Hummmm, I've got this image in my head of the smiling Cecil we all know
> from your pictures roaring down a arizona highway on a Z1B at 135 mph
> with the deputies in high speed pursuit.

Actually, the deputies were engaged in a less than "high speed pursuit".
The thing that sold me on the Z1B was a magazine review article. It said:
"What's it like to ride a Z1B? Ever been shot out of a cannon?" :-)
--
http://www.mindspring.com/~w6rca

3057. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 14:54:50 UTC
From: Paul Radge <scruffy@rabbit.com.au>
Message-ID: <3a88afe7$1@news.internex.net.au>
Source record: 170414

yes a rhombic 4 wavelength per side,I'm trying to find info on how to
reduce impedance to feed one ,
Paul,vk3ddu

"Riverland Internet Info" <info@riverland.net.au> wrote in message
news:3A7A0938.E976C975@riverland.net.au...
> I'm wanting an antenna for 23cm other than a yagi....can anyone point me
> to a suitable site? Or does anyone have any ideas? Thanks,
> VK5AW.

3058. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 14:56:25 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A894B19.307ECDEE@IEEE.org>
Source record: 170332

Mark Keith wrote:
> And the weird part is I never got a speeding
> ticket until I became a slow driving semi old fart. Then I finally got
> one.

They finally were able to catch you. :-)
--
http://www.mindspring.com/~w6rca

3059. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 15:46:42 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <2tkb69.dg3.ln@mail.specsol.com>
Source record: 170333

Reg Edwards <g4fgq.regp@btinternet.com> wrote:
> The subject matter is painting amateur multiband vertical antennas,
> operating frequency 1.8 to 30 MHz. This newsgroup is not conducting a
> seminar on a 30 GHz sideways-looking, terrain-mapping radar for the surface
> of Mars.

> Keeping to the subject, at 29MHz, a coat of paint, 0.002" thick, on a 1"
> diameter antenna conductor, height = 8.5 feet, will reduce its resonant
> frequency by less than 0.00018 percent. This is equivalent to a shift in
> frequency of 52Hz at 29 MHz.

> Is this slight difference noticeable ?
> ----
> Reg

Nope, not at all.

However, the "subject matter" drifted (as most newgroups are prone to do)
to radoms with Do Not Paint warnings. Gary's quite accurate response to
that drift was proclaimed by you to be "rubbish". I think you owe Gary
an apology.

Jim Pennino

3060. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 16:02:44 UTC
From: richardharrison@webtv.net
Message-ID: <24640-3A895AA4-7@storefull-115.iap.bryant.webtv.net>
Source record: 170335

Paul Radge wrote:
"Yes a rhombic 4 wavelengths per side. I`m trying to find information on how to reduce impedance to feed."

A rhombic may produce about 750 ohms at its feedpoint. Typically this is reduced by using a tapered line at h-f between the drivepoint and a parallel-wire 600-ohm transmission line. The rhombic is typically 1/2-wave above ground which makes the tapered line about that length.

A full wavelength would be a smoother impedance transistion than the 1/2-wave line would produce. Since the wavelength is only 23 centimeters, or about 9 inches, the line could be just a couple of rods.

Ed Laport has a table of parallel-line impedance versus the ratio of line spacing to wire radius, in his "Radio Antenna Engineering". Working this out for AWG 12 wire (.04 in. radius) gives a spacing of 20 inches for 750 ohms, the rhombic drivepoint, and 1/2-in. spacing for 300 ohms line impedance.

A matching section 9 inches or more long (even less will work ok) using AWG 12 or larger wire should be easy to produce as a partial solution to your problem. Larger wire is fine. It wil have a slightly lower line impedance which can be corrected with slightly wider spacing. This is not critical as you will note wide variations in the length of tapered lines used and the wide frequency range that is used with them in a typical rhombic. The rather casual attitude taken with tapered line spacing doesn`t seem to hurt in practice either.

Best regards, Richard Harrison, KB5WZI

3061. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 16:02:51 UTC
From: John Burrell <john@g8ozh.com>
Message-ID: <vVci6.16962$eZ2.1999098@nnrp3.clara.net>
Source record: 170334

Well, Helene's original query seems to have suffered the normal routine of several good answers and several answers to questions which hadn't been asked! Not necessarily a bad thing as we can all learn something from these 'wriggling threads', although they do seem to generate yet more questions...

This business of conductive paint for example, perhaps someone can helpout with an explanation. As I see it I can quite happily paint either my antenna or its 'radome' (i.e. pvc tube etc) with just about any paint I can buy without causing a problem at normal amateur hf/vhf/uhf frequencies. Even painting over traps and connections is unlikely to cause as big a problem as rainwater collecting on these parts. But what happens if I use a conductive paint? I don't think Gary's colloidal carbon paint would cause a problem when applied to antenna elements only, but it may well if used on that pvc radome or over a trap for instance. Am I right in this assumption? Metallic paint was also mentioned in one reply as if it were to be avoided. Is this necessary. Surely metallic paint as sold in aerosol cans for car body repairs consists of fine aluminium particles supended in an acrylic medium and is unlikely to ever form a substantial metal coat. So what effect would this have on the antenna? I reckon none at all - as in normal paint. So has anyone ever investigated this situation with respect to amateur radio use or are we all running on hearsay, guesswork and non-relevant radar techniques? I'm not knocking any of those who responded to the original query but I think there are now several loose ends which ought to be sorted.

Regards,

John, G8OZH

3062. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 16:16:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96bmlo$82p$1@uranium.btinternet.com>
Source record: 170336

Cecil wrote
> Reg Edwards wrote:
> > Why don't you just state outright you can paint your antenna any colour
you
> > like, with any sort of paint you like, and nobody will ever notice the
> > slightest difference.
>
> What if the paint had a high carbon content?
==========
All paints have a high carbon content - just like polyethylene, the finest
insulating material ever invented.

Suppose a thin coating of sump oil + soot + super-glue is to be applied to
an antenna conductor.

Suppose the antenna is 95% efficient, a reasonable value, before the goo is
applied.

Suppose the conductor loss resistance increases by 25%, a ridiculously high
value, after the goo is applied.

On application of the goo efficiency falls to 93.8%

This is equivalent to a loss in signal strength of 0.055 decibels or 1/109th
of an S-unit.

Does this constitute a disaster or is it likely to remain un-noticed ?

Reg.

3063. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 16:37:20 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <+OYHTVAALWi6EwH7@invest.fsbusiness.co.uk>
Source record: 170337

Cecil,

>Actually, the deputies were engaged in a less than "high speed pursuit".
>The thing that sold me on the Z1B was a magazine review article. It said:
>"What's it like to ride a Z1B? Ever been shot out of a cannon?" :-)
The same could be said for the one time, back in the early 70's I had a
ride in an original big black 429 Boss Mustang.

Few made it to these shores, fewer took that rascal on at the lights.

Phil G4ZOW
London, SW1

3064. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 17:13:16 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <kmmJOuMsB4jHe=404AxFjJ7JhjZm@4ax.com>
Source record: 170338

"KA9CAR" <nospam@nospam.usa> wrote:

>I am 48.
>
>Allowing for a 3% inflation in dues, and a 5 to 8 % investment rate, I
>figured I will break even on the present value when I am 80. I decided to
>go for it. Wish I had done it 20 years ago!
>KA9CAR

Well, with the current lifetime membership at $850 for those under 65,
that's 25 years of dues at $34 a year -- but assuming dues will
probably double or triple over the next 25 years (dues were $12 back
in 1978), then you might break even in maybe 10 or 15 years... (the
stock market usually goes down when the Republicans are in the White
House, so don't look for any good investment gains for awhile)

Bob
k5qwg
>
>
>
>AC6V <ac6v@ix.netcom.com> wrote in message
>news:3A8581D1.218845B6@ix.netcom.com...
>> Hi Mark -- sure wished I had opted for ARRL Life Membership 25 years
>ago --
>> would have saved a pile of greenstamps. But Hams come and go into the
>hobby, so
>> be fairly certain you will have a Life Long" interest. Many benefits -
>> insurance, bureaus if you are or get into DXing, great articles on all
>aspects
>> of the hobby. Also on the internet there is "ARRL Members Only access" --
>wow
>> what a wealth of info one can gain access to there.
>> --
>> 73 From Rod AC6V In San Diego
>> 700 Ham Topics & 6,000 Links
>> http://ac6v.com/
>> I Doubt, Therefore I Might Be!!!
>> ====================
>>
>>
>> Texas Rangers Fan Since 1972 wrote:
>>
>> > Is it worth it? I enjoy ham radio so much I dont ever see myself leaving
>the

>> > hobby. I am considering a lifetime membership but would like to hear
>some
>> > opinions from others first.
>> >
>> > Mark
>> > KE4QKN
>> > EM60
>> >
>> > "Hell, Columbus thought Cuba was China!!!" - Tully Mars
>>
>>
>>
>>
>>
>

3065. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 17:38:09 UTC
From: Richard Clark <rwclark@rwclark.seanet.com>
Message-ID: <emaJOjfU1MaAsYWa4AcG8N+CQoET@4ax.com>
Source record: 170339

On Tue, 13 Feb 2001 04:42:59 GMT, nospam_n7ws@arrl.net (Wes Stewart)
wrote:

>On Mon, 12 Feb 2001 15:25:28 -0800, Roy Lewallen <w7el@eznec.com>
>wrote:
>
>>Just a point of clarification. Rho in these equations is the magnitude
>>of the reflection coefficient, not the reflection coefficient itself.
>>The reflection coefficient is actually a complex number. Rho is
>>unfortunately used to sometimes represent the (complex) reflection
>>coefficient and sometimes (like here) its magnitude, although some
>>people (me included) prefer to use uppercase gamma for the complex
>>reflection coefficient and lowercase rho for its magnitude.
>
>Roy raises a good point. Tom Bruhns already took me to task for a
>somewhat careless use of rho. Although I did define it below, as Roy
>and Tom said, it is often used as a complex number.
>
>I too prefer upper case Gamma for the complex number and rho for the
>magnitude but unfortunately the literature is full of confusing usage.
>Some of the literature was even published by Tom's employer, the
>former H-P, now Agilent (how do you pronounce that again?)
>
>My autographed copy of Steve Adam's, book "Microwave Theory and
>Applications", published by H-P, shows on page 23:
>
>" |Gamma| = rho "
>
>Similarly, my handy dandy H-P "Reflectometer calculator" sliderule
>says that SWR = (1 + rho) / (1- rho) which bears a striking
>resemblence to what I wrote below.
>
>But then in H-P's App Note 77-3, "Measurement of Complex Impedance
>1-1000 MHZ", it says that rho is a vector quantity and it shows:
>
>SWR = (1 +|rho|) / (1 - |rho|)
>
>Finally, the best reference I have is General Radio's "Handbook of
>Microwave Measurements" (out of print but reissued by Gilbert
>Engineering) and it says that Gamma is complex and rho isn't.
>
>So I guess the thing to do is do as I did below and define the damned
>thing every time you use it<g>.
>

>>
>>I know Wes is at least, and probably better, acquainted with this than I
>>am, and the equations are of course just fine. I'm commenting just
>>because I've often seen confusion among the reflection coefficient, its
>>magnitude, and its real part.
>
>You give me far too much credit.
>
>Wes Stewart N7WS
>>
>>Roy Lewallen, W7EL
>>
>>Wes Stewart wrote:
>>>
>>> On Fri, 26 Jan 2001 16:57:31 GMT, carkenord@juno.com wrote:
>>>
>>> >If I know forward power, and reflected power.......to and from an
>>> >antenna system, what is the math formula to calculate SWR?
>>> >
>>> > Lee Carkenord KA0FPJ
>>> >
>>> >
>>> >Sent via Deja.com
>>> >http://www.deja.com/
>>>
>>> Calculate the reflection coefficient (rho) as:
>>>
>>> rho = sqrt(Pref) / sqrt(Pfwd)
>>>
>>> then SWR = (1 + rho) / (1 - rho)
>>>
>>> N7WS

Hi Wes,

Here is an additional reference:

"rho is called the reflection coefficient. It is the
(complex) ratio of the amplitude of the reflected wave to the
amplitude of the incident wave. We shall represent its magnitude
by r. This is:
rho = r * e^j*theta "
HP Application Note #16, Waves On Transmission Lines

I think the confusion of:
>My autographed copy of Steve Adam's, book "Microwave Theory and
>Applications", published by H-P, shows on page 23:
>
>" |Gamma| = rho "
is attributed to the difference between the Reflection Coefficient for
the general line and the reflection coefficient for one point on the

line (or a terminus). Generally the uppercase form is the complex function and the lower case form is the scalar solution.

My reference above demonstrates that rho is a scalar, but is derived from a magnitude and a phase (explicitly stated in polar notation). This reference being an engineering piece rather than an academic exercise has omitted discussion as to the limits over which theta are allowed - hence the lack of discussion in regard to appearances of the absolute operator in other works.

73's
Richard Clark, KB7QHC

3066. Re: Portable "wind-up" multi-band Dipole's.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 17:51:49 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8072AEAF0@www.premiersi.com>
Source record: 170340
Cross-posted to:
rec.radio.swap,alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Careful - "Yo-Yo" is a trademark.

"Bill" <ARS--KC8BCR@webtv.net> wrote in message
news:16815-3A884CF8-29@storefull-136.iap.bryant.webtv.net...
> After marketing our wind-up reel antenna for SWL's, several hams have
> approached us about manufacturing a DIPOLE model. So we've done just
> that and call it the "YoYo-Tenna Deluxe". We've taken two of our
> YoYo-Tenna wind-up antennas and combined them into a PL-259 coax
> fitting. You can add coax...or...just plug it straight into your rig or
> tuner! 40 ft. per reel, so operation is from 10 thru 40 meters. (One ham
> suggested "stacking" them...or running them in series to cover 75/80 and
> 160. I'll leave that up to you guys...) If you want to see what a single
> reel looks like, please visit our website. - http://qth.com/dwm -
> Remember, no shipping and handling will be charged on the Deluxe model
> since you are ordering two...and we give free shipping on two or more
> YoYo-Tennas. (Total cost - $29.90)
>
> Thanks for your time and 73!
>
> Bill - WA8MEA @ Jackson Co., Michigan QRP Club Station - KC8BCR
> http://qth.com/dwm

3067. Re: Modelling High Frequency Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 19:10:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A898692.AE700AD6@eznec.com>
Source record: 170341

Ah, finally, a question with a simple answer: I don't know. Sorry.

Roy Lewallen, W7EL

Dan Richardson wrote:
>
> Roy,
>
> You bring up a question I have... Using the equal area rule when
> modeling a .... say a horn... How good is it?
>
> Danny, K6MHE
>
> On Tue, 30 Jan 2001 15:50:45 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:

[about modeling flat conductive surfaces as wire grids, using a wire
diameter to give the same total surface area as the plate being modeled]

3068. Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 19:22:26 UTC
From: jgboyles@aol.com
Message-ID: <20010213142226.14006.00000789@ng-mg1.aol.com>
Source record: 170342

Hello,
I have an MFJ-259B swr analyzer that tells me all sort of things about my antenna system. Also have an earlier version analyzer that will only give the impedance of the system and the swr. I imagine both instruments have the same kind of measurement bridges in the business end, the 259B has lots more calculating power. Does anyone know how to get R+/-jX indirectly if only the impedance and swr are know? Maybe using a Smith chart normalized to 50 ohms? Also, the cheaper analyzer must only measure Z and get swr from that, but looking at a Smith chart there are infinite swrs from 50 ohms inductive reactance to 50 capacitive reactance. How does it know which one is correct? Thanks for any answers.
73 Gary N4AST

3069. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 20:19:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8996E7.1CA2E1EC@IEEE.org>
Source record: 170343

JGBOYLES wrote:
> Does anyone know how to get R+/-jX indirectly if only the
> impedance and swr are known?

You know Z but R and X are unknown. You know SWR but R and X are unknown.
That's two independent equations and two unknowns. Solving for R and X
just involves some messy algebra. It could even be done using a Smith
Chart. I would assume that someone somewhere has already done it. Can
Hamcalc do that? Reg, can any of your software do that?
--
http://www.mindspring.com/~w6rca

3070. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 20:31:16 UTC
From: K0HB@arrl.org
Message-ID: <96c5ik$7fv$1@news.netmar.com>
Source record: 170344
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna

Richard Harrison wrote:

> Creative individuals such as Mr. Carroll try to read more into it to
> suit their own purposes, but if it isn`t written in the rules, it isn`t
> a mandate.

Sure it is.

"97.102(c) Everything not specifically prohibited in these rules is
mandatory."

73, de Hans, K0HB
--
My Go this amn keyboar oesn't have any 's.

----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3071. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 22:02:55 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3A89AF0F.47C2B87D@aztek-eng.com>
Source record: 170345

SWR = (1 + rho) / (1 - rho)
rho = (sqrt((R + Zo)^2 + X^2)) / (sqrt((R - Zo)^2 + X^2))
Z = sqrt(R^2 + X^2)

Z0 = 50ohms (reference impedance)

Substitute for rho in the SWR equation.
Now you have SWR is a function of R and X
and Z is a function of R and X.

Cecil is correct, 2 equations in 2 unknowns however the solution
is not all that easy.

Larry, W0QE

Cecil wrote:
>
> JGBOYLES wrote:
> > Does anyone know how to get R+/-jX indirectly if only the
> > impedance and swr are known?
>
> You know Z but R and X are unknown. You know SWR but R and X are unknown.
> That's two independent equations and two unknowns. Solving for R and X
> just involves some messy algebra. It could even be done using a Smith
> Chart. I would assume that someone somewhere has already done it. Can
> Hamcalc do that? Reg, can any of your software do that?
> --
> http://www.mindspring.com/~w6rca

3072. Re: Modelling High Frequency Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 22:41:00 UTC
From: k6mhe@arrl.net
Message-ID: <3a89b7d8.1470670@news.mcn.org>
Source record: 170348

Well, at least, that makes two of us :-)

Danny

On Tue, 13 Feb 2001 11:10:10 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Ah, finally, a question with a simple answer: I don't know. Sorry.
>
>Roy Lewallen, W7EL
>
>Dan Richardson wrote:
>>
>> Roy,
>>
>> You bring up a question I have... Using the equal area rule when
>> modeling a .... say a horn... How good is it?
>>
>> Danny, K6MHE
>>
>> On Tue, 30 Jan 2001 15:50:45 -0800, Roy Lewallen <w7el@eznec.com>
>> wrote:
>
>[about modeling flat conductive surfaces as wire grids, using a wire
>diameter to give the same total surface area as the plate being modeled]

3073. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 22:49:14 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <27mJOiWlLCcFzspzm2RFtC7zH3Oa@4ax.com>
Source record: 170347

Whoops, my latest QST, in the mail today, shows that July 1, 2001,
dues are increasing from $34 annually to $39. ($34 will be the senior
rate.)

That life membership looks better all the time...

Bob
k5qwg

3074. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 23:32:12 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A89C3FC.7794@wt.net>
Source record: 170349

John Burrell wrote:
But what happens if I use a conductive
> paint? I don't think Gary's colloidal carbon paint would cause a problem
> when applied to antenna elements only, but it may well if used on that pvc
> radome or over a trap for instance. Am I right in this assumption? Metallic
> paint was also mentioned in one reply as if it were to be avoided. Is this
> necessary. Surely metallic paint as sold in aerosol cans for car body
> repairs consists of fine aluminium particles supended in an acrylic medium
> and is unlikely to ever form a substantial metal coat. So what effect would
> this have on the antenna? I reckon none at all - as in normal paint. So has
> anyone ever investigated this situation with respect to amateur radio use or
> are we all running on hearsay, guesswork and non-relevant radar techniques?
> I'm not knocking any of those who responded to the original query but I
> think there are now several loose ends which ought to be sorted.

If the paint is conductive I think there would be an effect. If the coating is thick enough to make a nearly constant plating effect it would be much the same as using a copper pipe as your radome. This would act as the antenna in effect and the inner real antenna would be shielded from having any effect. I wouldn't want anything overly conductive painted on a radome. Probably not a solid vertical either as the antenna metal probably has a low resistance than the paint. I'd want a paint that was invisible to rf. MK

--
http://web.wt.net/~nm5k

3075. Re: Coaxial choke balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-13 23:48:25 UTC
From: kk7ho@aol.communicate
Message-ID: <20010213184825.12217.00000775@ng-ca1.aol.com>
Source record: 170350

A lot of real handy progs Reg. Thanks, KK7HO

3076. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 00:06:31 UTC
From: atkes@imap1.asu.edu
Message-ID: <96ci67gpe1@news.asu.edu>
Source record: 170351

Larry Benko (benko@aztek-eng.com) wrote:
: SWR = (1 + rho) / (1 - rho)
: rho = (sqrt((R + Zo)^2 + X^2)) / (sqrt((R - Zo)^2 + X^2))
: Z = sqrt(R^2 + X^2)

: Z0 = 50ohms (reference impedance)

: Substitute for rho in the SWR equation.
: Now you have SWR is a function of R and X
: and Z is a function of R and X.

: Cecil is correct, 2 equations in 2 unknowns however the solution
: is not all that easy.

Simplifying a bit this becomes (assuming I made no mistakes)

R = [(Z0^2+Z^2)/Z0] [SWR/(1+SWR^2)]
X^2 = Z^2-R^2

which shows that you can get the magnitude of the reactance X but not its sign from these measurements. That is changing from inductive to capacitive reactance would neither change the SWR or the magnitude of the impedance. In principle you could add a small inductance in series or a small capacitance in parallel with the antenna and see how X changes to get the sign. Looking at a graph may help to estimate the error propagation which may be large. I have a vague recollection that QST had a chart for this conversion several years ago in hints and kinks.

73 Kevin w9cf

3077. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 00:14:48 UTC
From: jgboyles@aol.com
Message-ID: <20010213191448.26841.00000900@ng-mh1.aol.com>
Source record: 170352

Thanks Cecil and Larry,
I had decided it would be simultaneous equations, but did not know where to find eq. for rho till Larry filled me in. Some number crunching, but not impossible. Was thinking the less expensive analyzers (Vectronics 584B-$150) would have more utility if there were methods for indirectly computing R+/-jX. Still wondering if the Smith Chart can do it? Once again thanks.
73 Gary N4AST

3078. WTB--Military/Army etc antennas and masts

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 00:19:46 UTC
From: steve4621@aol.com
Message-ID: <20010213191946.04658.00000064@ng-fg1.aol.com>
Source record: 170353

Hey! If you have anything in the military range of antenna equipment, let me know. I collect and use the stuff, even just pieces or parts. Or let me know if you use it also. Thanx Steve---email only please

3079. Re: Coaxial choke balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 00:22:51 UTC
From: kg4ggx@aol.com
Message-ID: <20010213192251.12329.00000871@ng-fs1.aol.com>
Source record: 170354

Thanks to all for the info.I'm making this dipole for a friend.I'll try what I have and go from there with the info you all have given me. Thanks again.
73 Rob

3080. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 00:25:29 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A89D079.2AB041EA@IEEE.org>
Source record: 170355

JGBOYLES wrote:
> Still wondering if the Smith Chart can do it?

Yep, the Smith Chart can do it. You need to draw constant-Z
curves on the Chart and then draw SWR circles. The two
points of intersection are the two solutions.
--
http://www.mindspring.com/~w6rca

3081. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 00:34:46 UTC
From: richardharrison@webtv.net
Message-ID: <9491-3A89D2A6-96@storefull-117.iap.bryant.webtv.net>
Source record: 170356

Paul, VK3DDU wrote:
"The feed should taper from 2 inches?"

300 ohms is about as low as it is practical to go because the spacing gets so close (0.5 in.). But there is 300-ohm TV gear.

20 inches is the spacing for wire lines with 750 ohm impedance. It`s a high transmission line impedance. It`s handled by tapping the rhombic where it is 20 inches between opposite sides. symmetrically, of course.

At 4 wavelengths per side for your rhombic, you should have about 6 feet of wire in each half of the antenna. I don`t know your design, but the rhombic probably ends up being about twice as long as it is wide. Don`t fret if it isn`t. There are many designs and they could all work well.

Insulators can be used to shorten the wires in the driven end of the rhombic to space the transmission line attachment point at 20 inches.

The wires or rods you choose for a tapered-line section then converge from this 20 inches down to 1/2 inch which presents an impedance of 300 ohms. The longer you make this tapered line, the smoother the impedance transformation. But the 20-in. spacing is wavelengths, so you will have radiation from the tapered line too.
You might want to make the the tapered line just an extension to the rear of the rhombic. Its radiation would then be in-synch with the rhombic`s.

I think I would try a 20-inch transverse insulator to terminate (space) the rhombic at the driven end. Then just continue the two wires in the curtain and allow them to converge more slowly to the 1/2-inch spacing you need for 300 ohms.

At the 300-ohm point you could use twinlead to a 300-ohm / 75-ohm balun. Or you could use a Q-section to lower the impedance to your chosen value.

Best regards, Richard Harrison, KB5WZI

3082. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 01:02:01 UTC
From: Nick Kennedy <nkennedy@tcainternet.com>
Message-ID: <t8jm75dfejn98d@corp.supernews.com>
Source record: 170357

Good points and reminds me of a QSO I had on 40 last night. I was running about 4 watts out to a 180 foot dipole up 60 feet. He was running about 75 watts (a classic Swan) and his antenna was a sheet metal clothes chute in his building. I was 559, he was 449 and I think we both got a kick out of the QSO.

73--Nick, WA5BDU

(BTW--first clothes chute antenna I've ever worked.)

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A85C7FE.68EFB7F7@eznec.com...
> I continue to be puzzled by this. If it annoys you to copy weak signals,
> why do you respond to them? And is it ok to have a weak signal if you
> run 100 watts, or is anything less than 1.5 KW (or more?) unfair to the
> other guy? What if I'm running 1.5 KW into a very poor antenna? Is that
> unfair?
>
> Roy Lewallen, W7EL
>
> W4JLE wrote:
> >
> > The only problem with QRP is that you put the onus on the person at the
> > other end to dig YOUR signal out of the noise for YOUR enjoyment.
> >
> > --
> > Fred W4JLE NHI≠1001

3083. Class A, AB1, AB2, C Tetrode RF Power Amps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 01:10:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96clsa$8ji$1@plutonium.btinternet.com>
Source record: 170358

NOW AVAILABLE :

New Program "TETRODE1.exe"

CLASS A, AB1, AB2, C OPERATION OF TETRODE RF PA's

Obtain a minumum of info from a tube (beam tetrode or pentode) manufacturer's data sheets or curves. Enter in program with DC anode supply volts, DC screen volts, minimum anode volts, maximum control grid volts, required operating angle, intrinsic Q of tank coil, required working Q of tank circuit, frequency.

A useful feature of this program is direct entry by the user of the anode current operating angle. This angle controls the various combinations of linearity and efficiency.

An important data entry item is the control-grid to screen-grid amplification factor, Mu. If the manufacturer's value is not available it can be guesstimated by varying it until other characteristcs become compatible with what info there is available.

The program computes RF power output, anode loss, screen grid loss, tank coil loss, DC-RF power conversion efficiency, peak and DC anode current, DC screen current.

Also tank inductance, tuning capacitance, turns ratio for link winding to 50-ohm load, source impedance looking back into 50-ohm output terminals. Note that a congugate match does not exist at this point.

Grid circuit conditions are computed:- peak RF drive voltage, negative DC grid bias, input impedance, drive power, DC grid current, grid bias resistor, grid current operating angle, grid dissipation.

Covers power outputs from QRP to 100KW.

Push your own precious and delicate linear up to and beyond its safe working limits without any fear of accidentally blowing it up.

Highly educational even if you never use this program in anger.

Download in a few seconds from website below. 52 kilobytes, 1 file only, not zipped up, run immediately.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3084. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 01:21:18 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A89DD3D.5628@bellsouth.net>
Source record: 170359

Cecil wrote:

> That bike redlined at 60mph in first gear. (snip)

So did Dad's old Ford Fairlane. When he first bought it (I was 11),
he didn't pay any attention to the engine. I remember his shock when
his new Ford turned out to've been built as an HP car. It had a 332
C.I.D Thunderbird Police Interceptor (huge in 1958) with 3-0n-the-Tree.
As Dad's little boy giggled with glee, he groaned, "I never meant to
buy a car with a big motor!" I couldn't wait to get hold of it.

Jerry
K4KWH

> --

3085. Re: Antenna help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 01:24:03 UTC
From: Dale Wiese <dwiese@lucent.com>
Message-ID: <3A89DE33.608045BA@lucent.com>
Source record: 170360

With an FT-847, you might want to look at a Butternut HF9V, rather than
the 6V. You can use this all the way from 80M to 6M by telling the
radio to use the HF jack for 6 meters. That is what I have on my 847.
Check out www.bencher.com for details.

lbratche wrote:
>
> If you are limited to a vertical, I'd suggest the Butternut HF6V. I was
> limited to either a vertical or an attic dipole and after much research
> settled on the Butternut. I have never been sorry of the purchase. I
> worked many DX countries with great reports. If you are worried about
> durability, don't be. It survives severe winds here in Arkansas and even
> the great ice storm during December. You can check out review on the
> Butternut and other antennas at www.eham.com . Granted, a long dipole might
> be cheaper and as good, and a yagi would be great. However, there is times
> when the dipole or yagi just can't be installed.
>
> Larry
>
> "jm" <jmacfarl@visi.com> wrote in message
> news:O60g6.4954$77.111215@ruti.visi.com...
> > Hello antenna guru's. I have just purchased a Yaesu FT-847 radio. I would
> > like advice on a good multiband vertical antenna for the HF bands (perhaps
> > 10-80).

3086. Re: Mobile HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 01:49:01 UTC
From: dcollin@connix.com
Message-ID: <3a89e4e4.38107062@news.mybizz.net>
Source record: 170361

On Tue, 13 Feb 2001 00:45:54 GMT, "dapastaguy"
<dapastaguy@hotmail.com> wrote:

>I am new and looking for a mobile HF antenna to easily mount on a Pontiac
>Transport van (1997). I read with interest an earlier post about Hamsticks,
>but want multiband. I saw someone referenced a spider antenna. Are these
>true multiband, or do you have to swap the coils? My local ham club has
>suggested a screwdriver, and the expense is not a problem, but the mounting
>would be a concern. Any suggestions?

Probably stating the obvious, but you do realize those vehicles do not
have a steel body, right? You'll have to carry the ground to the
frame, and bond as much metal to it (engine, etc) as you can.

3087. Re: Transmitter protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 02:01:21 UTC
From: Dale Wiese <dwiese@lucent.com>
Message-ID: <3A89E6F1.5B398E09@lucent.com>
Source record: 170362

jm wrote:
>
> I am new to this - so help me out even if this is a dumb question please. I
> just got a Yaesu FT-847 radio. I currently have a 2 meter antenna. The back
> of the radio has 4 antenna connectors. I am interested in connecting my 2
> meter antenna to one of the 4 connectors on the back of the radio. I would
> like to protect the radio from me accidently transmitting to the wrong
> antenna port. Is it possible for me to get a triplexer and a single dummy
> load and connect the remaining three open antenna out jacks to the single
> dummy load via the triplexor? To add another small twist - one of the open
> antenna out ports is a type "N" not a type "M". is there a simple adapter i

it is type N/M versus PL-259/SO-239. N's and M's mate. PL-259's and
SO-239's mate. N won't mix with SO-239, but you can get adapters.
Adapters add loss, but not much.

> can get if the triplexer only has type "M" connectors? Please set me
> striaght if this is way off base. Thanks!
>
> jmacfarl@visi.com

First, switch the 6 meter output to the HF port on the radio - now you
only have two unprotected ports to worry about. Check your manual for
how to do this - it is a feature of the 847. Then go to
www.cometantenna.com. The have a number of duplexers which will work.
You can get one that has just the right connectors on the radio side
(CF-416C), but you might not like having the N type connector on the
output side. It should be easy to make up a cable to adapt this to your
dummy load (or by an N to UHF adapter). You could also buy the version
which has PL-259s on both inputs and put the adapter on the radio.

This is the duplexer I use to feed my Diamond dual band vertical (for my
847). I use N connectors for the COAX, so I need no adapters in the
signal path. If you are thinking about going to a dual band antenna for
VHF/UHF, you might want to consider this.

73,

Dale, KB9WOQ

3088. Re: Class A, AB1, AB2, C Tetrode RF Power Amps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 02:40:39 UTC
From: kk7ho@aol.communicate
Message-ID: <20010213214039.00350.00000811@ng-bd1.aol.com>
Source record: 170363

Man, will this come in handy for some mods to my existing amp. Thanks Again.

3089. Re: After all this is QRP

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 02:53:50 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <3msj8tkih03p7m56kq8gdp5tr1gl6niucg@4ax.com>
Source record: 170364

On Tue, 13 Feb 2001 19:02:01 -0600, "Nick Kennedy" <nkennedy@tcainternet.com>
wrote:

>(BTW--first clothes chute antenna I've ever worked.)

I worked a guy once on six meters using an electric heater for an antenna.
About ten miles, running five watts output on AM (back in the old days).

73, Bill W7TI

3090. Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 03:07:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96csp1jfe1@uranium.btinternet.com>
Source record: 170365

Program TETRODE has a little add-on extra. It computes the internal generator (source) impedance, Zs, of an RF power amplifier looking back into the 50-ohm power output terminals. Zs varies with operating angle and is never anywhere near the proverbial conjugate match with ordinary pentodes and tetrodes.

When an amplifier is operating in class AB or A conditions, Zs is constant over the whole modulation cycle to the same extent that the amplifier approaches perfect linearity.

But Walter, W2DU, was quite right when he reported the measured value of Zs to be in the neighborhood of 50 ohms. He had forced Zs to be 50-ohms by adjusting the output tank circuit to develop maximum power into a 50-ohm load. The maximum power transfer theorem never fails whether the load or Zs is the quantity varied.

However, in forcing the issue by using the minimum-dip tune-up procedure, he drove the PA into a saturated non-linear region. Saturation occurs either because the amplitude of the RF plate swings causes the instantaneous plate volts to fall too far below the screen volts, or because available cathode current is insufficient to allow any further increase in output, or perhaps both together.

Because of non-linearity, a very small change in operating conditions causes Zs to shift. Walter mentions the difficulty in measuring Zs as the load is varied a small way from 50-ohms. He used the load variation method to measure Zs.

As the load resistance increases, voltage saturation prevents the load voltage from increasing and the transmitter behaves as a constant voltage generator with an internal impedance less than 50 ohms.

As the load resistance decreases, current saturation prevents the expected increase in load current and the transmitter behaves as a constant current generator with an internal resistance greater than 50 ohms. (Pentodes and tetrodes. We are in the same operating region as covered by the computer program).

This is a serious matter because the only reason we would like to know Zs is to predict what happens when only the load resistance changes (SWR no longer 1:1). But as soon as the load resistance changes the internal resistance changes a good deal faster.

So after performing a minimum dip, the knowledge that Zs is in the 50-ohm ball-park is of no use. In fact, changing anything, especially the changes which occur during the modulation cycle, shifts Zs.

Walter was right !

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3091. 30 to 88 MHz Mobile Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 03:08:27 UTC
From: Brooke Clarke <brooke@pacific.net>
Message-ID: <3A89F6AB.370BD275@pacific.net>
Source record: 170366

Hello:

I am looking for an antenna that covers 30 to 88 MHz for l Watt transmit
(PRC-126).
The AS-1729 has as about 8 dB loss in some places in the band.
Are there more efficient mobile antennas available.
The OF-254 does this for a fixed location.

73,

Brooke Clarke, N6GCE

3092. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 03:16:34 UTC
From: "John D. Farr" <johnfarr@ro.com>
Message-ID: <0aoi6.7353$GA5.105934@e420r-atl1.usenetserver.com>
Source record: 170270

I believe that impedance IS R +/- jX. I think your early model gives only R.
In this case, impedance cannot be calculated from the data from earlier
version.
John
KC4ZXX
JGBOYLES wrote in message <20010213142226.14006.00000789@ng-mg1.aol.com>...
>Hello,
> I have an MFJ-259B swr analyzer that tells me all sort of things about my
>antenna system. Also have an earlier version analyzer that will only give
the
>impedance of the system and the swr. I imagine both instruments have the
same
>kind of measurement bridges in the business end, the 259B has lots more
>calculating power. Does anyone know how to get R+/-jX indirectly if only
the
>impedance and swr are know? Maybe using a Smith chart normalized to 50
ohms?
>Also, the cheaper analyzer must only measure Z and get swr from that, but
>looking at a Smith chart there are infinite swrs from 50 ohms inductive
>reactance to 50 capacitive reactance. How does it know which one is
correct?
>Thanks for any answers.
>73 Gary N4AST
>

3093. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 03:27:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96ctt5irb1@plutonium.btinternet.com>
Source record: 170367

I never apologise to Garry.

He never apologises to me.

We are old friends.

Reg
========================
> Gary's quite accurate response to
> that drift was proclaimed by you to be "rubbish". I think you owe Gary
> an apology.
>
> Jim Pennino
>

3094. Re: Want to build a 6m ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 03:40:35 UTC
From: ##hmkarse##@earthlink.net
Message-ID: <23vj8t0381evekbdmcopmv53i28ki66qu9@4ax.com>
Source record: 170368

On Tue, 13 Feb 2001 03:46:00 -0600, Mark Keith <nm5k@wt.net> wrote:

>JRW wrote:
>>
>> Hi
>>
>> I want to build an antenna made with wire for 6m, centre freq: 51MHz (UK 6m
>> band).
>>
>> I want to make it so I don't have to keep tuning it, i.e. cut it to the
>> optimum length and I want about 50ohms.
>
>No problems doing that.
> I could put up a 1/4 wave vertical
>> piece of wire with some radials or a dipole or inverted V.
>
>Those would work too.
> I would also
>> like to try a Yagi with one reflector, a driven element and one director.
>> How do i calculate the spacings and lengths of each element and how to I
>> calculate the folded radiating element?
>
>You can get a table of lengths for NBS yagis in the arrl ant book. Also
>you might be able to find on the net. You could even use a modeling
>program to calculate one, and also optimize for your specific uses. But
>I wouldn't bother with the folded driven element. I prefer a normal
>driven element grounded to the boom, and fed with a gamma match, or
>whatever. I think the easiest and most rugged way to build.
> Oh, and how about a loaded dipole,
>> are they any good and what are the dimensions?
>
>I wouldn't bother with that on 6m. You have room for full size. Or
>should anyway. I just put up a 6m antenna the other day. It's a base fed
>1/2 wave vertical I threw up to be able to try the band. Mainly for fm,
>rptr use. I also plan something for SSB/CW. Maybe a yagi. 6m fairly dead
>around here on the whole, but was surprised today on 52.525. I keyed up
>and ID'ed not expecting any answer, and had a guy actually call back.
>Wonders never cease...I've been trying to stir up a little more local
>interest in 6m. I'd never worked 6m up until recently when I got a radio
>that has the band. Might as well try it and get my moneys worth. MK

Mark,
I get plenty of 6 meter from Texans on SSB so go ahead and get
horizontal - you're in a good positon to work much of the continental
US when the band is open.

As to the first poster's question: for starters make a dipole from some #14 wire it's easy and they work - besides at 6M it's easy to get them 1/2 wave above ground. As Mark mentioned, the ARRL antenna book has what you need to build a 6M yagi and I suspect that the RSGB publications do also. The other option is to go the Cushcraft website and download their manual for their 3 element 6M beam as it has the dimensions and would be another good starting point.
http://www.cushcraft.com/

Good luck,
Howard

3095. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 04:01:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8A02FD.965F8BDD@IEEE.org>
Source record: 170269

Jerry Oxendine wrote:
>
> Cecil wrote:
> > That bike redlined at 60mph in first gear. (snip)
>
> So did Dad's old Ford Fairlane.

I forgot to say it was at 9000 rpm. :-)
--
http://www.mindspring.com/~w6rca

3096. Re: Painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 06:02:51 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3A8A1F8A.EDBF0C7F@ipeg.com>
Source record: 170271

Noah wrote:

> While we're already discussing this subject, I have a quick question about
> antennas and paint. I have several different VHF & UHF mobile antennas that
> have a black finish on them. Because of the weather they've been exposed to
> over the last couple of years here in Michigan, some of the black finish is
> chipping off. Is there a generic type of spray paint I could get at the
> hardware store that would be okay to use on the antennas without hurting their
> TX/RX performance? I know it should be non-metallic, but what specifically
> should I be looking for in the ingredients?
>
> Thanks,
>
> Noah

Noah,

I've used flat, black 'Krylon' for years. Works fine for me. You can find it in most hardware or paint store. A word of caution: avoid any paints that are 'metallic' or that have metal flakes in them.

Marty...
N7MX

3097. Re: Repeater antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 07:17:14 UTC
From: w5omr <no_mail@no_mail.org>
Message-ID: <_hqi6.34821$iB1.3611188@typhoon.austin.rr.com>
Source record: 170273

: I am looking for a replacement 440 Mhz HAM repeater antenna for a
: non-hostile (high wind/snow) environment.

DB-420

: I have used the Diamond 500 in the past (I used the 2 meter side of the
: antenna for a remote base)

Don't forget at least 7/8 Andrews hardline.

: I would like to go to a single band antenna and have been debating on the
: Diamond F-718A or the Hustler G6.

And, connectors...

: Does anyone have any words of wisdom on these, or other antennas?

: I don't want to spend the $$ on a station master.

Spend the money one time, and have it last a lifetime.

--
73 = Best Regards,
-=Jeff/W5OMR=-

3098. Re: Want to build a 6m ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 07:23:32 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8A3274.1A23@wt.net>
Source record: 170272

##hmkarse##@earthlink.net wrote:

> Mark,
> I get plenty of 6 meter from Texans on SSB so go ahead and get
> horizontal - you're in a good positon to work much of the continental
> US when the band is open.

Is the band still opening up as far as F layer very often? I haven't kept up with it as far as the solar cycle goes. It's seemed to be a pretty flat cycle to me overall, but I've listened on 10m much more than 6m. It doesn't seem near as good as last cycle in 89 ??? or so. So far in listening on 6m I've heard no skip signals, but I guess it could be just because no one is talking. I bet it will perk up if I listen during a contest.. Also I guess a better antenna could help. I get a bit of crud on that band because I'm about 8 miles from a 2000 ft CH 2 tower/ant. It whacks me pretty good , but I'm trying to work around it.
MK
--
http://web.wt.net/~nm5k

3099. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 07:55:39 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <oTe1vuA7nji6EAk3@ifwtech.plus.net>
Source record: 170274

Richard Harrison wrote:
>
>300 ohms is about as low as it is practical to go because the spacing
>gets so close (0.5 in.). But there is 300-ohm TV gear.
>
[...]
>I think I would try a 20-inch transverse insulator to terminate (space)
>the rhombic at the driven end. Then just continue the two wires in the
>curtain and allow them to converge more slowly to the 1/2-inch spacing
>you need for 300 ohms.
>
>At the 300-ohm point you could use twinlead to a 300-ohm / 75-ohm balun.
>Or you could use a Q-section to lower the impedance to your chosen
>value.
>
There are established techniques for using 200-ohm line with very low loss for 432MHz moonbounce.

In particular, the lower-impedance line lends itself nicely to semi-rigid construction using spaced rods with minimal PTFE support. You can then make a two-slug tuner using two sliding blocks of PTFE. These look like giant two-hole balun beads, which the line passes through. By sliding them up and down the line you can position the two sections of lower impedance to cancel a wide range of mismatches.

Having a means to adjust the matching, you can use a very 'casual' tapered line transition from the rhombic feed impedance, and tune out almost any kind of mismatch (if it won't tune, you only need to alter the line lengths to bring it into range).

Sorry, I'm not quite clear whether the original request was for 50- or 75-ohm matching; but it doesn't matter much. The half-wave loop for a 4:1 balun should be made from UT-141 semi-rigid or something with even lower loss (50-ohm cable is OK for a 300-75 ohm balun). Alternatively, at 23cm a slit-sleeve 4:1 balun may have even lower loss.

Unfortunately the relevant articles are not on-line, but you can go to www.dubus.org and follow the links to the contents pages of the DUBUS-TECHNIK books to find the article by DJ9BV. The Australian rep for DUBUS publications is Doug McArthur, VK3UM - a telephone call to him may be very useful.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3100. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 09:34:00 UTC
From: Paul Radge <scruffy@rabbit.com.au>
Message-ID: <3a89b635@news.internex.net.au>
Source record: 170346

Richard,
Thanks very much for your info,
let me just double check with you,the tapering should be approx 1
wavelength ,,,the feed should taper from 2 inches(you have 20 maybe typo)
to 1/2 inch to reduce to 300ohms,then a 1/4 wave of 75ohm to drop it to 50
ohm area,,
I got the frame and wire built hope to have a shot at the feed
soon,
Thanks again Richard,
Paul......vk3ddu

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:24640-3A895AA4-7@storefull-115.iap.bryant.webtv.net...
> Paul Radge wrote:
> "Yes a rhombic 4 wavelengths per side. I`m trying to find information on
> how to reduce impedance to feed."
>
> A rhombic may produce about 750 ohms at its feedpoint. Typically this is
> reduced by using a tapered line at h-f between the drivepoint and a
> parallel-wire 600-ohm transmission line. The rhombic is typically
> 1/2-wave above ground which makes the tapered line about that length.
>
> A full wavelength would be a smoother impedance transistion than the
> 1/2-wave line would produce. Since the wavelength is only 23
> centimeters, or about 9 inches, the line could be just a couple of rods.
>
> Ed Laport has a table of parallel-line impedance versus the ratio of
> line spacing to wire radius, in his "Radio Antenna Engineering". Working
> this out for AWG 12 wire (.04 in. radius) gives a spacing of 20 inches
> for 750 ohms, the rhombic drivepoint, and 1/2-in. spacing for 300 ohms
> line impedance.
>
> A matching section 9 inches or more long (even less will work ok) using
> AWG 12 or larger wire should be easy to produce as a partial solution to
> your problem. Larger wire is fine. It wil have a slightly lower line
> impedance which can be corrected with slightly wider spacing. This is
> not critical as you will note wide variations in the length of tapered
> lines used and the wide frequency range that is used with them in a
> typical rhombic. The rather casual attitude taken with tapered line
> spacing doesn`t seem to hurt in practice either.
>
> Best regards, Richard Harrison, KB5WZI
>

3101. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 11:35:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96dqfg$kf1$1@slb3.atl.mindspring.net>
Source record: 170275

Reg: Didn't we all - already know that? Heh, heh. -Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:96csp1jfe1@uranium.btinternet.com...
> Program TETRODE has a little add-on extra. It computes the internal
> generator (source) impedance, Zs, of an RF power amplifier looking back
into
> the 50-ohm power output terminals. Zs varies with operating angle and is
> never anywhere near the proverbial conjugate match with ordinary pentodes
> and tetrodes.
>
> When an amplifier is operating in class AB or A conditions, Zs is constant
> over the whole modulation cycle to the same extent that the amplifier
> approaches perfect linearity.
>
> But Walter, W2DU, was quite right when he reported the measured value of
Zs
> to be in the neighborhood of 50 ohms. He had forced Zs to be 50-ohms by
> adjusting the output tank circuit to develop maximum power into a 50-ohm
> load. The maximum power transfer theorem never fails whether the load or
Zs
> is the quantity varied.
>
> However, in forcing the issue by using the minimum-dip tune-up procedure,
he
> drove the PA into a saturated non-linear region. Saturation occurs either
> because the amplitude of the RF plate swings causes the instantaneous
plate
> volts to fall too far below the screen volts, or because available cathode
> current is insufficient to allow any further increase in output, or
perhaps
> both together.
>
> Because of non-linearity, a very small change in operating conditions
causes
> Zs to shift. Walter mentions the difficulty in measuring Zs as the load is
> varied a small way from 50-ohms. He used the load variation method to
> measure Zs.
>
> As the load resistance increases, voltage saturation prevents the load
> voltage from increasing and the transmitter behaves as a constant voltage
> generator with an internal impedance less than 50 ohms.
>
> As the load resistance decreases, current saturation prevents the expected

> increase in load current and the transmitter behaves as a constant current
> generator with an internal resistance greater than 50 ohms. (Pentodes and
> tetrodes. We are in the same operating region as covered by the computer
> program).
>
> This is a serious matter because the only reason we would like to know Zs
is
> to predict what happens when only the load resistance changes (SWR no
longer
> 1:1). But as soon as the load resistance changes the internal resistance
> changes a good deal faster.
>
> So after performing a minimum dip, the knowledge that Zs is in the 50-ohm
> ball-park is of no use. In fact, changing anything, especially the changes
> which occur during the modulation cycle, shifts Zs.
>
> Walter was right !
> ----
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
>
>

3102. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 12:26:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96dtfaqii1@uranium.btinternet.com>
Source record: 170276

From Z and SWR, R and X can be calculated. But the sign of X is ambiguous.

To determine the sign of X it is necessary to inspect the item being measured. For example, if the antenna wire is open circuit at the other end and its length is less than 1/4-wavelength, then input X must be negative.

The sign of X can also be investigated by connecting a capacitor or coil in series with the unknown Z and observing what happens to Z.

Arithmetically -

R = (2500 + Z^2) / 50 / (SWR + 1 / SWR)

X = Sqrt(Z^2 - R^2)

Angle = ArcCos(R / Z)

However, measurement uncertainties can be greatly magnified when passing through the arithmetic. X is related to the small difference between two large quantities.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Cecil <Cecil.A.Moore@IEEE.org> wrote in message
news:3A89D079.2AB041EA@IEEE.org...
> JGBOYLES wrote:
> > Still wondering if the Smith Chart can do it?
>
> Yep, the Smith Chart can do it. You need to draw constant-Z
> curves on the Chart and then draw SWR circles. The two
> points of intersection are the two solutions.
> --
> http://www.mindspring.com/~w6rca

3103. VSWR Meter..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 13:07:30 UTC
From: Robert Greene <rgreene@pivot.net>
Message-ID: <3a8a83b4_2@news.cybertours.com>
Source record: 170277

After messing around with several antennas on 2m that seem to have poor performance (and may be hurting the finals!), I determined that I need an SWR meter.

What's the current thinking on the most bang for the buck?? In years gone past I've built 'em, and I've used commercial ones.

I'm looking for the most "bang for the buck" that will cover 2m/70cm.

Thanks for any comments.
N6QWI

3104. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 13:18:36 UTC
From: richardharrison@webtv.net
Message-ID: <24249-3A8A85AC-3@storefull-112.iap.bryant.webtv.net>
Source record: 170278

Reg wrote:
"But Walter W2DU was quite right when he found the value of Zs to be in the neighborhood of 50 ohms."

In the "47 KW CB" thread days I thought a matched load meant 50% power loss in the source. Walter insisted it wasn`t so. Walter was right!

The source is not a perfect switch, but if it were, its on-off cycle could be set for 50% with np loss in the switch. Power in the load would average 50% of the continuously-on power.

The effect is the same as 50% loss in the source but without source dissipation.

Walter called switched-off time dissipationless resistance. That seems a fair characterization.

Best regards, Richard Harrison, KB5WEZI

3105. Re: VSWR Meter..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 14:36:01 UTC
From: richardharrison@webtv.net
Message-ID: <7781-3A8A97D1-59@storefull-118.iap.bryant.webtv.net>
Source record: 170279

Robert, N6QWI wrote:
"I`m looking for the most "bang for the buck" that will cover 2m/70cm."

The Bird Model 43 will last almost indefinitely. With the appropriate plug-ins it covers 0.45-2300 MHz and 0.1-10,000 watts. It is reasonably accurate. At any time after purchase you are likely to recover more of your investment were you to liquidate.

It reads watts in each direction but is supplied with a chart for equivalent SWR.

Best regards, Richard Harrison, KB5WZI

3106. Re: Want to build a 6m ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 16:04:09 UTC
From: richardharrison@webtv.net
Message-ID: <988-3A8AAC79-8@storefull-111.iap.bryant.webtv.net>
Source record: 170280

JRW wrote:
"I want to build an antenna made with wire for 6m, centre freq. 51 MHz,
(UK 6m band)."

A 1/2-wave dipole up 1/2-wave above earth?

My 1998 ARRL Handbook has optimized 6-m yagi designs. 3-element and
5-element designs are offered. Gains are 8dBi and 10dBi. Front to back
ratios are better than 22 dB for either. SWR is better than 1.6:1 from
50 to 51 MHz. Boom lengths are 6 and 12 feet.

My RSGB VHF-UHF Manual doesn`t seem to include 6m yagi antennas.

Best regards, Richard Harrison, KB5WZI

3107. Re: tuner help needed (part 2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 16:55:43 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <friKOgDYBESjpfhBGot+AriYg+NO@4ax.com>
Source record: 170281

"rdalton1" <rdalton1@postoffice.swbell.net> wrote:

>Thanks for the lack of response,should have known better than to ask for
>help here.
>

You asked for help on a 6 meter tuner. MFJ makes one. Go to their site
and download the manual for that tuner. It's free, and should have the
specs/circuit for the tuner.

Is that enough help?

Bob
k5qwg

3108. Re: Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 17:09:53 UTC
From: donrm@soco.agilent.com
Message-ID: <982170592.936108@cswreg.cos.agilent.com>
Source record: 170282

John P. Franklin <jpfrankl@teleport.com> wrote:
>
> Thanks ED, sorry to hear of the "demise" of that place. There were some
> real helpful and friendly people in there, one who comes to mind is W6CCW. I
> don't remember his name but I remember his friendly attitude, and his laugh.

W6CCW was Manny Nevalhas, a real ham's ham - always ready for an
eyeball QSO. I'd go to Quement's at least once a month, hit the
Coke machine, and check out the latest trade-ins on the used equip-
ment shelf. Manny would usually offer to liven up my Coke a bit
with a little shot of Four Roses...never took him up on it. Maybe
the Four Roses is why he was always so friendly and in a good mood.
He's probably a Silent Key by now.

You couldn't miss Frank Quement in the store. He was a big guy,
like HP's David Packard, and wore a big button on his shirt that
said "Ask Me".

Quement's started to go downhill after Frank became a Silent Key.
I believe his family tried to keep the place going, but it was
never the same again.

73 from Don, K6LTS
donrm@soco.agilent.com

>
> 73, Pat WB7FFI
>
>

3109. Scanner Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 17:51:44 UTC
From: jimdpeters@aol.com
Message-ID: <20010214125144.28005.00001044@ng-ci1.aol.com>
Source record: 170283

I'm thinking of buying a new scanner antenna. The two choices I have narrowed it down to are the "SCANTENNA" and the "DIAMOND D130J DISCONE" antenna. Has anyone had experience with both that can let me know which one is the better antenna?

Jim Peters
jimdpeters@aol.com
Portland, Oregon

3110. vlf HP 117A ant ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 18:25:14 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <t8ljcidbfb24bb@corp.supernews.com>
Source record: 170284

i have an HP117A rx for WWWVB..
the matching antenna is a 43 inch loop..
the HP 10509A, with 2 13CW4 nuvistors..
it's to big to ship by UPS so i'm looking for reasonable options..
it will fit into 2 bike boxes and can be checked as air baggage for an extra $75.00..

listed below are my questions:
1. how many turns of wire are there in the aluminum loop?
the schematic shows 1500 & 270 pfd caps across the windings feeding each of the grids..
according to the notes these caps are selected or may be omitted..
it's center tapped which is grounded..

2. how does this loop work with the turns inside aluminum tubing? why doesn't the tubing act as a shield?

3. the nuvistors, 2 13cw4 may be hard to find for replacement and i wonder if anyone has developed a mod for FETs..??

can this thing be knocked down without destroying it so it can be ship by regular UPS??

i'm in Tulsa and it's in Maryland..
tnx
hank wd5jfr

3111. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 19:15:09 UTC
From: rwclark@seanet.com
Message-ID: <3a8ad156.169696200@news.seanet.com>
Source record: 170285

On Wed, 14 Feb 2001 07:18:36 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Reg wrote:
>"But Walter W2DU was quite right when he found the value of Zs to be in
>the neighborhood of 50 ohms."
>
>In the "47 KW CB" thread days I thought a matched load meant 50% power
>loss in the source. Walter insisted it wasn`t so. Walter was right!
>
>The source is not a perfect switch, but if it were, its on-off cycle
>could be set for 50% with np loss in the switch. Power in the load would
>average 50% of the continuously-on power.
>
>The effect is the same as 50% loss in the source but without source
>dissipation.
>
>Walter called switched-off time dissipationless resistance. That seems a
>fair characterization.
>
>Best regards, Richard Harrison, KB5WEZI

Hi Richard,

This is simply the difference in thinking of the Thevenin Generator requiring an R to match when Thevenin actually (classically) requires a Z (and was the lesson our friend John Fakan tried to communicate to us some two years ago with his homopolar generator). It also relates to what I tried to characterize as the closed loop source Z instead of the open loop discussions that were going on at the time.

There's room for everyone to find their answer in the same data, but that doesn't necessarily translate into a proof of their assertions made then or now; except as observed, Thevenin is satisfied with the measurement that Walt made. That this seems to surprise....

Punchinello's comedy of errors was driven by the trolly myopic approach of looking at each degree of conduction, which devolves the discussion to a steady state solution that in turn expects an R to perform the conjugation. This linear thinking fails at the world view where Z handles the occasion without fuss, old wives' needs, or extra theories on the meaning of the universe, life and everything.

73's
Richard Clark, KB7QHC

3112. Re: Repeater antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 21:23:57 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8AF76D.3233@wt.net>
Source record: 170286

w5omr wrote:
>
> : I am looking for a replacement 440 Mhz HAM repeater antenna for a
> : non-hostile (high wind/snow) environment.
>
> DB-420
>
> : I have used the Diamond 500 in the past (I used the 2 meter side of the
> : antenna for a remote base)
>
> Don't forget at least 7/8 Andrews hardline.
>
> : I would like to go to a single band antenna and have been debating on the
> : Diamond F-718A or the Hustler G6.
>
> And, connectors...
>
> : Does anyone have any words of wisdom on these, or other antennas?
>
> : I don't want to spend the $$ on a station master.
>
> Spend the money one time, and have it last a lifetime.
>
> --
> 73 = Best Regards,
> -=Jeff/W5OMR=-

Hummm, w5 old man river. Haven't heard you in a while. We used to yak on
40m etc. I see you got your dad's old callsign. Good deal... MK
--
http://web.wt.net/~nm5k

3113. WTB 40 & 80 SMALL ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 21:53:11 UTC
From: sawman2@aol.com
Message-ID: <20010214165311.17722.00000833@ng-cm1.aol.com>
Source record: 170287

Looking for an antenna for 40 & 80 meter use. Must be fairly small. e-mail to wb2hid@arrl.net

3114. Re: WTB 40 & 80 SMALL ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 22:56:42 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3A8B0D2A.EB04215D@bloomer.net>
Source record: 170288

Are you looking for home use or mobile use? If home use, are you
looking for a shortened dipole using loading coils for example?

Scott
N0EDV

Sawman2 wrote:
>
> Looking for an antenna for 40 & 80 meter use. Must be fairly small. e-mail to
> wb2hid@arrl.net

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

3115. Degen Designs - Baby Boomer Quad - Web Page Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-14 23:24:58 UTC
From: stop the spam <"stop the spam"@limbo.hell>
Message-ID: <etEi6.235184$f36.9445713@news20.bellglobal.com>
Source record: 170289

We are now accepting orders for the Baby Boomer Quad. This is a mini-quad antenna.

We appreciate any comments that you may have.

Please address them to info@degendesigns.com or this newsgroup.

73
Guenther

PS We do not forward your information to anyone. PERIOD.

3116. Re: WTB 40 & 80 SMALL ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 01:13:13 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <k7bm8tcmss5o9rnodt584fmkkh1od0vaql@4ax.com>
Source record: 170290

On 14 Feb 2001 21:53:11 GMT, sawman2@aol.com (Sawman2) wrote:

>Looking for an antenna for 40 & 80 meter use. Must be fairly small.
>e-mail to wb2hid@arrl.net

What's the largest size that can be emailed?

W7TI

3117. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 02:09:51 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <PTGi6.311909$hD4.74044529@news1.rdc1.mi.home.com>
Source record: 170291

I have built several dipole type antennas for 2m use.
Some used old aluminum TV antenna elements cut down to size and found that they seem to match 50 ohms best when in a "Y" configuration with the coax being the bottom part of the "Y". I could never could get a "T" configuration to read a flat 1:1 SWR. I was using a MFJ antenna analyzer to read SWR.

William Lee

"Frizz" <none@none.com> wrote in message
news:966ntu$4h0$1@bob.news.rcn.net...
> Well, thanks to all that replied about my CB antenna question but I have
yet
> another one. I currently am running a discone in my attic for 2m and
> because of the way the cable and satellite lines were run, I interfere
with
> them both and can't really do anything about it until I am able to re-run
> those cables when it warms up. However, I want to try and build a dipole
in
> my attic in hopes of correcting this TVI problem. First off, will this do
> it? Or am I just going to be stuck in the same boat with the interference
> problems? Second, I have read about how wire diameter affects the
resonance
> of the dipole. What are some recommended diameters or lengths for those
> different diameters on 2 meters? Any help is appreciated. THanks!
>
> KG4ivt
>
>

3118. Re: Scanner Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 02:16:21 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <VZGi6.311930$hD4.74048931@news1.rdc1.mi.home.com>
Source record: 170292

Jim, is the Scantenna a beam type antenna?
If it is then it will preform better than a discone in the direction it is pointed.
The discone type antenna has no gain and is good for omin-drictional use.
If you choose the D-130 discone try removing the top loading coil and whip assembly .... or replace it with a 60" whip with no loading coil and see if it improves the reception of the lower and mid frequencys.

William Lee

"Jimdpeters" <jimdpeters@aol.com> wrote in message news:20010214125144.28005.00001044@ng-ci1.aol.com...
> I'm thinking of buying a new scanner antenna. The two choices I have narrowed
> it down to are the "SCANTENNA" and the "DIAMOND D130J DISCONE" antenna. Has
> anyone had experience with both that can let me know which one is the better
> antenna?
>
> Jim Peters
> jimdpeters@aol.com
> Portland, Oregon
>
>

3119. Re: vlf HP 117A ant ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 02:42:38 UTC
From: Brooke Clarke <brooke@pacific.net>
Message-ID: <3A8B421D.395B7EC1@pacific.net>
Source record: 170293

Hi Henry:

1. don't know
2. the loop is not continuos, like all shielded loops there is an insulating gap.
3. the nuvisotrs show up, keep an eye out. There are also nuvistors in the 117 60 KHz amplifier box.
If anyone has a FET replacement scheme for any of these I would like to also know.
4. No way that I know of to disassemble the loop.

73,

Brooke Clarke
http://www.pacificsites.com/~brooke/timefreq.shtml

Henry Kolesnik wrote:

> i have an HP117A rx for WWWVB..
> the matching antenna is a 43 inch loop..
> the HP 10509A, with 2 13CW4 nuvistors..
> it's to big to ship by UPS so i'm looking for reasonable options..
> it will fit into 2 bike boxes and can be checked as air baggage for an extra
> $75.00..
>
> listed below are my questions:
> 1. how many turns of wire are there in the aluminum loop?
> the schematic shows 1500 & 270 pfd caps across the windings feeding each of
> the grids..
> according to the notes these caps are selected or may be omitted..
> it's center tapped which is grounded..
>
> 2. how does this loop work with the turns inside aluminum tubing? why
> doesn't the tubing act as a shield?
>
> 3. the nuvistors, 2 13cw4 may be hard to find for replacement and i wonder
> if anyone has developed a mod for FETs..??
>
> can this thing be knocked down without destroying it so it can be ship by
> regular UPS??
>
> i'm in Tulsa and it's in Maryland..
> tnx
> hank wd5jfr

3120. Re: Scanner Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 03:08:01 UTC
From: Brian <reidb@nbnet.nb.ca>
Message-ID: <3A8B47F5.51942566@nbnet.nb.ca>
Source record: 170294

I had the scantenna, it fell apart in about 6 months, couldn't take the wind up here in the great white north. Can't say about the discone, never owned one.
Brian

Jimdpeters wrote:

> I'm thinking of buying a new scanner antenna. The two choices I have narrowed
> it down to are the "SCANTENNA" and the "DIAMOND D130J DISCONE" antenna. Has
> anyone had experience with both that can let me know which one is the better
> antenna?
>
> Jim Peters
> jimdpeters@aol.com
> Portland, Oregon

3121. Re: Is Quement's still around in San Jose??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 03:11:35 UTC
From: sam@severs.com
Message-ID: <sam-1402011916460001@c307794-c.frmt1.sfba.home.com>
Source record: 170295

In article <982170592.936108@cswreg.cos.agilent.com>,
donrm@soco.agilent.com wrote:

> John P. Franklin <jpfrankl@teleport.com> wrote:
> >
> > Thanks ED, sorry to hear of the "demise" of that place. There were some
> > real helpful and friendly people in there, one who comes to mind is W6CCW. I
> > don't remember his name but I remember his friendly attitude, and his laugh.
>
> W6CCW was Manny Nevalhas, a real ham's ham - always ready for an
> eyeball QSO. I'd go to Quement's at least once a month, hit the
> Coke machine, and check out the latest trade-ins on the used equip-
> ment shelf. Manny would usually offer to liven up my Coke a bit
> with a little shot of Four Roses...never took him up on it. Maybe
> the Four Roses is why he was always so friendly and in a good mood.
> He's probably a Silent Key by now.
>
> You couldn't miss Frank Quement in the store. He was a big guy,
> like HP's David Packard, and wore a big button on his shirt that
> said "Ask Me".
>
> Quement's started to go downhill after Frank became a Silent Key.
> I believe his family tried to keep the place going, but it was
> never the same again.
>
> 73 from Don, K6LTS
> donrm@soco.agilent.com
>
>
>
>
>
>
> >
> > 73, Pat WB7FFI
> >
> >
John,

It was not long after the death of Mr. Quement that the HAM dept was
closed down. Within a shockingly short interval of time after that the
heir's closed the store to retail trafic and concentrated on being just an
electronics distributor. They blamed it on Fry's, Good Guy's and other
electronic retailers.

I long for the return of the Bascom Bandits! Now all we have in the Santa Clara Valley is Ham Radio Outlaws...

Sam WS6S

3122. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 03:29:40 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A8B4D24.D9022D76@dialpoint.net>
Source record: 170296

A simple dipole will never read 1:1 if it is far enough away from other
things that can influence the impedance. The dipole is normally around
70 ohms and the coax (in your case) is 50 ohms. This is automatically a
1.5 to 1 best case.

William Lee wrote:
>
> I have built several dipole type antennas for 2m use.
> Some used old aluminum TV antenna elements cut down to size and found that
> they seem to match 50 ohms best when in a "Y" configuration with the coax
> being the bottom part of the "Y". I could never could get a "T"
> configuration to read a flat 1:1 SWR. I was using a MFJ antenna analyzer to
> read SWR.
>
> Wi

3123. What is a good dual band mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 04:02:47 UTC
From: matjake@aol.comns
Message-ID: <20010214230247.20193.00000151@ng-fm1.aol.com>
Source record: 170297

Hi,

I am sure this question has been asked a million times but I never payed attention since I never had a dual band radio, 2M/440.

Soooooo I was wondering if anyone has any good or bad comments on various antennas. I am used to using 5/8 commercial antennas for VHF, antenna specialists, Larsen.

Regards,

Matt

remove the ns to respond direct.

3124. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 04:03:11 UTC
From: richardharrison@webtv.net
Message-ID: <994-3A8B54FF-3@storefull-111.iap.bryant.webtv.net>
Source record: 170298

Richard Clark wrote:
"There`s room for everyone to find their answers in the same data, but that doesn`t necessarily translate into a proof of their assertions made then or now; except as observed."

That was the clincher. Walt is too honest to fudge data and he is to competent to make any serious errors. Anyone can make a big mistake, but Walt clearly did not. I still need to reconcile some issues, so I have more to learn about matching r-f power amplifiers.

Best regards, Richard Harrison, KB5WZI

3125. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 04:53:30 UTC
From: k6mhe@arrl.net
Message-ID: <3a8b5fd8.10814937@news.mcn.org>
Source record: 170299

Never say never.

A dipole placed in the right environment (distance from ground and
other objects) it is very possible to have a dipole's feed point
impedance to be 50 Ohms and provide a SWR of 1:1.

Danny, K6MHE

On Wed, 14 Feb 2001 22:29:40 -0500, Ralph Mowery
<rmowery@dialpoint.net> wrote:

> A simple dipole will never read 1:1 if it is far enough away from other
>things that can influence the impedance. The dipole is normally around
>70 ohms and the coax (in your case) is 50 ohms. This is automatically a
>1.5 to 1 best case.
>
>
>William Lee wrote:
>>
>> I have built several dipole type antennas for 2m use.
>> Some used old aluminum TV antenna elements cut down to size and found that
>> they seem to match 50 ohms best when in a "Y" configuration with the coax
>> being the bottom part of the "Y". I could never could get a "T"
>> configuration to read a flat 1:1 SWR. I was using a MFJ antenna analyzer to
>> read SWR.
>>
>> Wi

3126. HiGain 18AVT-WBS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 06:32:19 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A8B77F3.42AC4A5C@eskom.co.za>
Source record: 170300

I have lost the top resonator for the 18AVT. Does anyone know the
technical details to replace this resonator.
Thanks
Stan
ZS6HAL

3127. Re: vlf HP 117A ant ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 06:55:23 UTC
From: k7itm@aol.com
Message-ID: <20010215015523.03295.00000365@ng-fc1.aol.com>
Source record: 170301

Lyle Kohler has a couple loop preamps written up and posted on his web site. I built one of them, which should work well with the antenna you describe. It has a high impedance balanced input. The version I built is remote-tuneable, which might not be necessary in this case. You'd want to make sure the output transformer would handle 60kHz OK, maybe a bit higher inductance than what Lyle's schematic shows, though the version I built seems to work well down below 100kHz.

Re the shield: one very effective way to view it is that the shield is the antenna, and the gap in the shield is the feedpoint of the antenna. The voltage given by Faraday's law relating the changing magnetic field within the loop and the voltage around the loop is delivered by the good conductor of the loop to the gap. There is a nice description of this in King, Mimno and Wing, "Transmission Lines, Antennas and Waveguides." This construction has the advantage that you can make the loop extremely symmetrical, and thus avoid sensitivity to voltage fields; if you can make the loop symmetrical enough without the "shield", it should perform similarly, and I believe that making it balanced with a grounded center tap and feeding a carefully balanced preamp will go a long way to making that happen. So it may be possible to get good performance for the 60kHz receiver by constructing a new loop, too. But be aware that there gets to be a lot of wire in a LF loop: you can estimate the number of turns if you know the external capacitance by using Reg Edward's loop (loop3, I think it is) program. In any event, you can design your own with that program. But for instance, a 40 turn loop 5 feet on a side represents 800 feet of wire.

Cheers,
Tom

>Subject: Re: vlf HP 117A ant ???
>From: Brooke Clarke brooke@pacific.net
>Date: 2/14/01 6:42 PM Pacific Standard Time
>Message-id: <3A8B421D.395B7EC1@pacific.net>
>
>Hi Henry:
>
>1. don't know
>2. the loop is not continuos, like all shielded loops there is an insulating
>gap.
>3. the nuvisotrs show up, keep an eye out. There are also nuvistors in the
>117
>60 KHz amplifier box.
> If anyone has a FET replacement scheme for any of these I would like to
>also
>know.

>4. No way that I know of to disassemble the loop.
>
>73,
>
>Brooke Clarke
>http://www.pacificsites.com/~brooke/timefreq.shtml
>
>Henry Kolesnik wrote:
>
>> i have an HP117A rx for WWWVB..
>> the matching antenna is a 43 inch loop..
>> the HP 10509A, with 2 13CW4 nuvistors..
>> it's to big to ship by UPS so i'm looking for reasonable options..
>> it will fit into 2 bike boxes and can be checked as air baggage for an
>extra
>> $75.00..
>>
>> listed below are my questions:
>> 1. how many turns of wire are there in the aluminum loop?
>> the schematic shows 1500 & 270 pfd caps across the windings feeding each of
>> the grids..
>> according to the notes these caps are selected or may be omitted..
>> it's center tapped which is grounded..
>>
>> 2. how does this loop work with the turns inside aluminum tubing? why
>> doesn't the tubing act as a shield?
>>
>> 3. the nuvistors, 2 13cw4 may be hard to find for replacement and i wonder
>> if anyone has developed a mod for FETs..??
>>
>> can this thing be knocked down without destroying it so it can be ship by
>> regular UPS??
>>
>> i'm in Tulsa and it's in Maryland..
>> tnx
>> hank wd5jfr
>

3128. Bobtails/Half Squares- A Few New Pages

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 08:15:09 UTC
From: k3ky@erols.com
Message-ID: <3a8b8b38.715308@news.erols.com>
Source record: 170302

For those interested in these antenna types, I have added some new
material to my Bobtails and Half Squares pages.
As always, the entry point for this series is "The Low Bands":
http://www.angelfire.com/md/k3ky/page20.html
There is a new page with some comments about high band
versions of these antennas, low bands 'benchmarks', and an
interesting 17 meter design by NJ0F:
http://www.angelfire.com/md/k3ky/page44.html
This is a work in progress and is offered only to stimulate
further research and experimentation by interested users.

There are also some new photos of various LC matching
networks and also a collection of photos taken by W7AV
of his new 40 meter half square in WA. He reports good
success DXing with the antenna. These are all available
as links from:
http://www.angelfire.com/md/k3ky/page41.html
73, David K3KY

3129. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 08:29:15 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <96gr0s$q32$1@slb2.atl.mindspring.net>
Source record: 170306

A kite antenna, beware of wires and lightning storms.
Also a weather balloon antenna

3130. How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 10:19:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96gag3$62k$1@uranium.btinternet.com>
Source record: 170303

(1) Place a single turn, close-coupled, link winding around the centre of the solenoid.

(2) Connect it to an Autek or MFJ antenna analyser via a loosely twisted-pair line about 10" long.

(3) Switch the antenna analyser to the Z range.

(4) Suspend the solenoid in mid-air.

(5) Z will be in the range 0 to a few ohms. Vary frequency slowly searching for a very sharp, resonant increase in Z.

Maximum Z will very likely be in the range 50 to 500 ohms at the self-resonant frequency. Q will be extremely high, too high to be determined from the 3dB points on the resonance curve.

The method works for solenoids 2 or 3 inches long, and for helically-loaded dipoles, 1" diameter, 6 feet long.

Its an old wives' tale that Q is poor when most of the capacitance is of the parasitic variety. Unless frequency is varied very slowly the resonant point will be missed.

Program SOLNOID2 predicts the self-resonant frequency before you've wound it. Program MIDLOAD deals with continuously-loaded dipoles which are just very long solenoids damped by radiation resistance.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:96bene$m90$1@uranium.btinternet.com...
> Rob, what you are looking for is the self-resonant frequency of a solenoid
> wound with a conductor as thick as the outside diameter of the coax you
> intend to use.
>
> A solenoid, 4 inches long, 2 inches former diameter, close-wound with 16
> turns of 1/4 inch outside diameter coaxial cable, has a self-resonant
> frequency of about 50 MHz.
>
> For other dimensions of coil and coax download in a few seconds program
> SOLNOID2. In addition to the essentials of coil design this program

> calculates the self-resonant frequency due to parasitic capacitance, and
the
> impedance at the resonant and lower frequencies.
>
> The PVC jacket on coax will cause some uncertainty in the exact resonant
> frequency but in choke-balun applications this is a relatively unimportant
> matter.
>
> (Having said all that, I think a 2" diameter ferrite ring filled with
> loosely-wound coax does a better job. It has a smaller loss, it has a much
> wider operating bandwidth, it weighs less and is mechanically more
> convenient to install.)
> ---
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> KG4GGX <kg4ggx@aol.com> wrote in message
> news:20010212174348.12373.00000574@ng-fs1.aol.com...
> > Hi all
> > I'm looking for recommendations on a coaxial choke balun for a 6 meter
> > dipole.I plan to make the choke from RG-8X. At this time, I've made one
> from
> > RG-8X that is 4 feet of coax, 5 turns at about 2.5 inches diameter. How
> far off
> > am I? Do I need a longer length of coax, more turns, smaller or larger
> > diameter? I'd really like to use an effective choke to keep the feed
line
> from
> > radiating since 6 m seems prone to RFI.
> > Thanks for all replys.
> > 73 Rob KG4GGX
>
>

3131. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 11:03:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96gcvt$k3a$1@neptunium.btinternet.com>
Source record: 170304

When a dipole's impedance is adjusted to 50 ohms by positioning it relative
to ground and nearby objects, it has been done only by increasing losses and
degrading radiating efficiency.

But no loss in efficiency is caused by bending it in the middle and calling
it an inverted-V. The radiation resistance then decreases nearer to 50 ohms.
But all this does is reduce the already small feedline loss on a 50-ohm coax
due to an SWR of 1.5 : 1.

If feedline loss causes a loss of sleep then the best tactic is to use a
75-ohm coax feeder which is a perfect match to a high 1/2-wave dipole.

But even this is not the ideal cure for insomnia - SWR and feedline loss
at HF return to their worrying values at the band edges.

However, at VHF, although a dipole feedpoint impedance will change less over
the band, invariably the directing and reflecting elements will shift
feedpoint impedance well away from 50 or 75 ohms anyway.

Reg
======================

Dan Richardson <k6mhe@arrl.net> wrote in message
news:3a8b5fd8.10814937@news.mcn.org...
> Never say never.
>
> A dipole placed in the right environment (distance from ground and
> other objects) it is very possible to have a dipole's feed point
> impedance to be 50 Ohms and provide a SWR of 1:1.
>
> Danny, K6MHE
>
>
> On Wed, 14 Feb 2001 22:29:40 -0500, Ralph Mowery
> <rmowery@dialpoint.net> wrote:
>
> > A simple dipole will never read 1:1 if it is far enough away from other
> >things that can influence the impedance. The dipole is normally around
> >70 ohms and the coax (in your case) is 50 ohms. This is automatically a
> >1.5 to 1 best case.
> >
> >
> >William Lee wrote:
> >>
> >> I have built several dipole type antennas for 2m use.
> >> Some used old aluminum TV antenna elements cut down to size and found

that
> >> they seem to match 50 ohms best when in a "Y" configuration with the
coax
> >> being the bottom part of the "Y". I could never could get a "T"
> >> configuration to read a flat 1:1 SWR. I was using a MFJ antenna
analyzer to
> >> read SWR.
> >>
> >> Wi
>

3132. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 14:34:17 UTC
From: Bruce Muscolino <w6toy@erols.com>
Message-ID: <3A8BE8E9.C8292423@erols.com>
Source record: 170305

David,

Laying a dipole on the beach would not be a very good idea. To begin with the antenna would be pretty much grounded! Secondly to operate efficiently a dipole should be at least 1/2 wavelength up in the air! For a beach operation like you want I would suggest a vertical antenna. There are a number of fiberglass or composite "crappie" fishing poles that collapse to 4 to 6 feet that you could carry on the airplane. Examples are the SD20, which is now readily available from WorldRadio. You run a wire up them and use it as a vertical. Don't forget that a vertical depends on a good ground at its base!

73

3133. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 15:40:49 UTC
From: richardharrison@webtv.net
Message-ID: <14496-3A8BF881-2@storefull-112.iap.bryant.webtv.net>
Source record: 170308

Reg gave easy directions for measuring self-resonance in a coil.

Reg`s statement: "It`s an old wives` tale that Q is poor when most of the capacitance is of the parasitic variety." was inserted to draw a response, I suspect. Q usually depends upon high capacitance in a resonant circuit.

For any resonant circuit, its frequency is a constant when the product of L and C is a constant. The same resonant frequency can be obtained with high C and low L, or high L and low C.

High L and low C is the case of the self-resonant coil. A high-L resonant circuit maximizes the lossy element in a resonant circuit.

Q is the inductive reactance of a coil divided by its resistance. In most resonant circuits Q is the same as the coil Q because a properly made capacitor has very low losses.

A self-resonant coil is a coil without added capacitance in which most of the capacitance is of the "parasitic" variety. As such, the lossy coil is maximized, the low-loss capacitance is minimized, and the Q of the resonant circuit is relatively low.

Best regards, Richard Harrison, KB5WZI

3134. Re: tuner help needed (part 2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 15:54:12 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A8BFBA4.2781E494@rupert.tds-az.lmco.com>
Source record: 170307

Bob Miller wrote:
>
> "rdalton1" <rdalton1@postoffice.swbell.net> wrote:
>
> >Thanks for the lack of response,should have known better than to ask for
> >help here.

It has been my experience that if you don't get an answer the first
time, ask the question again. In all probability, the right people
to answer your question just didn't see it the first time.

> You asked for help on a 6 meter tuner. MFJ makes one. Go to their site
> and download the manual for that tuner. It's free, and should have the
> specs/circuit for the tuner.
>
> Is that enough help?
>
> Bob
> k5qwg

I have downloaded a couple of the MFJ manuals and the one thing that
is not included in them is the schematic. For some odd reason they
cut them out. Otherwise the manual is complete.

But if the original question was about antenna tuners, go page through
a couple issues of the ARRL handbook. There are always lots of info
on antenna tuners. Another option is to go to "http://www.arrl.org"
and do a search on "antenna tuner". You will find lots of info.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

3135. Diamond D-130J discone performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 17:00:48 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <nUTi6.6$te3.9001@news.pacbell.net>
Source record: 170309

I just got the Diamond D-130J discone antenna. When I connect it to my MFJ-259B, I was surprised to find that in 20-70M range, it has a very high SWR(mostly around or above10). Even on 2m, it's above 2. The lowest SWR is around 114. Does that kind explain why I am not getting good reception out of it? It's rated to transmitt to on 6m, but how come it has such a high SWR(above 6) around 50M? Any suggestions? Is there any improvement I might try? thx.

3136. Re: Diamond D-130J discone performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 17:29:25 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <96h3kl$4tf$1@news.tribune.com>
Source record: 170311

I have a Diamond, I don't know if it is the same model. The typical discone, has a verticle, base loaded element which has to be tuned for 6 meter operation. The cone itself should be useable over at least a 3 to 1 frequency range. So if you found a dip at 114 I would guess that is its bottom frequency, and you should be able to use it up to around 450 or higher. I use mine for 2 meter transmiting, and listening on 430 to 460. Gives me more coverage than I need. Copies the ISS on 143.625 at the horizon better than my Eggbeater, but not as well at high angles.
KA9CAR

Michael <hkc2001@pacbell.net> wrote in message
news:nUTi6.6$te3.9001@news.pacbell.net...
> I just got the Diamond D-130J discone antenna. When I connect it to my
> MFJ-259B, I was surprised to find that in 20-70M range, it has a very high
> SWR(mostly around or above10). Even on 2m, it's above 2. The lowest SWR is
> around 114. Does that kind explain why I am not getting good reception out
> of it? It's rated to transmitt to on 6m, but how come it has such a high
> SWR(above 6) around 50M? Any suggestions? Is there any improvement I might
> try? thx.
>
>

3137. Re: What is a good dual band mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 17:43:15 UTC
From: Timmins <n3ddy@yahoo.com>
Message-ID: <QyUi6.170$HW2.1701@newsfeed.slurp.net>
Source record: 170310

When I got my first dual-bander some years ago - my first dual band antenna was a Larsen NMO 2/70.. My second one was also, as one day shortly after I got it, I arrived at work with all the antenna missing, except for about half the coil. I contacted Larsen, who replaced the antenna complete, after they determined a manufacturing defect in the coil....used that for a little while till I couldn't keep the whip from turning green, about 2 years... then I bought a Diamond NR770HNMO - this antenna will out talk the Larsen by double, it doesn't turn green, and I still have it 11 years after I bought it (and still works as good as new)... a little pricey, but ya get what ya pay for....

de N3DDY

"MatJake" <matjake@aol.comns> wrote in message
news:20010214230247.20193.00000151@ng-fm1.aol.com...
> Hi,
>
> I am sure this question has been asked a million times but I never payed
> attention since I never had a dual band radio, 2M/440.
>
> Soooooooo I was wondering if anyone has any good or bad comments on various
> antennas. I am used to using 5/8 commercial antennas for VHF, antenna
> specialists, Larsen.
>
> Regards,
>
>
> Matt
>
> remove the ns to respond direct.

3138. Re: Diamond D-130J discone performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 17:53:14 UTC
From: Dale Parfitt <GTE/parinc@GTE.net>
Message-ID: <3A8C172D.242CBFF4@GTE.net>
Source record: 170312

Michael wrote:

> I just got the Diamond D-130J discone antenna. When I connect it to my
> MFJ-259B, I was surprised to find that in 20-70M range, it has a very high
> SWR(mostly around or above10). Even on 2m, it's above 2. The lowest SWR is
> around 114. Does that kind explain why I am not getting good reception out
> of it? It's rated to transmitt to on 6m, but how come it has such a high
> SWR(above 6) around 50M? Any suggestions? Is there any improvement I might
> try? thx.

This antenna is not a discone below 110 MHz. On VHF LO it is a ground plane. The vertical whip with a loading coil provide resonance over a VERY narrow segment of the 30-50 MHz range. The difference in reception (and TX) between a 2:1 VSWR and 1:1 VSWR is pretty much imperceptable. How long and what type of transmission line are you using?

Dale W4OP

3139. Help: IC-765 TX Freq Adjustment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 18:03:32 UTC
From: Robert Fanfant <robertfa@microsoft.com>
Message-ID: <3a8c19f4$1@news.microsoft.com>
Source record: 170313

Can someone out there tell me how to adjust my TX freq. offset on my IC-765.
It seems to be too low by about 120 Hz (i.e. my display shows 7.016 but my
TX freq is around 7.015.88) .I've got the calibrate knob on the top of the
rig to the minimum position and it's still too low.

Email is robertfa@microsoft.com

Thanks,
-rob N7QT

3140. Re: IC-765 TX Freq Adjustment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 18:06:18 UTC
From: Robert Fanfant <robertfa@microsoft.com>
Message-ID: <3a8c1a9b$1@news.microsoft.com>
Source record: 170314

Sorry, posted to wrong group. Please ignore.

"Robert Fanfant" <robertfa@microsoft.com> wrote in message
news:3a8c19f4$1@news.microsoft.com...
> Can someone out there tell me how to adjust my TX freq. offset on my
IC-765.
> It seems to be too low by about 120 Hz (i.e. my display shows 7.016 but my
> TX freq is around 7.015.88) .I've got the calibrate knob on the top of the
> rig to the minimum position and it's still too low.
>
> Email is robertfa@microsoft.com
>
> Thanks,
> -rob N7QT
>
>

3141. 2.4Ghz directional antenna for LAN (home RF)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 18:13:16 UTC
From: mindy <mindy1701@hotmail.com>
Message-ID: <3A8C1C31.54F974A1@hotmail.com>
Source record: 170315

Hi All

Iï¿½m trying to extend the range of my wireless (2.4Ghz Spread Spectrum)
LAN system in my house.

I need to extend it to around 1000ft ï¿½ Standard is 150-200 ft with the
Omni
directional antennas. It only needs to be point-to-point, so a
directional antenna
will work fine. The path is all line of sight with a single tree about
half way.

The transceivers have standard dipole antenna on them. They appear to be
either
0db or ï¿½3db dipoles.

My though was to build either a Helical or a Yagi antenna with an
appropriate
gain to overcome my losses. I figure the gain should be +9db for the
extended
range plus all the cable and connector losses.

I am an electrical engineer, but I have no experience in antenna or RF
design.
I have a HP network analyzer at my disposal, so can make measurement on
the system.

Now here is my question:

1) I would prefer not to tear into the transceiver and attach the coax
to the circuit
board.

Is it possible to couple the signal to the existing dipole
efficiently enough to make
this work ?

What would be the loss if I ran the output of, say an 18db
helical antenna,
through a coax to a ï¿½ wave dipole and place it next to the
transceiverï¿½s
antenna. ?

Does this idea have any chance of working ?

If so is there an optimal position or configuration that I can
employ?

Is there any impedance issues that I need to deal with?

2) If I have to tear into the transceiver and connect the antenna directly to the
circuit board, I assume that the impedances are not going to be matched.

What will I have to do to match it close enough to work ?

Any other Ideas would be greatly appreciated.

Thanks
Mindy

mindy1701@hortmail .com

3142. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 19:57:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96hc9r$63f$1@slb3.atl.mindspring.net>
Source record: 170316

Theread:

Regardless of whether Walter was right or not, symantics be dammed, words do not meaning make...

Always remember that...

the maximum power transfer theorem, otherwise known by other "high falutin" monikers, such as, "The Conjugate Matching" Theorem, etc... is a subject or theorem only of interest to the designers of loads, NOT to the designers of sources.

If you find yourself designing a SOURCE of power, a.k.a amplifier, battery, generator, etc... kindly disregard the maximum power transfer theorem for it is not applicable to your problem, and will only lead you astray!

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:994-3A8B54FF-3@storefull-111.iap.bryant.webtv.net...
> Richard Clark wrote:
> "There`s room for everyone to find their answers in the same data, but
> that doesn`t necessarily translate into a proof of their assertions made
> then or now; except as observed."
>
> That was the clincher. Walt is too honest to fudge data and he is to
> competent to make any serious errors. Anyone can make a big mistake, but
> Walt clearly did not. I still need to reconcile some issues, so I have
> more to learn about matching r-f power amplifiers.
>
> Best regards, Richard Harrison, KB5WZI
>

3143. Re: Good beach antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 20:40:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8C3EC4.33FC8902@eznec.com>
Source record: 170317

I can think of a couple of considerations, for an antenna to be used on the beach. One is corrosion. If it's at the beach for very long at all, corrosion will be a rea problem. Something like the St. Louis Vertical (http://www.fix.net/~jparker/slvt.html, http://www.superantennas.com) is useful for portable operation but in its common implementation requires a clip connection to a loading coil. This arrangement would have to be modified to make an antenna that would put up with salt spray for very long. Another consideration is the ground system. Someone else pointed out that a vertical produces tremendous low angle radiation when it's beside salt water, so it's really attractive to take advantage of this. A quarter wave vertical does require a good ground system. I'd guess that just a couple of radials would be adequate on the beach, but these can be a nuisance and a hazard if there are other people around or other activities going on. (You could bury them a few inches, though.) With a half wavelength vertical, you can get by with a very simple ground system -- a four foot ground rod would probably be adequate. But it'll corrode quickly too, unless made from something pretty resistant to salt water. It'll be a bit of a challenge, but it'll be fun and I'm sure worth the effort.

Roy Lewallen, W7EL

Peter Parker wrote:
>
> > Anyone have any better QRP beach antenna suggestions?
> >
>
> Have a look at http://www.alphalink.com.cu/~parkerp/project.htm
>
> A squid pole can collapse to 1.1m, but extend to 9m. It's also fairly
> light.
>
> I've used it to support a quad loop for 20m with good results.
>
> 73, Peter

3144. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 20:41:29 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8C3EF9.6737@wt.net>
Source record: 170318

Dan Richardson wrote:
>
> Never say never.
>
> A dipole placed in the right environment (distance from ground and
> other objects) it is very possible to have a dipole's feed point
> impedance to be 50 Ohms and provide a SWR of 1:1.
>
> Danny, K6MHE

It's a piece of cake actually. Just shift the center point of the dipole one way or the other to get a perfect match to the coax. Wouldn't have to shift far on a VHF dipole. Kinda like adjusting a gamma match in a way. MK
--
http://web.wt.net/~nm5k

3145. Re: How many dBs makes a 3-element ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 20:57:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8C42BA.F9841691@eznec.com>
Source record: 170219

It it's designed properly, the gain is about 7 dB compared to a dipole.

Roy Lewallen, W7EL

TruckDrivingMan wrote:
>
> Can anybody tell me how much gain approximately a 3-element yagi for 10m has
> ? The reflektor-dipol distance is 2 m and the dipol-director distance 1 m
>
> TIA
> Tom

3146. Re: 2.4Ghz directional antenna for LAN (home RF)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 21:04:11 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a8c4447_3@news3.prserv.net>
Source record: 170202

Can you position it in the focus of a 5 foot parabolic reflector? That
won't require any low loss coax, tearing into anything, or building a device
which will require 0.05" precision in construction.

--
Crazy George
mindy <mindy1701@hotmail.com> wrote in message
news:3A8C1C31.54F974A1@hotmail.com...
> Hi All
>
> I'm trying to extend the range of my wireless (2.4Ghz Spread Spectrum)
> LAN system in my house.
>
> I need to extend it to around 1000ft - Standard is 150-200 ft with the
> Omni
> directional antennas. It only needs to be point-to-point, so a
> directional antenna
> will work fine. The path is all line of sight with a single tree about
> half way.
>
> The transceivers have standard dipole antenna on them. They appear to be
> either
> 0db or -3db dipoles.
>
> My though was to build either a Helical or a Yagi antenna with an
> appropriate
> gain to overcome my losses. I figure the gain should be +9db for the
> extended
> range plus all the cable and connector losses.
>
> I am an electrical engineer, but I have no experience in antenna or RF
> design.
> I have a HP network analyzer at my disposal, so can make measurement on
> the system.
>
>
> Now here is my question:
>
> 1) I would prefer not to tear into the transceiver and attach the coax
> to the circuit
> board.
>
> Is it possible to couple the signal to the existing dipole
> efficiently enough to make

> this work ?
>
> What would be the loss if I ran the output of, say an 18db
> helical antenna,
> through a coax to a ï¿½ wave dipole and place it next to the
> transceiver's
> antenna. ?
>
> Does this idea have any chance of working ?
>
> If so is there an optimal position or configuration that I can
> employ?
>
> Is there any impedance issues that I need to deal with?
>
>
> 2) If I have to tear into the transceiver and connect the antenna
> directly to the
> circuit board, I assume that the impedances are not going to be matched.
>
> What will I have to do to match it close enough to work ?
>
> Any other Ideas would be greatly appreciated.
>
>
> Thanks
> Mindy
>
> mindy1701@hortmail .com
>
>
>
>

3147. Re: HiGain 18AVT-WBS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 21:42:52 UTC
From: jayvan <jayvan@jps.net>
Message-ID: <3A8C4D5C.E8642A3B@jps.net>
Source record: 170220

Call Hy-gain. They are still in business. I don't have their number in front of me but just do a search on the internet for Hy-gain and the web site will pop up. I just talked to them a couple weeks ago about a new base for my 14avq that shorted out. Also they have a good tech support group there.
ka6otj

stan.holmes@eskom.co.za wrote:

> I have lost the top resonator for the 18AVT. Does anyone know the
> technical details to replace this resonator.
> Thanks
> Stan
> ZS6HAL

3148. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 21:46:13 UTC
From: richardharrison@webtv.net
Message-ID: <17215-3A8C4E25-36@storefull-113.iap.bryant.webtv.net>
Source record: 170222

Peter, K1PO wrote:
"The Conjugate Matching" Theorem, etc. is a subject or theorem only of interest to the designer of loads, NOT to the designers of sources.

Whether maximum power transfer happens or not, the impedance presented to the final amplifier is important to the deesigner. The load impedance determines power output and affects dissipation in the final amplifier.

Maximum power delivered is the peak voltage times the peak current divided by 2. The value of the load impedance is the peak voltage divided by the peak current.

Modern transmitters are usually designed for a 50-ohm load impedance. This is important to harmonic suppression and overload protection circuitry. The designer is definitely interested in the load impedance presented to the transmitter.

The transmitter is coupled to the transmission line through a matching networlk (tuner). Why use a tuner? To load the transmitter properly.

Best regards, Richard Harrison, KB5WZI

3149. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 22:00:04 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A8C5164.BCE9C26D@dialpoint.net>
Source record: 170221

I did add a qualifing statement to the posting. The antenna in question
was a two meter antenna and a simple dipole. It was not stated to be
fed off center or close to any objects. I am well awear that a dipole
can have almost any value depending on where it is located. I have a
dipole for 80 meters that is only up about 20 feet and it does have
almost a 1:1 swr at one frequency around 3.8 mhz because it is close to
the ground.

Dan Richardson wrote:
>
> Never say never.
>
> A dipole placed in the right environment (distance from ground and
> other objects) it is very possible to have a dipole's feed point
> impedance to be 50 Ohms and provide a SWR of 1:1.
>
> Danny, K6MHE
>
> On Wed, 14 Feb 2001 22:29:40 -0500, Ralph Mowery
> <rmowery@dialpoint.net> wrote:
>
> > A simple dipole will never read 1:1 if it is far enough away from other
> >things that can influence the impedance. The dipole is normally around
> >70 ohms and the coax (in your case) is 50 ohms. This is automatically a
> >1.5 to 1 best case.
> >
> >

3150. Re: 30 to 88 MHz Mobile Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 22:36:15 UTC
From: richardharrison@webtv.net
Message-ID: <28957-3A8C59DF-97@storefull-118.iap.bryant.webtv.net>
Source record: 170224

Brooke, N6GCE wrote:
"I am looking for an antenna that covers 30 to 88 MHz for 1 Watt transmit (PRC-126)."

A discone is a broadband solution that may not fit well with your mobile. My 15th Edition of the "Radio Handbook" has a version good for 11 through 2 meters. The disk is 6 feet in diameter. The skirt has a diameter of 9.5 feet, and a slant height of 9.5 feet.

Another way would be to adapt a screwdriver antenna or a broadcast power antenna. Either would be set for the frequency being used at the moment.

Best regards, Richard Harrison, KB5WZI

3151. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 22:38:38 UTC
From: rwclark@seanet.com
Message-ID: <3a8c4ee3.267373222@news.seanet.com>
Source record: 170223

On Thu, 15 Feb 2001 14:57:56 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Theread:
>
>Regardless of whether Walter was right or not, symantics be dammed, words do
>not meaning make...
>
>Always remember that...
>
>the maximum power transfer theorem, otherwise known by other "high falutin"
>monikers, such as, "The Conjugate Matching" Theorem, etc... is a subject or
>theorem only of interest to the designers of loads, NOT to the designers of
>sources.
>
>If you find yourself designing a SOURCE of power, a.k.a amplifier, battery,
>generator, etc... kindly disregard the maximum power transfer theorem for it
>is not applicable to your problem, and will only lead you astray!
>
>-Peter K1PO

Hi Peter,

This is not the experience that I have had in linear design, in fact it is the concern (the source matching the load, not the load matching the source) of many linear systems. This is such a commonplace issue of design, that almost every spec sheet for linear components covers it in their specification (which seems to be wholly ignored by those who claim designers have no interest). And, this is not to limit such considerations to linear design. I have many logic designs who impose a restriction to loads in what is called "fan-out." This too, is specified by every logic vendor. If you believe that I have no interest in the internal resistance of the battery that drives my design, or the re-charge circuit that in turn drives it - then you inhabit a world free from care.

Ignoring those considerations is too simplistic and serves no useful purpose otherwise.

I am sure there are a world of designers who toe the line of your comment; and I am equally sure they produce nothing of special regard either. That is, there are many instances where such consideration is wholly outside of meeting necessary requirements. But even here, this is more the matter of the eventual design's flexibility (or ability to be forgiving). In that regard, ignoring these considerations may be absolved through over-design (or even sloppy, inefficient design); but

this does not make it a good engineering practice (unless you are a production engineer, as distinct from an R&D engineer).

Back in the late '40's in NYC there was a fellow by the name of Mad Man Muntz who built TV receivers. His standard design practice was to visit each engineer who was working on a piece of the design. The Mad Man always carried a pair of dikes and would whip them out and snip out parts of the bread board until the circuit failed. His advice was always: "replace that last part and ship it!" This is the art of production engineering and it has its basis in the formalisms and academic concern, but they only evidence themselves in the circuit's failure. The Mad Man probably didn't give a damn about these formalisms (he was a car dealer anyway) insofar as how to make a circuit work, but he certainly trusted them when his last snip disabled product.

Mad Man Muntz shipped TV's without extravagant circuits like horizontal stabilizing/synchronizing because his TV's were aimed at city environments where the signals would be guaranteed to be strong and issues of synchronization were already enforced by the quality of the existing signal. (I, on the other hand, often found myself trying to "repair" such TV's for folks in the boondocks. Yes a fool's mission.)

If I thump the tub to loudly proclaim the necessity of matching source to load, it comes from years of experience that showed nothing less would satisfy. That this concern is treated with care and deep coverage by the vendors and users of linear components, this too speaks of the reality of such consideration that has been manifest for decades now.

That there are some amateurs here who routinely neglect this coverage of the past 40 years suggests they lost the capacity to care, or that it is not perceived to be a problem. This last (the perception) is not an argument for-or-against, it is simply a prejudice. The first (the lack of interest in the coverage) has no argument ('t'ain't so does not qualify as argument).

73's
Richard Clark, KB7QHC

3152. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 22:56:35 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8C5EA3.16E0@wt.net>
Source record: 170225

Ralph Mowery wrote:
>
> I did add a qualifing statement to the posting. The antenna in question
> was a two meter antenna and a simple dipole. It was not stated to be
> fed off center or close to any objects. I am well awear that a dipole
> can have almost any value depending on where it is located. I have a
> dipole for 80 meters that is only up about 20 feet and it does have
> almost a 1:1 swr at one frequency around 3.8 mhz because it is close to
> the ground.

I see wide variations depending on the surroundings and height. But you were correct in the orignal part, a dipole in "virtual" free space will almost always show a 1:4-1:5 to 1 SWR. Of course, the difference in signal is unnoticable, but this will limit the available bandwidth that will be usable with a solid state rig if you are limited to 2:1 SWR. I like the center point shifting, because no matter the surroundings or coupling, etc problems you could have, you can still get a good match. Which just means you have more usable bandwidth considering a picky rig. Of course, you will be slightly unbalancing the antenna, but I've never noticed any adverse results from doing this. MK
--
http://web.wt.net/~nm5k

3153. Re: 2.4Ghz directional antenna for LAN (home RF)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 23:05:56 UTC
From: richardharrison@webtv.net
Message-ID: <10114-3A8C60D4-33@storefull-114.iap.bryant.webtv.net>
Source record: 170227

Mindy wrote:
"Any other ideas would be greatly appreciated."

At 2.4 GHz your wavelength is about 4.9 inches. You can make a
right-angle corner-reflector about 1 wavelength on a side (5 inches).
Place your 1/2-wave dipole about 2.5 inches from the apex inside and
parallel to the corner.

The reflector adds about 10 db to the dipole.

Bst regards, Richard Harrison, KB5WZI

3154. most powerful am antenna I can build?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-15 23:57:57 UTC
From: tom <tom@idirect.com>
Message-ID: <3A8C971E.74E4@idirect.com>
Source record: 170228

Trying to pull in am reception from as far away as possible. What is the most powerful am antenna I can build? I have a 3rd floor attic, with lots of space. Any suggestions? Anybody been able to pull in am reception from FAR away?

3155. Re: What is a good dual band mobile antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 00:09:31 UTC
From: noah824@att.net
Message-ID: <%c_i6.977$TD1.84309@bgtnsc05-news.ops.worldnet.att.net>
Source record: 170229

In article <20010214230247.20193.00000151@ng-fm1.aol.com>, matjake@aol.comns (MatJake) wrote:
>Hi,
>
>I am sure this question has been asked a million times but I never payed
>attention since I never had a dual band radio, 2M/440.
>
>Soooooo I was wondering if anyone has any good or bad comments on various
>antennas. I am used to using 5/8 commercial antennas for VHF, antenna
>specialists, Larsen.

Antenex makes a couple of great dual band antennas for the ham bands. One is a standard closed collinear 2db gain on VHF / 5db gain on UHF model, and the other is a short version which is unity gain on VHF and probably 3 db on UHF. I've been using the longer one for the last 2 years and haven't had any problems with it. I have a friend who uses the short one and has no complaints either. You can even get these in a black finish, which in my opinion looks much better on a vehicle.

Noah

3156. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 00:35:55 UTC
From: richardharrison@webtv.net
Message-ID: <10114-3A8C75EB-41@storefull-114.iap.bryant.webtv.net>
Source record: 170231

Paul wrote:
"I`m happy it`s working. it`s very sharp."

Thanks for the report. A rhombic is simple, high-gain, and underappreciated.

Best regards, Richard Harrison, KB5WZI

3157. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 00:37:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8C764A.82A80379@eznec.com>
Source record: 170230
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Once again we have an illustration of trying to reduce a great deal of widely varying information about pattern, efficiency, and communications effectiveness into the binary pigeonholes "good" and "bad". The result is predictable, and there will never be a consensus. Why can't people realize that what's best for one particular situation or under one set of circumstances isn't good for another? That it takes more information than "good" or "bad" to determine whether a particular antenna is suitable for a particular application?

Sure, I could use a T2FD for an 80 meter QRP station. I could even talk to a few people. But I'd put out a much stronger signal and be able to talk to a lot more people with a half wavelength dipole, or even a center loaded shortened one. If I had to carry an antenna on my back and set it up within a few minutes nearly anywhere, had adequate power, no tuner or a limited range one, and had to communicate with other relatively high powered stations on just about any frequency in the HF range -- or if I had a frequency-hopping radio that covered several MHz, the T2FD would be a much better choice than an 80 meter dipole, or just about any other antenna. So tell me, is the T2FD "good" or "bad"? How about the 80 meter dipole?

Roy Lewallen, W7EL

Dick Carroll wrote:
>
> Cecil wrote:
> >
> > Dick Carroll wrote:
> > >
> > > Cecil wrote:
> > > >
> > > > Walt Novinger wrote:
> > > > > My XYL and I built a T2FD a couple of years ago, ...
> > > > > The antenna is extremely quite, ...
> > > > >
> > > > > Both on receive and transmit. :-)
> > > >
> > > I'll bet you've never used one. If you depend entirely on an engineering
> > > analysis to assess their usefulness you will never appreciate what they
> > > will do. They perform much better-both transmitting and receiving-than
> > > you think.
> > >
> > I think they perform exactly according to the laws of physics. Are you
> > saying they are so good they violate the laws of physics?

>
> I'm saying that you slam them with no experience whatever from which
> to derive a true functional evaluation. Typical of one who depends on
> nothing but the "numbers" in the face of a huge body of evidence that
> they do indeed perform quite adequately in practice. Government
> facilities worldwide have used them with very effective results.
>
> Dick

3158. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 00:50:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8C796A.4EC8246F@eznec.com>
Source record: 170232

Richard Harrison wrote:

> . . .

> The sheriff in my county has an underground hardened emergency
> management center which is perpetually manned and well equipped for
> communications with units anywhere in the county and it has sturdy links
> with the rest of the world. They are equipped with a big capable
> computer system in the bunker.The sheriff also has a large
> communications van ready for everything they could think of and always
> ready to roll. If needed in a disaster, I`m sure the sheriff would let
> it leave the county to help. Next time he might be the one asking for
> help.
>
> The government can be your friend when you have a disaster.
>
> Best regards, Richard Harrison, KB5WZI

I remember many years ago going on a tour of a multi-state central emergency control center at the Denver Federal Center west of Denver. It also was underground. They'd stockpiled food and medical supplies, with an emphasis on supplies to treat radiation casualties. There were seats for the directors of the several states to sit and direct distaster operations. When I asked how they were supposed to get there from their respective states, the answer was that they were to come via commercial transportation (really!). For communications, they had a multi-kW transmitter that could autotune to any frequency in a few seconds. It was connected to a log periodic antenna on a tower outside. This was their only antenna, and it could have been easily dropped by a microburst, good windstorm, saboteur, or of course any kind of strong explosive blast. Floods and downpours are common there. If the place didn't leak, there could be periods when no one (including the alleged incoming state directors) could go in or out without letting in a whole lot of water.

Presumably, the lower level disaster agencies were to be coordinated or to take their orders from this facility.

It was a very worthwhile tour. It taught me that I, not the government, am most likely going to be my best friend when a disaster strikes.

Roy Lewallen, W7EL

3159. Re: most powerful am antenna I can build?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 01:08:33 UTC
From: richardharrison@webtv.net
Message-ID: <10114-3A8C7D91-44@storefull-114.iap.bryant.webtv.net>
Source record: 170233

Tom wrote:
Anybody been able to pull in AM reception from far away?

I listened for hours to contnuous Hurricane Carla coverage by Dan Rather from KTRH in Houston. I was in Tierra del Fuego Argentina some 6000 miles from Houston. My radio was a hand-held Hitachi with a built-in loopstick. Oh yes, I set it down and still heard very well. One advantage to being not far from the South Pole is a very quiet listening location. Thunder and lightning are completely unknown. KTRH radiates 50 KW with a north-south directional array. That helps on this path.

The best antenna I`ve used is a Beverage that I used in Europe to nightly listen to stations in the USA. It has an excellent signal to noise ratio due to its high directivity.

Best regards, Richard Harrison, KB5WZI

3160. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 01:54:54 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96i19i$n7c$1@slb4.atl.mindspring.net>
Source record: 170234

Richard:

I see that you feel strongly about the "maximum power theorem" and have now apparently elevated your "belief" in this "mantra" to the level of a religion. Was/is Fred Muntz a messiah? What?

Be that as it may... beliefs aside, let's consider the use of laws of physics and rules of mathematics rather than recalling historical incidents of sloppy engineering.

Richard, the maximum power transfer theorem provides nothing more nor less than the prescription for the value of a load impedance z to be used to extract the maximum power from an existing fixed source which has an impedance Z already designed by someone else.

In other words only the optimum value of the load is being sought by the maximum power transfer theorem, and not the optimum value of the source impedance!

The load is the independent variable, the thing being "designed", while the power is the dependent variable, depending upon the load being designed. The source impedance is merely a constant in that calculation! The source impedance is not the value being sought! Rather it is the value of the load impedance being sought. Is that not the design of a load? No?

What?

In other words, for the purposes of the so called "maximum power transfer theorem" the source impedance is considered a fixed (complex) constant, while the load impedance is considered to be the variable or "unknown" which is sought by the designer and which is to be varied until it reaches the value which extracts the maximum power from the given source.

In simple mathematical terms, the Power P is the dependent variable. This power P is calculated by the usual formulae and it is the power that the load designer wishes to be extracted from a fixed source of impedance Z=R+jX and delivered to the variable load z=x+jr being "designed" by the "designer.

Here P is a simple function of z. In functional notation, it is P(z).

By simple application of the complex differential calculus, i.e. by differentiating P(z) with respect to z and setting the differential to zero and solving the resulting equations for the value of z which makes dP/dz = 0 one finds the unique value z = R - jX.

P(z) can be proved to have a unique maximum. This occurs only when the load impedance z = Z = R-jX. i.e. when the load z is equal to the complex conjugate of Z.

This "so-called" theorem, the application of that name which any "mathematician" would laugh at since it is such a trivial mathematical result, is easily proved by application of simple differential calculus.

In other words, as your math teacher would have said, finding the value of z that maximizes P is left as an exercise for the student!

What the hexx finding the maximum of P(z) over z has to do with the design of a source impedance Z is surely nothing.

Let's find another theorem for what you propose! Call it the optimum source impedance theorem, or whatever...

As the little guy on TV used to say, you can call it Ray, or you can call it Ray Jay, or you can call it.... it's still a load designer's theorem!

In other words to meet your needs, we need to ask another question, or pose another theorem.

Surely what you are interested in as a designer of sources rather than of loads is...

What is the optimum value of the parameters of my source (a.k.a.) amplifier impedance, or whatever, required to deliver the maximum power to my given fixed load?

In other words, let Z be the independent variable and let z be fixed, then calculate the value of Z that maximizes P(Z).

That, my friend is what is of interest to the designer of sources.

Richard, do you have any idea what that value of Z would be? Is it unique, is it a useful result?

What?

-Peter K1PO

"Richard Clark" <rwclark@seanet.com> wrote in message news:3a8c4ee3.267373222@news.seanet.com...
> On Thu, 15 Feb 2001 14:57:56 -0500, "Peter O. Brackett"
> <ab4bc@ix.netcom.com> wrote:
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> >Theread:
> >
> >Regardless of whether Walter was right or not, symantics be dammed, words do
> >not meaning make...
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> >Always remember that...
> >
> >the maximum power transfer theorem, otherwise known by other "high falutin"
> >monikers, such as, "The Conjugate Matching" Theorem, etc... is a subject or

> >theorem only of interest to the designers of loads, NOT to the designers
of
> >sources.
> >
> >If you find yourself designing a SOURCE of power, a.k.a amplifier,
battery,
> >generator, etc... kindly disregard the maximum power transfer theorem for
it
> >is not applicable to your problem, and will only lead you astray!
> >
> >-Peter K1PO
>
>
> Hi Peter,
>
> This is not the experience that I have had in linear design, in fact
> it is the concern (the source matching the load, not the load matching
> the source) of many linear systems. This is such a commonplace issue
> of design, that almost every spec sheet for linear components covers
> it in their specification (which seems to be wholly ignored by those
> who claim designers have no interest). And, this is not to limit such
> considerations to linear design. I have many logic designs who impose
> a restriction to loads in what is called "fan-out." This too, is
> specified by every logic vendor. If you believe that I have no
> interest in the internal resistance of the battery that drives my
> design, or the re-charge circuit that in turn drives it - then you
> inhabit a world free from care.
>
> Ignoring those considerations is too simplistic and serves no useful
> purpose otherwise.
>
> I am sure there are a world of designers who toe the line of your
> comment; and I am equally sure they produce nothing of special regard
> either. That is, there are many instances where such consideration is
> wholly outside of meeting necessary requirements. But even here, this
> is more the matter of the eventual design's flexibility (or ability to
> be forgiving). In that regard, ignoring these considerations may be
> absolved through over-design (or even sloppy, inefficient design); but
> this does not make it a good engineering practice (unless you are a
> production engineer, as distinct from an R&D engineer).
>
> Back in the late '40's in NYC there was a fellow by the name of Mad
> Man Muntz who built TV receivers. His standard design practice was to
> visit each engineer who was working on a piece of the design. The Mad
> Man always carried a pair of dikes and would whip them out and snip
> out parts of the bread board until the circuit failed. His advice was
> always: "replace that last part and ship it!" This is the art of
> production engineering and it has its basis in the formalisms and
> academic concern, but they only evidence themselves in the circuit's
> failure. The Mad Man probably didn't give a damn about these

> formalisms (he was a car dealer anyway) insofar as how to make a
> circuit work, but he certainly trusted them when his last snip
> disabled product.
>
> Mad Man Muntz shipped TV's without extravagant circuits like
> horizontal stabilizing/synchronizing because his TV's were aimed at
> city environments where the signals would be guaranteed to be strong
> and issues of synchronization were already enforced by the quality of
> the existing signal. (I, on the other hand, often found myself trying
> to "repair" such TV's for folks in the boondocks. Yes a fool's
> mission.)
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> If I thump the tub to loudly proclaim the necessity of matching source
> to load, it comes from years of experience that showed nothing less
> would satisfy. That this concern is treated with care and deep
> coverage by the vendors and users of linear components, this too
> speaks of the reality of such consideration that has been manifest for
> decades now.
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> That there are some amateurs here who routinely neglect this coverage
> of the past 40 years suggests they lost the capacity to care, or that
> it is not perceived to be a problem. This last (the perception) is
> not an argument for-or-against, it is simply a prejudice. The first
> (the lack of interest in the coverage) has no argument ('t'ain't so
> does not qualify as argument).
>
> 73's
> Richard Clark, KB7QHC

3161. Dipole VS Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 02:02:28 UTC
From: smlane1@mediaone.net
Message-ID: <96i1nk$g21$1@news.netmar.com>
Source record: 170235

I have a limited space to install an antenna but I could get a wire up about 25'. Which would work better for all band 80-10 meters. A 135' doublet fed with ladder line or a full wave 80 meter loop fed with ladder line?
Thanks
Steve
K9SL

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http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
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made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3162. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 02:09:09 UTC
From: richardharrison@webtv.net
Message-ID: <11982-3A8C8BC5-123@storefull-116.iap.bryant.webtv.net>
Source record: 170236

Roy Lewallen, W7EL wrote:
"It was a worthwhile tour. It taught me that I, not the government, am most likely going to be my best friend when disaster strikes."

If you need a helpimg hand, you look to the end of your arm, right?

Planners make mistakes. Some would be comical if they weren`t serious. Our sheriff has had his shakedowns and his stuff works.

There was a National Geographic PBS special TV program last night on "The Storm of the Century". It was in the last decade and it started in the Gulf of Mexico and swept all the way through New England with tornados and blizzards. It was the most damaging storm ever recorded but the 1900 Galveston storm is the worst killer. The Storm of the Century happened in Mid-March.

Weather forecasting and relief efforts were featured. Police, firemen, National Guard, Coast Guard, and broadcasters who recruited civilian volunteers to handle emergency traffic and killed their regular programs were shown. Rescue seemed to work fairly well. Helicopters plucked victims from perilous situations though some victims froze or were drowned.

Notable by their absence in the TV coverage were amateur radio operators. Some must have handled useful traffic and not just talked about the storm. Why didn`t National Geographic show them?

Best regards, Richard Harrison, KB5WZI

3163. Texas Antenna Legislation, H.B. 1148

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 02:42:15 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <0JKMOpquO2APmpKgdmSd4=x0cSFZ@4ax.com>
Source record: 170238

FYI, A couple of days ago, I received the following email from ARRL concerning the Texas legislation, H.B. 1148.

Bob
k5qwg

From: <arrl-mailer@jupiter.interbridge.net>
Reply-To: <arrl-mailer@jupiter.interbridge.net>
X-Sender: <arrl-mailer@jupiter.interbridge.net>
To: <bamiller@texas.net>
Subject: ALERT re: Texas Bill H.B. 1148
X-Mailer: <IMail v6.00>

ALERT - FROM jhaynie@arrl.org via arrl-mailer@jupiter.interbridge.net

TO: ALL TEXAS ARRL MEMBERS
FROM: JIM HAYNIE, W5JBP, PRESIDENT, ARRL

RE: TEXAS BILL H.B. 1148

There has been much concern recently about the potential impact of H.B. 1148, introduced in the Texas State Legislature by Representative Robert "Robbie" Cook (28th District). Hundreds of ARRL members have contacted me urging ARRL involvement in protecting the interests of Amateur Radio operators in the state.

Here's the issue: Many Amateur Radio operators fear that this bill, if enacted, could inadvertently impose some very difficult bureaucratic requirements on any attempt to erect even the smallest whip antenna.

I have spoken with Representative Cook's office and that was not his intention. The bill was supposed to deal only with commercial structures. When informed of the concerns of ham operators, Representative Cook's office invited an amendment to ensure that ham operators would not be affected.

I have sent the following amendment to Representative Cook's office and they are willing to put it into the bill:

Sec. 240.082.5 EXCLUSIONS: Nothing herein shall be construed to regulate, nor shall it regulate, antennas, antenna support structures, devices or facilities, installed, maintained and used exclusively for Amateur Radio communications by Amateur Radio operators licensed by the Federal Communications Commission.

Rather than continuing to alert me about this bill, Amateur Radio operators in Texas may wish to contact Representative Cook at the State Capitol to indicate their support of this amendment.

3164. Texas Antenna Legislation, H.B. 1492

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 02:42:31 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <N5OMOhdPK3C4xgCt4Kd74QA0vXhS@4ax.com>
Source record: 170237

FYI, A couple of days ago, I received the following email from ARRL concerning the Texas legislation, H.B. 1492.

Bob
k5qwg

Date: Wed, 14 Feb 2001 16:35:13 -0600 (CST)
from: jhaynie@ARRL.ORG
to: bamiller@texas.net
subject: ALERT TEXAS H.B. 1492

Yesterday I sent you a message about Texas House Bill 1148 but failed to include the contact information for Representative Cook. They are as follows:

TEL (512) 463-0682
FAX (512) 463-9955
email: robert.cook@house.state.tx.us

Now we have another bill sponsored by Representative Rick Hardcastle, bill number 1492 that would require amateurs with towers higher than 50 feet to paint and light with appropriate markings for aviation safety. I urge you to contact Representative Hardcastle's office and voice your objections to his bill and exempt amateurs.

> By Hardcastle H.B. No. 1492
> 77R6141 JAT-D
> A BILL TO BE ENTITLED
> 1-1 AN ACT
> 1-2 relating to painting, marking, and lighting requirements for
> 1-3 certain antenna structures.
> 1-4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:
> 1-5 SECTION 1. This Act may be called the LeClair-Jennings Act.
> 1-6 SECTION 2. Subchapter B, Chapter 21, Transportation Code, is
> 1-7 amended by adding Section 21.069 to read as follows:
> 1-8 Sec. 21.069. PAINTING, MARKING, AND LIGHTING OF ANTENNA
> 1-9 STRUCTURES. (a) The department shall adopt rules to establish
> 1-10 painting, marking, lighting, and other visibility requirements for
> 1-11 antenna structures that are at least 50 feet but not more than 200
> 1-12 feet in height above ground level.
> 1-13 (b) The rules adopted under this section shall be similar to
> 1-14 the rules for antenna structures more than 200 feet in height above
> 1-15 ground level under 47 C.F.R. Part 17, Subpart C, and its subsequent
> 1-16 amendments.
> 1-17 (c) In this section, "antenna structure" includes the
> 1-18 radiating or receiving system, its supporting structures, and any
> 1-19 appurtenances mounted on the radiating or receiving system or its

> 1-20 supporting structures.
> 1-21 SECTION 3. This Act takes effect September 1, 2001.

His address is:
Richard Hardcastle
Capitol Phone (512) 463-0526
District Phone (940)553-3829
e-mail: rick.hardcastle@house.state.tx.us

Please note that I am sensitive to mass e-mails as I get them also, but these two issues are very important to amateurs here in Texas, and I need for you to be aware of events that affect you and amateur radio.

Sincerely,

Jim Haynie, W5JBP
President, ARRL

Dallas, Texas

3165. Re: Dipole VS Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 03:25:31 UTC
From: k9sqg@aol.com
Message-ID: <20010215222531.09372.00001083@ng-mm1.aol.com>
Source record: 170239

I'd go with the loop any day based upon my personal tests and the articles that have been published.

73s,

Evan

3166. Crude dipole antenna in roof crawl space

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 03:26:08 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3A8C9DD0.812F1660@ix.netcom.com>
Source record: 170240

I've had apartments in 2 to 3 floor wood frame
construction buildings with peaked roofs. I've
been able to open the access hatch and stick my
head into the space. But it's not really possible
to walk up there. What I have done is take some
wire and tie weights to the ends, and toss as far
as I can the weights with wire to make a horizontal
antenna. Do it twice in opposite directions and you
can produce a crude dipole. I figure I made a dipole
with about 12 to 14 foot legs. Terrible SWR, but my
TS440S with AT automatic tuner can tune it on all
bands from 80 to 10M. The wire I used was electrician's
14 AWG copper stranded without tinning. Tinning would
increase losses due to RF skin effect.

Made a test contact, from TX to CA with 100W USB,
report of 5-7 on 20 meters at 2:26 zulu. Not too horrible.

Also found out my Sony TV set radiates white noise on 20
when on but not receiving an active TV channel.

3167. SWR Equation Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 03:49:03 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <Pq1j6.240110$ge4.82990900@news2.rdc2.tx.home.com>
Source record: 170241

Does anyone have the equation to calculate SWR from measured forward and reflected power levels.

Thanks, Pete KA�TZK Colorado

3168. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 04:04:42 UTC
From: richardharrison@webtv.net
Message-ID: <28958-3A8CA6DA-34@storefull-118.iap.bryant.webtv.net>
Source record: 170242

Peter, K1PO wrote:
"---let`s consider the use of the laws of physics and rules of mathematics rather than recalling historical incidents of sloppy engineering."

In the 1955 Edition of "Electronic and Radio Engineering" Terman says on page 76:
"Alternatively, a load impedance may be matched to a source of power in such a way as to make the power delivered to the load a maximum. This is accomplished by making the load impedance the conjugate of the generator impedance as defined by Thevenin`s theorem."

I have never seen any reason to laugh at Terman. He is closer to infallible than any source I know.

Simple differential calculus just gives you the slope of a curve at a point where a little bit of x and a little bit of y become infinitessimal. We don`t need calculus for a steady-state matching problem. It`s true that the rate of change of power output is zero with respect to impedance at the maximum power output point, but that`s what the maximum power transfer theorem tells us. The problem is already solved.

Please don`t reply that non-linearity excludes the radio transmitter from the Thevenin treatment. Radio transmitters put out nice sine waves. They are not allowed to be big harmonic generators.

As for dependent and independent variable mumbo-jumbo, the formulas work in either direction. As Reg mentioned at the start of this thread, the output impedance of the transmitter is subject to operator adjustment through the simple setting of conduction angle. The point is that Reg has some new software that answers some of the questions. More power to him!

Best regards, Richard Harrison, KB5WZI

3169. Re: SWR Equation Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 04:34:21 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8CADCD.8667E5DA@IEEE.org>
Source record: 170243

Pete Holden wrote:
> Does anyone have the equation to calculate SWR from measured forward and
> reflected power levels.

SWR = square root of forward power plus square root of reflected power
divided by
square root of forward power minus square root of reflected power

Example: Forward power = 200, Reflected power = 100

SWR = (14.14 + 10)/(14.14 - 10) = 5.83
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3170. Re: SWR Equation Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 05:37:47 UTC
From: richardharrison@webtv.net
Message-ID: <18853-3A8CBCAB-104@storefull-111.iap.bryant.webtv.net>
Source record: 170244

Pete, KA0TZK wrote:
"Does anyone have the equation to calculate SWR from measured forward
and reflected power levels?"

VSWR = 1+square root of ref. pwr. / fwd. pwr.

divided by: 1-square root of ref. pwr. / fwd. pwr.

Bird will send you a chart to save you the calculation.

Best regards, Richard Harrison, KB5WZI

3171. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 05:45:27 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8cbd51.86312899@news.accessunited.com>
Source record: 170245

On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Richard, the maximum power transfer theorem provides nothing more nor less
>than the prescription for the value of a load impedance z to be used to
>extract the maximum power from an existing fixed source which has an
>impedance Z already designed by someone else.
>In other words only the optimum value of the load is being sought by the
>maximum power transfer theorem, and not the optimum value of the source
>impedance!

Peter, you should go to a sooth-sayer and contact the people who wrote
the theorems, and set them straight.

73 Tom

3172. Re: Dipole VS Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 05:46:01 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8cbe4e.86566044@news.accessunited.com>
Source record: 170246

On 16 Feb 2001 03:25:31 GMT, k9sqg@aol.com (K9SQG) wrote:

>I'd go with the loop any day based upon my personal tests and the articles that
>have been published.
>
>73s,
>
>Evan

Why?

73 Tom

3173. Re: SWR Equation Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 05:53:47 UTC
From: richardharrison@webtv.net
Message-ID: <17767-3A8CC06B-36@storefull-115.iap.bryant.webtv.net>
Source record: 170247

Pete Holden wrote:
"Does anyone have the equation to calculate SWR---"

When I posted an answer I saw Cecil had responded also. His equation is fundamentally the same as mine and both give the same answer.

Best regards, Richard Harrison, KB5WZI

3174. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 06:56:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8CCF31.D1D66CB6@eznec.com>
Source record: 170248

Peter is absolutely correct. There's nothing wrong with the theorem except that it's often misapplied. Given a Thevenin source model in which you're free to adjust the source impedance, the source impedance which will deliver the maximum power to any load is zero ohms. Anyone who doesn't believe this is encouraged to try and produce a single exception with numerical values. Peter had left this conclusion as an "exercise for the reader", but it looks like it's going to be necessary to state it more explicitly.

Roy Lewallen, W7EL

Tom W8JI wrote:
>
> On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
> <ab4bc@ix.netcom.com> wrote:
>
> >Richard, the maximum power transfer theorem provides nothing more nor less
> >than the prescription for the value of a load impedance z to be used to
> >extract the maximum power from an existing fixed source which has an
> >impedance Z already designed by someone else.
> >In other words only the optimum value of the load is being sought by the
> >maximum power transfer theorem, and not the optimum value of the source
> >impedance!
>
> Peter, you should go to a sooth-sayer and contact the people who wrote
> the theorems, and set them straight.
>
> 73 Tom

3175. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 06:58:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8CCF9C.5BE2E33A@eznec.com>
Source record: 170249

Hes write, you no.

Roy Lewallen, W7EL

gsanial@ecn.ab.ca wrote:
>
> Bill Turner (w7ti@jps.net) wrote:
> : On Sat, 03 Feb 2001 21:53:08 -0700, Dick Hughes <rhughes33@cableone.net> wrote:
>
> : >Of course you realize that 73's is an absolutely incorrect term. 73
> : >stands for, "best regards." 73's means best regards's. Don't know
> : >why 73's always grates on me like scratching your fingernails on a
> : >blackboard, but it does.
>
> : ____
>
> : I don't know which I hate worse - hearing "73's" or hearing someone complain
> : about it. English is a "living language", guys. Let it breathe.
>
> : 73, Bill W7TI
>
> Their you go...
>
> 73 de VE6GES.
> --

3176. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 07:22:26 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96ike6$158$1@slb7.atl.mindspring.net>
Source record: 170250

Tom:

Hi. Long time no post. Welcome back.

Yeah... some day when I get some time I'll do that.... heh, heh.

Meanwhile I can have fun with folks who get the theorem backwards...

-Peter K1PO

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3a8cbd51.86312899@news.accessunited.com...
> On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
> <ab4bc@ix.netcom.com> wrote:
>
> >Richard, the maximum power transfer theorem provides nothing more nor
less
> >than the prescription for the value of a load impedance z to be used to
> >extract the maximum power from an existing fixed source which has an
> >impedance Z already designed by someone else.
> >In other words only the optimum value of the load is being sought by the
> >maximum power transfer theorem, and not the optimum value of the source
> >impedance!
>
> Peter, you should go to a sooth-sayer and contact the people who wrote
> the theorems, and set them straight.
>
> 73 Tom

3177. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 07:56:21 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96imdq$2tb$1@slb7.atl.mindspring.net>
Source record: 170251

Roy:

Thanks for that. I am sure that you have "done the exercise" and are now convinced of the validity of your claim.

And so here on the NG we can now proclaim that we have the new "Lewallen's Maximum Power Transfer Conjecture", or perhaps Lewallen's Source Impedance Theorem, or whatever... I suppose the "Mathematicians" won't let us "coarse engineers and ham operators" be callin it a "Theorem". At least until the proof is exhibited for all to see and they decide if it is significant enough. Perhaps it will just be treated as a "lemma", or whatever...

BTW... I have often wondered just who is the "Pope" of the mathematicians? Who is the one who allows such results to be cannonized into "Theorems"? Is there a Chief Mathematician? Who? What? I once worked for a Chief Engineer at a company where I was employed, but never saw or heard of a Chief Mathematician to this day. Strange!

In any case, here it is in all of it's glory!

Lewallen's Maximum Power Transfer Theorem states that -

the value of the "internal" impedance of a voltage source required to deliver the maximum power to a fixed load, is...

"ta da"....

ZERO!

A corollary to this theorem, which I am sure is near and dear to Reg Edward's heart, is...

the value of the internal impedance of a current source required to deliver the maximum power to a fixed load is...

"ta da"...

INFINITE!

Let's call this converse to Lewallen's Theorem, "Edwards Theorem" since our illustrious NG poster Reg Edwards has written and provided free "gratis" an excellent software design package which makes use of it.

For those practical lab oriented folks wondering about that latter value of source impedance, you won't find resistors of that value [INFINITE] in your parts bins, not even in the new 604 SMT package, heh, heh...

However, as Reg has noted on occasion, the "plate resistance" of a tetrode is a pretty good approximation to INFINITE. At least, as the engineer said

to the mathematician, good enough for all practical purposes.

and so one might ask of what use are Lewallen's theorem and it's now
celebrated corollary, Edward's theorem?

All of you source designers out there please take note!

And pray tell us exactly... how do these two theorem's help us to design
amps?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A8CCF31.D1D66CB6@eznec.com...
> Peter is absolutely correct. There's nothing wrong with the theorem
> except that it's often misapplied. Given a Thevenin source model in
> which you're free to adjust the source impedance, the source impedance
> which will deliver the maximum power to any load is zero ohms. Anyone
> who doesn't believe this is encouraged to try and produce a single
> exception with numerical values. Peter had left this conclusion as an
> "exercise for the reader", but it looks like it's going to be necessary
> to state it more explicitly.
>
> Roy Lewallen, W7EL
>
> Tom W8JI wrote:
> >
> > On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
> > <ab4bc@ix.netcom.com> wrote:
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> > >Richard, the maximum power transfer theorem provides nothing more nor
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> > >than the prescription for the value of a load impedance z to be used
to
> > >extract the maximum power from an existing fixed source which has an
> > >impedance Z already designed by someone else.
> > >In other words only the optimum value of the load is being sought by
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> > >maximum power transfer theorem, and not the optimum value of the source
> > >impedance!
> >
> > Peter, you should go to a sooth-sayer and contact the people who wrote
> > the theorems, and set them straight.
> >
> > 73 Tom

3178. looking for Buternut info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 09:23:35 UTC
From: "." <p@tp.telepac.pt>
Message-ID: <96irg2$3kq$1@venus.telepac.pt>
Source record: 170255

I pretend to buy a Buternut antena.
And i'm looking for all the info i can get.
is there a site with a catalog?
thanks in advance

CT1EKD
ct1ekd@qsl.net

3179. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 09:56:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8CF95D.4076830C@eznec.com>
Source record: 170252

Please, there's no need to assign a name to this (although I recognize the spirit in which it's being done ;)). Anybody with even basic technical knowledge can draw a three-element circuit, write the Ohm's-law equations for it, and see the result in a couple of minutes. High school level calculus is adequate to prove it definitively, but elementary algebra and a little intuition is plenty adequate to be convincing.

There are a lot of "theorems", "laws", and rules floating around out there. But too often, the people using them don't have any idea what the limits of their applicability are. When one is misused, you're lucky if the answer is so absurd that it's obviously wrong. Other times you're not so lucky. When in doubt, go back to the basics.

Yes, Peter, I've "done the exercise". I think it was in the early or mid '60's, either when I was in high school or not long after I got out.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy:
>
> Thanks for that. I am sure that you have "done the exercise" and are now
> convinced of the validity of your claim.
>
> And so here on the NG we can now proclaim that we have the new "Lewallen's
> Maximum Power Transfer Conjecture", or perhaps Lewallen's Source Impedance
> Theorem, or whatever... I suppose the "Mathematicians" won't let us "coarse
> engineers and ham operators" be callin it a "Theorem". At least until the
> proof is exhibited for all to see and they decide if it is significant
> enough. Perhaps it will just be treated as a "lemma", or whatever...
>
> BTW... I have often wondered just who is the "Pope" of the mathematicians?
> Who is the one who allows such results to be cannonized into "Theorems"? Is
> there a Chief Mathematician? Who? What? I once worked for a Chief
> Engineer at a company where I was employed, but never saw or heard of a
> Chief Mathematician to this day. Strange!
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> In any case, here it is in all of it's glory!
>
> Lewallen's Maximum Power Transfer Theorem states that -
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> the value of the "internal" impedance of a voltage source required to
> deliver the maximum power to a fixed load, is...

>
> "ta da"....
>
> ZERO!
>
> A corollary to this theorem, which I am sure is near and dear to Reg
> Edward's heart, is...
>
> the value of the internal impedance of a current source required to deliver
> the maximum power to a fixed load is...
>
> "ta da"...
>
> INFINITE!
>
> Let's call this converse to Lewallen's Theorem, "Edwards Theorem" since our
> illustrious NG poster Reg Edwards has written and provided free "gratis" an
> excellent software design package which makes use of it.
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> For those practical lab oriented folks wondering about that latter value of
> source impedance, you won't find resistors of that value [INFINITE] in your
> parts bins, not even in the new 604 SMT package, heh, heh...
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> However, as Reg has noted on occasion, the "plate resistance" of a tetrode
> is a pretty good approximation to INFINITE. At least, as the engineer said
> to the mathematician, good enough for all practical purposes.
>
> and so one might ask of what use are Lewallen's theorem and it's now
> celebrated corollary, Edward's theorem?
>
> All of you source designers out there please take note!
>
> And pray tell us exactly... how do these two theorem's help us to design
> amps?
>
> -Peter K1PO
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3A8CCF31.D1D66CB6@eznec.com...
> > Peter is absolutely correct. There's nothing wrong with the theorem
> > except that it's often misapplied. Given a Thevenin source model in
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> > which will deliver the maximum power to any load is zero ohms. Anyone
> > who doesn't believe this is encouraged to try and produce a single
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> > to state it more explicitly.
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> > Roy Lewallen, W7EL
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> > Tom W8JI wrote:
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> > > On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
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> > > >extract the maximum power from an existing fixed source which has an
> > > >impedance Z already designed by someone else.
> > > >In other words only the optimum value of the load is being sought by
> the
> > > >maximum power transfer theorem, and not the optimum value of the source
> > > >impedance!
> > >
> > > Peter, you should go to a sooth-sayer and contact the people who wrote
> > > the theorems, and set them straight.
> > >
> > > 73 Tom

3180. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 10:04:29 UTC
From: Paul Radge <scruffy@rabbit.com.au>
Message-ID: <3a8c6058@news.internex.net.au>
Source record: 170226

Thanks guys,
I've now attached the tapered feed from 20 inch down 10
1/2 inch with a length of 1.25 wavelength after another discussion with
W1VDE Roger,on the end of the tapper I've put a 4:1 1/2 wave balun made of
mini coax,and then fed with 50ohm,no idea what the match looks like,after
this I plugged on my little handie and went out into the backyard held the
rhombic vertical and hit two out of three repeaters firing through trees and
garden sheds.I'm happy it's working,it's very sharp.
Having lots of fun,thanks again,
Paul ,,vk3ddu
"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:oTe1vuA7nji6EAk3@ifwtech.plus.net...
> Richard Harrison wrote:
> >
> >300 ohms is about as low as it is practical to go because the spacing
> >gets so close (0.5 in.). But there is 300-ohm TV gear.
> >
> [...]
> >I think I would try a 20-inch transverse insulator to terminate (space)
> >the rhombic at the driven end. Then just continue the two wires in the
> >curtain and allow them to converge more slowly to the 1/2-inch spacing
> >you need for 300 ohms.
> >
> >At the 300-ohm point you could use twinlead to a 300-ohm / 75-ohm balun.
> >Or you could use a Q-section to lower the impedance to your chosen
> >value.
> >
> There are established techniques for using 200-ohm line with very low
> loss for 432MHz moonbounce.
>
> In particular, the lower-impedance line lends itself nicely to semi-
> rigid construction using spaced rods with minimal PTFE support. You can
> then make a two-slug tuner using two sliding blocks of PTFE. These look
> like giant two-hole balun beads, which the line passes through. By
> sliding them up and down the line you can position the two sections of
> lower impedance to cancel a wide range of mismatches.
>
> Having a means to adjust the matching, you can use a very 'casual'
> tapered line transition from the rhombic feed impedance, and tune out
> almost any kind of mismatch (if it won't tune, you only need to alter
> the line lengths to bring it into range).
>
> Sorry, I'm not quite clear whether the original request was for 50- or
> 75-ohm matching; but it doesn't matter much. The half-wave loop for a

> 4:1 balun should be made from UT-141 semi-rigid or something with even
> lower loss (50-ohm cable is OK for a 300-75 ohm balun). Alternatively,
> at 23cm a slit-sleeve 4:1 balun may have even lower loss.
>
> Unfortunately the relevant articles are not on-line, but you can go to
> www.dubus.org and follow the links to the contents pages of the DUBUS-
> TECHNIK books to find the article by DJ9BV. The Australian rep for DUBUS
> publications is Doug McArthur, VK3UM - a telephone call to him may be
> very useful.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

3181. Naval HF FAN wire antenna

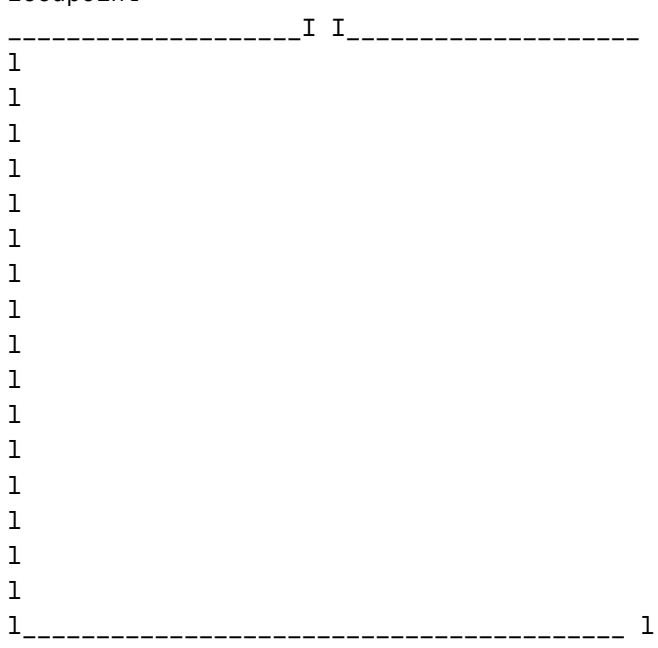
Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 10:06:28 UTC
From: Flavio Marsich <f.marsich@ids-spa.it>
Message-ID: <3A8CFC0B.A395544C@ids-spa.it>
Source record: 170253

I need to learn something more about the broadband conformal HF FAN wire antennas.

3182. HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 11:34:09 UTC
From: Big Ben <SPAMSUCKSbigbensblazer@yahoo.com>
Message-ID: <of8j6.12$jR.27705@news.uswest.net>
Source record: 170256

I've seen and read stuff about wire antennas that are basically just a big horizontal loop or square of wire. Ok I'll try to draw it.



Well that took a while. Now the questions. Please base it on 80 meters.
1) How long - total length or if a square, the length of each side?
2) What kind of wire is best to use?
3) Do these have to be a perfect square? I live in a mobile home and would like to mount it above the roof which is 14x67 feet.
4) Will the aluminum siding or rubber coated aluminum roof cause problems with the performance of the antenna?
5) Will this perform any better than a standard long wire? I am in a mobile home park so I would have to use an inverted vee.
6) If this will work, how high above the roof will it need to be mounted?

Thank you,
Ben Lee
KC7UIP
CN85

3183. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 12:04:49 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3A8D1761.49834D7C@bloomer.net>
Source record: 170257

According to the ARRL Antenna Book, a full wave loop's lenght (in feet) is calculated by taking 1005/frequency in MHz (1005 divided by the operating frequency, i.e 1005/3.850 = 261 feet total). They show it as a square or even a triangle, so shape may be a bit variable. Of course a square sounds like it would be best, but you can adjust as necessary. It doesn't mention what the feedpoint impedance would be, so I'm not sure if it would best be fed directly with 50 Ohm coax or ladder line with a tuner. If you have a tuner, I would just try it out and see how it works feeding it with coax.

Looking further in the book, I see they feed a loop directly with coax. I can scan a copy of the article and send it to you if you like. Just send your real email address directly to me (I believe it would just be with the SPAMSUCKS removed :))

Scott
N0EDV

Big Ben wrote:
>
> I've seen and read stuff about wire antennas that are basically just a big
> horizontal loop or square of wire. Ok I'll try to draw it.
>
> feedpoint
> _____________________I I_____________________
> l
> l
> l
> l
> l
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> l
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> l
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> l
> l
> l_____________________________________ l
>
> Well that took a while. Now the questions. Please base it on 80 meters.
> 1) How long - total length or if a square, the length of each side?

> 2) What kind of wire is best to use?
> 3) Do these have to be a perfect square? I live in a mobile home and would
> like to mount it above the roof which is 14x67 feet.
> 4) Will the aluminum siding or rubber coated aluminum roof cause problems
> with the performance of the antenna?
> 5) Will this perform any better than a standard long wire? I am in a mobile
> home park so I would have to use an inverted vee.
> 6) If this will work, how high above the roof will it need to be mounted?
>
> Thank you,
> Ben Lee
> KC7UIP
> CN85

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

3184. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 12:09:02 UTC
From: Big Ben <SPAMSUCKSbigbensblazer@yahoo.com>
Message-ID: <7M8j6.22$jR.38978@news.uswest.net>
Source record: 170258

Well that didn't work. Oh well I hope I somewhat got the message across.

```
________I I_________
l l
l l
l l
l l
l__________________l
```

Maybe a smaller version will show up.

3185. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 12:14:21 UTC
From: Big Ben <SPAMSUCKSbigbensblazer@yahoo.com>
Message-ID: <5R8j6.23$jR.40847@news.uswest.net>
Source record: 170259

Thanks thats exactly what I needed.
Thanks for the scan offer but that shouldn't be necessary.

Ben Lee
KC7UIP

3186. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 12:22:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96j614$i86$1@slb1.atl.mindspring.net>
Source record: 170260

Roy:

Heh, heh... Roy as you no doubt understand that I am being somewhat fanciful in my characterizations of these "theorems".

Still and all, from recent controversies in our avocation, it seems that simply giving something a name and applying capital letters to it's name can raise the level of it's importance far beyond it's applicability in some folks minds.

Certainly, in recent times, the "Conjugate Match" has been so raised in importance by some as to have reached the status of a religious belief. Of course, I too prescribe to religious beliefs, and I readily acknowledge that there will always be a place in human endeavor for religion and belief systems without a rational basis. However such belief systems are non-scientific and when applied to engineering endeavors they can lead to disasters. Humans simply don't design aircraft based upon the principles of Mohamed's ascent from the Rock, etc... And, like many mis-used religious beliefs, when carried over into all parts of life far beyond their original mission, they can become disadvantageous rather than advantageous.

I believe it was Tom Peters who said... "Perception is Reality"...

and so if, by giving these simple results names such as Lewallen's Theorem and Edward's Theorem, we can create the perception that they are of "great importance", why then perhaps they will become important to people and will be recognized as the useful and applicable results they most certainly are.

It will certainly help to raise them to the level of perception of the "Conjugate Match" so that they can sit with that august concept in a position of equal importance!

Best,

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A8CF95D.4076830C@eznec.com...
> Please, there's no need to assign a name to this (although I recognize
> the spirit in which it's being done ;)). Anybody with even basic
> technical knowledge can draw a three-element circuit, write the
> Ohm's-law equations for it, and see the result in a couple of minutes.
> High school level calculus is adequate to prove it definitively, but
> elementary algebra and a little intuition is plenty adequate to be
> convincing.
>
> There are a lot of "theorems", "laws", and rules floating around out

> there. But too often, the people using them don't have any idea what the
> limits of their applicability are. When one is misused, you're lucky if
> the answer is so absurd that it's obviously wrong. Other times you're
> not so lucky. When in doubt, go back to the basics.
>
> Yes, Peter, I've "done the exercise". I think it was in the early or mid
> '60's, either when I was in high school or not long after I got out.
>
> Roy Lewallen, W7EL
>
> "Peter O. Brackett" wrote:
> >
> > Roy:
> >
> > Thanks for that. I am sure that you have "done the exercise" and are
now
> > convinced of the validity of your claim.
> >
> > And so here on the NG we can now proclaim that we have the new
"Lewallen's
> > Maximum Power Transfer Conjecture", or perhaps Lewallen's Source
Impedance
> > Theorem, or whatever... I suppose the "Mathematicians" won't let us
"coarse
> > engineers and ham operators" be callin it a "Theorem". At least until
the
> > proof is exhibited for all to see and they decide if it is significant
> > enough. Perhaps it will just be treated as a "lemma", or whatever...
> >
> > BTW... I have often wondered just who is the "Pope" of the
mathematicians?
> > Who is the one who allows such results to be cannonized into "Theorems"?
Is
> > there a Chief Mathematician? Who? What? I once worked for a Chief
> > Engineer at a company where I was employed, but never saw or heard of a
> > Chief Mathematician to this day. Strange!
> >
> > In any case, here it is in all of it's glory!
> >
> > Lewallen's Maximum Power Transfer Theorem states that -
> >
> > the value of the "internal" impedance of a voltage source required to
> > deliver the maximum power to a fixed load, is...
> >
> > "ta da"....
> >
> > ZERO!
> >
> > A corollary to this theorem, which I am sure is near and dear to Reg
> > Edward's heart, is...

> >
> > the value of the internal impedance of a current source required to
deliver
> > the maximum power to a fixed load is...
> >
> > "ta da"...
> >
> > INFINITE!
> >
> > Let's call this converse to Lewallen's Theorem, "Edwards Theorem" since
our
> > illustrious NG poster Reg Edwards has written and provided free "gratis"
an
> > excellent software design package which makes use of it.
> >
> > For those practical lab oriented folks wondering about that latter value
of
> > source impedance, you won't find resistors of that value [INFINITE] in
your
> > parts bins, not even in the new 604 SMT package, heh, heh...
> >
> > However, as Reg has noted on occasion, the "plate resistance" of a
tetrode
> > is a pretty good approximation to INFINITE. At least, as the engineer
said
> > to the mathematician, good enough for all practical purposes.
> >
> > and so one might ask of what use are Lewallen's theorem and it's now
> > celebrated corollary, Edward's theorem?
> >
> > All of you source designers out there please take note!
> >
> > And pray tell us exactly... how do these two theorem's help us to design
> > amps?
> >
> > -Peter K1PO
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:3A8CCF31.D1D66CB6@eznec.com...
> > > Peter is absolutely correct. There's nothing wrong with the theorem
> > > except that it's often misapplied. Given a Thevenin source model in
> > > which you're free to adjust the source impedance, the source impedance
> > > which will deliver the maximum power to any load is zero ohms. Anyone
> > > who doesn't believe this is encouraged to try and produce a single
> > > exception with numerical values. Peter had left this conclusion as an
> > > "exercise for the reader", but it looks like it's going to be
necessary
> > > to state it more explicitly.
> > >
> > > Roy Lewallen, W7EL

> > >
> > > Tom W8JI wrote:
> > > >
> > > > On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
> > > > <ab4bc@ix.netcom.com> wrote:
> > > >
> > > > >Richard, the maximum power transfer theorem provides nothing more
nor
> > less
> > > > > >than the prescription for the value of a load impedance z to be
used
> > to
> > > > > >extract the maximum power from an existing fixed source which has
an
> > > > > >impedance Z already designed by someone else.
> > > > > >In other words only the optimum value of the load is being sought
by
> > the
> > > > > >maximum power transfer theorem, and not the optimum value of the
source
> > > > > >impedance!
> > > > >
> > > > > Peter, you should go to a sooth-sayer and contact the people who
wrote
> > > > > the theorems, and set them straight.
> > > > >
> > > > > 73 Tom

3187. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 12:54:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96j7s7ljs1@plutonium.btinternet.com>
Source record: 170261

It is silly to reduce the height of a dipole just to reduce loss in
the feedline.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3188. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 12:59:42 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96j85cshl1@neptunium.btinternet.com>
Source record: 170262

Mark Keith wrote -
> a dipole in "virtual" free space will
> almost always show a 1:4-1:5 to 1 SWR
==========

Not if feedline Zo = 75 ohms.

Reg

3189. Re: Dipole VS Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:19:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96j99m$11l$1@neptunium.btinternet.com>
Source record: 170263

If the full-wave loop is in a vertical plane then the 135' doublet would be preferable. The ground loss in a vertical loop would be greater.

If the loop was in the horizontal plane there would be little to choose between the two except, perhaps, their radiation patterns. But in any case, at the average amateur QTH, there is not a close agreement between predicted and actual HF radiation patterns.

But it should not be a complicated matter to change from one simple antenna to the other. Let us know your findings.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

<smlane1@mediaone.net> wrote in message
news:96i1nk$g21$1@news.netmar.com...
>
> I have a limited space to install an antenna but I could get a wire up about
> 25'. Which would work better for all band 80-10 meters. A 135' doublet fed
> with ladder line or a full wave 80 meter loop fed with ladder line?
> Thanks
> Steve
> K9SL
>
>
>
> ----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
> http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
> NewsOne.Net prohibits users from posting spam. If this or other posts
> made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3190. Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:29:19 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A8D2B2F.5F20240D@eskom.co.za>
Source record: 170264

Has anyone any comments on using relays instead of traps.
Are there any problems with the controlling wires running in the antenna tubing?
What type of relay can be used?
Thanks
Stan

3191. Re: Dipole VS Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:39:17 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8D2D85.F6411EC7@IEEE.org>
Source record: 170267

Tom W8JI wrote:
>
> On 16 Feb 2001 03:25:31 GMT, k9sqg@aol.com (K9SQG) wrote:
>
> >I'd go with the loop any day based upon my personal tests and the articles that
> >have been published.
> >
> >73s,
> >
> >Evan
>
> Why?

Before reaching conclusions and questioning those conclusions, wouldn't
it be good to say whether the loop is horizontal or vertical? :-)
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3192. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:48:52 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8d2f13.115439369@news.accessunited.com>
Source record: 170266

On Fri, 16 Feb 2001 15:29:19 +0200, stan.holmes@eskom.co.za wrote:

>Has anyone any comments on using relays instead of traps.
>Are there any problems with the controlling wires running in the antenna
>tubing?
>What type of relay can be used?
>Thanks
> Stan

Why would you want to make the system more complicated and less
reliable Stan?

That is what would happen.

Have you been reading advertisements about traps being especially bad
or something?

73 Tom

3193. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:48:59 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8D2FCB.8E664701@IEEE.org>
Source record: 170268

```
Big Ben wrote:
>
> Well that didn't work. Oh well I hope I somewhat got the message across.
>
> ________I I_________
> l l
> l l
> l l
> l l
> l__________________l
>
> Maybe a smaller version will show up.

Note to all: Fixed width font (Courier) is better for ASCII diagrams.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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```

3194. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:53:45 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8D30E9.61FB4CAB@IEEE.org>
Source record: 170169

stan.holmes@eskom.co.za wrote:
>
> Has anyone any comments on using relays instead of traps.
> Are there any problems with the controlling wires running in the antenna
> tubing? What type of relay can be used?

The voltages at the ends of a resonant dipole are too high for most
relays to handle. Some sort of bi-stable solenoid with enough air
gap would work better.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3195. Re: Antenna Rotator Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 13:59:59 UTC
From: Andy Cowley <krooandy.cowley@uwe.ac.uk>
Message-ID: <3A8D314E.543D938F@uwe.ac.uk>
Source record: 170170
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

VK4LAJ wrote:

> Hi all and thanks for reading my post
>
> I have been out of AR for 14 months (due to an accident not loss of
> interest) and am now looking to get back into it.
>
> I am looking at building a lot of my own gear this time around and one
> project is an antenna rotator. Although I have searched high and low on the
> internet, I can not find anyone that has built a rotator system from
> scratch. I have found a direction indicator but that's all.
>
> Has anyone built or know of an article that describes building an antenna
> rotator? If so could you please point me in the right direction or send me a
> scanned article, but please email me direct after you have removed the

My friend, Dave, G3YNH, is constructing a polarisation rotator for a
12 element ZL-special 2M antenna. He is using a gearbox from a
pre-war wind-up gramophone and the motor from a 35mm camera.
The motor runs on ~3 volts and is about 2cm x 3cm. with a 3000:1
reduction gear it can turn 180 degrees in about 30 seconds. It is
powerfull enough that you can't stop it bare-handed even on a
4" diameter wheel. It would certainly work as a conventional
rotator for 2m yagis of 12 elements or less.

The project is near completion and will be on the web when
finished, at

http://www.camuw.demon.co.uk/web_site/g3ynh/g3ynh.html

Not there yet but coming soon!

best

Andy, M1EBV

3196. Re: looking for Buternut info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 14:24:25 UTC
From: Richard Miller <k1rdm@mediaone.net>
Message-ID: <tKaj6.1999$GX2.564365@typhoon.ne.mediaone.net>
Source record: 170171
Body handling: HTML body converted to readable text

Check out the following web link:

http://www.bencher.com/ant_select.html

Butternut is owned by Bencher now. I have an HF9V that I use as my primary HF antenna. I'm very happy with it. It's the second Butternut that I've owned. My first was/is an HF6V which I still have and plan to put back on that air soon.

73
Rick
K1RDM
"." wrote in message news:96irg2$3kq$1@venus.telepac.pt...
> I pretend to buy a Buternut antena.
> And i'm looking for all the info i can get.
> is there a site with a catalog?
> thanks in advance
>
> CT1EKD
> ct1ekd@qsl.net
>
>

3197. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 14:25:13 UTC
From: richardharrison@webtv.net
Message-ID: <888-3A8D3849-2@storefull-112.iap.bryant.webtv.net>
Source record: 170173

Paul, VK3DDU wrote:
"---next I`m going to put in a terminating resistor and change it again."

The terminating resistor makes a rhombic unidirectional. With an open or a short at the far end of a rhombic, the reflected wave radiates in the reverse direction. With the proper termination, the remaining forward wave is absorbed.

There is no difference in rhombic forward performance when the far end is open, shorted, or matched to a terminating rsistance.

At a European broadcast plant where I worked, we temporarily ran 100-KW transmitters into 10-KW rhombics while we built curtain antennas. Our target was Eastern Europe. Our rhombic dissipation lines soon melted. For many weeks we ran with bi-directional rhombics. When we replaced our dissipation lines with heavier stainless wire we got a flood of protest from listeners in South America. They could no longer hear us. Sorry, but they were in an area claimed by other broadcasters as their targets at the times they were hearing us.

A terminating resistor can make a slight reduction in impedance variations seen at the driven end of a rhombic, but not much. By the time a wave makes a round-trip on a long rhombic there is just not much energy left to affect impedance at the drivepoint. It`s been radiated.

Best regards, Richard Harrison, KB5WZI

3198. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 14:26:16 UTC
From: Charlie Hicks <hicksc@starband.net>
Message-ID: <cMaj6.1480$dg5.366791846@twister1.starband.net>
Source record: 170172

I don't have the article in front of me but I a while back there was one titled Loop Skywire (or something like that). As I remember, the best configuration was to maximize the area within the loop - which would be a circle. A circle isn't real practical so most use a square or something close to it, depending on supports available. Also, I believe they had theirs cut at 272'.

The other thing affecting this is height above ground - otherwise it becomes a cloud warmer.

I live on 5 acres and have been reading about long wires, long wire V's, rhombics, loops, etc. I figure mulitple wavelengths of wire in the right configuration will beat any triband beam (which I have). One particular configuration I am leaning towards is a switchable V combination so you can get most directions with lots of gain.

If anyone has experience with long wire V's please speak up!

73, Charlie KCKH

3199. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 14:58:48 UTC
From: richardharrison@webtv.net
Message-ID: <14285-3A8D4028-15@storefull-118.iap.bryant.webtv.net>
Source record: 170174

Roy Lewallen, W7EL wrote:
"Given a Thevenin source model in which you`re free to adjust the source impedance, the source impedance which will deliver the maximum power to any load is zero ohms."

Yes, and the load which will accept maximum power from the zero-ohm source is as close to zero ohms as you can get without actually arriving at zero ohms.

The maximum power transfer theorem is still intact despite a reduction to the absurd.

Best regards, Richard Harrison, KB5WZI

3200. Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 15:31:04 UTC
From: Lloyd Kubis <kubis@one.net.au>
Message-ID: <3a8d2b5a$1_3@news01.one.net.au>
Source record: 170265

Has any tried homebrewing a Hex-Beam type limited space beam ???

Thanks
Lloyd

3201. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 15:38:59 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96jhi8$5vj$1@slb0.atl.mindspring.net>
Source record: 170175

Richard:

Wow!!! What an idea.

Who wants to draw the maximum power from a zero ohm voltage source? Would sort of be like blasting Hoover Dam apart to fill your bird bath! What?

Your comments simply don't make "walkin around" sense over here in source land...

A practical person would not attempt such a thing... unless of course he had an investment in a fuse or circuit breaker manufacturing company!

What?

Richard, come on over to the "other" side with us source designers.

The Dark Side?

You can go back to designing loads anytime, the load designer's union will not disown you just because you spend some time designing sources!

Don't worry, it won't hurt. Heh, heh, I know you'l really like it.

Best,

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:14285-3A8D4028-15@storefull-118.iap.bryant.webtv.net...
> Roy Lewallen, W7EL wrote:
> "Given a Thevenin source model in which you`re free to adjust the source
> impedance, the source impedance which will deliver the maximum power to
> any load is zero ohms."
>
> Yes, and the load which will accept maximum power from the zero-ohm
> source is as close to zero ohms as you can get without actually arriving
> at zero ohms.
>
> The maximum power transfer theorem is still intact despite a reduction
> to the absurd.
>
> Best regards, Richard Harrison, KB5WZI
>

3202. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 15:42:28 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A8D4A63.4BDA@pacbell.net>
Source record: 170178

Does anyone remember the Peter Principle?

Tom Donaly KA6RUH

Peter O. Brackett wrote:
>
> Roy:
>
> Thanks for that. I am sure that you have "done the exercise" and are now
> convinced of the validity of your claim.
>
> And so here on the NG we can now proclaim that we have the new "Lewallen's
> Maximum Power Transfer Conjecture", or perhaps Lewallen's Source Impedance
> Theorem, or whatever... I suppose the "Mathematicians" won't let us "coarse
> engineers and ham operators" be callin it a "Theorem". At least until the
> proof is exhibited for all to see and they decide if it is significant
> enough. Perhaps it will just be treated as a "lemma", or whatever...
>
> BTW... I have often wondered just who is the "Pope" of the mathematicians?
> Who is the one who allows such results to be cannonized into "Theorems"? Is
> there a Chief Mathematician? Who? What? I once worked for a Chief
> Engineer at a company where I was employed, but never saw or heard of a
> Chief Mathematician to this day. Strange!
>
> In any case, here it is in all of it's glory!
>
> Lewallen's Maximum Power Transfer Theorem states that -
>
> the value of the "internal" impedance of a voltage source required to
> deliver the maximum power to a fixed load, is...
>
> "ta da"....
>
> ZERO!
>
> A corollary to this theorem, which I am sure is near and dear to Reg
> Edward's heart, is...
>
> the value of the internal impedance of a current source required to deliver
> the maximum power to a fixed load is...
>
> "ta da"...
>
> INFINITE!
>

> Let's call this converse to Lewallen's Theorem, "Edwards Theorem" since our
> illustrious NG poster Reg Edwards has written and provided free "gratis" an
> excellent software design package which makes use of it.
>
> For those practical lab oriented folks wondering about that latter value of
> source impedance, you won't find resistors of that value [INFINITE] in your
> parts bins, not even in the new 604 SMT package, heh, heh...
>
> However, as Reg has noted on occasion, the "plate resistance" of a tetrode
> is a pretty good approximation to INFINITE. At least, as the engineer said
> to the mathematician, good enough for all practical purposes.
>
> and so one might ask of what use are Lewallen's theorem and it's now
> celebrated corollary, Edward's theorem?
>
> All of you source designers out there please take note!
>
> And pray tell us exactly... how do these two theorem's help us to design
> amps?
>
> -Peter K1PO
>

3203. Re: looking for Buternut info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 15:44:01 UTC
From: "." <p@tp.telepac.pt>
Message-ID: <96jhpg$hd4$1@venus.telepac.pt>
Source record: 170176
Body handling: HTML body converted to readable text

Thanks for the help.

Pedro - CT1EKD

"Richard Miller" wrote in message
news:tKaj6.1999$GX2.564365@typhoon.ne.mediaone.net...
> Check out the following web link:
>
> http://www.bencher.com/ant_select.html
>
> Butternut is owned by Bencher now. I have an HF9V that I use as my
> primary HF antenna. I'm very happy with it. It's the second Butternut
> that I've owned. My first was/is an HF6V which I still have and plan
> to put back on that air soon.
>
> 73
> Rick
> K1RDM
> "." wrote in message
news:96irg2$3kq$1@venus.telepac.pt...
> > I pretend to buy a Buternut antena.
> > And i'm looking for all the info i can get.
> > is there a site with a catalog?
> > thanks in advance
> >
> > CT1EKD
> > ct1ekd@qsl.net
> >
> >
>
>

3204. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 16:29:19 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <zzcj6.9813$X61.710915@bgtnsc04-news.ops.worldnet.att.net>
Source record: 170177

"Flavio Marsich" <f.marsich@ids-spa.it> wrote in message
news:3A8CFC0B.A395544C@ids-spa.it...
> I need to learn something more about the broadband conformal HF FAN
> wire antennas.
>

As a general overview, HF fan antennas installed on Naval ships are generally designed to operate untuned from 2.0 - 6.0 MHz or 2.0 - 8.0 MHz (maybe 10 MHz in some cases) with a maximum SWR of 3.0:1 over the band. Many of the installed fans will have a maximum SWR up to 4.0:1. The choice of upper operating frequency (6 or 8 MHz) is based on the configuration of the HF transceivers used to cover the 2.0 - 30.0 MHz frequency band. Older US Navy transceiver configurations had the HF band segmented into three smaller bands: 2 - 6 MHz, 4 - 12 MHz and 10 - 30 MHz. You will note some frequency overlap. Recent installations segment the bands differently as the transceiver systems are designed to be more broadband.

The HF fan antenna is typically constructed using two fan sections each made with three or four phosphor bronze insulated wires. Each end of the fan is insulated from the ship using delrin insulators. The fans are typically suspended from a main-mast yardarm to a deck level. The fan feedpoint will be located somewhere on the mast near the upper end of the fan. The fan wires will be connected to a single or dual feedpoint. A broadband matching network comprised of high-voltage vacuum capacitors and lowloss inductors (sometimes wound using CU refrigerator tubing) will be used to provide the impedance match.

The fan antenna itself is really designed to couple energy to and from the metal structure of the ship and its yardarms. At lower HF frequencies the fan essentially induces currents in the ship's superstructure so the entire ship functions as the "antenna". Integration of the fan into the ship's superstructure is important and that's why many of these antennas are (were) designed using 1/48th scale brass ship models (1/50th scale for metric).

If you have any specific questions, I would be happy to help.

Steve - VE9SRB

3205. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 16:30:25 UTC
From: richardharrison@webtv.net
Message-ID: <845-3A8D55A1-22@storefull-115.iap.bryant.webtv.net>
Source record: 170179

Peter, K1PO wrote:
"Your comments (The load which will accept maximum power from a zero-ohm source is as close to zero ohms as you can get without actually arriving at zero ohms.) simply don`t make "walking around" sense over here in source land..."

Try the numbers.

My near short-circuit load makes a lot more sense than your zero-ohm source. I can easily produce a very low load impedance. It is difficult to produce a zero-impedance high-power source.

Best regards, Richard Harrison, KB5WZI

3206. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 17:18:23 UTC
From: rwclark@seanet.com
Message-ID: <3a8d58bc.335430413@news.seanet.com>
Source record: 170180

On Thu, 15 Feb 2001 20:54:54 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Richard:
>
>I see that you feel strongly about the "maximum power theorem" and have now
>apparently elevated your "belief" in this "mantra" to the level of a
>religion. Was/is Fred Muntz a messiah? What?
>

snip of rhetorical baggage

>That, my friend is what is of interest to the designer of sources.
>
>Richard, do you have any idea what that value of Z would be? Is it unique,
>is it a useful result?
>
>What?
>
>-Peter K1PO
>

Hi Peter,

Sorry to have dismissed your academic (or high school) ï¿½tudes, but
they are simply not responsive to my post and of no particular
interest (and already handled better in the classical discussion of
Thevenin). Such ossified discussion is in glaring contrast to how the
Mad Man with a simple pair of dikes could cut to a solution without
all those old wive's tales. ;-)

I especially like each statement you make followed by the reflected
admission of "what?" Your mantra is certainly more entertaining, but
it could use a drumroll from Skitch Henderson's Band. ;-)

Sorry, but John Fakan presented far more compelling, and interesting,
discussion; but his was centered on experience proving theory rather
than conjecture and idle thought ambling through tedious math.

73's
Richard Clark, KB7QHC

3207. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 17:42:47 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8d6546.129316199@news.accessunited.com>
Source record: 170181

On Fri, 16 Feb 2001 10:38:59 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Richard:
>
>Wow!!! What an idea.
>
>Who wants to draw the maximum power from a zero ohm voltage source? Would
>sort of be like blasting Hoover Dam apart to fill your bird bath! What?

Some people have their minds made up, and closed.

You obviously don't understand the concept of a non-dissipative source
resistance (impedance) Peter.

Some people do.

Those that do, have no trouble understanding the concept of power
being limited without a dissipative resistance being necessary. It's
been explained so many times in so many ways, any further explaination
(especially in the face of 150 line posts) would likely do no good.

With that in mind, threads like this are useless.

73 Tom

3208. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 17:48:15 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8d66c9.129703739@news.accessunited.com>
Source record: 170182

On Fri, 16 Feb 2001 07:53:45 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>The voltages at the ends of a resonant dipole are too high for most
>relays to handle. Some sort of bi-stable solenoid with enough air
>gap would work better.

Even if he does that, he still has the same choking problems he has
with a trap if he wants to get control voltages to the next section.

A latching vauum relay would work best, but they require amperes of
coil per relay current at 24 volts! Imagine the difficulty in getting
seven or more amperes of control system current past the elements gaps
at each relay, and delivering that current from the house without
excessive resistance in the wiring!

The best solution would be to replace the relays with traps.

73 Tom

3209. Re: Portable "wind-up" multi-band Dipole's.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 17:52:26 UTC
From: ARS--KC8BCR@webtv.net
Message-ID: <5549-3A8D68DA-10@storefull-134.iap.bryant.webtv.net>
Source record: 170183

Actually it isn't trademarked. After the incident with the "Slinky"
antennas, we checked first.

73, Bill

3210. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 18:07:36 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3A8D6E4E.4030004@aol.com>
Source record: 170184

Yes, I'm tinkering with one now. I have a three bander (10, 15, and 17 meters). It is about 14 feet in diameter. It is giving me about 3 S-units(on a Yaesu FT-840) forward gain over my 3 band dipole. Right now, it is only about 12 feet high (on my "test" mast)

So far, the biggest drawback seems to be the narrow bandwidth. It works pretty good for $12 worth of electrical conduit (the support structure) and another $15 worth of wire. It is a good receive antenna (compared to dipole), very quiet. Also, it has been a lot of fun to work with.

I am sure a three element tribander is better, but I have a lot of trees, not much room to turn a tribander. Also, I don't want to spend money on a tower. I plan to mount the completed model on a 30 foot guyed TV pole.

Also, I don't know how much better the commercial hexbeam might be. It seems to be constructed of good material. I was curious, and got interested in the idea.

If you have specific questions, I'll take a shot.....

Lloyd Kubis wrote:

> Has any tried homebrewing a Hex-Beam type limited space beam ???
>
> Thanks
> Lloyd

3211. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 18:19:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8D6F15.BF0A9770@IEEE.org>
Source record: 170185

Tom W8JI wrote:
>
> On Fri, 16 Feb 2001 07:53:45 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >The voltages at the ends of a resonant dipole are too high for most
> >relays to handle. Some sort of bi-stable solenoid with enough air
> >gap would work better.
>
> Even if he does that, he still has the same choking problems he has
> with a trap if he wants to get control voltages to the next section.

Why would one need to get control voltages to an unused section?

```
\ \ / /
--------- +--------- +---------x---------+ ---------+ ---------
```

You would always have control over the next one that you need to
control assuming you can perform the switching serially in two or
more steps.

When I was in high school and didn't know how to feed a non-resonant
length dipole with open-wire feedline, I put an insulator at each
'+' point above. I had the dipole on pulleys so it was a two-minute
task to add jumpers to change bands to a different resonant-length
dipole. But I guess modern-day hams are too lazy and too spoiled
for something that simple.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3212. 18AVT vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 19:16:49 UTC
From: Pete <pete@etep.com>
Message-ID: <B0fj6.132855$P5.2846081@news1.rdc1.il.home.com>
Source record: 170186

Where can I purchase one? I can't find any in the catalogs I've looked in. I had one about 22 years ago in another state and worked the world with it. Thanks for your help.

3213. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 19:22:21 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A8D7DED.68E527FF@3n.net>
Source record: 170187

Mark Keith wrote:
>
> Dan Richardson wrote:
> >
> > Never say never.
>
> It's a piece of cake actually.

Sure is. I made a 2m antenna by soldering a 1/4 radiator plus 4
"legs" (radials) to a 259(?) chassis plug for a friend who uses
it indoors. He fine tunes the SWR by simply bending the legs
up/down.

73 ... KA3DWW

3214. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 19:29:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96juvqfab1@plutonium.btinternet.com>
Source record: 170188

I have used a relay suspended in an antenna wire to shorten it for resonance on a higher frequency.

This entails using twin wires (like 22 awg speaker cable) for the antenna wire up to the relay. I used an ordinary 12 volt relay with a single make-break contact rated at 500 volts. Prevent high RF volts between relay coil, core and contacts with a 0.02uF (or thereabouts) decoupling capacitor between each end of the relay coil and and the metal relay frame.

The 500-volt contact rating appeared to be adequate for a 100-watt transmitter.

At the transmitter end connect a 0.02uF capacitor between each antenna conductor and the transmitter or tuner output terminal.

Connect a bifilar choke wound on a ferrite rod, 6" or 8" long, 1/2" or 3/8" diameter to the pair of antenna conductors. The choke can be wound with the same 22 awg twin speaker wire as used for the antenna. Take the other end of the choke winding to the DC relay-operating supply. Include the on/off switch.

Ground one side of the DC supply. I used a spare 12 volt DC output from the transceiver. Make sure no other part of the antenna+relay+power supply can become in contact with ground or a fuse may blow.

Eventually I removed the relay because the relay contact resistance increased and became noisy when receiving on the lower operating freqency.

There are such things as reed relays with mercury-wetted contacts in a nitrogen atmosphere. The between-contact capacitance is very small. But I think the contact voltage and current ratings are low.

There should be no problems running connections to relays through tubular conductors. But still take the precaution of fitting decoupling capacitors at the relay end. Also a bifilar choke to decouple the relay power supply from the antenna system.
--
Reg, G4FGQ

==========

<stan.holmes@eskom.co.za> wrote in message
news:3A8D2B2F.5F20240D@eskom.co.za...
> Has anyone any comments on using relays instead of traps.

> Are there any problems with the controlling wires running in the
antenna
> tubing?
> What type of relay can be used?
> Thanks
> Stan
>
>
>

3215. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 20:42:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <zIpK7xA4CZj6EAvk@ifwtech.plus.net>
Source record: 170189

Reg Edwards wrote:
>I have used a relay suspended in an antenna wire to shorten it for
>resonance on a higher frequency.
>
>This entails using twin wires (like 22 awg speaker cable) for the
>antenna wire up to the relay. I used an ordinary 12 volt relay with
>a single make-break contact rated at 500 volts. Prevent high RF
>volts between relay coil, core and contacts with a 0.02uF (or
>thereabouts) decoupling capacitor between each end of the relay
>coil and and the metal relay frame.
>
>The 500-volt contact rating appeared to be adequate for a 100-watt
>transmitter.
>
[...]
>
>There are such things as reed relays with mercury-wetted contacts
>in a nitrogen atmosphere. The between-contact capacitance is very
>small. But I think the contact voltage and current ratings are low.
>
>There should be no problems running connections to relays through
>tubular conductors. But still take the precaution of fitting
>decoupling capacitors at the relay end. Also a bifilar choke to
>decouple the relay power supply from the antenna system.

Latching vacuum relays capable of holding off several kV are either very expensive or very cheap. If you're lucky enough to find them cheaply, they look like the best solution because they don't have to be energized all the time. Even thin wires would handle the short current pulses required.

However, like Tom I can't see a good way to get the control wires past the first relay, and onward to a second relay farther down the antenna. It has to involve RF chokes, which may have very similar losses to the inductors in traps.

For applications such as converting an inverted-L for 80m and 160m into a plain vertical for the higher HF bands, a relay at the top of the vertical may be a good solution.

Tom: what do you think of using a vacuum relay to band-switch a top-loading coil between 80m and 160m? There's going to be a lot of volts up there...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

http://www.ifwtech.com/g3sek

3216. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 20:54:47 UTC
From: Lorraine Wilson <wilsonlg@mindspring.com>
Message-ID: <96k4aq$fp2$1@slb0.atl.mindspring.net>
Source record: 170191
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Quit paying them...I bet that will work.
smiley o'riley <bummer-radio@licensing.org> wrote in message
news:goodbye@goodbye...
>
> I find I can no longer support the ARRL by being a member. What's the
best
> way to cancel a membership?
>
> TNX 73 de Smiley

3217. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 20:56:31 UTC
From: "Mr. Roboto" <663jlm@vei.net>
Message-ID: <t8r4s8crinsc64@corp.supernews.com>
Source record: 170190

I once made an emergency 220 MHz antenna by finding a six
inch piece of 2x4 wood, drilled two holes in it to accept 8
gauge aluminum grounding wire, cut one length of 8 gauge
grounding wire to 1/2 wavelength and another piece to 1/4
wavelength. Voila! Instant J-pole after soldering two
alligator clips onto the end of a piece of mini-8 coax with
a PL-259 on the other end. Just slide the alligator clips up
and down the "antenna" and matching stub until the SWR
disappears. Works great.
--
Mr. Roboto
delete663jlm@vei.net

"Old Biker" <enfield@3n.net> wrote in message
news:3A8D7DED.68E527FF@3n.net...
> Mark Keith wrote:
> >
> > Dan Richardson wrote:
> > >
> > > Never say never.
> >
> > It's a piece of cake actually.
>
> Sure is. I made a 2m antenna by soldering a 1/4 radiator
plus 4
> "legs" (radials) to a 259(?) chassis plug for a friend who
uses
> it indoors. He fine tunes the SWR by simply bending the
legs
> up/down.
>
> 73 ... KA3DWW

3218. Re: DK3 MOBILE HF ANTENNA QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 21:04:38 UTC
From: Lorraine Wilson <wilsonlg@mindspring.com>
Message-ID: <96k4ru$qq8$1@slb7.atl.mindspring.net>
Source record: 170192

Stick a piece in the microwave oven for about 5 minutes...If it gets hot:
Don't use it. Go to http:\\www.mindspring.com/~k4poz

Ed Lyons <elyons@sympatico.ca> wrote in message
news:3A81FE3C.D2277C5B@sympatico.ca...
>
> I am in the interest on building the DK3 Hf mobile antenna. I have all
> the plans how to make it. Anyways, the question I have is the loading
> coil form is made of 1 1/2" skep 40 PVC pipe white. Does it have to be
> the color white??
> The reason I ask is that my local supplier have the plumbing black sked
> 40 an I found the plastic conduit grey sked 40 for electrical.The white
> would have to be ordered.
>
> Now I was told that for the black PVC it has pigments of metal to form
> the black color and could cause a change in the inductance of the coil.
> Is this true???
>
> Thanks in advance.
>
> VE3EJL
>
> --
> Ed Lyons
>
>

3219. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 21:21:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8D99BC.195E@wt.net>
Source record: 170193

Reg Edwards wrote:
>
> Mark Keith wrote -
> > a dipole in "virtual" free space will
> > almost always show a 1:4-1:5 to 1 SWR
> ============================
>
> Not if feedline Zo = 75 ohms.
> ----
> Reg
Good point. My center point shifting would be required in such a case.
MK
--
http://web.wt.net/~nm5k

3220. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 21:21:55 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8D99F3.3DA4@wt.net>
Source record: 170194

Reg Edwards wrote:
>
> It is silly to reduce the height of a dipole just to reduce loss in
> the feedline.

I agree. I'd rather deal with feed losses than ground losses. MK

--
http://web.wt.net/~nm5k

3221. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 21:33:56 UTC
From: Paul Radge <scruffy@rabbit.com.au>
Message-ID: <3a8d01ef@news.internex.net.au>
Source record: 170254

Hi Richard.
Today I climbed the roof and hit all three repeaters here
in Melbourne,had a report from one station with good comments,I dropped from
1 watts to 100 mils and still fully pegged the device,the antenna is
definitely working,next I'm going to put in a terminating resistor and
change it again.Having great loads of fun,really appreciate the feedback
from you both,there seems to be little known down here on these subjects I
wonder if my wife would mind moving to Europe or the States,,hi hi.
Keep you posted in the future,thanks again I can't get my energy into
this page enough.
Best 73's,
Paul,,,,vk3ddu,,,,,
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:10114-3A8C75EB-41@storefull-114.iap.bryant.webtv.net...
> Paul wrote:
> "I`m happy it`s working. it`s very sharp."
>
> Thanks for the report. A rhombic is simple, high-gain, and
> underappreciated.
>
> Best regards, Richard Harrison, KB5WZI
>

3222. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 22:03:55 UTC
From: G&R <"stop the spam"@limbo.hell>
Message-ID: <fthj6.136488$Pm2.2456386@news20.bellglobal.com>
Source record: 170195

How about a mini-quad (10-15-20m) with a 7ft turning radius. Unfortunately,
we can't match you material cost.

Check out our site at www.degendesigns.com

Or you can contact me at info@degendesigns.com

73
Guenther

"kazering" <kazeringue@aol.com> wrote in message
news:3A8D6E4E.4030004@aol.com...
> Yes, I'm tinkering with one now. I have a three bander (10,
> 15, and 17 meters). It is about 14 feet in diameter. It is
> giving me about 3 S-units(on a Yaesu FT-840) forward gain
> over my 3 band dipole. Right now, it is only about 12 feet
> high (on my "test" mast)
>
> So far, the biggest drawback seems to be the narrow
> bandwidth. It works pretty good for $12 worth of electrical
> conduit (the support structure) and another $15 worth of
> wire. It is a good receive antenna (compared to dipole),
> very quiet. Also, it has been a lot of fun to work with.
>
> I am sure a three element tribander is better, but I have a
> lot of trees, not much room to turn a tribander. Also, I
> don't want to spend money on a tower. I plan to mount the
> completed model on a 30 foot guyed TV pole.
>
> Also, I don't know how much better the commercial hexbeam
> might be. It seems to be constructed of good material. I
> was curious, and got interested in the idea.
>
> If you have specific questions, I'll take a shot.....
>
>
>
> Lloyd Kubis wrote:
>
> > Has any tried homebrewing a Hex-Beam type limited space beam ???
> >
> > Thanks
> > Lloyd
>

3223. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 22:06:53 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <1whj6.1941$JS2.242102@newsread2.prod.itd.earthlink.net>
Source record: 170196

> Guessing from reading the specs, the MFJ has the built in capability to
> use 10 nicads and it includes a charging circuit for the batteries. The
> Vectronics can only use alkaline batteries (8).
>

Oddly, that is what you would think, but I just got mine yesterday and it is the VEC 584B. It looks EXACTLY like the MFJ 259B and even has the 10 slots for the batteries. Also has the circuit board jumper to switch between alkaline or nicads.

Dennis, W6NYC (was KF2XL)

3224. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 22:28:23 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <t8rdlc1n3dl652@corp.supernews.com>
Source record: 170197

Same here, got mine a few days ago and matches the 259B, takes 10 batteries.
The picture on the Radio Shack web site must be showing the older model.
Glad i got one for $149.

> Oddly, that is what you would think, but I just got mine yesterday and it
is
> the VEC 584B. It looks EXACTLY like the MFJ 259B and even has the 10
slots
> for the batteries. Also has the circuit board jumper to switch between
> alkaline or nicads.
>
> Dennis, W6NYC (was KF2XL)
>
>

3225. Re: math formula for SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 22:51:55 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <t8rf1g81kcg8fc@corp.supernews.com>
Source record: 170198

Here's a small windows program.
http://www.alaska.net/~sherman/asa/asa.html

carkenord@juno.com wrote:
> > >If I know forward power, and reflected power.....to and from an
> > >antenna system, what is the math formula to calculate SWR?
> > > Lee Carkenord KA0FPJ
> > >Sent via Deja.com
> > >http://www.deja.com/

3226. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-16 23:57:37 UTC
From: "Ed Hare, W1RFI" <w1rfi@arrl.net>
Message-ID: <j9jj6.278$HH5.1459305@news.ntplx.net>
Source record: 170199

Bob Miller <bamiller@texas.net> wrote in message
news:27mJOiWlLCcFzspzm2RFtC7zH3Oa@4ax.com...

> Whoops, my latest QST, in the mail today, shows that July 1, 2001,
> dues are increasing from $34 annually to $39. ($34 will be the senior
> rate.)

> That life membership looks better all the time...

Just decide before July 1, 2001. :-)

I split the difference myself and went for 3 years, though right after I
did, I saw this one: :-('cuz I paid more.

< ARRL Offers New Five-Year Membership Plan (Feb 9, 2001) -- With a
membership dues increase going into effect July 1, 2001, the ARRL is
offering a special five-year membership plan until then, so members can lock
in at the current, lower dues rates. Effective immediately, current or
prospective ARRL members in the US and US possessions can obtain a five-year
renewal or membership for $146 ($122 for those 65 or older). That's a saving
of $24 ($18 for those 65 or older) from the cost of year-to-year renewal at
current rates! Due to postal considerations, this offer cannot be extended
to those living in other countries. The special five-year membership offer
expires June 30, 2001, the last day the present dues schedule is in effect.
After that, annual dues will increase to $39 for individuals ($34 for those
65 and older). Another option is to apply for an ARRL Life Membership for
$850. Special discounts apply to senior and visually impaired applicants. A
complete rate schedule and application form is available on ARRLWeb.>

I would go on, but this is an antenna group, but I did want to offer the
options that would save hams money.

73,
Ed Hare, W1RFI

3227. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 00:08:07 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <q0pj6.12$mv4.462@newsfeed.slurp.net>
Source record: 170214

I went on an informal tour of the Voice of America transmitting site in Delano, CA. They have a RF switchting matrix so that they can route various quarter megawatt transmitters to various curtain arrays. They used pneumatically actuated switches. That way you dont have relay coils burning up from RF induced into the relay control wires. While you won't have that problem if you do it right at ham power levels, it may be a way to avoid having any control wires at all going inside the antenna element tubing, just some plastic hose. I don't know how to build the pneumatically controlled switch. It's just an idea that you might want to kick around.
stan.holmes@eskom.co.za wrote in message <3A8D2B2F.5F20240D@eskom.co.za>...
>Has anyone any comments on using relays instead of traps.
>Are there any problems with the controlling wires running in the antenna
>tubing?
>What type of relay can be used?
>Thanks
> Stan
>
>
>

3228. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 00:13:03 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96kh40abn10@lure.pipex.net>
Source record: 170200

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:969a3l$4lf$1@neptunium.btinternet.com...
> Garry, I've never read such a load of so-called technical jargon which
> should really be classified as rubbish.
>
> Why don't you just state outright you can paint your antenna any colour
you
> like, with any sort of paint you like, and nobody will ever notice the
> slightes difference.

Because Reg that isn't what I said.
I qualified my statements because you can not make a generality about it.
Most of the time you may be OK, but there is bound to be that occasion when
you are unlucky enough to use some paint with high losses.

Either read what I said Reg or take remedial reading classes, they can help.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3229. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 00:38:27 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A8DC803.74CF@wt.net>
Source record: 170201

Big Ben wrote:

> 2) What kind of wire is best to use?

Copper.
> 3) Do these have to be a perfect square? I live in a mobile home and would
> like to mount it above the roof which is 14x67 feet.

Not critical. A circle is best in general, but can be a square,
triangle, whatever to fit the lot.
> 4) Will the aluminum siding or rubber coated aluminum roof cause problems
> with the performance of the antenna?

It will have an effect. May not hurt the performance too bad, but may
effect tuning. This will effect a dipole also.

> 5) Will this perform any better than a standard long wire? I am in a mobile
> home park so I would have to use an inverted vee.

Dunno.. To tell you the truth, I don't see any real difference in
overall general 80m performance between the two on that band. I've
compared them on 75m. Either one will do the job. I prefer just a
dipole because it's less work for the same appx performance. I think the
turnstile is the best "general purpose" antenna for 75/80m myself. It
seems to outdo either one of the others. It's just a set of crossed
dipoles. One antenna I've never had the room/height to try is the
eggbeater. I'd like to try one of those on 80/40 meters just to see what
they do. I think the common idea of a horizontal loop being a super
duper cloudwarmer antenna on 80m is overstated.
I didn't see enough increase over a dipole to really measure in most
cases. "Both at the same appx 35-40 ft level". But when I compared a
dipole to a turnstile, I always saw an increase with the turnstile.

> 6) If this will work, how high above the roof will it need to be mounted?

If you are over metal, as high as you can get it. I'd try to get away
from the metal if at all possible, but if you can't , just go with what
you can do. You may have to tweak the tuning a bit, but it will still
work. I've seen cases of putting wire antennas over mobile homes where
the metal mobile home really threw the normal operation of a dipole for
a loop. Would have to do drastic measures to get it tuned, such as
offsetting the feedpoint a bit, etc. The home acts as a reflector of
sorts. MK
--
http://web.wt.net/~nm5k

3230. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 00:52:58 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3A8DCD51.3030605@aol.com>
Source record: 170204

Well, it sounds good....right up until I got to the price
tag... Sorry, I enjoy the tinkering. An antenna is one of
the pieces of ham gear that can be easily homebrewed.

73,
W4KAZ

G&R wrote:

> How about a mini-quad (10-15-20m) with a 7ft turning radius. Unfortunately,
> we can't match you material cost.
>
> Check out our site at www.degendesigns.com
>
> Or you can contact me at info@degendesigns.com
>
> 73
> Guenther
>
> "kazering" <kazeringue@aol.com> wrote in message
> news:3A8D6E4E.4030004@aol.com...
>
>> Yes, I'm tinkering with one now. I have a three bander (10,
>> 15, and 17 meters). It is about 14 feet in diameter. It is
>> giving me about 3 S-units(on a Yaesu FT-840) forward gain
>> over my 3 band dipole. Right now, it is only about 12 feet
>> high (on my "test" mast)
>>
>> So far, the biggest drawback seems to be the narrow
>> bandwidth. It works pretty good for $12 worth of electrical
>> conduit (the support structure) and another $15 worth of
>> wire. It is a good receive antenna (compared to dipole),
>> very quiet. Also, it has been a lot of fun to work with.
>>
>> I am sure a three element tribander is better, but I have a
>> lot of trees, not much room to turn a tribander. Also, I
>> don't want to spend money on a tower. I plan to mount the
>> completed model on a 30 foot guyed TV pole.
>>
>> Also, I don't know how much better the commercial hexbeam
>> might be. It seems to be constructed of good material. I
>> was curious, and got interested in the idea.
>>
>> If you have specific questions, I'll take a shot.....
>>

>>
>>
>> Lloyd Kubis wrote:
>>
>>
>>> Has any tried homebrewing a Hex-Beam type limited space beam ???
>>>
>>> Thanks
>>> Lloyd
>>

3231. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 00:53:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96kj5o$r65$1@neptunium.btinternet.com>
Source record: 170205

Richard wrote -
> A self-resonant coil is a coil without added capacitance in which most
> of the capacitance is of the "parasitic" variety. As such, the lossy
> coil is maximized, the low-loss capacitance is minimized, and the Q of
> the resonant circuit is relatively low.
==========

Rich, I'm afraid you are in danger of becoming an old wife.

The actual value of coil Q is, as you say, its reactance/resistance, X/R. Q depends only on frequency because X and R depend on frequency. Actual Q remains unchanged regardless of the capacitance across it, self C or otherwise. (The between-turns capacitances are negligible. Why ? Because they are all in series across the coil.)

So for a given frequency, actual Q remains at its normal high value even when the only capacitance in the circuit is the coil's self-capacitance.

But what the circuit designer is interested in is EFFECTIVE Q and this depends on what sort of circuit the coil is used in.

If the coil is used in a PARALLEL-TUNED circuit, with a capacitor in parallel as in an antenna trap, then Q' is the normal value of X/R. If the self capacitance and additional capacitance are in parallel with each other there is no reason to suppose circuit Q is any different from actual Q. For the same voltage across the coil its loss remains the same regardless of the extra shunt capacitance.

However, if the coil is used in a SERIES-TUNED circuit the situation may dramatically change. There is a circulating current around the coil and its self-capacitance. The current flowing in the coil is greater than that flowing through the series resonating capacitor. So coil loss is greater than that due just to the current flowing in the main series circuit. Effective circuit Q therefore is then less than actual coil Q.

Let Fself = Self-resonant frequency.

At a frequency F it is not difficult to prove that the effective Q' of a series tuned circuit is given very simply by -

Q' = Q * (1 - k)

where k = Square(F / Fself) and

Q is actual Q = X/R of the coil at the frequency F.

The effective series loss resistance, R', is given by -

R' = R / Square(1- k)

Where R is the actual coil loss resistance.

The effective series inductance L' of the coil is -

L' = L / (1 - k).

It will be seen that when the series capacitance is equal to the stray capacitance, effective circuit Q is half of the coil's actual Q and this occurs at a frequency of 0.707 of the self-resonant frequency.

At the coil's self resonant frequency, circuit Q is obviously zero because the series tuning capacitor reduces to zero pF and there is an open circuit. Also the effective series loss resistance becomes infinite.

When the circuit is series resonant at a frequency of 1/3rd of the self resonant frequency, effective Q is 89% of actual coil Q which is acceptable for nearly all applications.

A series tuned circuit of interest to the antenna newsgroup, where the self-capacitance of a coil can seriously affect performance, is an antenna loading coil. A loading coil is in-series resonance with the capacitance of the short length of antenna wire or rod or top hat beyond the coil. When attempting to increase radiation resistance, as the coil is raised nearer to the end of the antenna its inductance necessarily increases very rapidly. And so does its resistance even for the same Q. Simultaneously the coil's self-resonant frequency decreases. Effective Q falls like a brick. Loss resistance increases much faster than radiation esistance. The coil becomes hot. The optimum coil height on a very short antenna is usually less than 2/3rds of total height. Often on moderate length antennas any additional loss caused by not externally loading the antenna at all is hardly worth bothering about.

Program LOADCOIL examines the effect on radiating efficiency of sliding a loading coil along an antenna. Self-capacitance of the loading coil is taken into account.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3232. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 01:07:42 UTC
From: k9sqg@aol.com
Message-ID: <20010216200742.19518.00001177@ng-mp1.aol.com>
Source record: 170203

Can't figure out how much to delete from the anti-spam so...

Total length is 1005 divided by the frequency in megacycles.

Best wire I've found is insulated #13 stranded copperweld at 16 cents per foot.

Doesn't have to be perfect square. A circle would be best but performance will be good with unequal side length and unequal height for each section.

The aluminum objects might interfere but then again it might act as a reflector and actually help.

It will perform much better than a long wire. Receive noise will be down by about 6-8 db or so.

Mount it as high as practical. But it will work at only 15 ft off the ground.

73s,

Evan

3233. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 01:18:25 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8dd04d.156719832@news.accessunited.com>
Source record: 170206

On Fri, 16 Feb 2001 12:19:01 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Why would one need to get control voltages to an unused section?
>
> \ \ / /
>--------- +--------- +---------x---------+ ---------+ ---------

You don't need to. You can lower the antenna and remove the wires when
you change bands.

Or, you can use several expensive vacuum latching relays at each
disconnect point and some sort of polarity sensing to control relays
with the minimum number of wires.

>When I was in high school and didn't know how to feed a non-resonant
>length dipole with open-wire feedline, I put an insulator at each
>'+' point above. I had the dipole on pulleys so it was a two-minute
>task to add jumpers to change bands to a different resonant-length
>dipole. But I guess modern-day hams are too lazy and too spoiled
>for something that simple.

That's a good solution. He can lower the antenna and move jumpers
everytime he wants to change bands.

That'll get rid of them pesky traps without the complexity and expense
of relays.

73 Tom
>--
>http://www.mindspring.com/~w6rca
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3234. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 01:32:15 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8dd2f2.157397009@news.accessunited.com>
Source record: 170207

On Fri, 16 Feb 2001 20:42:32 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>However, like Tom I can't see a good way to get the control wires past
>the first relay, and onward to a second relay farther down the antenna.
>It has to involve RF chokes, which may have very similar losses to the
>inductors in traps.

There is no way to get them past the relays, unless you use chokes or
more relays to open relay lines!!

>For applications such as converting an inverted-L for 80m and 160m into
>a plain vertical for the higher HF bands, a relay at the top of the
>vertical may be a good solution.

It is. It works well for a two band change in a simple antenna.

>Tom: what do you think of using a vacuum relay to band-switch a top-
>loading coil between 80m and 160m? There's going to be a lot of volts up
>there...

Depends on the power and the antenna impedance. Even reasonably large
vacuum relays are marginal at kW power levels in a dipole at the HV
end. An inverted L makes voltage about twice as high, because it is
half of a dipole.

Derate the power by a factor of four when making the switch from a
dipole to a marconi, all other things equal.

You not only have to have a relay up there, it has to stand-off the
voltage in all kinds of weather.

No thanks! I'll use a trap or stub decoupling.

73 Tom

3235. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 01:34:53 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8dd485.157799966@news.accessunited.com>
Source record: 170208

On Fri, 16 Feb 2001 18:07:36 GMT, kazering <kazeringue@aol.com> wrote:

>Yes, I'm tinkering with one now. I have a three bander (10,
>15, and 17 meters). It is about 14 feet in diameter. It is
>giving me about 3 S-units(on a Yaesu FT-840) forward gain
>over my 3 band dipole. Right now, it is only about 12 feet
>high (on my "test" mast)

One S unit on my FT-1000D is one dB at S-1. It's 5 dB at S 7.

It's between 1/2 and 5 dB on my IC-751A's depending on the S meter
areqa you are working in.

How many dB is your S meter at the point where you made the gain test?

Certainly you don't have more than a 3 dB gain antenna there.

73 Tom

3236. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 04:13:11 UTC
From: G&R <"stop the spam"@limbo.hell>
Message-ID: <rTmj6.243158$f36.9750846@news20.bellglobal.com>
Source record: 170209

If you'd like to be kept updated sign up on the mailing list and as
information becomes available I'll forward it on to you.

73
Guenther

"kazering" <kazeringue@aol.com> wrote in message
news:3A8DCD51.3030605@aol.com...
> Well, it sounds good....right up until I got to the price
> tag... Sorry, I enjoy the tinkering. An antenna is one of
> the pieces of ham gear that can be easily homebrewed.
>
> 73,
> W4KAZ
>
> G&R wrote:
>
> > How about a mini-quad (10-15-20m) with a 7ft turning radius.
Unfortunately,
> > we can't match you material cost.
> >
> > Check out our site at www.degendesigns.com
> >
> > Or you can contact me at info@degendesigns.com
> >
> > 73
> > Guenther
> >
> > "kazering" <kazeringue@aol.com> wrote in message
> > news:3A8D6E4E.4030004@aol.com...
> >
> >> Yes, I'm tinkering with one now. I have a three bander (10,
> >> 15, and 17 meters). It is about 14 feet in diameter. It is
> >> giving me about 3 S-units(on a Yaesu FT-840) forward gain
> >> over my 3 band dipole. Right now, it is only about 12 feet
> >> high (on my "test" mast)
> >>
> >> So far, the biggest drawback seems to be the narrow
> >> bandwidth. It works pretty good for $12 worth of electrical
> >> conduit (the support structure) and another $15 worth of
> >> wire. It is a good receive antenna (compared to dipole),
> >> very quiet. Also, it has been a lot of fun to work with.
> >>
> >> I am sure a three element tribander is better, but I have a
> >> lot of trees, not much room to turn a tribander. Also, I

> >> don't want to spend money on a tower. I plan to mount the
> >> completed model on a 30 foot guyed TV pole.
> >>
> >> Also, I don't know how much better the commercial hexbeam
> >> might be. It seems to be constructed of good material. I
> >> was curious, and got interested in the idea.
> >>
> >> If you have specific questions, I'll take a shot.....
> >>
> >>
> >>
> >> Lloyd Kubis wrote:
> >>
> >>
> >>> Has any tried homebrewing a Hex-Beam type limited space beam ???
> >>>
> >>> Thanks
> >>> Lloyd
> >>
>

3237. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 04:25:25 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3A8DFD9A.738581D@bellatlantic.net>
Source record: 170210

No experience with this on 40 meters - but I had it on 2 meters.
Cured it with a big feed thru cap installed in the trunk in the line
to the fuel pump and a .22 mfd across the 12 supply at the radio.
(Actually the .22 mfd cured the noise from the heater blower, but
may have had some effect on the fuel pump noise.)

WEHowell wrote:

> I have a '90 Ford Ranger pickup that I mant to operate with a mobile rig on
> 40/20 meters (ICOM 706 MKII with auto tuner), however, the RFI is too great.
> The chief offender is the fuel pump which is buried in the plastic fuel tank.
> Has anyone had any experience with this. To bypass the fuel pump power line to
> ground (anywhere close to the exit point) will require that I drop the fuel
> tank. I am not ready to do that unless I have some indication that it would
> improve the situation.
>
> All information I have is that Ford does not have a TSB on the subject.
>
> I have tried nominal fixes such as rerouting the antenna cable; this has some
> effect but not significant. The antenna is mounted on the driver's side rear.
>
> With the feed line diconnected at the antenna the noise is slightly reduced;
> disconnected at the output of the antenna tuner the noise is completely gone -
> so the noise is getting in through the feed and antenna.
>
> Thanks for any suggestions
> WB4UYA
> wehowell@aol.com

3238. Re: DK3 MOBILE HF ANTENNA QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 04:55:52 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <96l08olea3@bashir.peak.org>
Source record: 170211

: The reason I ask is that my local supplier have the plumbing black sked
: 40 an I found the plastic conduit grey sked 40 for electrical.The white
: would have to be ordered.
:
: Now I was told that for the black PVC it has pigments of metal to form
: the black color and could cause a change in the inductance of the coil.
: Is this true???

If I recall correctly, the black color is due to that exotic chemical
carbon.

Bill Nelson

3239. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 06:00:06 UTC
From: jim@snoopy.cmagic.com
Message-ID: <3a8e1197.4783562@news.epix.net>
Source record: 170213

David Pearce <david.e.pearce@lmco.com> wrote:

>K4IA wrote:
I got one too. Looks just like the 259B. However, the advertisement
for the 259B says that it will display impedance on the LCD display
as either series resistance + reactance, ie R + jX, or R - jX, or as
magnitude plus phase angle. The 584B appears to show only the
impedance magnitude. It does not indicate individual resistance and
reactance values.

>>
>> I got mine yesterday and it looks just like the MFJ model. About $100 less
>> makes it a real bargain.
>> Radio K4IA
>> Buck
>> Fredericksburg, Virginia USA

3240. Re: continuously loaded vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 06:00:57 UTC
From: Paul <aa6pz@arrl.net>
Message-ID: <3A8E1399.1148FE2A@arrl.net>
Source record: 170212

A practical suggestion: It is much easier to start with a bit of extra wire
and remove
some turns for tuning than to be short and have to add wire.

Good luck, and report your results to the group.

Paul AA6PZ

David Snyder Hale wrote:

> I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of
> wire and wrap a linear coil around a non conducting support which is at
> least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot
> fishing pole with 122 feet of wire. Also, add a corona disk to the top.
>
> Has anyone tried this that can comment on what you might've had to have
> done to make it work well? Eg. what did you tune it with, Nr. of radials,
> performance, change in design, etc.?
>
> Tnx,
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3241. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 07:40:04 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <hVpj6.2732$OI.939370@news.uswest.net>
Source record: 170215

Hi Tom,

Certainly you have discovered by now that 1 dB of gain in line-of-sight field strength can - under the right conditions - translate into 1 S-unit for a propagated signal. Seeing a 3 S-unit difference when comparing to a dipole in on-air tests certainly does not seem all that unreasonable to me... assuming, of course, he was referring to on-air comparisons of propagated signals and both antennas were of similar heights and in equal ground conditions.

In any event, since the Hex-beam is a take-off of a critically coupled Moxon design, if properly designed and constructed, in my opinion, it should be capable if at least 4 dBd directional gain.

Since an approximate 3 dB reference is easily obtained - by reducing power by 50% - it would be interesting if kazering could perform such (line-of-sight) tests and let us know the results. Of course, for the results to be meaningful, care should be taken to insure that there is no interaction between the antennas under test.

73, Chuck

Tom W8JI <2w8ji@contesting.com> wrote in message
news:3a8dd485.157799966@news.accessunited.com...
> On Fri, 16 Feb 2001 18:07:36 GMT, kazering <kazeringue@aol.com> wrote:
>
> >Yes, I'm tinkering with one now. I have a three bander (10,
> >15, and 17 meters). It is about 14 feet in diameter. It is
> >giving me about 3 S-units(on a Yaesu FT-840) forward gain
> >over my 3 band dipole. Right now, it is only about 12 feet
> >high (on my "test" mast)
>
> One S unit on my FT-1000D is one dB at S-1. It's 5 dB at S 7.
>
> It's between 1/2 and 5 dB on my IC-751A's depending on the S meter
> areqa you are working in.
>
> How many dB is your S meter at the point where you made the gain test?
>
> Certainly you don't have more than a 3 dB gain antenna there.
>
> 73 Tom

3242. Re: continuously loaded vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 08:12:06 UTC
From: "William F. Hagen" <whagen@inreach.com>
Message-ID: <3A8E3256.B760614A@inreach.com>
Source record: 170216

I used a 10 foot piece of schedule 40 pvc, wrapped a length of wire on
it determined from a software calculation for 40 meters, added a
quarterwave cb whip at the top from radioshack, and tuned it with an
automatic tuner. It is almost as good as a dipole.

Paul wrote:
>
> A practical suggestion: It is much easier to start with a bit of extra wire
> and remove
> some turns for tuning than to be short and have to add wire.
>
> Good luck, and report your results to the group.
>
> Paul AA6PZ
>
> David Snyder Hale wrote:
>
> > I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of
> > wire and wrap a linear coil around a non conducting support which is at
> > least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot
> > fishing pole with 122 feet of wire. Also, add a corona disk to the top.
> >
> > Has anyone tried this that can comment on what you might've had to have
> > done to make it work well? Eg. what did you tune it with, Nr. of radials,
> > performance, change in design, etc.?
> >
> > Tnx,
> >
> > --
> > Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3243. Wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 08:29:59 UTC
From: carl domanico <carl.domanico@verizon.net>
Message-ID: <3A8E367A.98560502@verizon.net>
Source record: 170217

Wanted:

Collins KWM-2A and Matching AC Supply
Drake TR-4C and AC-4 Power Supply
Heathkit SB-102 and Matching AC Supply
Drake L4-B Linear Amplifer and Matching AC Supply
Johnson Viking Valiant 2 Transmitter

All Equipment Must be in Good To Mint Conditionï¿½Manuals are a plus..

Carl
N2MFW

3244. Re: 18AVT vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 11:43:06 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a8e63cf_2@news.cybertours.com>
Source record: 170218

"Pete" <pete@etep.com> wrote in message
news:B0fj6.132855$P5.2846081@news1.rdc1.il.home.com...
> Where can I purchase one? I can't find any in the catalogs I've looked in.
I
> had one about 22 years ago in another state and worked the world with it.
> Thanks for your help.
Try Hy-Gains Web Page at
http://www.hy-gain.com/hy-gain/prods.htm
They List an 18V which I beleive is the same as the 18avt use to be.

73 Dave kc1di

3245. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 12:53:16 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8e712a.9088056@news.accessunited.com>
Source record: 170119

On Sat, 17 Feb 2001 00:40:04 -0700, "Anonymous" <alias@microsoft.com>
wrote:

>Hi Tom,
>
>Certainly you have discovered by now that 1 dB of gain in line-of-sight field
>strength can - under the right conditions - translate into 1 S-unit for a
>propagated signal. Seeing a 3 S-unit difference when comparing to a dipole in

Dear Chuck,

Nonsense.

1 dB is 1 dB, either through the ionosphere or a big resistor. The
ionosphere, at least at the ERP levels we can muster, is perfectly
linear.

Maybe you read and believed that "junk" in a recent QST article where
some guy (trying to sell his antennas) claimed or implied the
ionosphere was not linear.

The 3 S units can only come from:

1.) Comparing a null of the dipole to a main lobe of the Hex beam

2.) A grossly inefficient dipole

3.) Screwed-up S meters

4.) Drunks or people with poor vision giving signal reports

The Hex beam, at tops, would be about 3-4 dB above a dipole.

>Since an approximate 3 dB reference is easily obtained - by reducing power by
>50% - it would be interesting if kazering could perform such (line-of-sight)
>tests and let us know the results. Of course, for the results to be meaningful,
>care should be taken to insure that there is no interaction between the antennas
>under test.

Youseem to think the ionosphere or propagation is non-linear Chuck.
That is absolutely not true.

It is the meters and the PEOPLE in the tests that are the sources of
"non-linear" behavior. 3 dB is 3 dB, even through the ionophere.

73 Tom

3246. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 12:57:14 UTC
From: dcollin@connix.com
Message-ID: <3a8e75f1.414049@news.mybizz.net>
Source record: 170120

On Sat, 17 Feb 2001 06:00:06 GMT, jim@snoopy.cmagic.com (Jim) wrote:

>David Pearce <david.e.pearce@lmco.com> wrote:
>
>>K4IA wrote:
>I got one too. Looks just like the 259B. However, the advertisement
>for the 259B says that it will display impedance on the LCD display
>as either series resistance + reactance, ie R + jX, or R - jX, or as
>magnitude plus phase angle. The 584B appears to show only the
>impedance magnitude. It does not indicate individual resistance and
>reactance values.

Yep. However, the manual does include a method to derive pure
reactance. My guess is the only real difference in in the firmware.
All in all, for my use, the 584B was a bargain.

3247. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 12:59:06 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8e744d.9890866@news.accessunited.com>
Source record: 170121

On Sat, 17 Feb 2001 00:53:24 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

Reg,

>Rich, I'm afraid you are in danger of becoming an old wife.
>
>The actual value of coil Q is, as you say, its
>reactance/resistance, X/R. Q depends only on frequency because X
>and R depend on frequency. Actual Q remains unchanged regardless of
>the capacitance across it, self C or otherwise. (The
>between-turns capacitances are negligible. Why ? Because they are
>all in series across the coil.)
>

I've noticed your programs greatly overestimate Q in some cases Reg.
Many software inductor programs do so.

That's probably because the software writers think the turn-to-turn
capacitance is negligable, and that shunting capacitance can not lower
Q at a given frequency with all else constant.

73 Tom

3248. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 12:59:43 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3A8E77A7.7000805@aol.com>
Source record: 170124

Gentlemen, I agree.

First, I did not conduct a scientific study. I put the hex up on my trusty ten foot pole and spent several weeks playing on the radio. The dipole was at a height of only about 25 feet at the time.

I agree that the linearity of s-meters is not to be relied upon for station to station comparisons. Alas, I have yet to build the ARRL attenuator project to have a benchmark for scaling my FT-840 meter into db. So I can not tell you how far off the meter is using a readily available benchmark. I am just guessing, but I would bet the $4000 1000-MP is more linear than my $600 FT-840! (And that didn't sound too linear!)

As Tom noted, I found a lot of variability based on how the strength of the signal I was measuring. My "about" 3 s-unit claim is what I noted on very weak signals. When a signal was about S-1 to S-3 on the dipole, I got between S-4 to S-7 on the hex. Also, signal strength reports from my contacts showed differences consistent with this. Again, not accurate scientific measures, but anecdotal. It did not occur to me at the time to modify the power for a 3db test. It will likely take several months for me to rack up enough information to know.

Since the dipole could not be easily moved, I had two directions to work with. Also, my QTH is on uneven terrain. (We are NOT in Kansas here, Toto!) Also, the gain is better on 17 meters than 15 or 10. I am still working on that, but I now suspect there may be interaction between the elements. Still quieter than the dipole, and more effective a radiator. I took the dipole down to use the tree supports(my longest run) for my 80-40-20 inverted V.

I would not be surprised to find that the real gain of my hex is only 3dbd. For me the real story was the rejection from the sides. The dipole, on my terrain, seems to be a real skyburner. I might as well have a vertical. I hear everybody. The hex rejection of signals to the rear seems good too. The differences there are more dramatic.

Chuck, I started out with an intent to build a Moxon. I actually built one for 2-meters.(untested) To build the hexes, I started with a set of Moxon dimensions, then spent entirely TOO MUCH time pruning and testing. I am now

motivated to buy EZNEC.......

Anonymous wrote:

> Hi Tom,
>
> Certainly you have discovered by now that 1 dB of gain in line-of-sight field
> strength can - under the right conditions - translate into 1 S-unit for a
> propagated signal. Seeing a 3 S-unit difference when comparing to a dipole in
> on-air tests certainly does not seem all that unreasonable to me... assuming, of
> course, he was referring to on-air comparisons of propagated signals and both
> antennas were of similar heights and in equal ground conditions.
>
> In any event, since the Hex-beam is a take-off of a critically coupled Moxon
> design, if properly designed and constructed, in my opinion, it should be
> capable if at least 4 dBd directional gain.
>
> Since an approximate 3 dB reference is easily obtained - by reducing power by
> 50% - it would be interesting if kazering could perform such (line-of-sight)
> tests and let us know the results. Of course, for the results to be meaningful,
> care should be taken to insure that there is no interaction between the antennas
> under test.
>
> 73, Chuck
>
> Tom W8JI <2w8ji@contesting.com> wrote in message
> news:3a8dd485.157799966@news.accessunited.com...
>
>> On Fri, 16 Feb 2001 18:07:36 GMT, kazering <kazeringue@aol.com> wrote:
>>
>>
>>> Yes, I'm tinkering with one now. I have a three bander (10,
>>> 15, and 17 meters). It is about 14 feet in diameter. It is
>>> giving me about 3 S-units(on a Yaesu FT-840) forward gain
>>> over my 3 band dipole. Right now, it is only about 12 feet
>>> high (on my "test" mast)
>>
>> One S unit on my FT-1000D is one dB at S-1. It's 5 dB at S 7.
>>
>> It's between 1/2 and 5 dB on my IC-751A's depending on the S meter
>> areqa you are working in.
>>
>> How many dB is your S meter at the point where you made the gain test?
>>
>> Certainly you don't have more than a 3 dB gain antenna there.
>>
>> 73 Tom

3249. Re: continuously loaded vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 13:03:24 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8e7586.10204106@news.accessunited.com>
Source record: 170122

On Fri, 16 Feb 2001 22:00:57 -0800, Paul <aa6pz@arrl.net> wrote:

>David Snyder Hale wrote:
>
>> I found this in the ARRL Antenna Handbook. It says to take 1 wavelength of
>> wire and wrap a linear coil around a non conducting support which is at
>> least 0.05 wavelengths long. So, for 40m this means wrapping a 7 foot
>> fishing pole with 122 feet of wire. Also, add a corona disk to the top.
>>
>> Has anyone tried this that can comment on what you might've had to have
>> done to make it work well? Eg. what did you tune it with, Nr. of radials,
>> performance, change in design, etc.?

Remember the efficiency of such an antenna is always lower than that
of a similar-length antenna with properly placed conventional
lumped-loading, assuming the inductor is constructed in a somewhat
reasonable manner.

Linear loading saves you the trouble of adding an inductor and makes
the antenna "slim", but the tradeoff is reduced efficiency.

73 Tom

3250. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 13:13:08 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96ltbo$8st$1@slb7.atl.mindspring.net>
Source record: 170123

Richard:

Here in Cary, NC I've found that Carolina Power and Light seems to make a
pretty good zero ohm source.

Want some other examples? I've got lots...

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:845-3A8D55A1-22@storefull-115.iap.bryant.webtv.net...
> Peter, K1PO wrote:
> "Your comments (The load which will accept maximum power from a zero-ohm
> source is as close to zero ohms as you can get without actually arriving
> at zero ohms.) simply don`t make "walking around" sense over here in
> source land..."
>
> Try the numbers.
>
> My near short-circuit load makes a lot more sense than your zero-ohm
> source. I can easily produce a very low load impedance. It is difficult
> to produce a zero-impedance high-power source.
>
> Best regards, Richard Harrison, KB5WZI
>

3251. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 13:33:44 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96lukp$r6l$1@slb2.atl.mindspring.net>
Source record: 170125

Tom:

Hey, as you probably have already surmised...

I don't belong to the church of Dissipationless Resistance, and the pastor of my own church [The church of "All Resistance is Futile".] forbids me to attend any of their rituals.

As an ordained priestess, she told me that I'll go to Hell if I attend those rituals!

I guess we'll just have to agree to disagree and let everyone go to Hell thier own way. Thank God for the US Constitution!

I hope Johann Frederich Ohm is not turning in his grave. "Dissipationless Resistance" indeed. RIP dear Johann.

BTW... speaking of adjectives applied to the noun "resistance", I'm curious.

Even though I am not allowed to attend your services, I have often wondered, in your church, what name do y'all have for the value of the voltage across a flashlight battery divided by the current into an HF power amp at sunrise?

FlashAmp Resistance perhaps?

Is it dissipative or not? What?

Best,

-Peter K1PO

P.S. Stealing a catchy phrase from Mark Twain K5MT, I'd like to state that, "the above was writ Ironic". Was Mark a 5-lander or a 4-lander?

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3a8d6546.129316199@news.accessunited.com...
> On Fri, 16 Feb 2001 10:38:59 -0500, "Peter O. Brackett"
> <ab4bc@ix.netcom.com> wrote:
>
> >Richard:
> >
> >Wow!!! What an idea.
> >
> >Who wants to draw the maximum power from a zero ohm voltage source?
Would
> >sort of be like blasting Hoover Dam apart to fill your bird bath! What?
>
> Some people have their minds made up, and closed.

>
> You obviously don't understand the concept of a non-dissipative source
> resistance (impedance) Peter.
>
> Some people do.
>
> Those that do, have no trouble understanding the concept of power
> being limited without a dissipative resistance being necessary. It's
> been explained so many times in so many ways, any further explaination
> (especially in the face of 150 line posts) would likely do no good.
>
> With that in mind, threads like this are useless.
>
> 73 Tom

3252. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 13:53:21 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <lnvj6.3267$0u5.632442@news1.rdc1.mi.home.com>
Source record: 170126

A friend of mine in Aransas Pass, Texas runied a R-7 vertical by painting it
prevent corosion.
The paint was somewhat RF conductive.

William Lee

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96kh40abn10@lure.pipex.net...
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:969a3l$4lf$1@neptunium.btinternet.com...
> > Garry, I've never read such a load of so-called technical jargon which
> > should really be classified as rubbish.
> >
> > Why don't you just state outright you can paint your antenna any colour
> you
> > like, with any sort of paint you like, and nobody will ever notice the
> > slightes difference.
>
> Because Reg that isn't what I said.
> I qualified my statements because you can not make a generality about it.
> Most of the time you may be OK, but there is bound to be that occasion
when
> you are unlucky enough to use some paint with high losses.
>
> Either read what I said Reg or take remedial reading classes, they can
help.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

3253. Re: Diamond D-130J discone performance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 14:00:09 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <Jtvj6.3299$0u5.635030@news1.rdc1.mi.home.com>
Source record: 170127

The SWR of my D-130 is a flat 1:1 accross the 2 meter band.
Everything below that has SWR except for the top whip and coil frequency.
You can use other resonators like Hustler or a full size hamstick for other
bands.

Try removing the 6m coil and whip and see if the 2m SWR improves.

William Lee

"Michael" <hkc2001@pacbell.net> wrote in message
news:nUTi6.6$te3.9001@news.pacbell.net...
> I just got the Diamond D-130J discone antenna. When I connect it to my
> MFJ-259B, I was surprised to find that in 20-70M range, it has a very high
> SWR(mostly around or above10). Even on 2m, it's above 2. The lowest SWR is
> around 114. Does that kind explain why I am not getting good reception out
> of it? It's rated to transmitt to on 6m, but how come it has such a high
> SWR(above 6) around 50M? Any suggestions? Is there any improvement I might
> try? thx.
>
>

3254. Re: most powerful am antenna I can build?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 14:04:38 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <Wxvj6.3319$0u5.637430@news1.rdc1.mi.home.com>
Source record: 170128

That would be a "ROMBIC" antenna.
But I dont think you will get one to fit into you attic.
You might be able to use a large multi loop antenna but it would be
directional.
Most likley antenna for your attic would be a dipole type.

William Lee

"tom" <tom@idirect.com> wrote in message news:3A8C971E.74E4@idirect.com...
> Trying to pull in am reception from as far away as possible. What is
> the most powerful am antenna I can build? I have a 3rd floor attic,
> with lots of space. Any suggestions? Anybody been able to pull in am
> reception from FAR away?

3255. Earth Mat question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 15:29:34 UTC
From: Ben Owen <owenb@mailandnews.com>
Message-ID: <p56t8tc22p5dqnn4hei1hk0pq3q0gettgb@4ax.com>
Source record: 170129

Hi

I have a question regarding a earth mat.
I think I know how to test a single earth spike, a good resistivity
are under 10 Ohm, if you take the measurements from 10 and 20m from
the spike.
But how do you test a complete earth mat say 70 squere meters used by
a HF antenna system?

Any help ??

Regards
B Owen

3256. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 16:15:44 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8EA3B0.F9898EBD@IEEE.org>
Source record: 170130

"Peter O. Brackett" wrote:
> I hope Johann Frederich Ohm is not turning in his grave. "Dissipationless
> Resistance" indeed. RIP dear Johann.

Peter, the Z0 of a transmission line has a dissipationless resistive component. The IEEE Dictionary says that resistance is "the real part of impedance". Dissipation is not required in that particular definition. The IEEE Dictionary also says dissipation is "the loss of electric energy as *HEAT*". According to the IEEE, a resonant antenna is nearly a dissipationless resistance. The 50+j0 ohm point in a transmission line is at a nearly dissipationless resistance point.
--
http://www.mindspring.com/~w6rca

3257. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 16:25:16 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8EA5EC.DB4B0E8E@IEEE.org>
Source record: 170131

Tom W8JI wrote:
>
> "Anonymous" <alias@microsoft.com>
> >Certainly you have discovered by now that 1 dB of gain in line-of-sight field
> >strength can - under the right conditions - translate into 1 S-unit for a
> >propagated signal.
>
> 1 dB is 1 dB, either through the ionosphere or a big resistor. The
> ionosphere, at least at the ERP levels we can muster, is perfectly
> linear.

Is it possible to get a 1dB gain in the ground wave while getting a
3+dB gain in the skywave?
--
http://www.mindspring.com/~w6rca

3258. Crystals for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 17:08:47 UTC
From: kb2sin <kb2sin@stny.rr.com>
Message-ID: <zeyj6.88319$v.5943388@typhoon.nyroc.rr.com>
Source record: 170132

I have the following Regency Scanner Crystals for sale for $3.34 each
including Shipping
to the U.S.

33.740 Mhz
37.200 Mhz
37.300 Mhz
39.100 Mhz
39.260 Mhz
39.340 Mhz
39.380 Mhz
39.960 Mhz
119.500 Mhz
122.200 Mhz
123.000 Mhz
123.100 Mhz
123.500 Mhz
125.000 Mhz
126.100 Mhz
126.600 Mhz
154.415 Mhz
155.610 Mhz
'155.700 Mhz

Please e-mail me at kb2sin@stny.rr.com if your interested.
Thank You
de Kb2sin

3259. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 17:57:39 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <UWyj6.500$nZ.221267@news.uswest.net>
Source record: 170133

Hi Tom,

Comments to follow...

Tom W8JI <2w8ji@contesting.com> wrote in message
news:3a8e712a.9088056@news.accessunited.com...
> On Sat, 17 Feb 2001 00:40:04 -0700, "Anonymous" <alias@microsoft.com>
> wrote:
>
> >Hi Tom,
> >
> >Certainly you have discovered by now that 1 dB of gain in line-of-sight field
> >strength can - under the right conditions - translate into 1 S-unit for a
> >propagated signal. Seeing a 3 S-unit difference when comparing to a dipole in
>
> Dear Chuck,
>
> Nonsense.
>
> 1 dB is 1 dB, either through the ionosphere or a big resistor. The
> ionosphere, at least at the ERP levels we can muster, is perfectly
> linear.
>
> Maybe you read and believed that "junk" in a recent QST article where
> some guy (trying to sell his antennas) claimed or implied the
> ionosphere was not linear.

Wow, I must have overlooked that one... What issue?

>
<snip>
>
> The Hex beam, at tops, would be about 3-4 dB above a dipole.

I agree!

>
> >Since an approximate 3 dB reference is easily obtained - by reducing power by
> >50% - it would be interesting if kazering could perform such (line-of-sight)
> >tests and let us know the results. Of course, for the results to be
meaningful,
> >care should be taken to insure that there is no interaction between the
antennas
> >under test.
>
> Youseem to think the ionosphere or propagation is non-linear Chuck.

> That is absolutely not true.

In my mind, ionospheric linearity is not the issue here - rather, signal scatter / path attenuation is. My experience suggests H-plane beamwidth is a more significant factor on the success of the propagated signal. Apparently, the more concentrated the lobe is in the H-plane, the less will be the scatter / attenuation that occurs. I would suppose the H-plane beamwidth of the Hex-beam - or beams in general - is signigantly narrower than that of a dipole.

73, Chuck
>
> It is the meters and the PEOPLE in the tests that are the sources of
> "non-linear" behavior. 3 dB is 3 dB, even through the ionophere.
>
> 73 Tom

3260. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 18:25:36 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <vlzj6.557$nZ.245512@news.uswest.net>
Source record: 170134

kazering <kazeringue@aol.com> wrote in message news:3A8E77A7.7000805@aol.com...
<snip>
> Chuck, I started out with an intent to build a Moxon. I
> actually built one for 2-meters.(untested) To build the
> hexes, I started with a set of Moxon dimensions, then spent
> entirely TOO MUCH time pruning and testing. I am now
> motivated to buy EZNEC.......

Hi kazering,

I am quite impressed with Moxon's work...

While pruning and testing is certainly educational and perhaps entertaining, it can be quite labor intensive and time consuming! Modern tools such as modeling software and hand-held analyzers are a huge improvement over the stuff we had to work with 40 years ago... hi. I'm sure you will find EZNEC to be of much help.

73, Chuck

3261. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 18:53:01 UTC
From: richardharrison@webtv.net
Message-ID: <24513-3A8EC88D-40@storefull-118.iap.bryant.webtv.net>
Source record: 170135

Peter, K1PO wrote:
"---I`ve found that Carolina Power and Light seems to make a pretty good zero ohm source."

Carolina Power and Light works to appear as if their source has a very low resistance. To do so, they perform voltage control at a local level. Tap changes are used at substations to raise and lower voltages supplied to customers to compensate voltage variations resulting from loss in generation and distribution apparatus.

Overload your circuit severely but just instantaneously. You`ll see the lights dim for that instant.

Best regards, Richard Harrison, KB5WZI

3262. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 19:41:30 UTC
From: richardharrison@webtv.net
Message-ID: <12545-3A8ED3EA-24@storefull-112.iap.bryant.webtv.net>
Source record: 170139

Peter, K1PO wrote:
"I don`t belong to the Church of Dissipationless Resistance."

Dissipationless resistance is a coined phrase, not an article of faith.

The most simple example may be a silicon diode in series with a 100 watt, 120 volt a-c lamp.

A perfect diode allows current only on half of the a-c alternations.

A real diode has almost no reverse current. Its forward voltage drop is a fraction of a volt. So, its loss is less than a watt. Compare this with an ordinary resistor which would dim the lamp by the same amount. A practical resistor would get plenty hot dimming a 100 watt lamp by the same amount that a cool diode would do.

The apparent brilliance is identical whether produced by a series resistor or by a series diode. It is fair to characterize what is happening in the diode as a near dissipationless resistance when compared with what is happening in a resistor that gets plenty hot.

Best regards, Richard Harrison, KB5WZI

3263. Homebrew 1/2 wave multiband vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 19:41:46 UTC
From: CA <sm6pxj@hotmail.com>
Message-ID: <otAj6.2570$hi2.6969@nntpserver.swip.net>
Source record: 170137

Is there any description of a do-it-yourself 1/2 wave (no radials)
multiband vertical? Preferably not with ordinary traps.
/sm6pxj

3264. Smarttuner and wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 19:42:48 UTC
From: Egon Zürrer <egon.zuerrer@balcab.ch>
Message-ID: <3A8ED438.9AA8A77A@balcab.ch>
Source record: 170136

Hi,
who could give me details or tell me where to find information or plans
to build a fibre glass helical wound vertical antenna, 10 to 80 (160) m,
used in combination with a Smarttuner.
Any input will be greatly appreciated. 73
Egon (HB9EBB)

3265. Qui utilise l'antenne Sommer T-25 ou T-25S ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 20:07:04 UTC
From: Francis Pinson <F6BLP@wanadoo.fr>
Message-ID: <96mlu4$g66$1@wanadoo.fr>
Source record: 170138

Bonsoir tous

Je recherche des oms utilisant l'antenne verticale d cam trique multibande
de
marque Sommer T-25 ou T-25S.

Ayant utilis la R7000 Cushcraf et la GAP Eagle, je recherche une antenne verticale sans radians qui pourrait me donner d'autres satisfactions que les antennes pr c dentes....

Si vous avez utilis la T-25 je vous remercie de bien vouloir me donner vos impressions F6BLP@wanadoo.fr

```
Cordiales 73

Francis **F6BLP**
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3266. Re: SW antenna basics for dummies please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 20:53:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <96mobk$4lu$0@208.206.142.66>
Source record: 170140
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Exactly. I'm sure the Federal Government didn't place the T2FD's they used in service without such an evaluation and operational testing. I don't think anyone believes they're anything they really aren't. Of course there are better choices for most amateur uses. Thanks.
Dick

Roy Lewallen wrote:
>
> Once again we have an illustration of trying to reduce a great deal of
> widely varying information about pattern, efficiency, and communications
> effectiveness into the binary pigeonholes "good" and "bad". The result
> is predictable, and there will never be a consensus. Why can't people
> realize that what's best for one particular situation or under one set
> of circumstances isn't good for another? That it takes more information
> than "good" or "bad" to determine whether a particular antenna is
> suitable for a particular application?
>
> Sure, I could use a T2FD for an 80 meter QRP station. I could even talk
> to a few people. But I'd put out a much stronger signal and be able to
> talk to a lot more people with a half wavelength dipole, or even a
> center loaded shortened one. If I had to carry an antenna on my back and
> set it up within a few minutes nearly anywhere, had adequate power, no
> tuner or a limited range one, and had to communicate with other
> relatively high powered stations on just about any frequency in the HF
> range -- or if I had a frequency-hopping radio that covered several MHz,
> the T2FD would be a much better choice than an 80 meter dipole, or just
> about any other antenna. So tell me, is the T2FD "good" or "bad"? How
> about the 80 meter dipole?
>
> Roy Lewallen, W7EL
>
> Dick Carroll wrote:
> >
> > Cecil wrote:
> > >
> > > Dick Carroll wrote:
> > > >
> > > > Cecil wrote:
> > > > >
> > > > > Walt Novinger wrote:
> > > > > > My XYL and I built a T2FD a couple of years ago, ...
> > > > > > The antenna is extremely quite, ...
> > > > > >

> > > > > Both on receive and transmit. :-)
> > > >
> > > > I'll bet you've never used one. If you depend entirely on an engineering
> > > > analysis to assess their usefulness you will never appreciate what they
> > > > will do. They perform much better-both transmitting and receiving-than
> > > > you think.
> > >
> > > I think they perform exactly according to the laws of physics. Are you
> > > saying they are so good they violate the laws of physics?
> >
> > I'm saying that you slam them with no experience whatever from which
> > to derive a true functional evaluation. Typical of one who depends on
> > nothing but the "numbers" in the face of a huge body of evidence that
> > they do indeed perform quite adequately in practice. Government
> > facilities worldwide have used them with very effective results.
> >
> > Dick

3267. Re: most powerful am antenna I can build?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 20:53:54 UTC
From: richardharrison@webtv.net
Message-ID: <9601-3A8EE4E2-78@storefull-111.iap.bryant.webtv.net>
Source record: 170143

Tom wrote:
"What is the most powerful AM antenna I can build?"

Tom also said he had a 3rd floor attic with lots of space. Probably not enough space for a directional antenna other than a loop in the medium-wave band.

Housewiring in an attic may carry interference to be avoided. It is preferable to have an antenna sited away from interference and have the signal wired to the receiver with balanced or shielded cable.

If the antenna can`t be placed in the clear, a loop has the possibility of nulling out some of the noise and interference.

Signal strength is usually adequate in good receivers. Preamplifiers amplify noise along with the signal and usually don`t help. Preselection can help when strong local stations may overload a receiver tuned to a distant station near the frequency of a local.

Armstrong discovered regeneration was an effective way to sharpen bandwidth and gain of a receiver nearly 100 years ago. Controlled regeneration is still used in active antennas and preamplifiers.

The easiest thing to try after a random wire is a large external tuned loop antenna.

Best regards, Richard Harrison, KB5WZI

3268. Re: 23cm gain ant ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 20:59:12 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <96mon0$6v2$0@208.206.142.66>
Source record: 170141

Richard Harrison wrote:
>
> Paul wrote:
> "I`m happy it`s working. it`s very sharp."
>
> Thanks for the report. A rhombic is simple, high-gain, and
> underappreciated.

I doubt anyone who ever used one underappreciates them. Too bad the HF version takes up so much real estate. The one at Fort Monmouth was awesome.

Dick

3269. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:12:48 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <96mpgg$b65$0@208.206.142.66>
Source record: 170142

Roy Lewallen wrote:
>
> Richard Harrison wrote:
>
> > . . .
>
> > The sheriff in my county has an underground hardened emergency
> > management center which is perpetually manned and well equipped for
> > communications with units anywhere in the county and it has sturdy links
> > with the rest of the world. They are equipped with a big capable
> > computer system in the bunker.The sheriff also has a large
> > communications van ready for everything they could think of and always
> > ready to roll. If needed in a disaster, I`m sure the sheriff would let
> > it leave the county to help. Next time he might be the one asking for
> > help.
> >
> > The government can be your friend when you have a disaster.
> >
> > Best regards, Richard Harrison, KB5WZI
>
> I remember many years ago going on a tour of a multi-state central
> emergency control center at the Denver Federal Center west of Denver. It
> also was underground. They'd stockpiled food and medical supplies, with
> an emphasis on supplies to treat radiation casualties. There were seats
> for the directors of the several states to sit and direct distaster
> operations. When I asked how they were supposed to get there from their
> respective states, the answer was that they were to come via commercial
> transportation (really!). For communications, they had a multi-kW
> transmitter that could autotune to any frequency in a few seconds. It
> was connected to a log periodic antenna on a tower outside. This was
> their only antenna, and it could have been easily dropped by a
> microburst, good windstorm, saboteur, or of course any kind of strong
> explosive blast. Floods and downpours are common there. If the place
> didn't leak, there could be periods when no one (including the alleged
> incoming state directors) could go in or out without letting in a whole
> lot of water.
>
> Presumably, the lower level disaster agencies were to be coordinated or
> to take their orders from this facility.
>
> It was a very worthwhile tour. It taught me that I, not the government,
> am most likely going to be my best friend when a disaster strikes.
>

Which is the conclusion that I drew from my time as an emergency planner.
In a disaster that covers any large area or region it takes time, and lots of it, to get even a wellplanned relief effort to the people who need it worst. Ask the people in the area of Homestead, Florida. There are *lots* of things that escape the eye of planners, no matter how thorough they think they are.
In the Loma Pietra (San Francisco) quake the TV stations had built a huge hardened tower, and had hardened their station plant until they were sure that it would survive. But the diesel fuel tanks for the generators rolled off their cradles.......

Dick

3270. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:16:21 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96mpu4$3v3$1@slb4.atl.mindspring.net>
Source record: 170145

Cecil:

I beg to differ with the loose lexicography promulgated by the IEEE's poor excuse for a dictionary!

Excuse me, but describing a thing as a "dissipationless resistance" is sort of like those other "silly" combinations of adjectives and nouns such as "jumbo shrimp", "military intelligence", etc...

Come on, get serious, resistance cannot be simply defined to be the "real" part of an impedance. One often finds that resistance is the real part of an impedance, but not always. Defining it that way is the same as saying that gold is the real part of a dollar. What?That is a necessary condition for something to be called a resistance, but certainly not sufficient. The real part of an impedance might be a resistance, but then again maybe not.

The necessary and sufficient condition for a thing to be called an electrical resistance is dissipation pure and simple.

To be an electrical resistance a device must convert all of the electrical energy presented to it into a completely different form of energy. Since all of us non-relativistic hams and engineers believe that energy can neither be created or destroyed, the dissipation of electrical energy simply means the conversion of electrical energy into some other form. Usually heat, but it could be radiant or kinetic energy, etc..

That's what an electrical resistance does pure and simple. It dissipates electrical energy. Nothing more nothing less! Deal with it.

I simply cannot agree to such a misuse of the term resistance as the IEEE Dictionary tries to pass off in it's offhanded reference to some vague concept called dissipationless resistance. And neither should anyone else. It's sort of like the ignominity we English speakers have allowed to be bestowed upon that once wonderful word "gay". Gay has now been completely usurped by common use and today folks think of something completely different whenever it is used.

I believe that what y'all [Including the IEEE] are calling dissipationless resistance, is properly called "effective resistance" or perhaps by another new word such as "effistance" or some other such new word, in order to avoid applying an ill-chosen adjective to a well understood concept. What y'all need to do is to apply some other such phrase or word to your unecessary new concept, one which does not prostitute the true meaning of the word resistance by implying that there is some kind of dissipation that can be dissipationless!

BTW... as sources go...besides Carolina Power and Light having nearly zero Ohm sources, most Operational Amplifiers come pretty close to a zero output resistance, and those OTA's or Operational Transconductance Amplifiers come pretty close to an infinite output resistance.

And what about all of those other new things and concepts invented since Dr. J . F. Ohm passed into that big lab in the sky.

I mean those devices and concepts with names such as: transconductance, transresistance, gyrators, isolators, circulators, current conveyors, nullors, norators, magic tee's, GIC's [Generalized Immitance Converters] and such. Why... they all got brand new names. The folks introducing those new concepts didn't try to mess up perfectly good meanings! What?

I think that you guys just don't have the "guts" or persistance to invent and promulgate a new name, and so you try to pass off your so-called new concept by slinging improper adjectives at a perfectly good word, "resistance".

So there... here's my challenge to ya'll!

Why not give a brand new name to the "dissipationless resistance" instead of messing up a perfectly good name and concept?

And while you'r at it, stop using the maximum power transfer theorem backwards!

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A8EA3B0.F9898EBD@IEEE.org...
> "Peter O. Brackett" wrote:
> > I hope Johann Frederich Ohm is not turning in his grave.
"Dissipationless
> > Resistance" indeed. RIP dear Johann.
>
> Peter, the Z0 of a transmission line has a dissipationless resistive
> component. The IEEE Dictionary says that resistance is "the real part
> of impedance". Dissipation is not required in that particular
> definition. The IEEE Dictionary also says dissipation is "the loss of
> electric energy as *HEAT*". According to the IEEE, a resonant antenna
> is nearly a dissipationless resistance. The 50+j0 ohm point in a
> transmission line is at a nearly dissipationless resistance point.
> --
> http://www.mindspring.com/~w6rca

3271. Ferrite Core Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:18:03 UTC
From: Dwight E Stotler <ni0f@worldnet.att.net>
Message-ID: <fUBj6.2975$TD1.247577@bgtnsc05-news.ops.worldnet.att.net>
Source record: 170144

Hello all:
I understand the relation between turns ratio and impedance ratio,
But how do you determine the first winding number of turns.
Example: I want make a 700 ohm to 75 ohm transformer using type 73 core
material (first choice)
The frequency would be for broad band 1-10 Mhz..
Where do you start..
Thanks for all help.
Bud NI0F
ni0f@worldnet.att.net

3272. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:20:51 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <96mpvjcms0@208.206.142.66>
Source record: 170146

Richard Harrison wrote:
>
> Roy Lewallen, W7EL wrote:
> "It was a worthwhile tour. It taught me that I, not the government, am
> most likely going to be my best friend when disaster strikes."
>
> If you need a helpimg hand, you look to the end of your arm, right?
>
> Planners make mistakes. Some would be comical if they weren`t serious.
> Our sheriff has had his shakedowns and his stuff works.
>
> There was a National Geographic PBS special TV program last night on
> "The Storm of the Century". It was in the last decade and it started in
> the Gulf of Mexico and swept all the way through New England with
> tornados and blizzards. It was the most damaging storm ever recorded but
> the 1900 Galveston storm is the worst killer. The Storm of the Century
> happened in Mid-March.
>
> Weather forecasting and relief efforts were featured. Police, firemen,
> National Guard, Coast Guard, and broadcasters who recruited civilian
> volunteers to handle emergency traffic and killed their regular programs
> were shown. Rescue seemed to work fairly well. Helicopters plucked
> victims from perilous situations though some victims froze or were
> drowned.
>
> Notable by their absence in the TV coverage were amateur radio
> operators. Some must have handled useful traffic and not just talked
> about the storm. Why didn`t National Geographic show them?
>

I bet it didn't show any Public Safety dispatch centers at work either.
And believe me, that wasn't just another day at the office for them
The "action" shots are what draws audience attention, the helicopter
rescues stranded people on rooftops, etc, not someone talking or typing
into a radio. A Morse code key might draw attention, though. :-)
Ham radio doesn't ofgten get much good press. I guess the folks in
Newington are too busy congratulating each other.

Dick

3273. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:27:12 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96mqb5icq1@nntp9.atl.mindspring.net>
Source record: 170148

Richard:

[snip]
> The apparent brilliance is identical whether produced by a series
> resistor or by a series diode. It is fair to characterize what is
> happening in the diode as a near dissipationless resistance when
> compared with what is happening in a resistor that gets plenty hot.
>
> Best regards, Richard Harrison, KB5WZI
[snip]

Tsk, tsk...

No! I wholeheartedly disagree!

It is not fair to charcterize a diode as a resistor!

Why not characterize an airplane as a train? They both can be used for transportation.

A light bulb can be dimmed by any number of devices including a passive LC tank circuit, which will not even get hot, but we don't characterize them all as resistances. What?

Come now... that kind of loose analogy and hocus pocus can be passed off to lay people and CB operators, but... not on this NG.

Best,

-Peter K1PO

3274. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:27:43 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8ee99c.39927238@news.accessunited.com>
Source record: 170147

On Sat, 17 Feb 2001 10:15:44 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Peter, the Z0 of a transmission line has a dissipationless resistive
>component. The IEEE Dictionary says that resistance is "the real part
>of impedance". Dissipation is not required in that particular
>definition. The IEEE Dictionary also says dissipation is "the loss of
>electric energy as *HEAT*". According to the IEEE, a resonant antenna
>is nearly a dissipationless resistance. The 50+j0 ohm point in a
>transmission line is at a nearly dissipationless resistance point.
>--
>http://www.mindspring.com/~w6rca

When Peter wants to slow the engine down in his Toyota, he applies the
brakes.

That's much better than liting the power of the source.

When you and I drive, Cecil, we shift gears so the engine's available
power is matched to the load.

Peter just leaves it in high gear... because while we try to match the
dissipationless resistance of the source.... he matches the friction
of a needlessly high power source.

73 Tom

3275. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:36:05 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8EEEC5.28DAC61A@IEEE.org>
Source record: 170150

"Peter O. Brackett" wrote:
> Come on, get serious, resistance cannot be simply defined to be the "real"
> part of an impedance. One often finds that resistance is the real part of
> an impedance, but not always.

Who said it was "always"? That's just one of two definitions of resistance
but the point is that it is one of the two *scientifically acceptable*
definitions of resistance. A resistance may dissipate energy as heat
but it is not required to do so. A resistor has dissipative resistance
but resistance doesn't require the existence of a resistor.

> The necessary and sufficient condition for a thing to be called an
> electrical resistance is dissipation pure and simple.

Nope, it is not necessary for resistance to dissipate power. Definition
(A) is for dissipative resistance. Definition (B) allows for a
dissipationless resistance. The IEEE dictionary says that the two
definitions are NOT equivalent and instead are supplementary.

> To be an electrical resistance a device must convert all of the electrical
> energy presented to it into a completely different form of energy. Since
> all of us non-relativistic hams and engineers believe that energy can
> neither be created or destroyed, the dissipation of electrical energy
> simply means the conversion of electrical energy into some other form.
> Usually heat, but it could be radiant or kinetic energy, etc..

Nope, the IEEE dictionary says "dissipation" is limited to heat energy.
Radiation is NOT dissipation according to the IEEE.

> That's what an electrical resistance does pure and simple. It dissipates
> electrical energy. Nothing more nothing less! Deal with it.

But that's not what a resistive Z0 does. That's not what a resonant
antenna does. According to the IEEE dictionary, RF radiation is NOT
dissipation. Heat is dissipation.

> I simply cannot agree to such a misuse of the term resistance as the IEEE
> Dictionary tries to pass off in it's offhanded reference to some vague
> concept called dissipationless resistance.

I don't agree with the Bible either but they haven't changed it.

> I think that you guys just don't have the "guts" or persistance to invent
> and promulgate a new name, and so you try to pass off your so-called new
> concept by slinging improper adjectives at a perfectly good word,
> "resistance".

The English language has lots of words with more than one definition.
"Bus" is one of them and so is "resistance".

> Why not give a brand new name to the "dissipationless resistance" instead of
> messing up a perfectly good name and concept?

Why not just accept the second definition of resistance as presented in
the IEEE dictionary? Would you have us rename a computer bus to something
else because it doesn't have wheels?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3276. Re: Ferrite Core Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:41:46 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8EF01A.A1772811@IEEE.org>
Source record: 170151

Dwight E Stotler wrote:
>
> Hello all:
> I understand the relation between turns ratio and impedance ratio,
> But how do you determine the first winding number of turns.
> Example: I want make a 700 ohm to 75 ohm transformer using type 73 core
> material (first choice)
> The frequency would be for broad band 1-10 Mhz..
> Where do you start..

The inductive reactance needs to be 3-10 times the source/load impedance.
--
http://www.mindspring.com/~w6rca

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3277. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:44:28 UTC
From: JRW <johnrwells@hotmail.com>
Message-ID: <FgCj6.4257$Cq.47474@news2-hme0>
Source record: 170149

What is the best way to feed this kind of aerial, i.e. feeder impedence and balun? Also, can these be used on more than one band?

Ta,

John
"K9SQG" <k9sqg@aol.com> wrote in message news:20010216200742.19518.00001177@ng-mp1.aol.com...
>
> Can't figure out how much to delete from the anti-spam so...
>
> Total length is 1005 divided by the frequency in megacycles.
>
> Best wire I've found is insulated #13 stranded copperweld at 16 cents per foot.
>
> Doesn't have to be perfect square. A circle would be best but performance will
> be good with unequal side length and unequal height for each section.
>
> The aluminum objects might interfere but then again it might act as a reflector
> and actually help.
>
> It will perform much better than a long wire. Receive noise will be down by
> about 6-8 db or so.
>
> Mount it as high as practical. But it will work at only 15 ft off the ground.
>
> 73s,
>
> Evan

3278. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:45:46 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3A8EF2E5.4080704@aol.com>
Source record: 170153

Yes, I thumb through Moxon's book quite often. I also enjoy
the many articles from W4RNL, on moxons and other topics.

I have a MFJ-259b (borrowed), it helped with SWR
adjustments. I went through two sets of batteries. I am
sure EZNEC will be fun too. I sure did get tired of running
back and forth, raising and lowering, ad infinitum.....

In the end I may fall back to a moxon, on 10, 12, and 15
anyway. I think the support structure will be too large for
a moxon on my site on 17 and 20 meters. I'm, too cheap to
buy a decent beam....hi....

Have you any experience using a moxon?
73, KAZ

Anonymous wrote:

> kazering <kazeringue@aol.com> wrote in message news:3A8E77A7.7000805@aol.com...
> <snip>
>
>> Chuck, I started out with an intent to build a Moxon. I
>> actually built one for 2-meters.(untested) To build the
>> hexes, I started with a set of Moxon dimensions, then spent
>> entirely TOO MUCH time pruning and testing. I am now
>> motivated to buy EZNEC.......
>
>
> Hi kazering,
>
> I am quite impressed with Moxon's work...
>
> While pruning and testing is certainly educational and perhaps entertaining, it
> can be quite labor intensive and time consuming! Modern tools such as modeling
> software and hand-held analyzers are a huge improvement over the stuff we had to
> work with 40 years ago... hi. I'm sure you will find EZNEC to be of much help.
>
> 73, Chuck

3279. Re: Smarttuner and wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 21:54:53 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3A8EF330.48F0D205@cybatek.fsnet.co.uk>
Source record: 170152

Hi!

It's simple, go to:

http://www.chelcom.co.uk

and look at the HFV1 vertical.

I use it with my SGC SG235 autotuner, have worked the world on all bands
!!!

Have fun!

MikeT ...
M0AWs / GB6VR (Valve Radio)

Egon Zï¿½rrer wrote:

> Hi,
> who could give me details or tell me where to find information or plans
> to build a fibre glass helical wound vertical antenna, 10 to 80 (160) m,
> used in combination with a Smarttuner.
> Any input will be greatly appreciated. 73
> Egon (HB9EBB)

3280. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 22:07:33 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96msn4$3fv$1@slb4.atl.mindspring.net>
Source record: 170154

Thread:

Q is a somewhat nebulous concept. Quality is always subjective I suppose.

Q has several definitions in the literature and one has to make sure what definition is being described and discussed before entering upon a measurement or calculation of its value.

The "Q" found in the electrical and electronics literature refers usually to the "quality" of energy storage devices.

If energy storage devices were perfect we wouldn't need Q. If companies were honest we wouldn't need a Better Business Bureau.

Q then arises only because of secondary or undesirable effects.

In other words, in a perfect world, Q would be infinite and we would not be discussing it.

There is a reciprocal concept often called "dissipation factor" sometimes labeled with the character "d", usually defined such that dissipation factor d = 1/Q.

In a perfect world d is always zero and again, we would not be discussing it.

Any devices capable of storing energy can have a Q. A capacitor [condenser] can have a Q. An inductor can have a Q. A tuned circuit, which is a combination of an inductor and a capacitor can have a Q.

Some think that Q or d is a constant. Because it arises from secondary or undesirable side effects Q or d is not a constant and varies with other parameters, such as frequency, current levels, etc...

I believe that the "best" definition of Q for any energy storage system and the one that most often corresponds to the formulae found in most references is:

Q = Energy Stored Per Cycle/Energy Dissipated Per Cycle

Simple calculations for an inductor L having a parasitic resistance equivalent to a series resistance R then result in:

Q = (2 pi f L)/R, with similar formula for a capacitor with an equivalent parallel conductance G, etc...

The problems in finding simple formulae and or software algorithms to calculate this Q arise in calculating the values of L and R from first physical principles. For instance the parasitic resistance varies with

frequency due to skin effect, and the equivalent L varies with frequency because of the effects of parasitic interwinding capacitances, all of which are functions of the physical geometry of the devices, etc...

How are we to believe in any computer program that purports to calculate Q?

We could ask the programmer to share his/her formulae and code with us so that we could understand what factors enter into the calculations.

Reg? Care to share?

But clearly, if we are from that great State of Missouri in the USA, "the show me State", we should compare the computer program output to laboratory measurements of Q.

How are we to do that without a Q meter at our disposal?

And... even if we have a Q meter, whose design is it? And how does it measure Q?

Was it made by Boonton, made by HP [Sorry Agilent], or Marconi, or Wandel and Golterman, or Siemens' or what...

Reg, care to share with us which instruments you have used to develop the experimental measurements that you have used to validate the formulae and algorthims in your programs?

Thoughts, comments?

Peter K1PO

"Tom W8JI" <2w8ji@contesting.com> wrote in message
news:3a8e744d.9890866@news.accessunited.com...
> On Sat, 17 Feb 2001 00:53:24 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> Reg,
>
> >Rich, I'm afraid you are in danger of becoming an old wife.
> >
> >The actual value of coil Q is, as you say, its
> >reactance/resistance, X/R. Q depends only on frequency because X
> >and R depend on frequency. Actual Q remains unchanged regardless of
> >the capacitance across it, self C or otherwise. (The
> >between-turns capacitances are negligible. Why ? Because they are
> >all in series across the coil.)
> >
>
> I've noticed your programs greatly overestimate Q in some cases Reg.
> Many software inductor programs do so.
>
> That's probably because the software writers think the turn-to-turn
> capacitance is negligable, and that shunting capacitance can not lower
> Q at a given frequency with all else constant.

>
> 73 Tom

3281. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 22:43:20 UTC
From: Spurious@StarBand.net
Message-ID: <Xns904B96B71735BFrog207Junocom@127.0.0.1>
Source record: 170155
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

>I find I can no longer support the ARRL by being a member. What's the
>best way to cancel a membership?
>

I recommend you burn your driver's license and bra, to let them know you
mean business.

Ed

3282. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 23:12:17 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <lzDj6.626$6N6.43233@newsread2.prod.itd.earthlink.net>
Source record: 170156

A few comments encompassing several responses already posted to this question:

I've been using a Traffie HexBeam (HX-5B) for 10 months now, and haven't experimented with any homebrew versions yet. If I were building my own, however, I think I'd use separate feeds for the multiple driven elements (on a multi-bander) and mount a coaxial switch at the top of the tower. The current commercial design involved a lot of trial-and-error work to optimize forward gain, f/b, and SWR across all of the bands. I suspect that one could avoid all that with the separate feedlines, but there would undoubtedly be interactions among the elements anyway. Perhaps someone who has modeled such instances could comment on that.

One response mentioned a narrow-banded characteristic of his home brew effort. With my hexbeam, it is NOT narrow banded in terms of SWR, but is perhaps in terms of f/b ratio and forward gain. The SWR is rather flat across all five bands, but the f/b ratio deteriorates noticeably on some of the bands as you move up the band (it's optimized for f/b at the low end). Yes, I know that a resistor would also have a flat SWR across the bands. If you'd like to compare your yagi against my beam on the air, let me know and we'll set up a schedule.

You can settle the "how many dBs per S-unit" argument for your particular receiver by buying a step attenuator like the MFJ-762 or building your own. On my TS-850S, I found that an S-unit was anything from 3 to 7 dB. Clearly, the S-unit scale was laid out for appearance and had little to do providing accurate measurements. With the step attenuator, you can also measure the f/b ratio with reasonable accuracy, provided you have a stable signal to listen to.

The other thing I learned from observing the f/b ratio of this antenna is that observed f/b did, on occasion, measure far higher than it should have. In some cases, with stable signals, I see f/b ratios around 30 dB, while around 10 dB is the normal measurement. I have no reason to believe that has anything to do with properties of this particular antenna design, and suspect that one could observe the same variation with other directional antennas, but I have not attempted to do that. Maybe someone can explain the mechanics of such results.

It would be interesting to hear about experiences in homebrewing a hexbeam for the 40 meter band. I haven't seen the Traffie version of the 40 meter hexbeam, and I wonder if the mechanical design of the higher frequency models scales up with little change.

K8AC

"Lloyd Kubis" <kubis@one.net.au> wrote in message
news:3a8d2b5a$1_3@news01.one.net.au...
> Has any tried homebrewing a Hex-Beam type limited space beam ???
>
> Thanks
> Lloyd
>
>
>
>
>

3283. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 23:18:39 UTC
From: Anonymous <alias@microsoft.com>
Message-ID: <kEDj6.4385$GE.486446@news.uswest.net>
Source record: 170157

Hi Kaz,

Comments below...

kazering <kazeringue@aol.com> wrote in message news:3A8EF2E5.4080704@aol.com...
> Yes, I thumb through Moxon's book quite often. I also enjoy
> the many articles from W4RNL, on moxons and other topics.
>
> I have a MFJ-259b (borrowed), it helped with SWR
> adjustments. I went through two sets of batteries. I am
> sure EZNEC will be fun too. I sure did get tired of running
> back and forth, raising and lowering, ad infinitum.....

I can recall - more than once - lugging a transmitter to the roof to reduce the distance traveled... up and down the tower... hi

>
> In the end I may fall back to a moxon, on 10, 12, and 15
> anyway. I think the support structure will be too large for
> a moxon on my site on 17 and 20 meters. I'm, too cheap to
> buy a decent beam....hi....

Me too... I've never used a commercially built beam, but I have built some decent ones - even if I say so myself... :-).

> Have you any experience using a moxon?
> 73, KAZ
>

No. However I was delighted when I discovered Moxon's work with critical coupling - and to find that his work much paralleled my own.

73, Chuck

3284. Jeep Cherokee Antenna & Mount Options

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-17 23:32:38 UTC
From: Chris McGowan <c279m@yahoo.com>
Message-ID: <qSDj6.718$IV6.58926@news1.news.adelphia.net>
Source record: 170158

Hello,

Does anybody have any ideas on antenna mount options for a dual band 2m/70cm antenna on a 2001 Jeep Cherokee? I currently have a nice dual band Diamond antenna about 50" in length that I used on my last car with a MFJ multi-angle trunk lip mount. It looks like right now I have 2 spots. The first would be to attach to the side of the rear hatch as high as I can go or to the front hood. If I go with a roof install, I would be to high for a garage.

Second, does anyone have experience with an overhead storage shelf for trucks, specifically the ones that attach to your visor mounts? I was wondering if they are strong enough to hold a rig. My rig is a Yaesu 8100, not too heavy. Thoughts, comments on this type of mounting?

Thanks

Chris
KC2GLX

3285. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 00:04:05 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8F1175.4A7DFB3F@IEEE.org>
Source record: 170160

kazering wrote:
> I have a MFJ-259b (borrowed), it helped with SWR
> adjustments. I went through two sets of batteries.

The solution is to run it from an external battery that will fit
in your pants pocket - one like the YUASA NP2-12 (12v 2ah).
--
http://www.mindspring.com/~w6rca

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3286. Random Length Wire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 00:07:19 UTC
From: "Rex Klopfenstein, Jr." <rklopfen@wcnet.org>
Message-ID: <3A8F1236.54570292@wcnet.org>
Source record: 170159

When the weather here get warmer I am planning to install a wire antenna. I can run a wire 56 feet (maybe 80 feet if I work a little harder--have to put up a mast). This antenna will run from my house to my garage, my radio will be in the basement of the house. I plan to install a good ground (about 6 feet from my transmitter). I would use a dipole but getting the feedline back into the house is a problem, it would drop right in the middle of the backyard.

I have several questions. One is the RF that will be present inside my basement using a random length antenna. How can I reduce any RF in my basement. I will be using an MFJ antenna tuner that supports wire antennae. I would like to put some sort of lightning protection outside of the house for the lead in wire, I haven't been able to find anything listed in the usual catalogs.

Anybody had any experience with an end-feed Zepp? I have a coil of 450 ohm parallel cable (looks like large tv twin lead with windows cut in web), will that work as a feed line. Doesn't the end-feed Zepp introduce RF into shack (high voltage at transmatch).

--
Rex Klopfenstein, Jr.
Bowling Green, OH
KC8PFP
rklopfen@wcnet.org
http://www.wcnet.org/~rklopfen

3287. Re: Ferrite Core Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 00:19:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8F1518.25149AFD@eznec.com>
Source record: 170161

The angle of the impedance (that is, whether it's resistive or reactive) doesn't matter as long as it's high enough, unless enough power is involved to cause unacceptable core heating. (I've probably said this a dozen times on this newsgroup, but apparently people either don't believe me or they're just ignoring me, since statements like Cecil's keep popping up.) The materials that give you the most impedance at HF are primarily resistive over most of the HF range. Type 73 material is an example. It's a very good choice for this use, and above about 1-3 MHz, its impedance is primarily resistive. This is actually an advantage, because the impedance stays more or less constant for several *decades* of frequency. If it were purely inductive, it would increase linearly with frequency until it approached self resonance, then decrease above that. A good model for the impedance of a ferrite core is a parallel RL network. For 70 series ferrites, R equals Xl at about 1-3 MHz. You can see that at higher frequencies, the contribution from the L becomes less and less significant, so it looks more and more like a plain resistor as frequency increases.

What you need to do first is get the impedance per turn squared for your particular core at the frequency of interest -- which is actually what your question was. You can get this from either the Amidon or Fair-Rite web sites. Don't use the low frequency Al value -- it won't be accurate at HF. (Type 73 material is a Fair-Rite designation, and it's sold by Amidon among other retailers.) Alternatively, you can measure it with an impedance meter or antenna analyzer. It'll probably be lowest at 1 MHz, so use the impedance at that frequency. The winding impedance appears in parallel with the source and load, so you want it to be higher than the source/load impedance to minimize the disturbance on your system. Cecil suggests a minimum of three times higher, but it depends on the application. I like to use 5-10 times when possible. 3500 ohms (5 times 700) might be difficult at the upper HF range because the maximum amount you can get is limited by the stray shunt capacitance of the winding. But at 1-10 MHz it's probably possible. To get 3500 ohms, divide 3500 by the impedance per turn squared from Amidon or Fair-Rite, or your single turn measurement. The square root of this is the number of turns you'll need for the 700 ohm winding. For example, if the core gives you 20 ohms per turn squared, you'll need sqrt(3500/20) ~ 13 turns. The 75 ohm winding would then be 13 * sqrt(75/700) ~ 4 turns. You might want to fiddle the number of turns on the high Z winding if you need a more precise impedance ratio. You can also solve this problem beginning with the 75 ohm winding instead of the 700 ohm winding -- you should get the same result.

Roy Lewallen, W7EL

Cecil wrote:
>
> Dwight E Stotler wrote:
> >
> > Hello all:
> > I understand the relation between turns ratio and impedance ratio,
> > But how do you determine the first winding number of turns.
> > Example: I want make a 700 ohm to 75 ohm transformer using type 73 core
> > material (first choice)
> > The frequency would be for broad band 1-10 Mhz..
> > Where do you start..
>
> The inductive reactance needs to be 3-10 times the source/load impedance.
> --
> http://www.mindspring.com/~w6rca
>
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3288. Re: Ferrite Core Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 00:21:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8F1574.5C234793@IEEE.org>
Source record: 170162

Roy Lewallen wrote:
> The angle of the impedance (that is, whether it's resistive or reactive)
> doesn't matter as long as it's high enough, unless enough power is
> involved to cause unacceptable core heating. (I've probably said this a
> dozen times on this newsgroup, but apparently people either don't
> believe me or they're just ignoring me, since statements like Cecil's
> keep popping up.)

Sorry, I brain-farted. Somehow I missed the ferrite type 73 part
and assumed he was making a conventional transformer out of
something like #2 material.
--
http://www.mindspring.com/~w6rca

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3289. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 01:05:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8F1FF3.31801260@eznec.com>
Source record: 170163

Floyd Sense wrote:

> . . .

> The other thing I learned from observing the f/b ratio of this antenna is
> that observed f/b did, on occasion, measure far higher than it should have.
> In some cases, with stable signals, I see f/b ratios around 30 dB, while
> around 10 dB is the normal measurement. I have no reason to believe that
> has anything to do with properties of this particular antenna design, and
> suspect that one could observe the same variation with other directional
> antennas, but I have not attempted to do that. Maybe someone can explain
> the mechanics of such results.

> . . .

Nulls are the hardest things to predict for any antenna, because they occur when the fields from all the parts of the antenna -- and, in the real world, also the fields reflected from everything else -- all sum to zero or nearly zero. (I like to compare it to subtracting a million from a million to get zero. It doesn't take much of a percentage error in either quantity to have a profound effect on the result.) It only takes a tiny change in one reflection to move a null a few degrees, or change its depth by 20 dB or more. If you compare antenna patterns measured in a more-or-less real environment to ones predicted by a modeling program, you'll generally find that the pattern shape, forward gain, major lobe widths, and most other features match quite well. But nulls often don't. And even in the ideal environment of a modeling program, you'll often see nulls which vary considerably in depth as a function of elevation angle. So I'm not surprised at the differences you see.

Roy Lewallen, W7EL

3290. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 01:12:22 UTC
From: kg4ggx@aol.com
Message-ID: <20010217201222.12329.00001562@ng-fs1.aol.com>
Source record: 170164

Describe the configuration of the loop you want to use. 1 wave lengthor
something else?Horizontal or vertical?
I have a 160 meter 1 wave length horizontal loop up 45 feet in an odd shaped
rectangle. Not the best choice of shapes, but the best I could do. I'm feeding
it with 100 feet of 300 ohm twin lead to a remote balun, then 5 feet of RG-8
coax to my FT-920.The built in tuner tunes 160 thru 6 meters. This antenna does
a fairly good job comparing to my 80 thru10 meter parralle dipole at a similar
height, and to my 10/12 meter vertical. Each antenna has its time when it does
better than the others. But for an all around all band antenna I really like
the loop.Simple, cheap, and does a reasonably good job. It does take some work
to puup 540 feet of wire though. However you can make it as long as your lowest
freq. 73 Rob

3291. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 01:22:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A8F23ED.4D98049F@eznec.com>
Source record: 170165

I don't like the term "dissipationless resistance". The reason is, I think, sort of like the reason I didn't put the "Mr Yuk" stickers on bottles containing obvious poisons when my kids were little -- I figured they'd interpret it to mean that anything NOT having a sticker is ok to drink.

There are lots of electrical and electronic quantities that have dimensions of resistance and units of ohms but don't convert power into heat. For example, the impedance of free space, or more generally the ratio of an E field to an H field. Anyone using feedback amplifiers sooner or later encounters trans-resistance, which is the output voltage divided by the input current. This has the dimensions of resistance. The impedance of a transmission line is a familiar example. A resistor is a physical device that does turn electrical power into heat, but I don't see why we have to make a special category of "dissipating resistor" for it.

"Dissipationless resistance" is, I suppose, descriptive enough. But I see potential for its misuse and misinterpretation. Do all resistances now have to fit into the binary pigeonholes of "dissipative" and "dissipationless", or do we need more adjectives yet? Is trans-resistance dissipationless? How about the dynamic resistance of a diode (defined as the inverse of the slope of the I-V curve)?

Roy Lewallen, W7EL

3292. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 01:23:40 UTC
From: richardharrison@webtv.net
Message-ID: <24513-3A8F241C-70@storefull-118.iap.bryant.webtv.net>
Source record: 170167

Peter, K1PO wrote:
"The real part of an impedance might be a resistance, but again maybe not."

A resistance is a voltage to current ratio.
It has one further qualification.

No dissipation is necessary in a resistance. Dissipation is necessary in that class of resistance called a resistor, when power flows through the resistor.

A resistance is a voltage to current ratio in which the current is in-phase with the voltage as in a resistor or a radio transmission line excited with an energy surge. This is the one further qualification.

Dissipation or disposition of the energy making a ratio called resistance is immaterial to the status of the in-phase ratio of voltage to current called a resistance, or to its definition as a resistance.

Best regards, Richard Harrison, KB5WZI

3293. 5B HEX or C3SS beam??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 01:32:54 UTC
From: kiro <hector@pixy.com>
Message-ID: <3A8F2646.9FABF322@pixy.com>
Source record: 170166

I can't decide which to get. I like the size of the 5B HEX but
not the price.
The C3SS is kind of an eyesore compared to the 5B HEX.

3294. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 02:14:58 UTC
From: richardharrison@webtv.net
Message-ID: <9941-3A8F3022-5@storefull-117.iap.bryant.webtv.net>
Source record: 170069

Peter, K1PO wrote:
"A light bulb can be dimmed by any number of devices including a passive LC tank circuit, which will not even get hot but we don`t characterize them as resistors."

Well, L and C are reactances which can inhibit current. Pure reactance consumes no energy. It only stores energy for a short while. As L and C produce opposite phase rotations of 90 degrees each, their effects subtract when used in series combination to inhibit current in a circuit. If the two different kinds of reactance were of equal value and connected in a series circuit, they wouldn`t inhibit current flow at all.

Pure reactances produce no heat at all while inhibiting current. They normally give back all of the energy they accept from a source to the circuit within a complete cycle.

Pure resistances may or may not produce heat while inhibiting current. If current is inhibited in a lossless transmission line by the line`s surge (characteristic) impedance (a resistance because the voltage and current are in-phase), no heat is produced. If current is inhibited in a resistor (a different form of resistance) the energy consumed (converted to heat) is the product of the voltage across the resistor and the current through the resistor.

Best regards, Richard Harrison, KB5WZI

3295. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 02:15:27 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96nb36dgg1@slb6.atl.mindspring.net>
Source record: 170168

Richard:

I am afraid that you are wrong here on a few counts. I guess you can be forgiven, since an unauthoritative IEEE publication has apparently legitimized a bad usage of some terminology and you have just innocently picked up on it. Who at IEEE was/is responsible for this terrible work? Dissipationless Resistance. Can you find out the specific author or authority for this article and piece of work? I'd like to know? What was/are his qualifications? Where did he/she get her electrical training? Probably a "Computer Engineer" or some such...

First... there has already been established a common usage for the ratio of E to H in free space and of V to I on transmission lines.

On transmission lines and it free space this has long been called the "surge impedance" or "surge resistance", NOT dissipationless resistance. This well established usage of terminology goes back almost a century.

"Surge Resistance" or "Surge Impedance" is a well known and consistently used term. Dissipationless Resistance is not! It has apparently only appeared since the publication of that terrible IEEE Dictionary!

Your usage and the usage of the so-called IEEE dictionary is not consistent in this respect.

Please make use of the older established usage of "surge resistance" before "just inventing" a new term.

BTW... The ratio of any old voltage to any old current is just that... a ratio of voltage to current, nothing more nothing less.

Why dignifiyt it by calling it a resistance or anything else for that matter.

As I asked further up the thread, what would you call the ratio of the voltage across the terminals of a flash light battery in Paris, France, to the current through the finals of an HF Amp in Burlingame, CA? What? Is that FlashAmp Resistance...

You guys are carrying this terrible IEEE Dictionary dissipationless resistance "mistake" too far...

Enough is enough, now as my Mom used to say, "just stop it, before you put someone's eye out!"

Best Regards,

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:24513-3A8F241C-70@storefull-118.iap.bryant.webtv.net...
> Peter, K1PO wrote:
> "The real part of an impedance might be a resistance, but again maybe
> not."
>
> A resistance is a voltage to current ratio.
> It has one further qualification.
>
> No dissipation is necessary in a resistance. Dissipation is necessary in
> that class of resistance called a resistor, when power flows through the
> resistor.
>
> A resistance is a voltage to current ratio in which the current is
> in-phase with the voltage as in a resistor or a radio transmission line
> excited with an energy surge. This is the one further qualification.
>
> Dissipation or disposition of the energy making a ratio called
> resistance is immaterial to the status of the in-phase ratio of voltage
> to current called a resistance, or to its definition as a resistance.
>
> Best regards, Richard Harrison, KB5WZI
>

3296. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 02:43:13 UTC
From: richardharrison@webtv.net
Message-ID: <9941-3A8F36C1-7@storefull-117.iap.bryant.webtv.net>
Source record: 170070

Peter K1PO wrote:
"It is not fair to characterize a diode as a resistor."

I called the diode a "dissipationless resistance", not a dissipationless resistor (there is no such thing). I didn`t call it a resistor because all resistors convert the energy they accept into heat instantly. Resistors don`t store electrical energy, it undergoes instant conversion.

A resistor is one type of resistance. Not every resistance is a resistor.

A diode used to inhibit current has insignificant energy storage as it is not using reactance to limit current. Voltage and current are in-phase. Power loss in the diode is insignificant, so there is no significant resistor there. The diode is acting as a dissipationless resistance, not as a resistor.

Best regards, Richard Harrison, KB5WZI

3297. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 03:05:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96ne2dpmh1@plutonium.btinternet.com>
Source record: 170072

Tom wrote -
> I've noticed your programs greatly overestimate Q in some cases
Reg.
> Many software inductor programs do so.
>
> That's probably because the software writers think the
turn-to-turn
> capacitance is negligable, and that shunting capacitance can not
lower
> Q at a given frequency with all else constant.
========================

Tom, as a non-software writer, please tell us what YOU think.

In your reply could you be quantitative and include some accurate numerical information? Otherwise words like "overestimate" and "negligible" have no meaning.

By the way have you ever previously come across the formula relating Q', L' and R' for series resonance to the corresponding parallel resonance values, which I gave on my previous posting to this thread.

Reg

3298. Re: Hex-Beam Type Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 03:17:50 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8f3cec.61258386@news.accessunited.com>
Source record: 170071

On Sat, 17 Feb 2001 10:25:16 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>
>Is it possible to get a 1dB gain in the ground wave while getting a
>3+dB gain in the skywave?

I see what he might have been saying, but that has nothing to do with
the problem.

The Hexbeam just isn't directive enough to have that problem unless
the error was introduced by making the dipole have a null in the
direction of the arriving signal in the test.

Sometimes people get unrealistic gain results by comparing in the null
of one antenna to another. I pointed that out.

Of course that is a common error.

More than likely the errors are rooted in many things, but the S meter
is a prime suspect since most are very very poor at the low end of the
scale (which is where he measured).

3299. Re: Ferrite Core Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 03:41:59 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8f3f8d.61931516@news.accessunited.com>
Source record: 170073

On Sat, 17 Feb 2001 16:19:36 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>The angle of the impedance (that is, whether it's resistive or reactive)
>doesn't matter as long as it's high enough, unless enough power is
>involved to cause unacceptable core heating. (I've probably said this a
>dozen times on this newsgroup, but apparently people either don't
>believe me or they're just ignoring me, since statements like Cecil's
>keep popping up.)

I use 73 material in low power applications at HF, for the reasons Roy
gives above.

I use lesser ui cores like 65 material for high power (flux density)
applications at the same frequency range, because they look more like
a pure inductance and so they heat much less (even though I have to
use a taller stack and more turns to get the same Z magnitude).

As Roy says, I care less what part is reactance and what part is
resistance, as long as the impedance is high and flux density low.

Roy also makes a good point than many people miss, the higher
frequency impedance is nothing at all like the low frequency
impedance...so don't just pick a high ui at dc and expect good results
at 2 MHz or more! Most higher ui cores actually provide LESS impedance
at high frequencies than lower ui cores, and then you wind up using
more turns and reducing bandwidth (and power handling). Look at the
impedance at the operating frequency.

My Beverage transformers (and transformers in my receiving
splitters/amplifiers, etc.) are all a 73 material binocular core that
is about 3/8 inch thick, 1/2 inch wide, and about 1/2 inch deep.

Binocular cores allow you to keep most of the copper inside the core,
so impedance is maximized for a given amount of stray capacitance. The
broadband performance is excellent, since stray C is minimized.

73 works well in low power applications or even at high power in
applications where flux density is low. I've found 73 to be
unacceptable in choke baluns at the 1500 watt power level, especially
if common-mode voltage across the choke is high.

73 Tom

3300. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 03:50:13 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8f4485.63203257@news.accessunited.com>
Source record: 170074

On Sat, 17 Feb 2001 17:07:33 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>But clearly, if we are from that great State of Missouri in the USA, "the
>show me State", we should compare the computer program output to laboratory
>measurements of Q.
>
>How are we to do that without a Q meter at our disposal?

When I measure the Q of an inductor with nearly zero turn-to-turn
spacing, the Q can easily be half or less what it is when the turns
are spaced one wire diameter.

When I look at "programs", they almost always show the opposite.

I can design RF inductors using software that have Q's in the
thousands, but the highest I have ever measured is in the 800
range!!!! Those are generally large tank coils used in high power
transmitters.

I tried to do a notch filter for 160 meters, and the inductor Q is
what made the project not "do-able".

Of course if I used software inductors, it would have worked like a
charm. IMO, the BBB ought to put out a consumer watch for inductor Q
software programs.

73 Tom

3301. Re: 5B HEX or C3SS beam??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 03:50:58 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8f4640.63646366@news.accessunited.com>
Source record: 170075

On Sat, 17 Feb 2001 17:32:54 -0800, kiro <hector@pixy.com> wrote:

>I can't decide which to get. I like the size of the 5B HEX but
>not the price.
>The C3SS is kind of an eyesore compared to the 5B HEX.

Like many eyesores, it will work better.

73 Tom

3302. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 03:59:54 UTC
From: 2w8ji@contesting.com
Message-ID: <3a8f4677.63701166@news.accessunited.com>
Source record: 170076

On Sat, 17 Feb 2001 21:15:27 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:
Hi Peter,

I have a waterwheel with water spilling ove it, and I am extracting
power from it (through a generator if you like).

I do a load-pull on the wheel, and I find at a certain RPM I get a
certain torque where horsepower is maximized.

To extract maximum energy from that wheel, I must conjugately match
the load to the wheel. The wheel behaves exactly like a "resistance"
is in series with the "voltage", yet nothing is dissipated.

If I put a generator with a non-feedback field winding on that wheel,
I'll get maximum power at a certain load resistance and it will behave
exactly like a resistance is in series with a source voltage.

A switching power amplifier does the same thing, as does a switching
supply. I can easily conjugately match a PA to an antenna and not burn
anything up...and have an efficiency more than 50%.

It's unfortunate they didn't pick a different word to describe
dissipative and non-dissipative power-limited "things".

(What do you do with the body? Did you put it where I told you?)

73 Tom

3303. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 04:18:36 UTC
From: richardharrison@webtv.net
Message-ID: <9938-3A8F4D1C-119@storefull-117.iap.bryant.webtv.net>
Source record: 170077

Peter K1PO wrote:
"Surge Resistance or Surge Impedance is a well known and consistently used term. Dissipationless resistance is not!"

Beg to differ. I`ve heard it used for well over 50 years. Dissipationless resistance is a foregone conclusion, given resistances which are not resistors.

Terman was president of the IRE (a predecessor of the IEEE) in the era when he was publishing and perfecting "radio Engineering". That was long before he invented "silicon Valley". Terman says in "Radio Engineering", copyrighted in 1932 and 1937 (mine is the second edition) on page 698: "The characteristic impedance (of a transmission line) is determined by the line construction and at radio frequencies can for all practical purposes be considered a resistance defined by the equation Zo = Square Root L over C ohms." No dissipation there. Only L and C are involved.

When you have resistors, which are a type of resistance and which dissipate, and you also have free-space resistance, characteristic resistance of a transmission line, antenna radiation resistance and other resistances (not resistors) which don`t convert electricity into heat, you can surely catagorize resistances into resistors and into non-dissipative resistances. That is what the IEEE wisely did.

I don`t think an additional name is needed. I`m still sore over calling the perfectly descriptive cycles per second "Hertz".

Best regards, Richard Harrison, KB5WZI

3304. Places to get a good rotor, etc...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 05:52:04 UTC
From: Sorry I Hate Spam <nospam@noway.net>
Message-ID: <ZmJj6.1167$xe.11030@news.inreach.com>
Source record: 170078

I'm in the middle of my latest project, which is to set up my FM antenna array (TRI APS-13) probably on a 40+ foot tower.

I'd like some help sourcing a good rotor/control.... and the tower, etc. for that matter. Can't find anyting here in the San Joaquin Valley, CA.... :(

Thanks...
Clay

3305. Request comments Cushcraft A3S, MA5B ans ASL2010

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 07:15:01 UTC
From: "Richard A. Stern" <rstern@shore.intercom.net>
Message-ID: <fm2k6.23758$EW3.1268926@e3500-chi1.usenetserver.com>
Source record: 170067

Looking for a MultiBand 20-15-10 beam type antenna.

I live on the Eastern Shore of Maryland and we at times sustain Hurricane force winds and intermitant gusting to 90mph at different times of the year. I've been using wire and vertical antennas for years. I finally have the money to put up a beam. I already have a heavy duty 38' tower and just got a good deal on a Hygain rotor.

I've look ed at them all I really like Force12s. I don't know if I can spend that much. I looked over the Cushcraft catalog and like the lightweight 'SKYLOG ASL2010 or the MA5B.

Anyone out there in digitland have any realtime experience with Cushcraft. I know there's alot of A3S users around.

Thanks if you could reply!

--
Peninsula Radio Operators Society
http://www.intercom.net/npo/pros/index.html
No Fat in our HAM-LINKS!
Webmaster: NW3N

3306. Re: Bobtails/Half Squares- A Few New Pages

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 08:03:35 UTC
From: k3ky@erols.spamnocom
Message-ID: <3a8f8101.1170715308@news.erols.com>
Source record: 170079

On Thu, 15 Feb 2001 08:15:09 GMT, k3ky@erols.com wrote:

>For those interested in these antenna types, I have added some new
>material to my Bobtails and Half Squares pages.
>As always, the entry point for this series is "The Low Bands":
>http://www.angelfire.com/md/k3ky/page20.html
>There is a new page with some comments about high band
>versions of these antennas, low bands 'benchmarks', and an
>interesting 17 meter design by NJ0F:
>http://www.angelfire.com/md/k3ky/page44.html
>This is a work in progress and is offered only to stimulate
>further research and experimentation by interested users.

A new page on grounding and feeding has been added.
It is still in editing and will be expanded later.
http://www.angelfire.com/md/k3ky/page49.html
>
>There are also some new photos of various LC matching
>networks and also a collection of photos taken by W7AV
>of his new 40 meter half square in WA. He reports good
>success DXing with the antenna. These are all available
>as links from:
>http://www.angelfire.com/md/k3ky/page41.html

A few more photos of tuning network enclosures and LC
tanks have been added to the page above.

>73, David K3KY

3307. Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 08:39:49 UTC
From: Juan <novalid@novalid.com>
Message-ID: <96o1ff$ev2$1@diana.bcn.ttd.net>
Source record: 170080

Hi.

I am thinking in using a 7,5 meter vertical radiator as a multiband vertical. It can be "tuned" (I will say "adapting impedance") with a remote tuned L network placed at the feed point.
My first idea is using three isolated radials 7,5 meter each. The feed point is about 5 meter up the ground.

I think this monster can work between 7 to 28 MHz, also for SWL receiving .
Any ideas about it? I am not sure about radials counterpoise.

I worked 20 years with quarter wave verticals with isolated radials.

Juan, EA6NP
Mallorca Island, Spain
modest homepage: http://www.qsl.net/ea6np

**** Sorry, I don&#65533;t speak English. Only "Spanglish" **** ;-)

3308. SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 11:33:15 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <3nOj6.95405$Wq1.39345097@nnrp5-w.sbc.net>
Source record: 170081
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

As I was reading the SWR and impedance of my antenna on my MFJ-259B, I start to wonder,

1. Does SWR even matter for reception? Now correct me if I'm wrong, since most radios have 50ohm impedance, as long as I got 50ohm impedance at a frequency on my antenna, I would get the best signal on that frequency regardless of what the SWR is at that frequency, right?

2. My magnetic 2m mobile antenna on my car is not really connected to the car body as a ground(it's insulated by the magnet and paint), how can it utilize the car body as a ground plane? Thx.

3309. Wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 11:36:49 UTC
From: carl domanico <carl.domanico@verizon.net>
Message-ID: <3A8FB3D1.B43A918@verizon.net>
Source record: 170082

Condition Must be Minimum Very good and preferably better. Tubes &
Circuit must also be in similar condition..

Carl
N2MFW

3310. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:19:39 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <v5Pj6.5801$0u5.1204688@news1.rdc1.mi.home.com>
Source record: 170083
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

1. No. SWR will degrade the signal strength. A tuned or resonant antenna will delever the highest signal level to the coax. Impedance (match or mismatch) will affect the transfer of that signal from the antenna to the coax. The closer they match the better the signal will transfer and less loss there will be.
(hey ... this would be a great spot for a RF amplifier ... hint .. hint .. wink .. wink)

2. You have a ground connection thru the coax shield and power cable. Also there is some capacitive coupling due to the size of the base and closeness of the metal body. Works like a "thru the glass" mounted antenna.

William Lee

"Michael" <hkc2001@pacbell.net> wrote in message
news:3nOj6.95405$Wq1.39345097@nnrp5-w.sbc.net...
> As I was reading the SWR and impedance of my antenna on my MFJ-259B, I start
> to wonder,
>
> 1. Does SWR even matter for reception? Now correct me if I'm wrong, since
> most radios have 50ohm impedance, as long as I got 50ohm impedance at a
> frequency on my antenna, I would get the best signal on that frequency
> regardless of what the SWR is at that frequency, right?
>
> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.
>
>

3311. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:21:10 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96oena$go6$1@slb0.atl.mindspring.net>
Source record: 170084

Tom:

[snip]
"> It's unfortunate they didn't pick a different word to describe
> dissipative and non-dissipative power-limited "things".
[snip]

I agree, but we don't have to keep on propagating that terrible mistake!

>
> (What do you do with the body? Did you put it where I told you?)
>
> 73 Tom
[snip]

The body, hmm... I wonder what ever happened to poor old... what's his
name.

My wife told me to get rid of both of the bodies, she didn't want them
around her kitchen, and so...

I put one up there by where the creek flows under Kildaire Farms Road, the
other I just threw in the lake.

That OK?

-Peter K1PO

3312. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:24:35 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <7aPj6.5812$0u5.1205783@news1.rdc1.mi.home.com>
Source record: 170085

Juan, look into a screwdriver type antenna to use as your remote tuned antenna.
It will cover all bands and work great.

Remember this ..... when it comes to a mobile antenna anything shorter than 1/4 wave in length is a compromise in performance. The shorter the antenna the worse it gets.

William Lee

"Juan" <novalid@novalid.com> wrote in message news:96o1ff$ev2$1@diana.bcn.ttd.net...
> Hi.
>
> I am thinking in using a 7,5 meter vertical radiator as a multiband
> vertical. It can be "tuned" (I will say "adapting impedance") with a remote
> tuned L network placed at the feed point.
> My first idea is using three isolated radials 7,5 meter each. The feed point
> is about 5 meter up the ground.
>
> I think this monster can work between 7 to 28 MHz, also for SWL receiving.
> Any ideas about it? I am not sure about radials counterpoise.
>
> I worked 20 years with quarter wave verticals with isolated radials.
>
> Juan, EA6NP
> Mallorca Island, Spain
> modest homepage: http://www.qsl.net/ea6np
>
>
> **** Sorry, I don't speak English. Only "Spanglish" **** ;-)
>
>
>
>
>
>

3313. Re: Places to get a good rotor, etc...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:28:27 UTC
From: William Lee <n5wrx@home.com>
Message-ID: <LdPj6.5821$0u5.1206444@news1.rdc1.mi.home.com>
Source record: 170086

Check the ARRL hamfest scedule and attend a few hamfests.

http://www.arrl.org/hamfests.html

Find a radio / electronics shop and talk to the sales people.
Get the word out to the local hams about what you need.

"Sorry I Hate Spam" <nospam@noway.net> wrote in message
news:ZmJj6.1167$xe.11030@news.inreach.com...
> I'm in the middle of my latest project, which is to set up my FM antenna
> array (TRI APS-13) probably on a 40+ foot tower.
>
> I'd like some help sourcing a good rotor/control.... and the tower, etc.
for
> that matter. Can't find anyting here in the San Joaquin Valley, CA....
:(
>
> Thanks...
> Clay
>
>

3314. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:36:35 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96ofi9$j17$1@slb3.atl.mindspring.net>
Source record: 170087

Richard:

Frederick E. Terman, what a guy.

Every time I am at Stanford I go over and worship at the Frederick E. Terman Engineering Building.

Now there was an Engineer, and unlike the IEEE, of which he was never a member, he was not "reckless" with words. He was an IRE member though.

Richard I am ashamed of you trying to make the allusion that Terman has legitimized "dissipationless resistance" as an actual "thing"!

What?

You are really stretching things by quoting Terman out of context, and even then the qoute you have produced is not definitive. I have his 3rd Edition dated 1947 here by my side, and I too note that he does say, and I quote his words directly...

"for all practical purposes be considered a resistance".

NOTE he did not say it WAS a resistor or resistance, just that it [surge resistance] could be CONSIDERED a resistance for practical purposes.

Considered to be something is not the same as being something.

[snip]
> heat, you can surely catagorize resistances into resistors and into
> non-dissipative resistances. That is what the IEEE wisely did.
>
> I don`t think an additional name is needed. I`m still sore over calling
> the perfectly descriptive cycles per second "Hertz".
>
> Best regards, Richard Harrison, KB5WZI
>
[snip]

Now that hurts, you do approve of "dissipationless resistance" but you don't approve of Hertz!

What's in a name?

Best,

-Peter K1PO

3315. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:39:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96ofqftjd1@nntp9.atl.mindspring.net>
Source record: 170088

Richard:

If the L and C are suitably chosen so as to resonate at 60 Hertz and they are then connected in parallel and placed as a parallel tank in series with the light bulb, they will actually turn the bulb completely off...

then how much power are they dissipating? All of it? What?

-Peter K1PO

3316. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 12:53:33 UTC
From: B-Squared <rbethman@home.com>
Message-ID: <hBPj6.103310$B6.24933308@news1.rdc1.md.home.com>
Source record: 170089
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

> As I was reading the SWR and impedance of my antenna on my MFJ-259B, I start
> to wonder,
>
> 1. Does SWR even matter for reception? Now correct me if I'm wrong, since
> most radios have 50ohm impedance, as long as I got 50ohm impedance at a
> frequency on my antenna, I would get the best signal on that frequency
> regardless of what the SWR is at that frequency, right?
>

SWR does matter for reception. That is why most quality receivers have "preselectors". These attempt to "tune" the antenna. If you "have" 50 ohm impedance, you have a match. The problem is that this occurs at one frequency or specific harmonics

> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.
>

Your mag mount may not be directly connected to the car body, but the negative power lead to the battery is, in turn the shield of the coax is, and there is the capacitive coupling through the mag mount to the body.

The negative lead to the battery is tied by a large braid to the chassis of the vehicle. In essence the entire chassis IS a reference ground.

B-Squared
N0DGN

3317. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 13:00:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96oh38$3vq$1@slb2.atl.mindspring.net>
Source record: 170090

Richard:

Is resistance not the defining attribute of a resistor?

How many angels can sit on the head of a pin?

Richard by now you have got us wandering way off the topic of this thread.

I don't really care what ya'll call it for it is a non sequitor.

Reg started this thread with some tutorial material on the design of
sources.

I only tried to get those who are misusing the maximum power transfer
theorem, by applying it backwards, to cease and desist.

It is simply not a source designer's theorem, rather it is a load designer's
theorem.

It's simply a waste of perfectly good theorems when they are inappropriately
applied.

Regardless of the existence of "dissipationless resistance,", I care not
whether it exists, the unique optimum source impedance required to deliver
the maximum possible electircal power into a purely resistive load is zero.

All other source impedances pale in comparison!

This is Lewallen's Theorem. Deal with it!

Enjoy...

Heh, heh.

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:9941-3A8F36C1-7@storefull-117.iap.bryant.webtv.net...
> Peter K1PO wrote:
> "It is not fair to characterize a diode as a resistor."
>
> I called the diode a "dissipationless resistance", not a dissipationless
> resistor (there is no such thing). I didn`t call it a resistor because
> all resistors convert the energy they accept into heat instantly.
> Resistors don`t store electrical energy, it undergoes instant
> conversion.
>
> A resistor is one type of resistance. Not every resistance is a
> resistor.

>
> A diode used to inhibit current has insignificant energy storage as it
> is not using reactance to limit current. Voltage and current are
> in-phase. Power loss in the diode is insignificant, so there is no
> significant resistor there. The diode is acting as a dissipationless
> resistance, not as a resistor.
>
> Best regards, Richard Harrison, KB5WZI
>

3318. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 13:35:08 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8FCF8C.A1990A31@IEEE.org>
Source record: 170091

William Lee wrote:
>
> Juan, look into a screwdriver type antenna to use as your remote tuned
> antenna.
> It will cover all bands and work great.
>
> Remember this ..... when it comes to a mobile antenna anything shorter than
> 1/4 wave in length is a compromise in performance. The shorter the antenna
> the worse it gets.

With a 24 foot vertical radiator, I don't think he's mobile. :-)
With radials five meters off the ground, I would use more than three.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3319. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 13:43:25 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8FD17D.F9C7958@IEEE.org>
Source record: 170092
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

Michael wrote:
> 1. Does SWR even matter for reception?

Depends on what you mean by "matter". SWR reduces the available signal
but it reduces the accompanying noise by the same amount. Most modern
receivers have a wide enough dynamic range that SWR on receive doesn't
much matter.

> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.

The capacitive coupling impedance to ground is low so it really
is AC connected to the car body through that capacitance.
--
http://www.mindspring.com/~w6rca

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3320. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 13:55:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8FD44B.BD4D485B@IEEE.org>
Source record: 170094

"Peter O. Brackett" wrote:
>
> Tom:
>
> [snip]
> "> It's unfortunate they didn't pick a different word to describe
> > dissipative and non-dissipative power-limited "things".
> [snip]
>
> I agree, but we don't have to keep on propagating that terrible mistake!

Is it unfortunate and a terrible mistake that we use the word
"bus" for the transfer path in a computer? Is it unfortunate and
a terrible mistake that we use the word "key" for a pushbutton on
a computer keyboard? Is it unfortunate and a terrible mistake that
we use the words "tree", "limb", and "leaf" to describe
characteristics of a computer data base? I could go on forever but
you get the idea. Like thousands of other English language words,
"resistance" has more than one definition which is context dependent.
--
http://www.mindspring.com/~w6rca

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3321. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 13:58:22 UTC
From: Dan <Diverd4777@aol.com>
Message-ID: <3A8FD636.D3831981@aol.com>
Source record: 170093
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

```
call them up & complain about what you don't like;
follow it up with a letter;
- they might listen...

Lorraine Wilson wrote:
>
> Quit paying them...I bet that will work.
> smiley o'riley <bummer-radio@licensing.org> wrote in message
> news:goodbye@goodbye...
> >
> > I find I can no longer support the ARRL by being a member. What's the
> best
> > way to cancel a membership?
> >
> > TNX 73 de Smiley
```

3322. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 14:05:30 UTC
From: richardharrison@webtv.net
Message-ID: <5225-3A8FD6AA-24@storefull-118.iap.bryant.webtv.net>
Source record: 170095

Peter, K1PO wrote:
"Then how much power are they dissipating? (L and C in a parallel resonant circuit in series with a light bulb)."

Peter said the parallel resonant circuit turns the bulb off, so I will assume a perfect or lossless LC circuit.

A perfect circuit has infinite Q or zero dissiation. Inductive and capacitive currents are balanced. They are in fact the same current. Once set in motion, no more current is accepted from the source. The bulb is off because zero current flows through the bulb.

Perfect L and C dissipate no energy at any time regardless of how they are connected. Reactance only can store energy.

Best regards, Richard Harrison, KB5WZI

3323. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 14:17:21 UTC
From: richardharrison@webtv.net
Message-ID: <5226-3A8FD971-5@storefull-118.iap.bryant.webtv.net>
Source record: 170096

Peter, K1PO wrote:
"Is resistance not the defining attribute of a resistor?"

Resistance is the name given to the ratio of voltage to current when they are in-phase.

Resistance is the first of two defining attributes of a resistor. The second attribute is that a resistor instantly converts the energy it accepts into heat.

Best regards, Richard Harrison, KB5WZI

3324. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 14:37:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A8FDE0C.FAA9D8AC@IEEE.org>
Source record: 170097

"Peter O. Brackett" wrote:
> How many angels can sit on the head of a pin?

During WWII, was the French Resistance dissipative?
--
http://www.mindspring.com/~w6rca

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3325. Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 15:02:13 UTC
From: Excalibur@camelot.net
Message-ID: <18ov8tc836b18pq0flf964rs3bhf3n3em6@4ax.com>
Source record: 170099

I want to replace the am-fm antenna in my 95 GMC pickup with a different one. Could someone tell me what the coax running from the antenna to the radio is? (RG-58)? Am I correct in thinking that the coax end going to the radio is a motorola plug? I like to listen to talk radio on the am band. The fm band works perfectly. I am replacing this antenna because I have an engine noise problem. This noise increases in pitch as the engine revs up. I have tried grounding the antenna, coax, connections, hood, and radio every way that it can be grounded. I bought an expensive silver conductivity paste to ensure a good connection. I have cleaned every connection thoroughly with a small stainless steel brush all to no avail. I installed an inline power filter and as a last resort, I installed a new radio, thinking that the other on must have had a bad filter in it. All that is left is the antenna and coax. This vehicle has factory plugs and wires in it and they are new and in good condition. Does anyone have any recommendations for an antenna and/or coax? Or is there anything else that I am overlooking? Thanks for any advice.

Jody Sorrell
Eclectic, AL.

3326. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 15:08:40 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A8FE578.99184AA6@dialpoint.net>
Source record: 170098
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

The SWR will have some effect on the reception, The only thing is that you have to measuer it from the antenna back to the receiver. Difficult for most to do as you can't normally put power at the antenna end of the coax and feed it back to the input of a receiver without burning out the receiver. The recievers probably don't have a 50 ohm input over most of the range anyway. Sometimes if a good preamp is used and adjusted for the lowest noise figuer (what you really want) it won't be 50 ohms anyway. Many times with moder receivers they will have so much gain that the mismatch will not be noticed by most hams.

The megnetic antenna base should from a capacitance coupling with the car body. If the base is big enough you get enough coupling the losses in the system are low enough as not to effect things very much. One of the main effects I have noticed is that at highway speeds some magnets don't seem to be strong enough to hold the base in place and the receive signal seem to have a lot of noise in it on a 2 meter FM setup.

Michael wrote:
>
> As I was reading the SWR and impedance of my antenna on my MFJ-259B, I start
> to wonder,
>
> 1. Does SWR even matter for reception? Now correct me if I'm wrong, since
> most radios have 50ohm impedance, as long as I got 50ohm impedance at a
> frequency on my antenna, I would get the best signal on that frequency
> regardless of what the SWR is at that frequency, right?
>
> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.

3327. antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 15:34:38 UTC
From: les <l.collinson@btinternet.com>
Message-ID: <96oq62$75v$1@plutonium.btinternet.com>
Source record: 170100

I am going to buy a new vhf/uhf antennas and i am not sure wish one to go for watson or moonraker...please and body using one to let me know which is the best.

3328. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 15:49:33 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96osbh$pf3$5@lure.pipex.net>
Source record: 170101

"Peter O. Brackett" wrote >
> I hope Johann Frederich Ohm is not turning in his grave.
> "Dissipationless Resistance" indeed. RIP dear Johann.

Just another Joule in the Crown (& Anchor)

Even Peltier couldn't get away from Ohmic heating.

BTW it was
Georg Simon Ohm, 1787 - 1854
James P. Joule, 1818 - 1889 a brewer

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3329. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 15:54:30 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96osbi$pf3$6@lure.pipex.net>
Source record: 170102

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A8EA3B0.F9898EBD@IEEE.org...
> "Peter O. Brackett" wrote:
> > I hope Johann Frederich Ohm is not turning in his grave.
"Dissipationless
> > Resistance" indeed. RIP dear Johann.
>
> Peter, the Z0 of a transmission line has a dissipationless resistive
> component. The IEEE Dictionary says that resistance is "the real part
> of impedance". Dissipation is not required in that particular
> definition. The IEEE Dictionary also says dissipation is "the loss of
> electric energy as *HEAT*". According to the IEEE, a resonant antenna
> is nearly a dissipationless resistance. The 50+j0 ohm point in a
> transmission line is at a nearly dissipationless resistance point.

By real it is implied that the Current and Voltage are in phase.
Therefore there will be heating.
If there is heating there is resistance. I^2 R it is real enough.
Even if that resistance is only the 377 Ohm / square of free space.
If there is no dissipation there is no propagation. :)

The attenuation is purely inverse square law thinning of the field
intensity.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3330. Discone

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 16:35:31 UTC
From: Pete Desroche <mariobrosss@cgocable.ca>
Message-ID: <nRSj6.8961$Hz3.635513@carnaval.risq.qc.ca>
Source record: 170104

I would like to built my own antenna but I need a plan to built, so is there anyone knowing a good antenna plan (Discone) to built ?

3331. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 16:38:03 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A8FFA6B.387E6542@dialpoint.net>
Source record: 170103

The coax is some special low capacatiance cable. It is not the same a s
rg-58 or 59 that is about the same size. YOu will have to pull the plug
out to make sure, but the standard for most auto radios is the Motorola
type plug. I doubt that changing the antenna will have any effect on
the reception.

You did not describe the noise problem type. Is it a whine that the
pitch goes up with the motor speed or is it more of a popping noise ?
If it is a whining noise it is probably comming in via the power wiring.
Could be the alternator is getting ready to go out. The popping noise
comes in via the antenna. Try disconnecting the antena and see if the
noise is still there. It might be the hood has become ungrounded or the
other motor and other parts have become unconnected electrically from
each other. Did this noise hapen when the truck was new or did it just
start doing it ?

Excalibur@camelot.net wrote:
>
> I want to replace the am-fm antenna in my 95 GMC pickup with a
> different one. Could someone tell me what the coax running from the
> antenna to the radio is? (RG-58)? Am I correct in thinking that the
> coax end going to the radio is a motorola plug? I like to listen to
> talk radio on the am band. The fm band works perfectly. I am replacing
> this antenna because I have an engine noise problem. This noise
> increases in pitch as the engine revs up. I have tried grounding the
> antenna, coax, connections, hood, and radio every way that it can be
> grounded. I bought an expensive silver conductivity paste to ensure a
> good connection. I have cleaned every connection thoroughly with a
> small stainless steel brush all to no avail. I installed an inline
> power filter and as a last resort, I installed a new radio, thinking
> that the other on must have had a bad filter in it. All that is left
> is the antenna and coax. This vehicle has factory plugs and wires in
> it and they are new and in good condition. Does anyone have any
> recommendations for an antenna and/or coax? Or is there anything else
> that I am overlooking? Thanks for any advice.
>
> Jody Sorrell
> Eclectic, AL.

3332. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:08:21 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96ovgocqe1@slb7.atl.mindspring.net>
Source record: 170105

Gary:

Agreed. Good point.

The free space surge resistance of 377 Ohms does "dissipate" power...

The power expanding outward into the Universe will never return to be reclaimed by the transmitter, at least until after we are all retired.

-Peter K1PO

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96osbi$pf3$6@lure.pipex.net...
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A8EA3B0.F9898EBD@IEEE.org...
> > "Peter O. Brackett" wrote:
> > > I hope Johann Frederich Ohm is not turning in his grave.
> "Dissipationless
> > > Resistance" indeed. RIP dear Johann.
> >
> > Peter, the Z0 of a transmission line has a dissipationless resistive
> > component. The IEEE Dictionary says that resistance is "the real part
> > of impedance". Dissipation is not required in that particular
> > definition. The IEEE Dictionary also says dissipation is "the loss of
> > electric energy as *HEAT*". According to the IEEE, a resonant antenna
> > is nearly a dissipationless resistance. The 50+j0 ohm point in a
> > transmission line is at a nearly dissipationless resistance point.
>
> By real it is implied that the Current and Voltage are in phase.
> Therefore there will be heating.
> If there is heating there is resistance. I^2 R it is real enough.
> Even if that resistance is only the 377 Ohm / square of free space.
> If there is no dissipation there is no propagation. :)
>
> The attenuation is purely inverse square law thinning of the field
> intensity.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

3333. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:15:19 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96p087$8en$1@slb3.atl.mindspring.net>
Source record: 170107

Richard:

I see that you get reactance, but not dissipationless resistance.

Are not the L and C doing the same thing that your dissipationless resistance does in your analogy of the dissipationless resistance.

You would have a hard time convincing my wife that the L and C in the parallel tank are not acting as a dissipationless resistance to somehow "absorb" the power that was going to be dissipated in the light bulb?

Not much difference that I can see between this and your other example... put the L&C into a black box and do a "load pull" on it, it at various frequencies, by using a variety of light bulbs... see what happens.

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:5225-3A8FD6AA-24@storefull-118.iap.bryant.webtv.net...
> Peter, K1PO wrote:
> "Then how much power are they dissipating? (L and C in a parallel
> resonant circuit in series with a light bulb)."
>
> Peter said the parallel resonant circuit turns the bulb off, so I will
> assume a perfect or lossless LC circuit.
>
> A perfect circuit has infinite Q or zero dissiation. Inductive and
> capacitive currents are balanced. They are in fact the same current.
> Once set in motion, no more current is accepted from the source. The
> bulb is off because zero current flows through the bulb.
>
> Perfect L and C dissipate no energy at any time regardless of how they
> are connected. Reactance only can store energy.
>
> Best regards, Richard Harrison, KB5WZI
>

3334. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:21:17 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <uvTj6.4887$Dd3.326820@monolith.news.easynet.net>
Source record: 170106
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

1. The impedance seen by the reciever will not be 50 ohm if the SWR is not
1. It will vary along the length of the coax. You will still get a signal
but it will be stronger if you get the swr down. Better still, forget SWR
and tune antenna for best signal.

2, The magnet is one plate, the car body the other , and the paint the
dialectric of a two-plate capacitor. The signal passes through this
capacitor.

Michael <hkc2001@pacbell.net> wrote in message
news:3nOj6.95405$Wq1.39345097@nnrp5-w.sbc.net...
> As I was reading the SWR and impedance of my antenna on my MFJ-259B, I
start
> to wonder,
>
> 1. Does SWR even matter for reception? Now correct me if I'm wrong, since
> most radios have 50ohm impedance, as long as I got 50ohm impedance at a
> frequency on my antenna, I would get the best signal on that frequency
> regardless of what the SWR is at that frequency, right?
>
> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.
>
>

3335. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:26:26 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96p0f7don1@slb6.atl.mindspring.net>
Source record: 170108

Cecil:

WWII or whenever, the French are always dissipative, always have been always will be, and I say... vive La France!

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A8FDE0C.FAA9D8AC@IEEE.org...
> "Peter O. Brackett" wrote:
> > How many angels can sit on the head of a pin?
>
> During WWII, was the French Resistance dissipative?
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3336. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:28:23 UTC
From: richardharrison@webtv.net
Message-ID: <19049-3A900637-41@storefull-117.iap.bryant.webtv.net>
Source record: 170112

Gary Peach wrote:
"By real it implied that the Current and Voltage are in phase. Therefore there will be heating."

The first sentence is true. The second is false.

In the surge resistance of a transmission line the current is in-phase with the voltage when there is no significant loss (heating) in the line. The same is true of radiation resistance in an antenna or the 377 ohms of free-space.

"Inverse square" attenuation of free-space is only a result of spherical trigonometry and has nothing to do with conversion of radio energy to heat.

Propagation is the result of a magnetic wave begetting an electric wave which in turn begets a magnetic wave ad infinitum, as described by J.C. Maxwell.

Best regards, Richard Harrison, KB5WZI

3337. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:37:09 UTC
From: 2w8ji@contesting.com
Message-ID: <3a90051a.112511880@news.accessunited.com>
Source record: 170109

Hi Reg,

On Sun, 18 Feb 2001 03:05:04 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>In your reply could you be quantitative and include some accurate
>numerical information? Otherwise words like "overestimate" and
>"negligible" have no meaning.

You seem to think a definite number that is wrong is better than
saying "the result varies". I can't give any exact figures, because
the errors are all over the place. The software simply does not track
the real world, it isn't even remotely close as the frequency is moved
up towards the self-resonant frequency of the inductor.

Have you measured inductors, and compared them to you software? What
is the highest Q you have measured in a reasonably sized inductor at
radio frequencies, and how did it compare to your program's "estimate"
of Q?

73 Tom

3338. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:38:23 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <wLTj6.4892$Dd3.329077@monolith.news.easynet.net>
Source record: 170110

Nah! 73 is kind regards, - 73s is Many kind Regards, - best 73s is
typical American overkill ;-)
Bryan - G3GVB

Roy Lewallen <w7el@eznec.com> wrote in message
news:3A8CCF9C.5BE2E33A@eznec.com...
> Hes write, you no.
>
> Roy Lewallen, W7EL
>
> gsanial@ecn.ab.ca wrote:
> >
> > Bill Turner (w7ti@jps.net) wrote:
> > : On Sat, 03 Feb 2001 21:53:08 -0700, Dick Hughes
<rhughes33@cableone.net> wrote:
> >
> > : >Of course you realize that 73's is an absolutely incorrect term. 73
> > : >stands for, "best regards." 73's means best regards's. Don't know
> > : >why 73's always grates on me like scratching your fingernails on a
> > : >blackboard, but it does.
> >
> > : _____
> >
> > : I don't know which I hate worse - hearing "73's" or hearing someone
complain
> > : about it. English is a "living language", guys. Let it breathe.
> >
> > : 73, Bill W7TI
> >
> > Their you go...
> >
> > 73 de VE6GES.
> > --

3339. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:41:57 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96p1gppji1@nntp9.atl.mindspring.net>
Source record: 170111

Gary:

All I can say is Wow! You got it.

[snip]
Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96osbh$pf3$5@lure.pipex.net...
>
> "Peter O. Brackett" wrote >
> > I hope Johann Frederich Ohm is not turning in his grave.
> > "Dissipationless Resistance" indeed. RIP dear Johann.
>
> Just another Joule in the Crown (& Anchor)
>
> Even Peltier couldn't get away from Ohmic heating.
>
> BTW it was
> Georg Simon Ohm, 1787 - 1854
> James P. Joule, 1818 - 1889 a brewer
[snip]

I love you man, you'r the only one who is paying attention.

You win a free dinner for two at KFC. Because you got Ohm's genealogy
correct.

And... nice going!

Georges Peltier indeed found a way to dissipate without resistance.

In fact Peltier even discovered a way to "un-dissipate".

Peltier's fellow Frenchman, Sadi Carnot probably would have stirred in his
grave if he had found what Peltier had discovered.

Wow, deep stuff, I can see it now, as soon as those "Conjugate Matchers"
read about, but probably won't understand, the Peltier effect, they will
probably "invent" the un-dissipative resistor.

I can see it now... the "Conjugate Matchers" will use a propane heater to
feed heat into their final amplifiers so as to tune the "undissipative
output resistance" until it matches the 50 Ohms of the transmission line.
Instead of "load pulling" they will be "load pushing"!

Now, Gary my buddy, for a free dinner at Wendy's who was Johann Frederich
xxxx?

Best Regards, and thanks again man.

-Peter K1PO

3340. Re: 2.4Ghz directional antenna for LAN (home RF)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 17:48:13 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <KUTj6.4902$Dd3.330227@monolith.news.easynet.net>
Source record: 170113

Put a simple corner reflector around existing antenna. Touch nothing. Get at least 10 db gain.

Bryan.

mindy <mindy1701@hotmail.com> wrote in message
news:3A8C1C31.54F974A1@hotmail.com...
> Hi All
>
> I'm trying to extend the range of my wireless (2.4Ghz Spread Spectrum)
> LAN system in my house.
>
> I need to extend it to around 1000ft - Standard is 150-200 ft with the
> Omni
> directional antennas. It only needs to be point-to-point, so a
> directional antenna
> will work fine. The path is all line of sight with a single tree about
> half way.
>
> The transceivers have standard dipole antenna on them. They appear to be
> either
> 0db or -3db dipoles.
>
> My though was to build either a Helical or a Yagi antenna with an
> appropriate
> gain to overcome my losses. I figure the gain should be +9db for the
> extended
> range plus all the cable and connector losses.
>
> I am an electrical engineer, but I have no experience in antenna or RF
> design.
> I have a HP network analyzer at my disposal, so can make measurement on
> the system.
>
>
> Now here is my question:
>
> 1) I would prefer not to tear into the transceiver and attach the coax
> to the circuit
> board.
>
> Is it possible to couple the signal to the existing dipole
> efficiently enough to make
> this work ?

>
> What would be the loss if I ran the output of, say an 18db
> helical antenna,
> through a coax to a ½ wave dipole and place it next to the
> transceiver's
> antenna. ?
>
> Does this idea have any chance of working ?
>
> If so is there an optimal position or configuration that I can
> employ?
>
> Is there any impedance issues that I need to deal with?
>
>
> 2) If I have to tear into the transceiver and connect the antenna
> directly to the
> circuit board, I assume that the impedances are not going to be matched.
>
> What will I have to do to match it close enough to work ?
>
> Any other Ideas would be greatly appreciated.
>
>
> Thanks
> Mindy
>
> mindy1701@hortmail .com
>
>
>
>

3341. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 18:27:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A90141D.704CC4B@IEEE.org>
Source record: 170114

"Peter O. Brackett" wrote:
> The free space surge resistance of 377 Ohms does "dissipate" power...

According to the IEEE dictionary, not unless it *heats* up space.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3342. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 18:31:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A90151B.DEDE8696@IEEE.org>
Source record: 170115

"Peter O. Brackett" wrote:
> All I can say is Wow! You got it.

But the point is that the heating in a run of coax is not caused
by Z0 and it is not dependent upon current and voltage being in
phase.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3343. Re: Building a Windom or OCFD info please...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 18:53:19 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <ORUj6.4918$Dd3.336779@monolith.news.easynet.net>
Source record: 170116

Another approach is to use an open wire folded dipole continuously run between two (preferably plastic) pulleys like the system that used to be used for hanging laundry from high up windows. Feed with 300 ohm twin. The feed point will be in the centre for 160 but by pulling to one side the feed point can be moved (Actually the whole antenna moves through the pulleys) to any off-centre place which gives you a good match at the shack end of the feeder. You will need an ATU there of course - but then you should always have one anyway. ANY band can be worked with this sytem. Total cost about $10. On 18 Mhz for example - dont get a headache working out what current nodes are where - just adjust until you get a match.!
For $2 more you can have a two-sheave pulley at one end with a continuous loop of rope down to the ground to simplify the adjustment procedure without even going upstairs !

If neighbours look askance - just put some wet socks and shorts to dry - loading is unaffected and drying time enhanced by RF.
;-)

Bryan - G3GVB

Roy Lewallen <w7el@eznec.com> wrote in message
news:3A88B6DA.205A3E59@eznec.com...
> I know that Jack Belrose, VE2CV, wrote one or more articles in QST on
> the topic of OCFDs several (5?) years ago. Maybe someone can point you
> to the particular issue(s). I recall that he had a lot of difficulty
> preventing feedline radiation, even with a balun. Feedline radiation is
> sometimes not a problem, but it sure can complicate matters if you're
> trying to duplicate somebody else's system, because the feedline itself
> is part of the antenna so has to be duplicated also.
>
> Roy Lewallen, W7EL
>
> Mike wrote:
> >
> > I am considering building a Windom or an Off Center Fed Dipole. I am
looking
> > to see if anybody has any practical experience with these or can
reccomend a
> > source of information. I hare read the Windom/OCFD articles in the
current
> > edition of the ARRL Antenna Book and the OCFD section in ARRL's More
Wire
> > Antenna Classics-Vol2. I am planning on cutting it for the 160 meter
band
> > primarily for use there and on 75 phone. I should be able to hang the

feed
> > point height of 40 to 45' or so, and maintain a decent flat top
> > configuration with reasonable sag.
> >
> > I am interested on advice on feeding the OFCD. It appears many feed it
with
> > coax through a 4:1 Balun which provides a better match- sometimes a 1:1
swr
> > point, but a 6:1 (sometimes used on commercial models) give a wider
> > bandwidth but not always a 1:1 spot. Another version the appears circa
> > 1950's is to feed it with twin-lead through a 4:1 balun. Could feeding
it
> > with a specific length of twin lead or window/ladder enhance vertical
> > radiation?- Similar to how the Radiator section of coax on the Carolina
> > Windom radiates vertically.
> >
> > I saw a design in the first volume of ARRL Wire Antenna Classics where
the
> > builder fed a 40 meter OCFD with ladder line in odd multiple of 1/4 wave
> > (allowing for velocity factor) to get it to load on the odd harmonic of
15
> > meters as well as the normal (for windom-like arrays) even harmonics. He
> > simply had to change from the 4:1 balun to a 1:1 balun to use it on 15
> > meters. I am not looking to pick up even harmonic bands, but would be
> > interested if the addition of a resonant length of window/ladder line
could
> > enhane vertical radiation on 160 or 75 (or any other band as a bonus).
> >
> > Any advice, instructions, or suggestions appreciated. Please post here
or
> > Email direct. Remove the QRM from my address to email directly.
> >
> > 73,
> > Mike
> > KA1DRZ

3344. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 19:34:24 UTC
From: richardharrison@webtv.net
Message-ID: <19590-3A9023C0-62@storefull-116.iap.bryant.webtv.net>
Source record: 170118

Peter, K1PO wrote:
"It is simply not a source designer`s theorem, rather it is a load designer`s theorem."

We have a desire to maximize load power. We have dissimilar source and load resistances. We may find it inconvenient to change either impedance.

Like the 2500-ohm radio output impedance and the 4-ohm loudspeaker we want to use with the radio.

Like the 50-ohm radio transmitter we want to use with a 20-ohm drivepoint antenna.

To get the most power into the loads in the given examples, we reconcile the impedances in each case. We use an impedance matching transformer between the 2500-ohm radio and the 4-ohm speaker. We use a matching network between the 50-ohm transmitter and the 20-ohm antenna.

You can just as accurately say you have conformed the source to the load as saying you have conformed the load to the source.

Peter`s non-conformist attitude doesn`t change the facts. You can accurately go either way with a characterization of the impedance matching process.

Best regards, Richard Harrison, KB5WZI

3345. QRPp (2000) / SLPV info WTD

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 19:44:18 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <96p8milbk1@agate.berkeley.edu>
Source record: 170117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

I would like to obtain a copy of the Spring 2000 issue of QRPp. I
am specifically interested in seeing the construction article on
the St. Louis Pocket Vertical antenna. (This is different from the
St. Louis Vertical.)

Can anyone help me obtain this article in one form or another?
I'll do whatever it takes to get a copy of this article.

Backissues of QRPp are available from NorCal only from 1998 back,
nothing yet for '99 or '00. Thanks for your help,

73,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3346. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 19:59:02 UTC
From: paul <paul@nospam.com>
Message-ID: <3A902986.6BE2@nospam.com>
Source record: 170019

Stephen Dobak wrote:
>
>
>
> Keith Zimmermann wrote:
>
> OK, I almost made through the whole month without asking a
> dumb
> question...
>
> Years ago, when I was a teen-novice, someone suggested that
> I add salt
> around my ground rod and radial system. Being a novice, I
> of course
> did. I would also water and really soak the ground system
> prior to a
> planned night of DX-ing. Anything to help my 5 watts!
>
> Now, I'm wondering if there is any benefit from doing either
> of those
> things. Dry, parched, rocky ground like we have in Texas
> probably needs
> some help...especially in the summer. I used verticals,
> end-fed long
> wires, and inverted vees back then. I had a short run from
> my rig and
> antenna tuner to the ground. I had a good radial system
> below my
> ground-mounted vertical. But no matter what, I was
> convinced that
> watering my ground improved my signal and reduced static.
>
> Thanks for any info.
>
> Keith K5WX
>
> ----------

>
> Good way to corrode ground systems, There has been more than a few
> radio stations that tried the same
> then when their signal goes down the toilet the staff or consultant
> when checking the radials start to dig
> and find green in the soil that use to be radials.

>
>
> Steve WB3AMG
>

I've heard of a non salt type chemical that some people use but I can't remember the name. My VE told us about it when I was studying for the Novice so many years ago.

Paul

3347. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 20:17:36 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96parecrj1@neptunium.btinternet.com>
Source record: 170021

Tom said -
> When I measure the Q of an inductor with nearly zero turn-to-turn
> spacing, the Q can easily be half or less what it is when the
turns
> are spaced one wire diameter.
>
==========
Tom, if you take the trouble of using program SOLNOID2 before
criticising it you will find that at HF the computed Q is at a
maximum when the ratio of wire diameter/winding pitch is usually
between
0.5 and 0.7

Also, it is not the increase in capacitance between turns which
reduces Q when the spacing between turns decreases.

Reg, G4FGQ

3348. What kind of ferrite (RFI)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 20:21:33 UTC
From: PA5KE <pa5ke@euronet.nl>
Message-ID: <96pau9$187i$1@beast.euro.net>
Source record: 170020

Dear OM,

I appreciate some info on the kinds of ferrite that are best usable to fight RFI (common-mode?) in the stereo of my neighbour. The signal is picked up by their speaker cables. I have tried some clamp ferrites on the speaker cables but this did not fix the problem.

What type (ref. number) should I best use, I am active on HF and 6 meters.

Your help is appreciated!

73, de Peter
PA5KE

3349. Q: Dipole Horizontal tilt and radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:04:06 UTC
From: Quequeg@quahog.com
Message-ID: <slrn990efe.5b.Quequeg@daystar.capecod.net>
Source record: 170022

I have a 40 meter wire dipole up about 22 ft. on the east end, and 37 ft. on the other. with the east-west orientation, it should radiate mostly north-south. Will the tilt have a significant effect on the pattern?

-Q

-- "Dead Whale or a Stove Boat"
<---------[[[[[[[[[[[[[[[[[[

3350. Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:05:09 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <jbdp69.7nm.ln@kram.org>
Source record: 170023

I'm considering painting a discone green (non-metallic paint of course) and using a pole to make it sit right on top of a conifer tree with the tip of the tree sticking up inside the cone so that the radials/legs/cone sit almost flush with the tree with very little clearance and possibly even touching the tree in places. The disc will be clear of the top of the tree by some but not many inches. I'll probably leave the vertical element on to help with performance on 6m.

No prizes for guessing that I'm looking for a fairly subtle and low profile installation.

Will the tree being inside the cone have any effect on the discone, for example by altering it's radiation pattern or SWR? My guess is that the proximity of the tree won't do any harm and may even improve the approximation that the discone's legs are making to a cone.

Thanks,

Mark.

3351. Re: Discone

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:22:34 UTC
From: richardharrison@webtv.net
Message-ID: <18942-3A903D1A-74@storefull-114.iap.bryant.webtv.net>
Source record: 170025

Pete Desroche wrote:
"---a good antenna plan (discone) to build?"

The "Radio Handbook" from Editors and Engineers, edited by Bill Orr, W6SAI, 15th edition published in 1959 has a "design chart" for dimensions versus lowest frequency. It goes down to 50 MHz.

I recall seeing a design in which the disk was 6 feet in diameter and the slant height and diameter of the skirt were 9.5 feet. According to Bill orr`s chart the disk is 0.7 times the skirt diameter. That would make the design I saw about right at 27 MHz. The design I saw claimed to cover bands between 11 meters and 2 meters.

Best regards, Ricard Harrison, kB5WZI

3352. Re: Q: Dipole Horizontal tilt and radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:24:19 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A903D83.C24FB953@oio.net>
Source record: 170024

Queequeg wrote:
>
> I have a 40 meter wire dipole up about 22 ft. on the east end, and 37 ft. on
> the other. with the east-west orientation, it should radiate mostly
> north-south. Will the tilt have a significant effect on the pattern?
>
> -Q
>
> -- "Dead Whale or a Stove Boat"
> <---------[[[[[[[[[[[[[[[[[

Probably not. there will be some alteration of the radiation
pattern, but shouldn't be very much.
'Doc

3353. Re: What kind of ferrite (RFI)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:26:17 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <72Xj6.1199$xe.12718@news.inreach.com>
Source record: 170029

Peter:

The kind of trouble you describe will require more than an easy external clamp on ferrite...you can't get enough inductive reactance that way. Most likely, you will need to open up the amplifier and put RF chokes with enough inductance to present a high impedance at the frequencies you are using. Bypass capacitors should also be installed. While you have it open, you should apply the same treatment to the AC power leads if it isn't done already.

This kind of RF filtering, when done on someone else's equipmennt, may cure the RFI problem but it may also subject you to liability for other problems that may occur with the equipmenht, so you should do it only if you are on very good terms with your neighbor.

Roger K6

3354. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:37:47 UTC
From: HATHAWAY9894@webtv.net
Message-ID: <21867-3A9040AB-45@storefull-618.iap.bryant.webtv.net>
Source record: 170027

DONT PAY YOUR DUES WHEN THE COME DUE TO PAY !!!!!!!!!

3355. Re: Random Length Wire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:43:40 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A90420C.10CFC60D@oio.net>
Source record: 170026

Rex,
With any 'unbalanced' antenna you are going to have
RF in the shack on some band. You may be just fine on
one or two bands, but there's going to be at least one
band where your going to be 'eaten up' with RF. It's
just the 'nature of the beast'.
I think you won't have 'much' of a ground with just
the one ground rod. You might want to think about using
some sort of feedline out of the basement, then putting
in a radial system. Just a though...
'Doc

3356. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:47:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96pfsj$4f3$1@slb0.atl.mindspring.net>
Source record: 170028

Cecil:

And so... the IEEE is worried that it won't heat up space.

Don't worry... it will, it will... eventually.

Sadi Carnot's second law of Thermodynamics takes care of that.

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A90141D.704CC4B@IEEE.org...
> "Peter O. Brackett" wrote:
> > The free space surge resistance of 377 Ohms does "dissipate" power...
>
> According to the IEEE dictionary, not unless it *heats* up space.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3357. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 21:55:08 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96pgbm$h79$1@slb5.atl.mindspring.net>
Source record: 170030

Richard:

All of those instances quoted by you here below, are not really "designs" they are simply adaptations, or bench top fitting together of two different designs. Fitting a previously designed load to a previously designed source. Not really "design", just a "hook up".

However that is, as you so clearly pointed out, a very worthwhile use of impedance matching and the maximum power transfer theorem. I heartily concur with you.

However, if one starts from scratch [R&D perhaps?] rather than just "hooking up stuff" and begins with a green field design for a new source, why then the designer would clearly wish to "optimize" her source impedance, instead of merely matching two existing designs.

What?

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:19590-3A9023C0-62@storefull-116.iap.bryant.webtv.net...
> Peter, K1PO wrote:
> "It is simply not a source designer`s theorem, rather it is a load
> designer`s theorem."
>
> We have a desire to maximize load power. We have dissimilar source and
> load resistances. We may find it inconvenient to change either
> impedance.
>
> Like the 2500-ohm radio output impedance and the 4-ohm loudspeaker we
> want to use with the radio.
>
> Like the 50-ohm radio transmitter we want to use with a 20-ohm
> drivepoint antenna.
>
> To get the most power into the loads in the given examples, we reconcile
> the impedances in each case. We use an impedance matching transformer
> between the 2500-ohm radio and the 4-ohm speaker. We use a matching
> network between the 50-ohm transmitter and the 20-ohm antenna.
>
> You can just as accurately say you have conformed the source to the load
> as saying you have conformed the load to the source.
>
> Peter`s non-conformist attitude doesn`t change the facts. You can
> accurately go either way with a characterization of the impedance

> matching process.
>
> Best regards, Richard Harrison, KB5WZI
>

3358. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:00:28 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96pkcq$at1$2@lure.pipex.net>
Source record: 170042

"Richard Harrison" wrote
> Perfect L and C dissipate no energy at any time regardless of how they
> are connected. Reactance only can store energy.

Perfection Ah! elusive chalice that knows no decay.

Discussing perfect L and C is a convenient *concept* for understanding
whilst learning, which should not be carried forward into the real world.

i = ((2Ve^(-Rt/2L)/SQRT((4L/C)-R^2))sin((t/2L) SQRT(4L/C)-R^2))

i is the instantaneous current, this expression describes the gradual decay
of a damped oscillation.
The sort of practical damped oscillation (ringing) that you get from the
most perfectly constructed practical LC circuit. Once stimulated into
oscillation that oscillation does not continue forever, it dies out
exponentially unless the lost energy is replaced by an external source.

The expression is the product of three factors.
a constant
a decreasing exponential (called the damping factor)
a Real sinusoidal oscillation.

I think that so far some arguments in this thread have considered the third,
but omitted to mention the first two.

perpetual-motion machine,
a machine, considered impossible to build, that would be able to operate
continuously and supply useful work without needing a continuous supply of
heat or fuel.

A perpetual-motion machine of the first kind, which would produce more
energy in the form of work than is supplied to it in the form of heat,
violates the first law of thermodynamics.

A perpetual-motion machine of the second kind, which would continuously
supply work without a flow of heat from a warmer body to a cooler body,
violates the second law of thermodynamics.

This old lemon has been done to death,
anyone want to discuss entropy?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3359. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:02:11 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96pgmp$2lq$1@slb3.atl.mindspring.net>
Source record: 170031

Cecil:

In a run of "lossless" coax there is no heating! Now if the coax is lossy, of course there will be heating. And depending upon the impedance matching the heating may not be uniform, there may be hot spots along the line located at points of maximim current if there are standing waves present.

If there are no standing waves present on the lossy coax, and the dissipative or lossy line is infinitely long, where is most of the heat generated? Is it uniform all along the line, or what?

BTW... where do you buy your lossy coax?

Heh, heh.

That's why, like you, I use open wires... no "internal" heat loss to speak of.

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A90151B.DEDE8696@IEEE.org...
> "Peter O. Brackett" wrote:
> > All I can say is Wow! You got it.
>
> But the point is that the heating in a run of coax is not caused
> by Z0 and it is not dependent upon current and voltage being in
> phase.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3360. Need Help Finding / Building Cables for This

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:12:24 UTC
From: James Wendt <jimw@timeandtech.com>
Message-ID: <cNXj6.5146$Vy2.616639@typhoon.mn.mediaone.net>
Source record: 170032

I need to be able to connect my wireless network access point to an external antenna, but the connectors and cables are giving me fits.
The problem is that the antenna has a female SMA connector and the access point has a reverse male TNC connector and I am not able find anything standard to connect the two.

I can't and don't want to change the connector on the antenna though I have been able to find an adapter which turns it into a standard female TNC.

I could probably change the access point since the guts of the thing are basically a SMC PCMCIA wireless network card attached directly to the board. The built-in PCMCIA card has an industry standard female connector which is connected to the reverse male TNC connector by a short, skinny piece of coax.

I'd appreciate any advice you could share about where I can either buy the adapters (this isn't my first preference due to potential signal loss) or where I can buy the parts to change my access point from reverse TNC to female SMA so that I can use standard coax to hook this all up.

(See pictures of what I'm working with here: TNC / SMA connector problems http://www.manlycooking.com)

Please contact me at: jimw@timeandtech.com with any suggestions.

Thanks in advance,

Jim Wendt

3361. Re: What kind of ferrite (RFI)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:18:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A904A44.8C679604@eznec.com>
Source record: 170033

Get two ferrite cores of type 43 material (or other material with
initial permeability about 850 or greater). Wind several turns of each
speaker cable (both conductors together) through a core. 5 turns will
give as much impedance as 25 clamp on cores of the same size, 10 turns
as much as 100 cores. Put these as close to the stereo as possible. The
larger the core cross section, the more impedance you'll get.

Roy Lewallen, W7EL

PA5KE wrote:
>
> Dear OM,
>
> I appreciate some info on the kinds of ferrite that are best usable to fight
> RFI (common-mode?) in the stereo of my neighbour. The signal is picked up by
> their speaker cables. I have tried some clamp ferrites on the speaker cables
> but this did not fix the problem.
>
> What type (ref. number) should I best use, I am active on HF and 6 meters.
>
> Your help is appreciated!
>
> 73, de Peter
> PA5KE

3362. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:26:00 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A904BF8.119184B4@warwick.net>
Source record: 170034

Seems to me that I saw an article suggesting that you put a small container of your prospective paint into cup and into the microwave. If it gets hot when you blast it, don't use it. Or, brush some of it onto some material which you've already proved to be OK in the microwave and give it a shot that way. Any heat... don't use it!
Stan

William Lee wrote:
>
> A friend of mine in Aransas Pass, Texas runied a R-7 vertical by painting it
> prevent corosion.
> The paint was somewhat RF conductive.
>

3363. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:26:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96pkcs$at1$3@lure.pipex.net>
Source record: 170039

"William Lee" wrote
> 1. No. SWR will degrade the signal strength. A tuned or resonant antenna
> will delever the highest signal level to the coax. Impedance (match or
> mismatch) will affect the transfer of that signal from the antenna to the
> coax. The closer they match the better the signal will transfer and less
> loss there will be.
> (hey ... this would be a great spot for a RF amplifier ... hint .. hint ..
> wink .. wink)

More devastating the VSWR if bad would actually add to the noise.
Now this would hardly be noticed at HF (below 15 MHz) but at higher
frequencies where the sky temperature begins to approach Receiver
temperature (noise figure) A bad VSWR can wipe small signals right out.

> 2. You have a ground connection thru the coax shield and power cable. Also
> there is some capacitive coupling due to the size of the base and
closeness
> of the metal body. Works like a "thru the glass" mounted antenna.

Um!
Imagine a mag mount in the centre of the roof of your car.
Now for a moment let us consider static electricity, (you know the sort that
you get when you comb your hair in dry weather)
Imagine if you will that the tip of the antenna has a collection of
electrons on it thus a large negative charge. Now get out your electroscope
(Pith balls or bits of cellophane or very dry bits of fag paper) They would
line up along what the original experimenters called lines of electrostatic
influence.
Bit harder to do than the equivalent magnetic demonstration where you
simply put the magnet into a load of iron filings and they line up along the
lines of magnetic influence.
What you would see is a concentration of lines of electrostatic force
bunched together around the tip of the whip and they would be spread out
like a fountain with the other ends of the lines of influence terminating in
the first positively charged body. namely the roof of the car.

Now if you will come with me a bit further and consider that instead of an
electrostatic charge at the tip of the whip you substitute an alternating
high voltage, first a surplus of electrons at the tip making it negative and
next the electrons rush away and leave holes thus a positive charge.
The positive charge will have similar lines of influence in the form of a
fountain just the same as for the negative charge, but the field which they
represent will be in the reverse direction. So in space when an oscillating
voltage is applied to the antenna an oscillating electrostatic filed will be
produced in the space around the antenna. as the electrons rush away from

the tip they will constitute a current and a magnetic filed will circle the whip.
Now in space we have an oscillating magnetic field normal to (at right angles to) an oscillating electrostatic field in space. We have in fact an oscillating electromagnetic field radiating away from the whip.

Any nearby conductor will act as a terminator for the electrostatic lines of influence. The same is true if you consider the wave when it has progressed on its journey. It is by this mechanism that you get reflection, that targets are detected by a Radar, that multipath (Ghosts) spoils a TV picture.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3364. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:26:17 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <96pigukrg1@nntp9.atl.mindspring.net>
Source record: 170035

I couldn't say what the proximity will do to your pattern but have you thought about what will happen when the wind blows. It seems that it would be in an excellent position for destruction.
--
CW
KC7NOD
"Mark Turner" <mark@kram.org> wrote in message news:jbdp69.7nm.ln@kram.org...
> I'm considering painting a discone green (non-metallic paint of course) and
> using a pole to make it sit right on top of a conifer tree with the tip of
> the tree sticking up inside the cone so that the radials/legs/cone sit
> almost flush with the tree with very little clearance and possibly even
> touching the tree in places. The disc will be clear of the top of the tree
> by some but not many inches. I'll probably leave the vertical element on to
> help with performance on 6m.
>
> No prizes for guessing that I'm looking for a fairly subtle and low profile
> installation.
>
> Will the tree being inside the cone have any effect on the discone, for
> example by altering it's radiation pattern or SWR? My guess is that the
> proximity of the tree won't do any harm and may even improve the
> approximation that the discone's legs are making to a cone.
>
> Thanks,
>
> Mark.
>

3365. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:32:18 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96pkcu$at1$4@lure.pipex.net>
Source record: 170040

"B-Squared" wrote > >
>
> SWR does matter for reception. That is why most quality receivers have
> "preselectors". These attempt to "tune" the antenna. If you "have" 50
ohm
> impedance, you have a match. The problem is that this occurs at one
> frequency or specific harmonics

Be careful not to confuse a preselector with an antenna tuner.
Both do a little of each others job but each has a specific purpose.
A preselector usually will have a much higher Q than an Antenna tuner.
It will have very much higher rejection of unwanted signals outside the pass
band of operation.

An Antenna tuner is purely an impedance matching device and the Q is low.

If you have the choice for receiving then go for the preselector.
If you are above 15 MHz then go for both.
At VHF you have different methods of accomplishing the desired result.
However Matching of a Receiver Antenna if you want ultimate sensitivity and
low noise (best Signal to Noise Ratio) is important.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3366. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:33:54 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A904DD2.6765388F@warwick.net>
Source record: 170036

There's those ARC... whatevers again! Please... how do you convert from cosine,
or Tan to ArcCos, or ArcTan?
I made the mistake of asking someone who sounded like a math professor... BIG
MISTAKE!!! My algebra is shaky at best... Does anybody have an "easy" but
correct explanation out there?
If the answer might prove to be too boring for the rest of the net, a bit of
private tutoring to my Email account would be fine.
Thanks for any help! Stan

Reg Edwards wrote:
>
> From Z and SWR, R and X can be calculated. But the sign of X is ambiguous.
>
> To determine the sign of X it is necessary to inspect the item being
> measured. For example, if the antenna wire is open circuit at the other end
> and its length is less than 1/4-wavelength, then input X must be negative.
>
> The sign of X can also be investigated by connecting a capacitor or coil in
> series with the unknown Z and observing what happens to Z.
>
> Arithmetically -
>
> R = (2500 + Z^2) / 50 / (SWR + 1 / SWR)
>
> X = Sqrt(Z^2 - R^2)
>
> Angle = ArcCos(R / Z)
>
> However, measurement uncertainties can be greatly magnified when passing
> through the arithmetic. X is related to the small difference between two
> large quantities.
>
> ----
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A89D079.2AB041EA@IEEE.org...
> > JGBOYLES wrote:
> > > Still wondering if the Smith Chart can do it?

> >
> > Yep, the Smith Chart can do it. You need to draw constant-Z
> > curves on the Chart and then draw SWR circles. The two
> > points of intersection are the two solutions.
> > --
> > http://www.mindspring.com/~w6rca

3367. Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 22:49:35 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3a9051e9$0$1521$2a0ee87e@news.tdin.com>
Source record: 170037

The XYL and I are in the process of building a new home on 4 acres and will be moving in this spring. I'm starting to dream about my new farm (antenna, that is). I haven't finalized the design of the antennas yet, but I will probably initially put up the tower and antenna that I'm using here (once I get some extra cash I do want to upgrade, but that may be a while). I'm mainly interested in HF.

I'm looking for advice on feedline. Obviously the more I pay for feedline, the less loss, but what's the best bang for the buck. There will be 150 - 175 feet of feedline from the shack to the top of the tower.

73,
Mark, N8ME

3368. Re: Repeater antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:00:05 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A9053F5.26331C09@warwick.net>
Source record: 170038

Hmmm... I've heard folks commenting about Station Masters coming apart internally due to flexing in the wind... especially the UHF guys with their many, many soldered joints. Our club has gotten away from them in favor of the multi-bay dipoles... expensive but rugged to the max!
Stan

w5omr wrote:
>
> : I am looking for a replacement 440 Mhz HAM repeater antenna for a
> : non-hostile (high wind/snow) environment.
>
> DB-420
>
> : I have used the Diamond 500 in the past (I used the 2 meter side of the
> : antenna for a remote base)
>
> Don't forget at least 7/8 Andrews hardline.
>
> : I would like to go to a single band antenna and have been debating on the
> : Diamond F-718A or the Hustler G6.
>
> And, connectors...
>
> : Does anyone have any words of wisdom on these, or other antennas?
>
> : I don't want to spend the $$ on a station master.
>
> Spend the money one time, and have it last a lifetime.
>
> --
> 73 = Best Regards,
> -=Jeff/W5OMR=-

3369. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:01:53 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96pkd0$at1$5@lure.pipex.net>
Source record: 170041

"Cecil" wrote ...
> Michael wrote:
> > 1. Does SWR even matter for reception?
>
> Depends on what you mean by "matter". SWR reduces the available signal
> but it reduces the accompanying noise by the same amount. Most modern
> receivers have a wide enough dynamic range that SWR on receive doesn't
> much matter.

You can't improve upon the S/N at the input to the antenna,
but you can degrade it.

The ideal is to realise as near as possible at the output of the receiver
the signal to noise at the input. Anything that you fail to do that either
degrades signal or increases effective noise will spoil the output signal to
noise

(So/No)/ (Si/Ni) = So/Si * Ni/No

here we have two elements to receiver performance.

The SWR will affect both of these components.
The effective attenuations are available from tables.
Thus signal attenuation is easily calculated
however let us look at the noise

N = kTB
where k is Boltzmann's Constant
T is the absolute temperature
B is the bandwidth.

therefore Ni = k Ti B

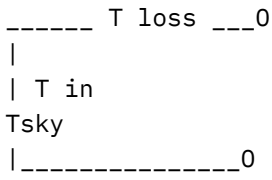
Ti is Temperature in

Noise out = Noise in plus noise generated in the receiver
= Ni + Nr
= k Ti B + k Tr B

Simplifying
= kB(Ti +Tr)

Let us look a little closer at Ti

It has two components,
Tsky and T loss



T loss = To (1- loss)

Tin = T sky * loss + To(1-loss)

Now the loss consists of two parts the actual insertion loss due to the feeders etc. and the effective loss due to a miss match.

Where T sky is very large as at the low end of the HF spectrum T loss is not significant. However as the frequency rises the sky noise falls off at 8 dB per octave until the sky noise begins to approach the noise figure (Tr) of the receiver, now these effects begin to become important. The effects starts to take effect above 15 MHz being quite small at that point and gradually becoming more significant as frequency increases.

So/Si * (Ni/(Ni + Nr)) = So/Si* Ni/(1+Nr)
Nr is affected by feeder loss and Feeder VSWR.

If you are a moon bouncer or a meteor scatterer, or a troposcatterer then you will pay special attention to low feeder loss and good VSWR for a receiving Antenna.
If you take a pride in your art you will always be jealous of these factors as major contributors to your stations efficiency.
Why spend several thousand on a good receiver and then spoil everything at the point where attention to detail has the greatest return smacks of sloppiness to me. And dare I say stupidity. :)

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3370. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:06:21 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A90556D.6EC549CD@IEEE.org>
Source record: 170045

"Stan Labinsky Jr." wrote:
> There's those ARC... whatevers again! Please... how do you convert from cosine,
> or Tan to ArcCos, or ArcTan?

It's pretty simple, e.g. sin(30deg)=0.5 arcsin(0.5)=30deg
The arcsin of a number is the angle whose sin is the number.
--
http://www.mindspring.com/~w6rca

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3371. Re: VSWR Meter..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:06:51 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A90558B.F440CDC7@warwick.net>
Source record: 170043

If you're in a real pinch, one of the better C.B. meters, the ones which use the parallel line construction will work surprisingly well on two (maybe even on 440, although I've not tried it yet). To make sure that it's working correctly, hook it up normally, take your reading and then reverse it and call Forward reverse and vice versa. If you get the same readings both ways, it'll be usable to detect a null (1:1)... but, the actual SWR values will be off.
Probably a used Bird 43 and a couple of slugs would be a good way to go.
Stan

Robert Greene wrote:
>
> After messing around with several antennas on 2m that seem to have poor
> performance (and may be hurting the finals!), I determined that I need an
> SWR meter.
>
> What's the current thinking on the most bang for the buck?? In years gone
> past I've built 'em, and I've used commercial ones.
>
> I'm looking for the most "bang for the buck" that will cover 2m/70cm.
>
> Thanks for any comments.
> N6QWI

3372. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:08:23 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9055E7.25C6270@IEEE.org>
Source record: 170046

Mark Erbaugh wrote:
> I'm looking for advice on feedline. Obviously the more I pay for feedline,
> the less loss, but what's the best bang for the buck. There will be 150 -
> 175 feet of feedline from the shack to the top of the tower.

I would put up a quad and feed it with ladder-line.
--
http://www.mindspring.com/~w6rca

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3373. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:14:29 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <tEFN42AVdFk6EA11@ifwtech.plus.net>
Source record: 170044

Stan Labinsky Jr. wrote:
>Seems to me that I saw an article suggesting that you put a small container of
>your prospective paint into cup and into the microwave. If it gets hot when
>you
>blast it, don't use it.

DON'T DO THAT!!

Most paints contain volatile solvents - at least, the ones you would use
to paint antennas do. Filling a microwave oven with flammable and/or
toxic vapor looks like a great short-cut to a Darwin Award!

The properties of the paint change considerably when it's dried, and
unless it is grossly lossy you will never notice the temperature change
in a thin film of paint.

The microwave oven test has its uses, but this isn't one of them!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3374. Loop on aluminum siding house

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:33:57 UTC
From: Walton Hackman <Walton205@hotmail.com>
Message-ID: <96pm55$5fc$1@mozo.cc.purdue.edu>
Source record: 170047

Anyone have any experience or guidance about installation of a loop antenna to the side of a two-story house which has aluminum siding? I want to use the loop for 160 and 75 meters. I am particularly concerned about radiation loss from induced currents in the aluminum oxide (a very poor conductor) siding.

Walton

3375. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:49:38 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <i2np69.nee.ln@mail.specsol.com>
Source record: 170049

Keith Zimmermann <keithz@austin.rr.com> wrote:
> OK, I almost made through the whole month without asking a dumb
> question...

> Years ago, when I was a teen-novice, someone suggested that I add salt
> around my ground rod and radial system. Being a novice, I of course
> did. I would also water and really soak the ground system prior to a
> planned night of DX-ing. Anything to help my 5 watts!

> Now, I'm wondering if there is any benefit from doing either of those
> things. Dry, parched, rocky ground like we have in Texas probably needs
> some help...especially in the summer. I used verticals, end-fed long
> wires, and inverted vees back then. I had a short run from my rig and
> antenna tuner to the ground. I had a good radial system below my
> ground-mounted vertical. But no matter what, I was convinced that
> watering my ground improved my signal and reduced static.

> Thanks for any info.

> Keith K5WX

Wet ground is better than dry ground. Put some sprinklers in and plant
grass. The ground will be better and it will look better.

Only use salt if you don't want Carthage to rise again.

Jim Pennino

3376. Re: VSWR Meter..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-18 23:56:19 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A906123.29B72BFD@dialpoint.net>
Source record: 170048

See if Fair Radio still has some of the Struthers Watt Meters. They may be listed as
a URM-120. It will go from about 80 meters to 1000 MHZ and a full scale of 10 watts or as much as 500 watts from 30 to 1000 mhz. This is by changing slugs smilar to the Bird 43 wattmeter. You should be able to find them from abut $ 120 to $ 150. Make sure you get the three slugs that normaly come with it to cover this range.

While this may seem high, it will cover most needs for swr from the low bands to uhf.
There are very few other meters that can do this.

Robert Greene wrote:
>
> After messing around with several antennas on 2m that seem to have poor
> performance (and may be hurting the finals!), I determined that I need an
> SWR meter.
>
> What's the current thinking on the most bang for the buck?? In years gone
> past I've built 'em, and I've used commercial ones.
>
> I'm looking for the most "bang for the buck" that will cover 2m/70cm.
>
> Thanks for any comments.
> N6QWI

3377. Re: 40 meters mobile noise

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 00:09:01 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A90641D.212DB33A@warwick.net>
Source record: 170050

Actually Ford does have a TSP on the subject, but it applies to their Tempo line. It involves dropping the tank, uninstalling the pump/fuel gauge assembly, cutting the leads to the pump and installing a bifilar wound choke between the pump and the tank feedthrough connectors.
The same technique *might* work if it was just installed between the vehicle harness and the tank connectors, but the tank was metal on those models... the shielding probably helped some.
Stan

ehsjr@bellatlantic.net wrote:
>
> No experience with this on 40 meters - but I had it on 2 meters.
> Cured it with a big feed thru cap installed in the trunk in the line
> to the fuel pump and a .22 mfd across the 12 supply at the radio.
> (Actually the .22 mfd cured the noise from the heater blower, but
> may have had some effect on the fuel pump noise.)
>
> WEHowell wrote:
>
> > I have a '90 Ford Ranger pickup that I mant to operate with a mobile rig on
> > 40/20 meters (ICOM 706 MKII with auto tuner), however, the RFI is too great.
> > The chief offender is the fuel pump which is buried in the plastic fuel tank.
> > Has anyone had any experience with this. To bypass the fuel pump power line to
> > ground (anywhere close to the exit point) will require that I drop the fuel
> > tank. I am not ready to do that unless I have some indication that it would
> > improve the situation.
> >
> > All information I have is that Ford does not have a TSB on the subject.
> >
> > I have tried nominal fixes such as rerouting the antenna cable; this has some
> > effect but not significant. The antenna is mounted on the driver's side rear.
> >
> > With the feed line diconnected at the antenna the noise is slightly reduced;
> > disconnected at the output of the antenna tuner the noise is completely gone -
> > so the noise is getting in through the feed and antenna.
> >
> > Thanks for any suggestions
> > WB4UYA
> > wehowell@aol.com

3378. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 00:20:58 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <i4pp69.hvm.ln@kram.org>
Source record: 170051

"CW" said....
> I couldn't say what the proximity will do to your pattern but have you
> thought about what will happen when the wind blows. It seems that it
would
> be in an excellent position for destruction.

I hadn't thought of that, thanks. However, the tree is fairly thin and
"floppy" so I'm hoping that if I loosely tie the tree to the pole at
intervals all the way up then it will be fine. Maybe the pole will even
protect the tree from wind damage! :)

Cheers,

Mark.

3379. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 00:58:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96pr15$rp7$1@plutonium.btinternet.com>
Source record: 170052

Tom W8JI <2w8ji@contesting.com> wrote in message
news:3a90051a.112511880@news.accessunited.com...
> Hi Reg,
>
> On Sun, 18 Feb 2001 03:05:04 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >In your reply could you be quantitative and include some
accurate
> >numerical information? Otherwise words like "overestimate" and
> >"negligible" have no meaning.
>
> You seem to think a definite number that is wrong is better than
> saying "the result varies". I can't give any exact figures,
because
> the errors are all over the place. The software simply does not
track
> the real world, it isn't even remotely close as the frequency is
moved
> up towards the self-resonant frequency of the inductor.
>
> Have you measured inductors, and compared them to you software?
What
> is the highest Q you have measured in a reasonably sized inductor
at
> radio frequencies, and how did it compare to your program's
"estimate"
> of Q?
>
> 73 Tom
==========

Sorry Tom, if you are unable, as I requested, to provide any
quantitative evidence or solid facts about the uncertainty in your
own calculations or in your own estimates or measurements of Q,
then your criticism is clearly unfounded and there's nothing more
to be said in the matter. Have a good day !

Reg, G4FGQ

3380. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 01:22:13 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A907509.D76BC600@att.net>
Source record: 170053

Peter, I have been reading your postings for a long time now and never fail to enjoy and learn from them.

But, please, what on earth is the "What?" all about and why do you keep using it?

In almost every instance, its presence seems to have no logical relationship to what you have just stated. Seldom does it appear that you are actually asking a question . . .

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

"Peter O. Brackett" wrote:
>
> Richard:
>
> What?
>
> -Peter K1PO

3381. Re: painting an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 01:38:52 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A90792C.5FD@wt.net>
Source record: 170054

Ian White, G3SEK wrote:

>
> The microwave oven test has its uses, but this isn't one of them!

I might add if someone does do a microwave test for some reason or another, always put a glass of water in the box along with the item to be tested. I hear it's bad to run a microwave empty. If the item to be tested is indeed non conductive, you want the glass of water in there so it won't be running "empty". MK

--
http://web.wt.net/~nm5k

3382. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 01:42:10 UTC
From: "John S. MacKay" <k35454@direct.ca>
Message-ID: <XN_j6.72250$FO1.2717065@brie.direct.ca>
Source record: 170055
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"Dan" <Diverd4777@aol.com> wrote in message
news:3A8FD636.D3831981@aol.com...
> call them up & complain about what you don't like;
> follow it up with a letter;
> - they might listen...
SNIP
More likely, they will tell you what you SHOULD like. Anything
else is either trivia or heresy.

3383. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 01:54:29 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <96pugg$m95vj$1@ID-20128.news.dfncis.de>
Source record: 170056
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

As you know , the input impedance of the load must match the output
impedance
of the source for 100% of the power to be transferred.
A high SWR affects reception as well as transmission, SWR is usually lowest
at the resonant frequency the antenna is tuned for.
Magnet mount antennas use capacitive and inductive coupling similar to a
thru-glass mount.
Neither of these antennas are very efficient for power transfer.
Top-loaded antennas see more of the signal before being attenuated by the
loading coil, this is why i dont like base-loaded antennas which attenuate
the
entire signal before sending it to the radio.

--
714 Sandpile,
The Mad Dog wavin' good bye
"Michael" <hkc2001@pacbell.net> wrote in message
news:3nOj6.95405$Wq1.39345097@nnrp5-w.sbc.net...
> As I was reading the SWR and impedance of my antenna on my MFJ-259B, I
start
> to wonder,
>
> 1. Does SWR even matter for reception? Now correct me if I'm wrong, since
> most radios have 50ohm impedance, as long as I got 50ohm impedance at a
> frequency on my antenna, I would get the best signal on that frequency
> regardless of what the SWR is at that frequency, right?
>
> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.
>
>

3384. Re: Random Length Wire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 02:04:25 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A907F29.2D9D6410@warwick.net>
Source record: 170060

A few things...
1) The length of the wire from the tuner to ground WILL be resonant at some of the higher frequencies. You do NOT want it to be a quarter wave length (or any odd multiples of a quarter wave, 1/4, 3/4, 5/4, etc.) on the bands of interest or it'll look like an open circuit... like it's not there to the RF. That would be about eight feet on ten meters, for instance.
2) Be wary that you do not have high levels of RF voltage at the tuner... no half wave lengths of antenna and feed line (taken as a total length) at any of the bands you plan to use.
3) The ladder line feed will not be balanced and therefore will not cancel out the fields around it... the feed line will radiate. Still may be better than just a single wire, though.
3) Lightning protection will be a problem. Go for the best ground you can make, right from the cabinet of the tuner. One inch copper strap (minimum) instead of wire... it's less inductive, more capacitve... less impedance to the strike current. Also, NO sharp bends... they increase inductance! One ground rod is not sufficient! Two would be better and they should be spaced twice their rod lengths apart (one close to the building, the next one out away from the house). Any closer and they will begin cancel each other out (the earth around the rods does saturate electrically during a strike). Also note, it's not the resistance which determines how poor a lightning ground is, inductance is the culprit! The energy contained in a lightning strike is spread out over many frequencies (DC to light on a decreasing scale)... the higher the frequency, the higher the voltage... E=I x XL, XL= 2Pi x L x F <= frequency, that is. Don't believe it? Listen to the racket on 80 meters during a thunder storm. In a real good one the noise'll extend up to two meters.
Tie the radio and any other box that is connected to the radio to that ground. The last thing that you want is to have the strike looking for ground at the service entrance panel (breaker box)... chasing up the safety ground lead (the third wire in the line cord) and through the house wiring to get there.
As far as removing the energy from the feed line, most strike abatement equipment is designed for coaxial feeds, with the shield firmly grounded at many points. Surge suppressers are designed to shunt as much energy from the center conductor to the shield as possible. With a single wire, given that there may be high voltages on your feed line just because of standing waves, a surge suppresser might fire the first time you say, "hello"... protecting your antenna from your signal... and making your rig very upset. An old fashioned spark gap might be a workable choice, the ARRL Handbook might give you some help there... an older one probably. And yes, the gap must be tied to your ground rod network which should be as close to the feed line's entrance into your dwelling as practicable. Which brings up another point:
The antenna feed line(s) should come into the house where the electricity and the phone lines do (their respective grounds should all be bonded together there). The idea is to have all the wiring in the house "jump" with the strike

so that there are no differentials from one end of the house to the other. The same applies to the equipment, that's why it all gets bonded together, so the interconnecting cabling doesn't have to carry the bulk of the strike current. Now, does that G5RV with buried coax begin to look a little bit better? ;)
If you want the gory details of lightning protection, look up Polyphaser's web site and order their "Grounds for Lightning Protection". While the book pushes their products, the supporting material is hard to ignore.
Hope this's helped, Rex... 73!
Stan... WA2PUQ

"Rex Klopfenstein, Jr." wrote:
>
> When the weather here get warmer I am planning to install a wire
> antenna. I can run a wire 56 feet (maybe 80 feet if I work a little
> harder--have to put up a mast). This antenna will run from my house to
> my garage, my radio will be in the basement of the house. I plan to
> install a good ground (about 6 feet from my transmitter). I would use a
> dipole but getting the feedline back into the house is a problem, it
> would drop right in the middle of the backyard.
>
> I have several questions. One is the RF that will be present inside my
> basement using a random length antenna. How can I reduce any RF in my
> basement. I will be using an MFJ antenna tuner that supports wire
> antennae. I would like to put some sort of lightning protection outside
> of the house for the lead in wire, I haven't been able to find anything
> listed in the usual catalogs.
>
> Anybody had any experience with an end-feed Zepp? I have a coil of 450
> ohm parallel cable (looks like large tv twin lead with windows cut in
> web), will that work as a feed line. Doesn't the end-feed Zepp
> introduce RF into shack (high voltage at transmatch).
>
> --
> Rex Klopfenstein, Jr.
> Bowling Green, OH
> KC8PFP
> rklopfen@wcnet.org
> http://www.wcnet.org/~rklopfen

3385. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 02:06:31 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <96pv72$mf6j6$1@ID-20128.news.dfncis.de>
Source record: 170058

When the spark plug wires go bad the insulation breaks down and can cause
the whining sound you hear.
A faulty diode in the full-wave bridge rectifier of your charging system
will
mix a little AC ripple in with the DC and cause audible whining that
increases with RPM.
Start with the cheapest solution, goto R/S and p/u a inline noise filter for
the
power cables going to the radio.
Changing the antenna is not the solution.

--
714 Sandpile,
The Mad Dog wavin' good bye
<Excalibur@camelot.net> wrote in message
news:18ov8tc836b18pq0flf964rs3bhf3n3em6@4ax.com...
> I want to replace the am-fm antenna in my 95 GMC pickup with a
> different one. Could someone tell me what the coax running from the
> antenna to the radio is? (RG-58)? Am I correct in thinking that the
> coax end going to the radio is a motorola plug? I like to listen to
> talk radio on the am band. The fm band works perfectly. I am replacing
> this antenna because I have an engine noise problem. This noise
> increases in pitch as the engine revs up. I have tried grounding the
> antenna, coax, connections, hood, and radio every way that it can be
> grounded. I bought an expensive silver conductivity paste to ensure a
> good connection. I have cleaned every connection thoroughly with a
> small stainless steel brush all to no avail. I installed an inline
> power filter and as a last resort, I installed a new radio, thinking
> that the other on must have had a bad filter in it. All that is left
> is the antenna and coax. This vehicle has factory plugs and wires in
> it and they are new and in good condition. Does anyone have any
> recommendations for an antenna and/or coax? Or is there anything else
> that I am overlooking? Thanks for any advice.
>
> Jody Sorrell
> Eclectic, AL.

3386. Re: Ferrite Core Help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 02:08:51 UTC
From: "Bud S. NI0F" <ni0f@worldnet.att.net>
Message-ID: <Te%j6.4402$TD1.341856@bgtnsc05-news.ops.worldnet.att.net>
Source record: 170059

Thanks to all that responded, I have a better understanding now.
73es Bud NI0f

"Dwight E Stotler" <ni0f@worldnet.att.net> wrote in message
news:fUBj6.2975$TD1.247577@bgtnsc05-news.ops.worldnet.att.net...
> Hello all:
> I understand the relation between turns ratio and impedance ratio,
> But how do you determine the first winding number of turns.
> Example: I want make a 700 ohm to 75 ohm transformer using type 73 core
> material (first choice)
> The frequency would be for broad band 1-10 Mhz..
> Where do you start..
> Thanks for all help.
> Bud NI0F
> ni0f@worldnet.att.net
>
>
>
>
>

3387. Re: Repeater antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 02:12:04 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <Uh%j6.190365$P82.23345318@news1.rdc1.ct.home.com>
Source record: 170057

"Stan Labinsky Jr." <stanbarb@warwick.net> wrote in message
news:3A9053F5.26331C09@warwick.net...
> Hmmm... I've heard folks commenting about Station Masters coming apart
> internally due to flexing in the wind... especially the UHF guys with
their
> many, many soldered joints. Our club has gotten away from them in favor
of the
> multi-bay dipoles... expensive but rugged to the max!
> Stan
>

Many Stationmasters were designed for typical 5-MHz commercial repeater splits, and may be abnormally noisy when used for ham repeaters with 600-kHz seperation (2-Mtrs). At one time, the manufacturer strongly suggested advising if the antennas were going to be used in ham repeater applications (this goes back at least 25 years or so...)

I was involved in maintaining a local repeater system for almost 30 years, and I have become more and more in favor of the exposed dipole arrays over the fiberglass colinears. Quality doesn't seem to be as good as it once was, we had a few sticks develop noise after a few years of mountain top use. Our oldest four bay exposed dipole array (Sinclair, 25 years old) is still going strong.

Pete K1ZJH

3388. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 02:38:58 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A908742.750FC444@oio.net>
Source record: 170061

Mark,
If you plan to use coax, and will be mainly on the HF bands,
RG-213, or the equivalent, will work as good as any. I wouldn't
worry about losses too much, not on HF.
'Doc

3389. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 03:11:37 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3A908EE9.FA6B46F3@warwick.net>
Source record: 170062

If the noise has a musical whistling sound, it's more likely coming from the alternator. An... oh about a half microfarad feedthrough capacitor suitable for the current capacity of the alternator might help. Mount it right on the alternator's case, run a jumper from the alternator's "Batt" terminal to one end of the capacitor, connect the lead that went to the "Batt" terminal to the other end.
If the noise is very raspy and you can almost count the pulses at idle, try cleaning the ignition cap, rotor and wires... after documenting where each wire runs from and to ('been burned by a bad memory on that one).
I use a hot strong dishwash detergent and water mix (should feel a little greasy) followed by a hot rinse with a baking time in the oven. 250deg. for a half an hour usually comes out a delicious golden brown... and very dry too!
This also works for the engine which just won't fire in very damp weather or one which likes to stall out running in a heavy rain storm, like my Plymouth van (V6) used to do. Oh, before you wash the wires, check their resistance... somewhere between 5k and 10k should be about right... often the longer ones will measure higher, but 20k plus is a bit too high. Flexing the wire while measuring it should show no change... as long as you are making good contact with the meter's leads.
You might want to make sure that the plugs are "resistor type". If you're not the original owner they may have been switched on you by someone thinking that he'd get better performance by doing so. With an old points and condenser ignition... maybe, but not with the electronic types so common today.
Also, make sure that the antenna's mount is well bonded to the vehicle's fender and that the fended is bonded to the truck's chassis... six years of use can loosen stuff up and allow rust to set in which'll ruin the original bonding. Things do rust in Alabama... don't they? ;-)
Many years ago the coax used to be high impedance, air dielectric with a very fine center conductor... used with a long antenna. With the advent of F.M. and quarter wave whips, the cable is more like 50 or so Ohms. The AM performance suffers because a 30" whip is such a poor antenna at 1 mHz. and low impedance cable adds soo much capacitance to ground that it becomes troublesome to match the antenna system to the radio's input.
If you can find an older style pull-up antenna, try it... you'll just have to collapse it when you want to listen to distant FM stations. Might find one at a truck stop electronics counter. And yes, that funny plug on the end is a Motorola.
Oh, another possible source of AM noise is the electric fuel pump... if you have one. They can be nasty to deal with. But their pitch is usually pretty constant and is there for about a second or two after you've turned on the key but before you turn the engine over.
Good hunting... Stan

Excalibur@camelot.net wrote:
>
> I want to replace the am-fm antenna in my 95 GMC pickup with a
> different one. Could someone tell me what the coax running from the
> antenna to the radio is? (RG-58)? Am I correct in thinking that the
> coax end going to the radio is a motorola plug? I like to listen to
> talk radio on the am band. The fm band works perfectly. I am replacing
> this antenna because I have an engine noise problem. This noise
> increases in pitch as the engine revs up. I have tried grounding the
> antenna, coax, connections, hood, and radio every way that it can be
> grounded. I bought an expensive silver conductivity paste to ensure a
> good connection. I have cleaned every connection thoroughly with a
> small stainless steel brush all to no avail. I installed an inline
> power filter and as a last resort, I installed a new radio, thinking
> that the other on must have had a bad filter in it. All that is left
> is the antenna and coax. This vehicle has factory plugs and wires in
> it and they are new and in good condition. Does anyone have any
> recommendations for an antenna and/or coax? Or is there anything else
> that I am overlooking? Thanks for any advice.
>
> Jody Sorrell
> Eclectic, AL.

3390. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 03:36:19 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a909488.99003046@news.aepnet.com>
Source record: 170063

On Sun, 18 Feb 2001 17:49:35 -0500, "Mark Erbaugh" <mark@nospam.microenh.com>
wrote:

7/8" Heliax

Wes Stewart N7WS

>The XYL and I are in the process of building a new home on 4 acres and will
>be moving in this spring. I'm starting to dream about my new farm (antenna,
>that is). I haven't finalized the design of the antennas yet, but I will
>probably initially put up the tower and antenna that I'm using here (once I
>get some extra cash I do want to upgrade, but that may be a while). I'm
>mainly interested in HF.
>
>I'm looking for advice on feedline. Obviously the more I pay for feedline,
>the less loss, but what's the best bang for the buck. There will be 150 -
>175 feet of feedline from the shack to the top of the tower.
>
>73,
>Mark, N8ME
>
>

3391. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 04:18:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A909EA7.9E195EC6@IEEE.org>
Source record: 170064

Tom W8JI wrote:
> There is no way to get them past the relays, unless you use chokes or
> more relays to open relay lines!!

All you need is a DC path and return. Why can't you use DPDT
relays for that? Each relay will enable the next relay.
--
http://www.mindspring.com/~w6rca

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3392. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 04:23:15 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A909FB3.89A0CB4@IEEE.org>
Source record: 170065
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

```
Mad Dog wrote:
> As you know , the input impedance of the load must match the output
> impedance of the source for 100% of the power to be transferred.

100% of the power is never transferred. Did you mean 100% of the
power available for transfer? :-)
--
http://www.mindspring.com/~w6rca

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3393. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 05:29:11 UTC
From: nielsen@remove_this.oz.net
Message-ID: <96qav7$o49$0@216.39.171.5>
Source record: 170066

On Sun, 18 Feb 2001 15:37:47 -0600 (CST), Stephanie Hathaway wrote:
>DONT PAY YOUR DUES WHEN THE COME DUE TO PAY !!!!!!!!!
>

Or if you are a life member, you can terminate yourself with extreme prejudice.

Which raises the question, "Does a no-code ham become a silent key when he dies?"

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen
IOTA NA-065, USI WA-028S

3394. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 06:15:53 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A90BA19.262B@wt.net>
Source record: 170068

Bob Nielsen wrote:
>
> On Sun, 18 Feb 2001 15:37:47 -0600 (CST), Stephanie Hathaway wrote:
> >DONT PAY YOUR DUES WHEN THE COME DUE TO PAY !!!!!!!!!
> >
>
> Or if you are a life member, you can terminate yourself with extreme
> prejudice.
>
> Which raises the question, "Does a no-code ham become a silent key when he
> dies?"

He becomes a closed repeater...:/ MK

--
http://web.wt.net/~nm5k

3395. Re: Q: Dipole Horizontal tilt and radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 06:34:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A90BE60.3FF3@wt.net>
Source record: 169969

Queequeg wrote:
>
> I have a 40 meter wire dipole up about 22 ft. on the east end, and 37 ft. on
> the other. with the east-west orientation, it should radiate mostly
> north-south. Will the tilt have a significant effect on the pattern?
>
> -Q
>
> -- "Dead Whale or a Stove Boat"
> <---------[[[[[[[[[[[[[[[[[

Almost no effect to the azumth pattern. With the elevation pattern just
a tad bit of gain in the direction of the lower end. Overall, not much
really . MK
--
http://web.wt.net/~nm5k

3396. Re: Loop on aluminum siding house

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 06:37:39 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A90BF33.3E95@wt.net>
Source record: 169970

Walton Hackman wrote:
>
> Anyone have any experience or guidance about installation of a loop antenna
> to the side of a two-story house which has aluminum siding? I want to use
> the loop for 160 and 75 meters. I am particularly concerned about radiation
> loss from induced currents in the aluminum oxide (a very poor conductor)
> siding.
>
> Walton

I've never tried that, but judging from using other antennas near metal houses, I doubt it would do very well. I'd try to get away from the house with loops or other wire antennas. One of those things you just have to try to see I guess. MK
--
http://web.wt.net/~nm5k

3397. Re: Request comments Cushcraft A3S, MA5B ans ASL2010

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 08:28:26 UTC
From: k3ky@erols.spamnocom
Message-ID: <3a90d75f.3517203@news.erols.com>
Source record: 169971

I had an A3S here and liked it. Mine had the 40m add-on, and did
well on 40 meters. My suggestion- look for a used Force 12 C-3 or
C-3S. You would probably get better long term reliability out of one
in that windy environment. There are just an awful lot of connections
in a trap tribander that can open up. I had a 10 meter DE trap open
up in mine. The aluminum wire in the trap had cold-flowed and worked
loose under a stainless steel screw head. It was an older antenna,
however. 73, David K3KY
P.S. I have a C4XL and I like it.

On Sun, 18 Feb 2001 02:15:01 -0500, "Richard A. Stern"
<rstern@shore.intercom.net> wrote:

>Looking for a MultiBand 20-15-10 beam type antenna.
>
>I live on the Eastern Shore of Maryland and we at times sustain Hurricane
>force winds and intermitant gusting to 90mph at different times of the year.
>I've been using wire and vertical antennas for years. I finally have the
>money to put up a beam. I already have a heavy duty 38' tower and just got a
>good deal on a Hygain rotor.
>
>I've look ed at them all I really like Force12s. I don't know if I can spend
>that much. I looked over the Cushcraft catalog and like the lightweight
>'SKYLOG ASL2010 or the MA5B.
>
>Anyone out there in digitland have any realtime experience with Cushcraft. I
>know there's alot of A3S users around.
>
>Thanks if you could reply!
>
>--
>Peninsula Radio Operators Society
>http://www.intercom.net/npo/pros/index.html
>No Fat in our HAM-LINKS!
>Webmaster: NW3N
>
>
>

3398. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 08:37:43 UTC
From: k3ky@erols.spamnocom
Message-ID: <3a90db05.4451925@news.erols.com>
Source record: 169972

A website about superior quality plug wires, including a lot of good
comments about engine RFI can be found at the Magnecor site:
http://www.magnecor.com/magnecor1/frequent.htm
73, David K3KY

On Sun, 18 Feb 2001 22:11:37 -0500, "Stan Labinsky Jr."
<stanbarb@warwick.net> wrote:

>If the noise has a musical whistling sound, it's more likely coming from the
>alternator. An... oh about a half microfarad feedthrough capacitor suitable for
>the current capacity of the alternator might help. Mount it right on the
>alternator's case, run a jumper from the alternator's "Batt" terminal to one end
>of the capacitor, connect the lead that went to the "Batt" terminal to the other
>end.
>If the noise is very raspy and you can almost count the pulses at idle, try
>cleaning the ignition cap, rotor and wires... after documenting where each wire
>runs from and to ('been burned by a bad memory on that one).
>I use a hot strong dishwash detergent and water mix (should feel a little
>greasy) followed by a hot rinse with a baking time in the oven. 250deg. for a
>half an hour usually comes out a delicious golden brown... and very dry too!
>This also works for the engine which just won't fire in very damp weather or one
>which likes to stall out running in a heavy rain storm, like my Plymouth van
>(V6) used to do. Oh, before you wash the wires, check their resistance...
>somewhere between 5k and 10k should be about right... often the longer ones will
>measure higher, but 20k plus is a bit too high. Flexing the wire while
>measuring it should show no change... as long as you are making good contact
>with the meter's leads.
>You might want to make sure that the plugs are "resistor type". If you're not
>the original owner they may have been switched on you by someone thinking that
>he'd get better performance by doing so. With an old points and condenser
>ignition... maybe, but not with the electronic types so common today.
>Also, make sure that the antenna's mount is well bonded to the vehicle's fender
>and that the fended is bonded to the truck's chassis... six years of use can
>loosen stuff up and allow rust to set in which'll ruin the original bonding.
>Things do rust in Alabama... don't they? ;-)
>Many years ago the coax used to be high impedance, air dielectric with a very
>fine center conductor... used with a long antenna. With the advent of F.M. and
>quarter wave whips, the cable is more like 50 or so Ohms. The AM performance
>suffers because a 30" whip is such a poor antenna at 1 mHz. and low impedance
>cable adds soo much capacitance to ground that it becomes troublesome to match
>the antenna system to the radio's input.
>If you can find an older style pull-up antenna, try it... you'll just have to
>collapse it when you want to listen to distant FM stations. Might find one at a
>truck stop electronics counter. And yes, that funny plug on the end is a
>Motorola.

>Oh, another possible source of AM noise is the electric fuel pump... if you have
>one. They can be nasty to deal with. But their pitch is usually pretty
>constant and is there for about a second or two after you've turned on the key
>but before you turn the engine over.
>Good hunting... Stan
>
>Excalibur@camelot.net wrote:
>>
>> I want to replace the am-fm antenna in my 95 GMC pickup with a
>> different one. Could someone tell me what the coax running from the
>> antenna to the radio is? (RG-58)? Am I correct in thinking that the
>> coax end going to the radio is a motorola plug? I like to listen to
>> talk radio on the am band. The fm band works perfectly. I am replacing
>> this antenna because I have an engine noise problem. This noise
>> increases in pitch as the engine revs up. I have tried grounding the
>> antenna, coax, connections, hood, and radio every way that it can be
>> grounded. I bought an expensive silver conductivity paste to ensure a
>> good connection. I have cleaned every connection thoroughly with a
>> small stainless steel brush all to no avail. I installed an inline
>> power filter and as a last resort, I installed a new radio, thinking
>> that the other on must have had a bad filter in it. All that is left
>> is the antenna and coax. This vehicle has factory plugs and wires in
>> it and they are new and in good condition. Does anyone have any
>> recommendations for an antenna and/or coax? Or is there anything else
>> that I am overlooking? Thanks for any advice.
>>
>> Jody Sorrell
>> Eclectic, AL.

3399. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 09:04:04 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96qs6d$q7d$1@lure.pipex.net>
Source record: 169974

"Cecil" wrote ...
> "Peter O. Brackett" wrote:
> > The free space surge resistance of 377 Ohms does "dissipate" power...
>
> According to the IEEE dictionary, not unless it *heats* up space.

Where if comes into contact with mass it does heat it up.
You stick a receiving AE into the path and the I/P resistance of you set
will heat up.
You'll have a problem measuring it though.

Here's another old chestnut for you.
#A high Power TV transmitter fills a service area.
Can you keep adding Receiving sets indefinitely?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3400. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 09:10:46 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96qs6e$q7d$2@lure.pipex.net>
Source record: 169973

"Richard Harrison" wrote
> Gary Peach wrote:
> "By real it implied that the Current and Voltage are in phase. Therefore
> there will be heating."
>
> The first sentence is true. The second is false.
>
> In the surge resistance of a transmission line the current is in-phase
> with the voltage when there is no significant loss (heating) in the
> line.

The key word is "Significant", You are arguing the degree of heating not if it occurs or not. This boils down, (pun intended), to the quality of the materials used for the construction of the line.

>The same is true of radiation resistance in an antenna or the 377
> ohms of free-space.

Believe me when the Electromagnatic Wave reaching out into space eventually encounters some mass ther will be heating. Be it ever so small never the less ther will be heating. If this is not true then a microwatt of power can communicate over any distance to as many places as you wish. We all know that to be false, and some spend enormous sums of money on Linear Amplifiers to overcome this natural affect to some degree.

> "Inverse square" attenuation of free-space is only a result of spherical
> trigonometry and has nothing to do with conversion of radio energy to
> heat.

Did I say otherwise?

> Propagation is the result of a magnetic wave begetting an electric wave
> which in turn begets a magnetic wave ad infinitum, as described by J.C.
> Maxwell.

True untill it encounters Mass, when the energy exchange between the fields is stopped by the heating of the mass.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3401. Re: Its and It's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 09:25:27 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96qs6g$q7d$3@lure.pipex.net>
Source record: 169975

```
"captbrian"
> Nah! 73 is kind regards, - 73s is Many kind Regards, - best 73s is
> typical American overkill ;-)
> Bryan - G3GVB

Can't find you in the book, have a nice day.
```

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3402. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 12:21:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96r346qft1@slb5.atl.mindspring.net>
Source record: 169976

George:

Uh.... What?.. Heh, heh.

There is apparently no meaning to those interjections. Sorry, it's just an "affectation" that I have picked up from my kids. Both now young adults and gone from home onto their own careers, leaving the "old fart" behind.

Even my wife tells me, "stop doing that!" And when I do it, she says, "What?"

I'll try to stop. But now that I'm "old", it's just about the only thing that I do now that annoys her.

Thanks, and best regards,

-Peter K1PO

"George, W5YR" <w5yr@att.net> wrote in message news:3A907509.D76BC600@att.net...
> Peter, I have been reading your postings for a long time now and never fail
> to enjoy and learn from them.
>
> But, please, what on earth is the "What?" all about and why do you keep
> using it?
>
> In almost every instance, its presence seems to have no logical
> relationship to what you have just stated. Seldom does it appear that you
> are actually asking a question . . .
>
> 72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437
>
>
> "Peter O. Brackett" wrote:
> >
> > Richard:
> >
> > What?
> >
> > -Peter K1PO

3403. HF signal levels in town vs out of town

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 12:50:55 UTC
From: jeraa2t@nospam.ultranet.com
Message-ID: <3a9115dc.560970@mdnews.btv.ibm.com>
Source record: 169977

I noticed while mobile this weekend on 20M, that the signal levels in and around town are much lower than out over the open highway. I have noticed also near the ocean signal levels are better even the upper bands on HF. Has anyone look at the shielding effect of all the overhear wiring that typically runs around town ala. cable, power, telephone etc..
I know that there are some vhf/uhf models around but nothing on HF. And how high above that cabling you would have to be in order for it to not effect things if you had a beam on a tower ?

Just a thought. AA2T

3404. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 13:27:19 UTC
From: k1bqt@aol.com
Message-ID: <20010219082719.02938.00001614@ng-fy1.aol.com>
Source record: 169978

I didn't see the original post, so I may be answering the wrong question. However, if the tree is inside the cone portion of the antenna, I wouldn't think it sould have much of any impact at all. Wouldn't the fields within the interior volume of the cone cancell and the RF energy tend to stay on the outside surface?

Rick K1BQT

3405. Re: Antenna Analyzer differences??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 14:24:34 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <96raa8$193k@r02n01.cac.psu.edu>
Source record: 169980

MFJ made and sold as the MFJ259 what I called the MFJ 259A. It was/is a model in-between the original 259 and the 259B. Physically it looks just like the "B" model and has some of the features of the "B" but not all. of them. I asked when the "B" model came out, if it could be upgraded to the "B" as it looked like it just needed a software upgrade. I was told by MFJ I should be happy with what I had and it couldn't be upgraded. The box works well and if the "B" model had not come out days after I bought mine I would have been happier but the tone of the answer I got from MFJ was not appreciated. I don't mind that it couldn't be upgraded, that's their call, but I didn't need to be told I should be happy with what I had. Anyway the radio shack sold VEC 584B sounds to me very much like the "A" model I have.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Dennis P. Stahr" <irfutures@earthlink.net> wrote in message
news:1whj6.1941$JS2.242102@newsread2.prod.itd.earthlink.net...
> > Guessing from reading the specs, the MFJ has the built in capability to
> > use 10 nicads and it includes a charging circuit for the batteries. The
> > Vectronics can only use alkaline batteries (8).
> >
>
> Oddly, that is what you would think, but I just got mine yesterday and it
is
> the VEC 584B. It looks EXACTLY like the MFJ 259B and even has the 10
slots
> for the batteries. Also has the circuit board jumper to switch between
> alkaline or nicads.
>
> Dennis, W6NYC (was KF2XL)
>
>

3406. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 14:25:47 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <naar69.7ao.ln@kram.org>
Source record: 169982

"Rick Littlefield" said....
> I didn't see the original post, so I may be answering the wrong question.

No, I think you're answering the right question, thanks.

> However, if the tree is inside the cone portion of the antenna, I wouldn't
> think it sould have much of any impact at all. Wouldn't the fields within
the
> interior volume of the cone cancell and the RF energy tend to stay on the
> outside surface?

Something along those lines is what I'm hoping. I figure that the inside of
the cone is similar to below the groundplane of any other aerial.

Cheers,

Mark.

3407. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 14:32:36 UTC
From: richardharrison@webtv.net
Message-ID: <28589-3A912E84-2@storefull-113.iap.bryant.webtv.net>
Source record: 169984

Gary Peach wrote:
"The key word is signficant."
I had written: "In the surge resistance of a transmission line the current is in-phase with the voltage when there is no significant loss (heating) in the line."

Well, had I omitted "significant", some would react with "There are no lossless lines". There are plenty of lines that might just as well be lossless.

I am also amazed at how many who should know better think the characteristic resistance of a transmission line is a loser.

Gary also wrote:
"Be it ever so small (mass heating of antennas and things extracting energy from a traveling r-f wave) never the less there will be heating."

Antennas have currents induced by a wave sweeping past. Especially when they are well placed and near to being a resonant length. If they are matched to a load they may extract up to half the power from a small area of the passing wavefront. The other half will be re-radiated. Receiving resistance produces heat.

The reason a microwatt can`t radiate into space and communicate indefinitely has nothing to do with sinks soaking up all the energy in the wave.

Every receiver has a sensitivity threshold. When a wave expands to a thinness in microwatts per square meter that is too weak to operate the receiver, it no longer provides satisfactory reception.

If we could concentrate radio energy into a column that would not spread out, we could aim it at any unobstructed point in space and communicate using extremely small power. It`s the spreading of the wave that`s our downfall, not absorption.

Best regards, Richard Harrison, KB5WZI

3408. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 14:36:44 UTC
From: 2w8ji@akorn.net
Message-ID: <3a912e7e.188655365@news.accessunited.com>
Source record: 169981

On Sun, 18 Feb 2001 20:17:36 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Tom, if you take the trouble of using program SOLNOID2 before
>criticising it you will find that at HF the computed Q is at a
>maximum when the ratio of wire diameter/winding pitch is usually
>between
>0.5 and 0.7

I'll look at solenoid2. The program I downloaded did not behave that
way, so I assume 2 corrects somewhat for winding capacitance?

>Also, it is not the increase in capacitance between turns which
>reduces Q when the spacing between turns decreases

It isn't?

73 Tom

3409. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 14:41:48 UTC
From: 2w8ji@akorn.net
Message-ID: <3a912fb2.188963595@news.accessunited.com>
Source record: 169983

On Sun, 18 Feb 2001 22:18:47 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>All you need is a DC path and return. Why can't you use DPDT
>relays for that? Each relay will enable the next relay.
>--
>http://www.mindspring.com/~w6rca

You can. Problem is all the surplus vacuum relays I've seen are SPST
or SPDT.

It isn't a very practical idea, unless you run very low power and
don't mind working on the antenna on occasion.

3410. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 14:56:17 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <luak6.13709$X61.936798@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169985

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96osbi$pf3$6@lure.pipex.net...
>
> By real it is implied that the Current and Voltage are in phase.
> Therefore there will be heating.
> If there is heating there is resistance. I^2 R it is real enough.
> Even if that resistance is only the 377 Ohm / square of free space.
> If there is no dissipation there is no propagation. :)
>
> The attenuation is purely inverse square law thinning of the field
> intensity.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>

Propagation of EM waves in "free space" is not the same as dissipation of EM energy in the form of "heat".

Assume a perfect isotropic radiator. Field density (or intensity) decreases with distance away from the radiator because the total radiated energy is distributed evenly over a sphere of increasing radius. This reduction in field density is not really an attenuation or "loss" of energy. At any distance, the total energy distributed over the sphere remains unchanged. We define this phenomenon as "path loss" only so that we can describe the decrease in the field density in terms of distance and wavelength.

Steve VE9SRB

3411. Re: HF signal levels in town vs out of town

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 15:02:20 UTC
From: mike.luther@ziplog.com
Message-ID: <t92dbsna2hsed7@corp.supernews.com>
Source record: 169986

In <3a9115dc.560970@mdnews.btv.ibm.com>, jeraa2t@nospam.ultranet.com (JR) writes:

>I noticed while mobile this weekend on 20M, that the signal levels in
>and around town are much lower than out over the open highway. I have
>noticed also near the ocean signal levels are better even the upper
>bands on HF. Has anyone look at the shielding effect of all the
>overhear wiring that typically runs around town ala. cable, power,
>telephone etc..
>I know that there are some vhf/uhf models around but nothing on HF.
>And how high above that cabling you would have to be in order for it
>to not effect things if you had a beam on a tower ?
>
>Just a thought. AA2T

It's a well documented fact that on low bands, ground conductivity places a terribly important factor on signal levels. Chewing up the ground for construction, roads, et. al. in a city or any other environment lowers the ground conductivity, per the references I've read. Undsiturbed soil in and around creek bottoms, marshes, especially a salt marsh, make for better signals on HF, particularly low band work.

I'll relay, again an experiment I played with a VK3 on 40 CW. I've posted it here before, but it's a fun story.

He had a sharply tuned loop antenna on his car! Said it attracted lots of attention from the curioys, but it worked very well. He an I used to talk frequently on 40CW at our sunrise when he was going home from work. His home was inland a bit, but close to the ocean coast line for the Pacific, and the road there wund out from Melbourne to that coastal road, then past a cliff with a public boat ramp under it. The cliff overloos the ocean.

On the way home from work on the road, one segment of it had concrete and re-bar in it; another segment did not. He would often have to stop and retune the loop going from the one to the other! Did it at traffic lights, if I recall! He'd jump out and tweak it a red light I think! You could see an actual difference between the re-bar road and the asphalt run!

As he drove along the coast line, he would be maybe S3 or so until he would get to the bluff area where the road began to run along the blufff overlooking the ocean. At that point his signal would rise two or three S units! Then, he would go down the road to the public boat ramp. As he approached the ocean, his signal would rise some more. He'd drive the car down into the salt water, optimum tune the loop, and his signal

would be up at S9 on the meter, ofen more. As he backed out of the water and moved back up the road to the bluff, his signal would go back to what it was before he left it.

Fron there he had to turn down a side road to go home. As he drove the mile or two back to his home site, his signal would fade down to S3, often into the noise. We could communicate while he was in his driveway, barely, at times. Of course he could go in and fire up the fixed rig and do OK.

Now that's from S3 to S9 plus at times, just on the basis of aperature effect and ground conductivity near salt water. And, no, I didn't, don't have a calibrated microvolt-aware black helicopter receiver to give you the precise signal levels. And no, because of the timing, there really wasn't much effect of path decay from the sunrise at my end which would have accounted for much of this.

We repeated this experiment a number of times. The results were the same. In fact, somehere in my audio tapes, I have a tape recorded session of it, buried deep in the box with the ones where I figured out how to kill the woodpecker and get it out of 40 meters in the early morning, plus the actual ID for the "V" beacon, which is/was RCQ45. "V" is gone now, too, chuckle! But "P", "S" are still there chirping away on 7038.8 and 7038.9, maybe "C" and "K" too, up there!

The effects of ground are less, I've seen on 40 than 80. Obviously, as a low band fanatic, I'd be interested. Although I do not work 160, the same is true there, with a side-bar comment. From what I have read, there may be a somewhat different propagation scenario on 160 as you go down toward the broadcast band, which changes the picture a little. W8JI can tell us that here I suspect.

I don't work 20 and up. But I suspect that the effects of ground conductivity decrease as the frequency goes up. Some of it, obviously, has to be present there on 20.

Here where I live in Suth Central Texas, I'm a few DB better off than just about 20 miles to the fault line that starts all the sand country and pine trees of the Conroe, Livingston, Beaumont area in Texas. You get into sand country and things get worse, but they are still bad here, compared to the coastal plain in Texas, and worse than the black gumbo up near Waco and in areas around Dallas which are pretty good.

Over forty years of this, and travelling around, comparing notes, my QTH is down about 3 DB or so from these other better sites on low bands, here in Texas. The overall path from either coast to me, is down at least 10 DB, and I suspect maybe more, on average, from what the East Coast folks see for Europe on low band, and the same is true for the West Coast on Asian paths.

What you've seen is a beautiful example of why those with money that are really concerned about ham radio .. move to places where it is easier to win. It still the real-estate game, location, location, location. And

when you get down to that, add some more location.. chuckle!

The effect is well documented, especially when in the game you compete
with someone who has the keys to the kingdom right there on the ground!

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

3412. Re: What kind of ferrite (RFI)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 15:17:09 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3A9138F5.CCD31575@aztek-eng.com>
Source record: 169987

Peter,

Roy is correct that a larger ferrite with more turns is better than several single turn ferrites. I had an occasion to make some measurements on some Amidon FT240-43 and Steward 28B material toroids of the same size (2.4"OD x 1.4"ID x .5"H). Both these toroids were u=850 types. The wire I wound on the ferrite was #14 THHN type and the winding was a single layer fairly tight over x% of the toroid. The dB. attenuation values were referenced to a 50 ohm system.

```
------------ Attenuation ------------------
Number Turns 3.5MHz 7MHz 14MHz 30MHz 50MHz 100MHz
4t (25%) 9dB 13dB 17dB 20dB 21dB 22dB
6t (33%) 15dB 19dB 23dB 26dB 28dB 29dB
8t (40%) 20dB 24dB 28dB 31dB 32dB 35dB
10t (50%) 24dB 28dB 32dB 35dB 37dB 42dB
12t (60%) 26dB 31dB 35dB 38dB 40dB 30dB
16t (70%) 31dB 36dB 41dB 43dB 43dB 20dB

1t (clamp on 1dB 3dB 5dB 7dB 9dB 11dB
ferrite 5/16"ID)
1t (clamp on 0dB 2dB 3dB 5dB 8dB 11dB
ferrite 1/2" ID)
2t (clamp on 2dB 5dB 8dB 13dB 16dB 20dB
ferrite 1/2" ID)
3t (clamp on 4dB 8dB 13dB 19dB 23dB 28dB
ferrite 1/2" ID)
```

The attenuation in dB can be converted to impedance but 10dB~=216ohms, 20dB~=900ohms, 30dB~=3060ohms, 40dB~=9900ohms.

Ferrites do their best when the source impedance of the offending signal is low and when the load impedance for the offending signal is low. A second nearby series ferrite will double the voltage loss (6dB) but a second ferrite several feet down the cable may improve things much more (or not at all) due to the impedances. The clamp on ferrites don't do much on HF. The big ferrites cost ~$6US new from Steward or ~$9 from Amidon and can sometimes be found surplus but then you need to measure the ferrite material. Is should also worth mentioning that jumble winding the turns or using more than 75% of the toroid decreases the effectiveness.

73,
Larry Benko, W0QE

Roy Lewallen wrote:
>
> Get two ferrite cores of type 43 material (or other material with
> initial permeability about 850 or greater). Wind several turns of each
> speaker cable (both conductors together) through a core. 5 turns will
> give as much impedance as 25 clamp on cores of the same size, 10 turns
> as much as 100 cores. Put these as close to the stereo as possible. The
> larger the core cross section, the more impedance you'll get.
>
> Roy Lewallen, W7EL
>
> PA5KE wrote:
> >
> > Dear OM,
> >
> > I appreciate some info on the kinds of ferrite that are best usable to fight
> > RFI (common-mode?) in the stereo of my neighbour. The signal is picked up by
> > their speaker cables. I have tried some clamp ferrites on the speaker cables
> > but this did not fix the problem.
> >
> > What type (ref. number) should I best use, I am active on HF and 6 meters.
> >
> > Your help is appreciated!
> >
> > 73, de Peter
> > PA5KE

3413. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 15:46:56 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Qdbk6.15098$Nj5.1046561@bgtnsc07-news.ops.worldnet.att.net>
Source record: 169988

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:28589-3A912E84-2@storefull-113.iap.bryant.webtv.net...
> Gary Peach wrote:
> "The key word is signficant."
> I had written: "In the surge resistance of a transmission line the
> current is in-phase with the voltage when there is no significant loss
> (heating) in the line."
>
> Well, had I omitted "significant", some would react with "There are no
> lossless lines". There are plenty of lines that might just as well be
> lossless.
>
> I am also amazed at how many who should know better think the
> characteristic resistance of a transmission line is a loser.
>
> Gary also wrote:
> "Be it ever so small (mass heating of antennas and things extracting
> energy from a traveling r-f wave) never the less there will be heating."
>
> Antennas have currents induced by a wave sweeping past. Especially when
> they are well placed and near to being a resonant length. If they are
> matched to a load they may extract up to half the power from a small
> area of the passing wavefront. The other half will be re-radiated.
> Receiving resistance produces heat.
>

The total "receiving resistance" is comprised of radiation resistance and
loss resistance. It is the loss resistance component that converts received
energy into heat.

Regards,
Steve VE9SRB

3414. Re: Request comments Cushcraft A3S, MA5B ans ASL2010

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 15:55:19 UTC
From: Richard Miller <k1rdm@mediaone.net>
Message-ID: <Hlbk6.257$ce4.74287@typhoon.ne.mediaone.net>
Source record: 169989

I have been considering the MA5B myself. I live near the
Cushcraft headquarters, and have the opportunity to drive by
the facility on occasion. I got a glimpse of the MA5B several
months before it was released at Dayton. They have one on their
tower that is probably in an ongoing test.

Last week I noticed that the elements are no longer in the same
plane. It looks as if an element to boom clamp has broken. So I'm
going to be a bit more cautious before I purchase one of those.

I will say that they probably do a lot of assembly and disassembly
with this particular antenna. So it may be more subject to fatigue
failures. On the other hand, maybe they have found a way to
squeak out another .5 DB.

Regards,

Rick
K1RDM

"Richard A. Stern" <rstern@shore.intercom.net> wrote in message
news:fm2k6.23758$EW3.1268926@e3500-chi1.usenetserver.com...
> Looking for a MultiBand 20-15-10 beam type antenna.
>
> I live on the Eastern Shore of Maryland and we at times sustain Hurricane
> force winds and intermitant gusting to 90mph at different times of the
year.
> I've been using wire and vertical antennas for years. I finally have the
> money to put up a beam. I already have a heavy duty 38' tower and just got
a
> good deal on a Hygain rotor.
>
> I've look ed at them all I really like Force12s. I don't know if I can
spend
> that much. I looked over the Cushcraft catalog and like the lightweight
> 'SKYLOG ASL2010 or the MA5B.
>
> Anyone out there in digitland have any realtime experience with Cushcraft.
I
> know there's alot of A3S users around.
>
> Thanks if you could reply!
>
> --
> Peninsula Radio Operators Society
> http://www.intercom.net/npo/pros/index.html

> No Fat in our HAM-LINKS!
> Webmaster: NW3N
>
>
>

3415. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 16:16:41 UTC
From: richardharrison@webtv.net
Message-ID: <157-3A9146E9-22@storefull-111.iap.bryant.webtv.net>
Source record: 169992

Peter, K1PO wrote:
"Fitting a previously designed load to a previously designed source. Not really "design", just a hook-up."

I`ll answer. First, I apologize for earlier saying energy dissipated is volts times amps. That is of course power. I avoided the word power because some people hate the word. Energy is volts times amps times time, of course.

Now, in the examples we had a radio receiver, a loudspeaker, a radio transmitter, and a transmitting antenna.

The radio receiver output impedance is a function of practical voltage and current the output device(s) will withstand, or the design can supply.

The speaker`s electrical impedance is determined by acoustic implications of voice-coil mass.

The transmitting antenna`s impedance is determined by choices made to get certain radiation characteristics which are the "job-one" of the antenna.

The transmitter`s output impedance is determined by the line impedance likely to be used with the transmitter. This is because the transmission line is usually long enough in terms of wavelength to permit voltage and impedance variations within its length. Characteristic impedance is then important. So, it makes more sense to accomodate a transmission line impedance than the final load impedance.

There are good reasons not to bother about a new design effort to make the sources and final loads equal to each other rather than adapting the usual dissimilar impedances.

Best regards, Richard Harrison, KB5WZI

3416. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 16:24:50 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <mNbk6.10309$5M5.664616@news1.frmt1.sfba.home.com>
Source record: 169990

I have a 90 foot vertical (three 30 foot irrigation tubes) for 160 meters.
It has relays at the 30 and 60 foot levels to make it a 1/4 wave
on 80 or 40 meter. I had considered using pneumatic actuation, but ended up
with latching vacuum
relays. At the 30 foot point, there is a pF or two of gap capacitance plus
another pF or two of
relay capacitance. I resonate this out with an inductor wound on a 4 inch
ferrite rod. The ends of
the inductor have blocking capacitors at the ends. This inductor allows me
to get a DC
connection across the gap. The wiring is as follows:

Wire #1 runs from the base along the vertical tubing to the 30 foot relay
coil.
Wire #2 parallels wire #1 up to the 30 foot point. There it is bypassed
with a capacitor
to the top of the lowest tubing section. It also connects to the bottom of
the inductor.
The top of the inductor is bypassed with a capacitor to the bottom of the
middle tubing section.
Wire #3 connects to the top of the inductor and runs alongside the tubing up
to the 60 foot relay
coil. The return for the relay coils is thru the tubing.

I have to have the 30 foot relay closed in order to be able to switch the 60
foot relay.
So I can't switch directly from 160 meter to 40 meters. I have to go
through the 80 meter setup first.

The relays are pulsed with current from a charged up capacitor. I remote
the capacitor
out at the antenna which is 1000 feet from the shack. This is analogous to
remoting the
motor capacitor on a rotator. There are steering diodes at the relays so
one polarity opens
the relay and another closes it.

It would even be possible to mount the capacitor for the 60 foot relay right
at the relay,
(along with a control circuit) and then replace the inductor at the 30 foot
level with a large
(megohms) resistor. Power would be continuously applied through this
resistor to keep the
capacitor charged. A pulse could be superimposed on this DC bias to signal
the control circuit

to switch the 60 foot relay.

I didn't do this because I consider the inductor across the 30 foot gap to be an advantage because it
decreases the coupling to the middle tubing when on 40 meters. I am building a phased array and
I don't want parasitic currents induced in unused tubing sections.

I will have to admit I have had some reliability problems with the 60 foot relay. I am still trying
to determine what is going on there, perhaps condensation. I may have to pot the assembly. The
30 foot relay has never had any problems.

I was just thinking about a relay Yagi yesterday. It would have 33 foot elements with loading
coils 2/3 of the way out to make it work on 30 meters. For 20 meters, relays would short out
the loading coils and I would have full size elements. For 17 meters, the relays would open up
and remove the coils and the outer 1/3 of the elements. I don't think you could do this with traps very easily.
Just brainstorming at this time.

Rick Karlquist
N6RK

Ken & Mary <kenmary@interpac.net> wrote in message
news:q0pj6.12$mv4.462@newsfeed.slurp.net...
> I went on an informal tour of the Voice of America transmitting site in
> Delano, CA. They have a RF switchting matrix so that they can route various
> quarter megawatt transmitters to various curtain arrays. They used
> pneumatically actuated switches. That way you dont have relay coils burning
> up from RF induced into the relay control wires. While you won't have that
> problem if you do it right at ham power levels, it may be a way to avoid
> having any control wires at all going inside the antenna element tubing,
> just some plastic hose. I don't know how to build the pneumatically
> controlled switch. It's just an idea that you might want to kick around.
> stan.holmes@eskom.co.za wrote in message
<3A8D2B2F.5F20240D@eskom.co.za>...
> >Has anyone any comments on using relays instead of traps.
> >Are there any problems with the controlling wires running in the antenna
> >tubing?
> >What type of relay can be used?
> >Thanks
> > Stan
> >
> >
> >
>

>

3417. which coax for 2 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 16:25:23 UTC
From: davekle@city-net.com
Message-ID: <3a914828.84558454@news.city-net.com>
Source record: 169979

I'm getting ready to elevate my 3/4" copper pipe J-Pole antenna and I'm trying to figure out which type of coax to use. It obviously needs to be weatherproof but I don't want to spend a fortune. I'm probably going to need about a 80-100' run.

Any suggestions on where to buy coax online?

Any suggestions/opinions would be greatly appreciated.

Thanks in advance.

-Dave
KB3FXI

3418. Coax/Velocity Factor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 16:36:36 UTC
From: "Mr. Arthur Garabedian" <westernmobiletel@worldnet.att.net>
Message-ID: <3A911E4D.B80481A8@worldnet.att.net>
Source record: 169991

Hello, Can someone tell me how to determine the velocity factor of co-ax? At present I am using RG-58. I am making a co-ax matching, shorted stub tuner. Is there smaller diameter 50 ohm cable that will carry 100 W, (I have a space problem)?

Very Best Regards, Arthur KC6KUK

3419. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 16:40:56 UTC
From: richardharrison@webtv.net
Message-ID: <159-3A914C98-5@storefull-111.iap.bryant.webtv.net>
Source record: 169994

Steve, VE9SRB wrote:
"The total "receiving resistance" is conprised of radiation resistance and loss resistance. It is the loss resistance compnent that converts the energy to heat."

Agreed. I was thinking of further sub-division. The whole system includes the receiver`s input resistance.

The radiation resistance becomes the "generator resistance" for the system. Line loss turns some of the received energy into heat. Then, some of the energy is absorbed by the receiver input which is the load for the system.

Energy lost in the radiation resistance is, of course, that which is re-radiated by the antenna.

Best regards, Richard Harrison, KB5WZI

3420. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 17:09:40 UTC
From: richardharrison@webtv.net
Message-ID: <157-3A915354-31@storefull-111.iap.bryant.webtv.net>
Source record: 169993

Dick Carroll wrote:
"Ham radio doesn`t often get much good press."

"The Morse Code". Rearrange the letters and it makes: Here come dots.

Who produces them? The dotty, of course.

3421. Re: Coax/Velocity Factor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 17:31:03 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3A915876.6801D2AA@earthlink.net>
Source record: 169995

"Mr. Arthur Garabedian" wrote:

> Hello, Can someone tell me how to determine the velocity factor of
> co-ax?

From the widely available manufacturer specs in catalogs, handbooks, websites, technical books in your local library, etc. Typically, solid polyethylene insulation results in the VF of 66%.

> At present I am using RG-58.

VF = 66%, unless the dielectric is *foamed* polyethylene.

> I am making a co-ax matching,
> shorted stub tuner. Is there smaller diameter 50 ohm cable that will
> carry 100 W, (I have a space problem)?

You don't say what frequencies. In SW, RG-174 (VF = 66%) or RG-316 (VF = 69.5%) should be able to handle it, at the price of increased attenuation.

73 .... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

3422. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 18:26:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A916561.D596A98F@IEEE.org>
Source record: 169996

Tom W8JI wrote:
>
> <Cecil.A.Moore@IEEE.org> wrote:
> >All you need is a DC path and return. Why can't you use DPDT
> >relays for that? Each relay will enable the next relay.
>
> You can. Problem is all the surplus vacuum relays I've seen are SPST
> or SPDT.

Seems, since the DC current is relatively low, one could also install
an inexpensive RF choke at each junction.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3423. Re: Coax/Velocity Factor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 18:33:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9166DC.ED16F1DA@IEEE.org>
Source record: 169997

"Mr. Arthur Garabedian" wrote:
> Is there smaller diameter 50 ohm cable that will
> carry 100 W, (I have a space problem)?

RG316 Teflon is about 0.1 inch diameter. RG400 Teflon is about 0.2 inch.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3424. Re: Request comments Cushcraft A3S, MA5B ans ASL2010

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 18:54:41 UTC
From: finham <finham@ntlworld.com>
Message-ID: <b_dk6.32529$mO6.589585@news6-win.server.ntlworld.com>
Source record: 169998

Hi,
I bought a CushCraft MA5B, I did quite a comprehensive review of it on my website www.g3zbe.freeserve.co.uk
You might find it useful!
bye Alex
G3ZBE
Richard A. Stern <rstern@shore.intercom.net> wrote in message news:fm2k6.23758$EW3.1268926@e3500-chi1.usenetserver.com...
> Looking for a MultiBand 20-15-10 beam type antenna.
>
> I live on the Eastern Shore of Maryland and we at times sustain Hurricane
> force winds and intermitant gusting to 90mph at different times of the year.
> I've been using wire and vertical antennas for years. I finally have the
> money to put up a beam. I already have a heavy duty 38' tower and just got a
> good deal on a Hygain rotor.
>
> I've look ed at them all I really like Force12s. I don't know if I can spend
> that much. I looked over the Cushcraft catalog and like the lightweight
> 'SKYLOG ASL2010 or the MA5B.
>
> Anyone out there in digitland have any realtime experience with Cushcraft. I
> know there's alot of A3S users around.
>
> Thanks if you could reply!
>
> --
> Peninsula Radio Operators Society
> http://www.intercom.net/npo/pros/index.html
> No Fat in our HAM-LINKS!
> Webmaster: NW3N
>
>
>

3425. Re: HF signal levels in town vs out of town

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 19:32:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A9174E7.99396146@eznec.com>
Source record: 170000

Modern concrete highways are laced with a dense mat of steel rebar. This should noticeably enhance signals to and from a mobile setup.

Roy Lewallen, W7EL

JR wrote:
>
> I noticed while mobile this weekend on 20M, that the signal levels in
> and around town are much lower than out over the open highway. I have
> noticed also near the ocean signal levels are better even the upper
> bands on HF. Has anyone look at the shielding effect of all the
> overhear wiring that typically runs around town ala. cable, power,
> telephone etc..
> I know that there are some vhf/uhf models around but nothing on HF.
> And how high above that cabling you would have to be in order for it
> to not effect things if you had a beam on a tower ?
>
> Just a thought. AA2T

3426. Re: What kind of ferrite (RFI)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 19:33:35 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <96rseo$magtg$1@ID-52642.news.dfncis.de>
Source record: 170001

I've had lousy luck with clamp on cores (RadioShaft). I'd like to try the cores mentioned below at the best price I can find, Suggestions please.

When the percentagtes are mentioned below, are we talking about close winding the wire so that say, 2/3 of the core has nothing on it.(33%) ..or spacing the wires to cover 100% of the core, but with significant spacing between each turn, so that only 33% of the total core has wire covering it, but the wire/coax etc, is wound around 100% of the available area of the corp (360 degrees).

That wording is terrible...do you use the full 360 degrees of the core, or only say 270 degrees, to keep to the 75% mentioned below. Using 360 degrees, the wires would be widely spaced, but evenly distribututed across the 360 degrees of the core. Using 270 degrees, the wires would be closely spaced, and 90 degrees of the core would have no wires on it at all. Which is appropriate?

73

"Larry Benko" <benko@aztek-eng.com> wrote in message
news:3A9138F5.CCD31575@aztek-eng.com...
> Peter,
>
> Roy is correct that a larger ferrite with more turns is better than
> several single turn ferrites. I had an occasion to make some
> measurements on some Amidon FT240-43 and Steward 28B material
> toroids of the same size (2.4"OD x 1.4"ID x .5"H). Both these
> toroids were u=850 types. The wire I wound on the ferrite was #14
> THHN type and the winding was a single layer fairly tight over x%
> of the toroid. The dB. attenuation values were referenced to a
> 50 ohm system.
>
> ------------- Attenuation -------------------
> Number Turns 3.5MHz 7MHz 14MHz 30MHz 50MHz 100MHz
> 4t (25%) 9dB 13dB 17dB 20dB 21dB 22dB
> 6t (33%) 15dB 19dB 23dB 26dB 28dB 29dB
> 8t (40%) 20dB 24dB 28dB 31dB 32dB 35dB
> 10t (50%) 24dB 28dB 32dB 35dB 37dB 42dB
> 12t (60%) 26dB 31dB 35dB 38dB 40dB 30dB
> 16t (70%) 31dB 36dB 41dB 43dB 43dB 20dB
>
> 1t (clamp on 1dB 3dB 5dB 7dB 9dB 11dB
> ferrite 5/16"ID)
> 1t (clamp on 0dB 2dB 3dB 5dB 8dB 11dB
> ferrite 1/2" ID)

> 2t (clamp on 2dB 5dB 8dB 13dB 16dB 20dB
> ferrite 1/2" ID)
> 3t (clamp on 4dB 8dB 13dB 19dB 23dB 28dB
> ferrite 1/2" ID)
>
> The attenuation in dB can be converted to impedance but
> 10dB~=216ohms, 20dB~=900ohms, 30dB~=3060ohms, 40dB~=9900ohms.
>
> Ferrites do their best when the source impedance of the offending
> signal is low and when the load impedance for the offending
> signal is low. A second nearby series ferrite will double the
> voltage loss (6dB) but a second ferrite several feet down the cable
> may improve things much more (or not at all) due to the impedances.
> The clamp on ferrites don't do much on HF. The big ferrites cost
> ~$6US new from Steward or ~$9 from Amidon and can sometimes be
> found surplus but then you need to measure the ferrite material.
> Is should also worth mentioning that jumble winding the turns or
> using more than 75% of the toroid decreases the effectiveness.
>
> 73,
> Larry Benko, W0QE
>
>
> Roy Lewallen wrote:
> >
> > Get two ferrite cores of type 43 material (or other material with
> > initial permeability about 850 or greater). Wind several turns of each
> > speaker cable (both conductors together) through a core. 5 turns will
> > give as much impedance as 25 clamp on cores of the same size, 10 turns
> > as much as 100 cores. Put these as close to the stereo as possible. The
> > larger the core cross section, the more impedance you'll get.
> >
> > Roy Lewallen, W7EL
> >
> > PA5KE wrote:
> > >
> > > Dear OM,
> > >
> > > I appreciate some info on the kinds of ferrite that are best usable to
fight
> > > RFI (common-mode?) in the stereo of my neighbour. The signal is picked
up by
> > > their speaker cables. I have tried some clamp ferrites on the speaker
cables
> > > but this did not fix the problem.
> > >
> > > What type (ref. number) should I best use, I am active on HF and 6
meters.
> > >
> > > Your help is appreciated!

> > >
> > > 73, de Peter
> > > PA5KE

3427. HY-Gain 14avq

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 19:35:26 UTC
From: jayvan <jayvan@jps.net>
Message-ID: <3A91757E.2FEDB7EB@jps.net>
Source record: 169999

Does anyone know if this vertical has a loading coil at the feed point or something else that would cause it to show a short between the center conductor and ground of the PL 239 connector. I would think that center conductor should be isolated from ground. Any help would be appreciated. Thanks

KA6OTJ
Jay

3428. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 19:36:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <96rvg9$522$1@plutonium.btinternet.com>
Source record: 170007

There is one more way of determining the sign of the impedance angle from the magnitude of Z and SWR. It involves varying the test frequency through an impedance resonance - if there is one.

It is a fundamental property of resonant circuits, including resonant transmission lines and antennas, that -

(1) As the magnitude of Z passes through a minimum in the Z/F curve with increasing frequency, the reactance of jX is negative on the low frequency side of resonance, jX is zero when exactly at resonant, and jX is positive on the high frequency side of resonance.

(2) As the magnitude of Z passes through a maximum with increasing frequency, jX is positive on the the low frequency side of resonance and negative on the high frequency side.

That (1) is true is demonstrated by considering the input impedance of a simple series L and C circuit, or a 1/4-wavelength of transmission line open-circuit at its other end.

That (2) is true is demonstrated by considering the impedance of a simple parallel L and C circuit, or a 1/4-wavelength of transmission line short-circuit at its other end.

At HF it is also a fair bet that as SWR varies with frequency, at a minimum SWR the line + antenna is resonant and jX is zero regardless of the value of R or the minimum SWR. But the accuracy of the usual SWR meter must be taken as a warning - don't bet your life on it !.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:96dtfaqii1@uranium.btinternet.com...
> From Z and SWR, R and X can be calculated. But the sign of X is ambiguous.
>
> To determine the sign of X it is necessary to inspect the item being
> measured. For example, if the antenna wire is open circuit at the other end

> and its length is less than 1/4-wavelength, then input X must be
negative.
>
> The sign of X can also be investigated by connecting a capacitor
or coil in
> series with the unknown Z and observing what happens to Z.
>
> Arithmetically -
>
> R = (2500 + Z^2) / 50 / (SWR + 1 / SWR)
>
> X = Sqrt(Z^2 - R^2)
>
> Angle = ArcCos(R / Z)
>
> However, measurement uncertainties can be greatly magnified when
passing
> through the arithmetic. X is related to the small difference
between two
> large quantities.
>
> ----
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A89D079.2AB041EA@IEEE.org...
> > JGBOYLES wrote:
> > > Still wondering if the Smith Chart can do it?
> >
> > Yep, the Smith Chart can do it. You need to draw constant-Z
> > curves on the Chart and then draw SWR circles. The two
> > points of intersection are the two solutions.
> > --
> > http://www.mindspring.com/~w6rca
>
>

3429. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 19:59:29 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96rucj$cc7$2@lure.pipex.net>
Source record: 170003

"Peter O. Brackett" wrote
> Gary:
> All I can say is Wow! You got it.
> Gary Peachwrote
> > "Peter O. Brackett" wrote
> > > I hope Johann Frederich Ohm is not turning in his grave.
> > > "Dissipationless Resistance" indeed. RIP dear Johann.
> > Just another Joule in the Crown (& Anchor)
> > Even Peltier couldn't get away from Ohmic heating.
> > BTW it was
> > Georg Simon Ohm, 1787 - 1854
> > James P. Joule, 1818 - 1889 a brewer

> I love you man, you're the only one who is paying attention.
>
> You win a free dinner for two at KFC.
> Because you got Ohm's genealogy correct.

KFC! no thanks, I have more respect for my innards.

> And... nice going!
>
> Georges Peltier indeed found a way to dissipate without resistance.

Actually all he did was reverse the thermo couple and turn it into a heat
pump.
The temperature differentila is limited by the Joule heating in the Ohmic
part of the resistance.

> In fact Peltier even discovered a way to "un-dissipate".

Nothing more than a refrigerator, it requires more external energy than it
shifts around.

> Peltier's fellow Frenchman, Sadi Carnot probably would have stirred in his
> grave if he had found what Peltier had discovered.

He'd get on his cycle and pedal as fast as his little legs would carry him.

> Wow, deep stuff, I can see it now, as soon as those "Conjugate Matchers"
> read about, but probably won't understand, the Peltier effect, they will
> probably "invent" the un-dissipative resistor.

But can they supercool a perpetual motion machine and remove the external
source of energy whilst the machine continues sustained by its own inertia?

> I can see it now... the "Conjugate Matchers" will use a propane heater to
> feed heat into their final amplifiers so as to tune the "undissipative

> output resistance" until it matches the 50 Ohms of the transmission line.
> Instead of "load pulling" they will be "load pushing"!
>
> Now, Gary my buddy, for a free dinner at Wendy's who was Johann Frederich
> xxxx?

One of the Bernoullis was a Johann,
Kepler was a Johannes,
but I do not know if he had another Christain name.

Joilet- Curie was a Frederic

Johann Friedrich Herbart (1776 - 1841) Educator
Johann Friedrich Adolf Von Baeyer (1835 - 1917) Chemist

I expect that if you go to South Africa,
you'll find a whole town turned over to them,
Johannesburg.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3430. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:04:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A917C36.75E948E7@eznec.com>
Source record: 170002

More important might be current crowding due to proximity effect. Every Q prediction program I've seen (admittedly not including Reg's) predicts higher Q -- often much higher -- than I can measure. I've felt this was most likely due to failure to account for proximity effect, but I've never known for sure. We did have some discussion on either this or the homebrew newsgroup a while back about the real meaning of inductor Q and whether it should or shouldn't include the effect of shunt capacitance. Some methods of measuring Q include the effect of shunt C (that is, the Xl becomes modified by the effect of shunt C) and some don't. The consensus was that you really need to specify whether shunt C is included or excluded when you specify inductor Q, and you need to be aware of what your measurement includes.

Roy Lewallen, W7EL

Tom W8JI wrote:
>
> On Sun, 18 Feb 2001 20:17:36 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >Tom, if you take the trouble of using program SOLNOID2 before
> >criticising it you will find that at HF the computed Q is at a
> >maximum when the ratio of wire diameter/winding pitch is usually
> >between
> >0.5 and 0.7
>
> I'll look at solenoid2. The program I downloaded did not behave that
> way, so I assume 2 corrects somewhat for winding capacitance?
>
> >Also, it is not the increase in capacitance between turns which
> >reduces Q when the spacing between turns decreases
>
> It isn't?
>
> 73 Tom

3431. Re: which coax for 2 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:04:50 UTC
From: richardharrison@webtv.net
Message-ID: <13556-3A917C62-8@storefull-118.iap.bryant.webtv.net>
Source record: 170005

Dave, KB3FXI wrote:
"Any suggestions on where to buy coax online?"

thewireman.com looks interesting.

Best regards, Richard Harrison, KB5WZI

3432. Re: Coax/Velocity Factor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:08:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A917D31.FEB3355E@eznec.com>
Source record: 170004

RG-174 (0.1 inch outside diameter) easily handles 100 watts with a moderate SWR. Your application, though, sounds like it might involve lines with high SWR.

Roy Lewallen, W7EL

"Mr. Arthur Garabedian" wrote:
>
> Hello, Can someone tell me how to determine the velocity factor of
> co-ax? At present I am using RG-58. I am making a co-ax matching,
> shorted stub tuner. Is there smaller diameter 50 ohm cable that will
> carry 100 W, (I have a space problem)?
>
> Very Best Regards, Arthur KC6KUK

3433. Moxon antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:13:04 UTC
From: Aleksandar Stamenkovic <emadu@eunet.yu>
Message-ID: <96rupmrmg1@news.EUnet.yu>
Source record: 170008

I need article "A Compact Two-Element, 2-Meter Beam" by Lee Lumpkin,
KB8WEV, and Bob Cerrito, WA1FXT. QST magazine.

73, Alexander

3434. Re: which coax for 2 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:16:21 UTC
From: Emptor Phriesadommazille <Finfor@rextov.net>
Message-ID: <pafk6.1$0A1.601@news7.onvoy.net>
Source record: 170006

I mostly use The Wireman. Whenever I call there to order, I get a kind of grumpy curmudgeon. He does seem to know what he is about and he ships quickly. I would use 9913F but thats about 70 cents a ft.

http://www.thewireman.com/
davekle@city-net.com wrote in message
<3a914828.84558454@news.city-net.com>...
>
>I'm getting ready to elevate my 3/4" copper pipe J-Pole antenna and
>I'm trying to figure out which type of coax to use. It obviously
>needs to be weatherproof but I don't want to spend a fortune. I'm
>probably going to need about a 80-100' run.
>
>Any suggestions on where to buy coax online?
>
>Any suggestions/opinions would be greatly appreciated.
>
>Thanks in advance.
>
>-Dave
>KB3FXI

3435. Re: Random Length Wire Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:41:05 UTC
From: richardharrison@webtv.net
Message-ID: <13551-3A9184E1-20@storefull-118.iap.bryant.webtv.net>
Source record: 170010

Rex, KC8PFP wrote:
"I am planning to install a wire antenna."

Look at page 5-19 in the new ARRL Antenna Book. That loop is the sort of wire most hams in this area are using. All sorts of variations are in use, too short, too low, and just looped around through the bushes. Everyone seems to be getting out allright.

Best regards, Richard Harrison, KB5WZI

3436. Re: What kind of ferrite (RFI)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 20:57:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3A91889C.AB9820EA@aztek-eng.com>
Source record: 170009

Hasan,

Generally use a single layer winding occupying 70% to 75% of the
core. For windings with fewer turns, space the turns with a gap
of approx. the diameter of the wire even if this uses up less than
75% of the core. This generally gives nearly the best performance.

73,
Larry Benko, W0QE

hasan schiers wrote:
>
> I've had lousy luck with clamp on cores (RadioShaft). I'd like to try the
> cores mentioned below at the best price I can find, Suggestions please.
>
> When the percentagtes are mentioned below, are we talking about close
> winding the wire so that say, 2/3 of the core has nothing on it.(33%) ..or
> spacing the wires to cover 100% of the core, but with significant spacing
> between each turn, so that only 33% of the total core has wire covering it,
> but the wire/coax etc, is wound around 100% of the available area of the
> corp (360 degrees).
>
> That wording is terrible...do you use the full 360 degrees of the core, or
> only say 270 degrees, to keep to the 75% mentioned below. Using 360 degrees,
> the wires would be widely spaced, but evenly distribututed across the 360
> degrees of the core. Using 270 degrees, the wires would be closely spaced,
> and 90 degrees of the core would have no wires on it at all. Which is
> appropriate?
>

3437. Re: which coax for 2 Meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 21:27:00 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A918FA4.F19D5166@IEEE.org>
Source record: 170011

davekle@city-net.com wrote:
> I'm getting ready to elevate my 3/4" copper pipe J-Pole antenna and
> I'm trying to figure out which type of coax to use. It obviously
> needs to be weatherproof but I don't want to spend a fortune. I'm
> probably going to need about a 80-100' run.

LMR-400 is slightly better than 9913 and doesn't leak.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3438. Re: Need Help Finding / Building Cables for This

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 23:22:35 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3a91aac7_4@news3.prserv.net>
Source record: 170012

Uh, that's why reverse sex connectors are used on those things, to prevent
what you are trying to do, which is essentially against FCC rules.

--
Crazy George
James Wendt <jimw@timeandtech.com> wrote in message
news:cNXj6.5146$Vy2.616639@typhoon.mn.mediaone.net...
> I need to be able to connect my wireless network access point to an
external
> antenna, but the connectors and cables are giving me fits.
> The problem is that the antenna has a female SMA connector and the access
> point has a reverse male TNC connector and I am not able find anything
> standard to connect the two.
>
> I can't and don't want to change the connector on the antenna though I
have
> been able to find an adapter which turns it into a standard female TNC.
>
> I could probably change the access point since the guts of the thing are
> basically a SMC PCMCIA wireless network card attached directly to the
board.
> The built-in PCMCIA card has an industry standard female connector which
is
> connected to the reverse male TNC connector by a short, skinny piece of
> coax.
>
> I'd appreciate any advice you could share about where I can either buy the
> adapters (this isn't my first preference due to potential signal loss) or
> where I can buy the parts to change my access point from reverse TNC to
> female SMA so that I can use standard coax to hook this all up.
>
> (See pictures of what I'm working with here: TNC / SMA connector problems
> http://www.manlycooking.com)
>
> Please contact me at: jimw@timeandtech.com with any suggestions.
>
> Thanks in advance,
>
> Jim Wendt
>
>
>

3439. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 23:37:11 UTC
From: jflanders2@home.com
Message-ID: <3a91ad82.203909281@news>
Source record: 170013

It should work fine, with no degradation from the tree, because the
tree will be outside the antenna area. BUT - I don't see how you can
install it unless you actually climb to the top, which might be risky.
Let us know how the installation goes if you get it up there.

Jerry W4UK

On Sun, 18 Feb 2001 21:05:09 -0000, "Mark Turner" <mark@kram.org>
wrote:

>I'm considering painting a discone green (non-metallic paint of course) and
>using a pole to make it sit right on top of a conifer tree with the tip of
>the tree sticking up inside the cone so that the radials/legs/cone sit
>almost flush with the tree with very little clearance and possibly even
>touching the tree in places. The disc will be clear of the top of the tree
>by some but not many inches. I'll probably leave the vertical element on to
>help with performance on 6m.
>
>No prizes for guessing that I'm looking for a fairly subtle and low profile
>installation.
>
>Will the tree being inside the cone have any effect on the discone, for
>example by altering it's radiation pattern or SWR? My guess is that the
>proximity of the tree won't do any harm and may even improve the
>approximation that the discone's legs are making to a cone.
>
>Thanks,
>
>Mark.
>

3440. Using CATV outlet's shield as station ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-19 23:52:50 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3A91B1D2.DD4C78DF@ix.netcom.com>
Source record: 170014

I'm in a 2nd floor apartment, and grounds are a little hard to
get. There's a CATV outlet in the bedroom next to the rig.
In combination with the electrical safety ground (green wire),
it seems to help to also connect to the CATV shield. Before
I connected it, I did measure with an ohmmeter about an ohm
resistance between the CATV shield and the local power plug
safety ground. Two grounds should (because of differing paths)
provide lower impedance to real ground. SWR on my crude
random wire dipole improved a little. No, I haven't received
any CATVI complaints yet.

3441. ATV (UHF) Antenna Design Suggestion?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 00:14:19 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <96scsr$a7q$1@agate.berkeley.edu>
Source record: 170015

Hi,

I'm working on all sorts of projects simultaneously. ;)

Can anyone suggest a good ATV antenna for 439.25 MHz,
something with moderately good gain, yet compact and
easy to take down, setup for portable operation?

I would prefer to build rather than buy one.

TNX,

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3442. Re: ATV (UHF) Antenna Design Suggestion?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 00:48:15 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <96sesfaih1@agate.berkeley.edu>
Source record: 170016

I have something in mind like a 3 el quad, or quagi....?

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3443. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 01:24:03 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96sgv7sch1@slb0.atl.mindspring.net>
Source record: 170017

Gary:

Thanks for the great inputs to this thread. Keep it up. I enjoy your contributions.

If you don't want to go to KFC for dinner, how about going over to Wendy's for a "salad" and send me the bill. My QRZ.com address is good.

-Peter K1PO

"Gary Peach" <xcg34@dial.pipex.com> wrote in message news:96rucj$cc7$2@lure.pipex.net...
>
> "Peter O. Brackett" wrote
> > Gary:
> > All I can say is Wow! You got it.
> > Gary Peachwrote
> > > "Peter O. Brackett" wrote
> > > > I hope Johann Frederich Ohm is not turning in his grave.
> > > > "Dissipationless Resistance" indeed. RIP dear Johann.
> > > Just another Joule in the Crown (& Anchor)
> > > Even Peltier couldn't get away from Ohmic heating.
> > > BTW it was
> > > Georg Simon Ohm, 1787 - 1854
> > > James P. Joule, 1818 - 1889 a brewer
>
> > I love you man, you're the only one who is paying attention.
> >
> > You win a free dinner for two at KFC.
> > Because you got Ohm's genealogy correct.
>
> KFC! no thanks, I have more respect for my innards.
>
> > And... nice going!
> >
> > Georges Peltier indeed found a way to dissipate without resistance.
>
> Actually all he did was reverse the thermo couple and turn it into a heat
> pump.
> The temperature differentila is limited by the Joule heating in the Ohmic
> part of the resistance.
>
> > In fact Peltier even discovered a way to "un-dissipate".
>
> Nothing more than a refrigerator, it requires more external energy than it

> shifts around.
>
> > Peltier's fellow Frenchman, Sadi Carnot probably would have stirred in
his
> > grave if he had found what Peltier had discovered.
>
> He'd get on his cycle and pedal as fast as his little legs would carry
him.
>
> > Wow, deep stuff, I can see it now, as soon as those "Conjugate Matchers"
> > read about, but probably won't understand, the Peltier effect, they will
> > probably "invent" the un-dissipative resistor.
>
> But can they supercool a perpetual motion machine and remove the external
> source of energy whilst the machine continues sustained by its own
inertia?
>
> > I can see it now... the "Conjugate Matchers" will use a propane heater
to
> > feed heat into their final amplifiers so as to tune the "undissipative
> > output resistance" until it matches the 50 Ohms of the transmission
line.
> > Instead of "load pulling" they will be "load pushing"!
> >
> > Now, Gary my buddy, for a free dinner at Wendy's who was Johann
Frederich
> > xxxx?
>
> One of the Bernoullis was a Johann,
> Kepler was a Johannes,
> but I do not know if he had another Christain name.
>
> Joilet- Curie was a Frederic
>
> Johann Friedrich Herbart (1776 - 1841) Educator
> Johann Friedrich Adolf Von Baeyer (1835 - 1917) Chemist
>
> I expect that if you go to South Africa,
> you'll find a whole town turned over to them,
> Johannesburg.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

3444. Re: Using CATV outlet's shield as station ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 01:33:38 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96shhh$5kr$1@slb4.atl.mindspring.net>
Source record: 170018

Robert:

What are you doin man? Connecting your transmitter to a CATV coaxial cable!
Might just as well wave a red flag at a bull!

That's just asking for trouble. Sooner or later, the whole neighbourhood
will be beating down your door with TVI complaints.

When on the second floor why not operate without a ground. That's a
perfectly fine option. Radio operators on airplanes and airships operate
radios when they are nowhere near ground. A balanced antenna system simply
doesn't need a "ground".

I repeat... You don't need a "ground" to operate your transmitter if your
antenna is balanced. It should work just fine without a "ground".

You might need a ground for lightning protection, but that's another issue.
Deal with it another way. Disconnect the antenna leads and throw them out
the window onto the ground if lightning storms approach, etc....

-Peter K1PO

"Robert Casey" <wa2ise@ix.netcom.com> wrote in message
news:3A91B1D2.DD4C78DF@ix.netcom.com...
> I'm in a 2nd floor apartment, and grounds are a little hard to
> get. There's a CATV outlet in the bedroom next to the rig.
> In combination with the electrical safety ground (green wire),
> it seems to help to also connect to the CATV shield. Before
> I connected it, I did measure with an ohmmeter about an ohm
> resistance between the CATV shield and the local power plug
> safety ground. Two grounds should (because of differing paths)
> provide lower impedance to real ground. SWR on my crude
> random wire dipole improved a little. No, I haven't received
> any CATVI complaints yet.
>

3445. Re: ATV (UHF) Antenna Design Suggestion?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 01:40:49 UTC
From: RanHefner <ranhefner@my-deja.com>
Message-ID: <96shv1$a3f$1@news.netmar.com>
Source record: 169919

http://webook.fset.de/20091999PHCHO/imagini/UHF.pdf

In article <96scsr$a7q$1@agate.berkeley.edu>, David Snyder Hale
<david@isi9.mtwilson.edu> writes:
>Hi,
>
>I'm working on all sorts of projects simultaneously. ;)
>
>Can anyone suggest a good ATV antenna for 439.25 MHz,
>something with moderately good gain, yet compact and
>easy to take down, setup for portable operation?
>
>I would prefer to build rather than buy one.
>
>TNX,
>
>--
>Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

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3446. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:17:19 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96t02d$r9c$1@lure.pipex.net>
Source record: 169925

"Richard Harrison" wrote
> Gary Peach wrote:
> "The key word is signficant."
> I had written: "In the surge resistance of a transmission line the

Please explain the use of the word "surge"

> current is in-phase with the voltage when there is no significant loss
> (heating) in the line."

Current is in phase with the voltage in an electric lamp circuit, so let
ther be light.
Phase shift between current and voltage is purly down to any net reactive
component. You know that inconvenient bit that has a 'j' in front of it.

Z= R+ jX

Heating in any line will be due entirely to the loses (resitive component
'R')

> Well, had I omitted "significant", some would react with "There are no
> lossless lines". There are plenty of lines that might just as well be
> lossless.

"Just as well" ?
What is being discussed here is that "just as well" component,
small though it is, practical lines always have a little of it.

> I am also amazed at how many who should know better think the
> characteristic resistance of a transmission line is a loser.

Only some of it is.

Zo = R + jX

Some of the people can be right some of the time,
but all of the people can't be right all of the time.

for illustartion consider jX to be zero at some particular frequency
(resonance)
then Zo = R and most of the problem resolves to seeing it in DC terms and
the
line loss is R. for no reflextion to take place the line must be of infinity
length and it will take energy from the source in exactly the same way as
free space continuously and it will be indistinguishable from a substituted
resistor. In fact if some imp cuts the line half way to infinity and
substitutes a resistor equal to the characteristic impedence you will not be
able to detect the difference. Now by some magical means the resistor is

gradually moved towards the source and the line snipped off behind it. now
can the generator tell the difference? The energy is now converted to heat
in the local environment instead of travelling away from the generator for
ever. The difference is only in the fact that the physical resistance has
mass and it is that mass which converts the energy into heat. From the
generator's point of view the resistor and the line are identical they both
take half of the power that it produces.

> Gary also wrote:
> "Be it ever so small (mass heating of antennas and things extracting
> energy from a traveling r-f wave) never the less there will be heating."
>
> Antennas have currents induced by a wave sweeping past.

Only half of the time,
there is also an electric element to the travelling wave,
electrophorus also occurs for the other half of the time.

> Especially when they are well placed and near to being a resonant length.

The antenna and *its associated circuit* come into resonance.

One thing that has puzzled me is the difference of the velocity of the wave
in free space and the velocity of the currents in a medium.
How does the current flow the distance within the medium in the time that it
takes for the free space wave to reverse polarity?
Or does it?

> If they are
> matched to a load they may extract up to half the power from a small
> area of the passing wavefront. The other half will be re-radiated.
> Receiving resistance produces heat.

Yes, I like particularly the words "up to", and Yes ideally it is the
receiver I/P resistance that produces the heat.

That must be true, when I put my hand on my receiver it is hot!

> The reason a microwatt can`t radiate into space and communicate
> indefinitely has nothing to do with sinks soaking up all the energy in
> the wave.

Did I say that it was?

> Every receiver has a sensitivity threshold. When a wave expands to a
> thinness in microwatts per square meter that is too weak to operate the
> receiver, it no longer provides satisfactory reception.

What you are saying I think is that when the signal is no longer significant
in magnitude with respect to the noise voltages naturally present at the
receiver the signal is not recognised as a seperate entity.
It is still present and suitable bandwidth reduction will if you know where
to look for the signal will reveal it.

Because, unlike noise it carries on in an un-stochastic (regular) manner.

Radio Astronomers have long used long time constant integrators to detect
the tiny signals from distant galaxies (excess noise).
However this became self defeating in the case of the pulsar, the modulation
was concealed due to the excessive time constants then used.
But I digress.

> If we could concentrate radio energy into a column that would not spread
> out, we could aim it at any unobstructed point in space and communicate
> using extremely small power. It`s the spreading of the wave that`s our
> downfall, not absorption.

In the case of very shortwave electromagnetic wave generated by a laser this
is demonstrated to be true.
To do the same thing with the sorts of waves with which we play would
require a parabola of as many wavelengths apperature. (Somewhat larger than
the Earth)

Diameter of Laser x (Radio Wavelength/ Light Wavelength)
0.01m x (80 / (8 x 10^-7)) = 10^6 m diameter for 80 m band.

However the problem then becomes one of pointing the concentrated beam with
sufficient accuracy to be useful.

Was it Hercules or Atlas that was looking for a platform?
Not that it would have done either of them much good the trains aren't
running yet again.

As I was going up the town
I met a train that wasn't there.
It wasn't there again today-
I wish to God they'd go away

If you want a train look for a crash.

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3447. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:25:22 UTC
From: 2w8ji@akorn.net
Message-ID: <3a91ef0c.237957060@news.accessunited.com>
Source record: 169920

On Mon, 19 Feb 2001 12:04:06 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>More important might be current crowding due to proximity effect. Every
>Q prediction program I've seen (admittedly not including Reg's) predicts
>higher Q -- often much higher -- than I can measure. I've felt this was
>most likely due to failure to account for proximity effect, but I've
>never known for sure. We did have some discussion on either this or the
>homebrew newsgroup a while back about the real meaning of inductor Q and
>whether it should or shouldn't include the effect of shunt capacitance.
>Some methods of measuring Q include the effect of shunt C (that is, the
>Xl becomes modified by the effect of shunt C) and some don't. The
>consensus was that you really need to specify whether shunt C is
>included or excluded when you specify inductor Q, and you need to be
>aware of what your measurement includes.
>

I'm not sure what the problem is Roy, but the Q values are
unrealistic. This is especially true above about 1/2 of the
self-resonant frequency of the inductor.

While Reg's program (even solenoid2) shows Q steadily increasing, real
world measurements show the parallel resonant Q peaks at about half of
the self-resonant frequency and then smoothly and rapidly decreases as
the self-resonant frequency is approached. Of course series resonant
systems peak much lower.

It is also very easy to "design" an inductor with a Q of well over
1000, yet I have never seen one over the high 800's (although there
might be some out there).

I assumed the error was in how it handles the capacitance, but it
might be anything. Anyway, as long as you stay away from anywhere
near the self-resonance it is a useful program. Except the damn
numbers are all in some odd meteric form, instead of the US standard.

73 Tom

3448. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:26:34 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96t02e$r9c$2@lure.pipex.net>
Source record: 169926

"VE9SRB" wrote
> "Richard Harrison" wrote
> > Gary Peach wrote:
...
> The total "receiving resistance" is comprised of radiation resistance and
> loss resistance. It is the loss resistance component that converts
received
> energy into heat.

Indeed Steve VE9SRB, however from the generators viewpoint, it only sees the universe looking up that bit of copper wire, it knows not the difference, it still has to give up half of the energy that it produces; whether it be as part heat and part wave going off into space forever, or as all heat in the case of a dummy load, to the generator it knows no difference.

Where things get a bit tacky is if some large reactive component that shifts the phase of the current with respect to the phase of the voltage is introduced.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3449. Re: Relays instead of traps in a beam antenna???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:27:47 UTC
From: 2w8ji@akorn.net
Message-ID: <3a91f19a.238610546@news.accessunited.com>
Source record: 169921

On Mon, 19 Feb 2001 12:26:41 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:
>
>Seems, since the DC current is relatively low, one could also install
>an inexpensive RF choke at each junction.
>--
>http://www.mindspring.com/~w6rca

The current in vaccuum latching relays is very high.

The choke has to stand-off high voltage.

You have almost the problems you would have with a trap.

73 Tom

3450. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:41:33 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3A91F579.385054E7@home.com>
Source record: 169922

Mark,

CATV coaxial hardline is very easily obtained from your local cable company. You should be able to come up with 200 feet of .750 hardline or larger for next to nothing. As for the connectors you will have to improvise or buy expensive connectors, but if the cable is free what the heck. Get the underground varitiey and it can be buried for a neat installation. I used 350 feet of the stuff for many years on hf. It is 75 ohms, but if you worry about the minor mismatch just build a unun or purchase some sort of matching balun/unun. I spent 20 years in the cable biz and it is good stuff. The loss on HF is very minor, and if you have a good coaxial remote coax switch at the tower you can also use it for vhf.

K7FU

Mark Erbaugh wrote:

> The XYL and I are in the process of building a new home on 4 acres and will
> be moving in this spring. I'm starting to dream about my new farm (antenna,
> that is). I haven't finalized the design of the antennas yet, but I will
> probably initially put up the tower and antenna that I'm using here (once I
> get some extra cash I do want to upgrade, but that may be a while). I'm
> mainly interested in HF.
>
> I'm looking for advice on feedline. Obviously the more I pay for feedline,
> the less loss, but what's the best bang for the buck. There will be 150 -
> 175 feet of feedline from the shack to the top of the tower.
>
> 73,
> Mark, N8ME

3451. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:44:48 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <96t02g$r9c$3@lure.pipex.net>
Source record: 169927

"VE9SRB" wrote
> "Gary Peach" wrote
> > By real it is implied that the Current and Voltage are in phase.
> > Therefore there will be heating.
> > If there is heating there is resistance. I^2 R it is real enough.
> > Even if that resistance is only the 377 Ohm / square of free space.
> > If there is no dissipation there is no propagation. :)
> >
> > The attenuation is purely inverse square law thinning of the field
> > intensity.
>
> Propagation of EM waves in "free space" is not the same as
> dissipation of EM energy in the form of "heat".

From the narrow world view of the generator it can tell no difference.
All that it knows that in a matched condition it has to give up half of the
nergy that it produces.
It's a bit like a tax payer, who knows that he has to part with some of his
hard earned income and then has absolutely no control over how the
government of the day wastes it.
(The masculine case shall include the femanine; unless otherwise stated)

> Assume a perfect isotropic radiator. Field density (or intensity)
decreases
> with distance away from the radiator because the total radiated energy is
> distributed evenly over a sphere of increasing radius.

It was smart of Newton to spot that one.
Oh for w afew simple drawings the square law loss is so much easier to teach
with a diagram. ASCII art just won't do justice to this one in particular.

> This reduction in
> field density is not really an attenuation or "loss" of energy. At any
> distance, the total energy distributed over the sphere remains unchanged.
> We define this phenomenon as "path loss" only so that we can describe the
> decrease in the field density in terms of distance and wavelength.

Precisely it is the diminution of field density available to the effective
apperature of any receiving antenna place in its path. It is of course loss
in the true sens because the receiving antenna can not make any use of the
other part of the 360 stradians that make up the surface of the sphere at
that distance from the transmitter. All of that signal is lost, unavailable
for reception. From the Receivers view point it cares not if the lost signal
energy was gobbled up by a resistor as heat or is yet carrying on into the
void of infinite space, that energy fraction from the transmitter is
unavailable for communication.

On these grounds we are justified, (on the square),
in calling the path loss a loss.

Loss that which is unavailable.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

AHD ses:

loss (l°s, l°s) noun
1. The act or an instance of losing: nine losses during the football season.
2. a. One that is lost: wrote their flooded house off as a loss.
b. The condition of being deprived or bereaved of something or someone: mourning their loss.
c. The amount of something lost: selling at a 50 percent loss.
3. The harm or suffering caused by losing or being lost.
4. losses. People lost in wartime; casualties.
5. Destruction: The war caused incalculable loss.
6. Electricity. The power decrease caused by resistance in a circuit, circuit element, or device.
7. The amount of a claim on an insurer by an insured.

° idiom.
at a loss
1. Below cost: sold the merchandise at a loss.
2. Perplexed; puzzled: I am at a loss to understand those remarks.

[Middle English los, from Old English. See lose.]

3452. Re: Using CATV outlet's shield as station ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 04:55:04 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3A91F8A4.72E2A81A@home.com>
Source record: 169923

Using theCATV shield is NOT a good idea.
#1. CATVI will occur
#2. Strong front end overload and damage to a neighbors TV can result in a lawsuit.
#3. Cable systems use the HF bands for their return path and you will interfere with them and they will come a looking for the problem.
#4. Not all cable companies use proper grounds, most are bonded with the power, and telco grounds. (more problems)
#5. If you must, lay out radials around your rig, but look out at night when going to the bathroom.... :-O
#6. Common Sense?

Ray Hansmeier...K7FU....Broadband Design Manager, 15 years cable experience, 30 years a ham...etc...

Robert Casey wrote:

> I'm in a 2nd floor apartment, and grounds are a little hard to
> get. There's a CATV outlet in the bedroom next to the rig.
> In combination with the electrical safety ground (green wire),
> it seems to help to also connect to the CATV shield. Before
> I connected it, I did measure with an ohmmeter about an ohm
> resistance between the CATV shield and the local power plug
> safety ground. Two grounds should (because of differing paths)
> provide lower impedance to real ground. SWR on my crude
> random wire dipole improved a little. No, I haven't received
> any CATVI complaints yet.

3453. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 05:21:24 UTC
From: dputnick@alumni.caltech.edu
Message-ID: <3a91fdda.51387481@207.217.77.23>
Source record: 169924

On Sun, 18 Feb 2001 07:35:08 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>With radials five meters off the ground, I would use more than three.

For an interesting study on the number of radials required for a
vertical, take a look at:

http://www.arising.com.au/people/Holland/Ralph/shortvert.htm

3454. Where are you??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 06:16:16 UTC
From: Dennis williams <dwwillia@mail.newcastle.edu.au>
Message-ID: <96t2nhotp1@seagoon.newcastle.edu.au>
Source record: 169928

I have a problem helping. If users of this group could say where they are
located it would help.. i,e. use your call sign

3455. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 07:42:12 UTC
From: Tom Twist <tom@twist.no>
Message-ID: <1o749t8k04e51m3694euohsh9pdcb012fu@4ax.com>
Source record: 169929

On Tue, 20 Feb 2001 04:25:22 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:

<snip>

>I assumed the error was in how it handles the capacitance, but it
>might be anything. Anyway, as long as you stay away from anywhere
>near the self-resonance it is a useful program. Except the damn
>numbers are all in some odd meteric form, instead of the US standard.

Correction.

The numbers are according to international standards ;)

73, Tom LB8X

Email: tom@twist.no (ttwist@online.no, lb8x@qsl.net)
Phone: +47 35972928/90662366, Ham call sign: LB8X Locator: JO49UA
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

3456. Re: Request comments Cushcraft A3S, MA5B ans ASL2010

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 08:08:01 UTC
From: Asko Henriksson <asko.henriksson@nokia.com>
Message-ID: <3A922621.9FF3749C@nokia.com>
Source record: 169930

finham wrote:

> Hi,
> I bought a CushCraft MA5B, I did quite a comprehensive review of it on my
> website www.g3zbe.freeserve.co.uk
> You might find it useful!
> bye Alex
> G3ZBE

Yes indeed Alex! I bought a MA5B too, partly because of your fine review.
The antenna itself works as expected - a good compromise, if you can't put
up a bigger antenna.

Asko OH2JMF

3457. Re: Where are you??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 08:17:29 UTC
From: Big Ben <bigbensblazer@NOSPAMyahoo.com>
Message-ID: <uLpk6.5331$Yb1.729640@news.uswest.net>
Source record: 169931

```
--
Ben Lee
KC7UIP
CN85
Remove NOSPAM to Reply
```

3458. Re: Using CATV outlet's shield as station ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 11:21:49 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <96tjvrotn1@slb7.atl.mindspring.net>
Source record: 169932

The cable ground should be bonded with telco and
power grounds at the service entrance. Why?

Lightning. Let's say a strike, or near-strike comes
in via the power line. All those electrons are looking
to get away from each other. Where can they go?
To your telco & cable grounds. How do they get there?
Well, if you bond at the service entrance, there is only one
ground. No problem.

What if you didn't? Well, what is the easy path from
the power mains to the cable ground? It's right through
your tv set and/or cable box. Toast.

73,
Tom Wagner - N1MM
Check out the N1MM Free Contest Logger at
http://tomwagner.home.mindspring.com/n1mm.htm
http://groups.yahoo.com/group/N1MMLogger
Raymond Hansmeier <rhansmeier@home.com> wrote in message
news:3A91F8A4.72E2A81A@home.com...
> Using theCATV shield is NOT a good idea.
> #1. CATVI will occur
> #2. Strong front end overload and damage to a neighbors TV can result in
> a lawsuit.
> #3. Cable systems use the HF bands for their return path and you will
> interfere with them and they will come a looking for the problem.
> #4. Not all cable companies use proper grounds, most are bonded with the
> power, and telco grounds. (more problems)
> #5. If you must, lay out radials around your rig, but look out at night
> when going to the bathroom.... :-O
> #6. Common Sense?
>
> Ray Hansmeier...K7FU....Broadband Design Manager, 15 years cable
> experience, 30 years a ham...etc...
>
> Robert Casey wrote:
>
> > I'm in a 2nd floor apartment, and grounds are a little hard to
> > get. There's a CATV outlet in the bedroom next to the rig.
> > In combination with the electrical safety ground (green wire),
> > it seems to help to also connect to the CATV shield. Before
> > I connected it, I did measure with an ohmmeter about an ohm
> > resistance between the CATV shield and the local power plug
> > safety ground. Two grounds should (because of differing paths)

> > provide lower impedance to real ground. SWR on my crude
> > random wire dipole improved a little. No, I haven't received
> > any CATVI complaints yet.
>

3459. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 12:24:47 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <pjnt69.b9q.ln@kram.org>
Source record: 169933

"Jerry Flanders" said....
> BUT - I don't see how you can
> install it unless you actually climb to the top, which might be risky.

The tree is only about 8 feet tall so I think I'll be Ok up there. :)

It does have a clear takoff to the horizon over about 200 degrees arc
though, and a vertical has worked reasonably well in a similar spot at a
similar height. I'm in the East Anglia region of England where the terrain
is pretty flat.

> Let us know how the installation goes if you get it up there.

Will do.

Cheers,

Mark.

3460. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 13:03:38 UTC
From: 2w8ji@akorn.net
Message-ID: <3a926803.268927900@news.accessunited.com>
Source record: 169934

On Tue, 20 Feb 2001 05:21:24 GMT, dputnick@alumni.caltech.edu (Don Putnick) wrote:

>On Sun, 18 Feb 2001 07:35:08 -0600, Cecil <Cecil.A.Moore@IEEE.org>
>wrote:
>
>>With radials five meters off the ground, I would use more than three.
>
>For an interesting study on the number of radials required for a
>vertical, take a look at:
>
>http://www.arising.com.au/people/Holland/Ralph/shortvert.htm

That isn't a "study", its a guess based on a NEC-2 model. Real world measurements disagree with the conclusions in that article.

As a matter of fact, VK3AX (the fellow who is reported to use the small system calculated as being better than 30 radials on the ground) is constantly beat by VK3ZL into the USA. VK3ZL uses a 40 foot top-loaded vertical with **25 radials** laid on the ground.

The difference in the signals from VK3AX and VK3ZL is striking, almost ten dB on average. I can hear VK3ZL virtually every morning no matter what conditions are, and only hear the station using the small ground a few days a month (despite the fact he meets almost daily with others in VK on a certain frequency).

The stark contrast in signals is enough to convince me small ground systems are far over-rated.

73 Tom

3461. gin pole info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 13:47:54 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3a92758b$0$35013$2c3edae7@news.voyager.net>
Source record: 169935

anyone know a source to purchase a gin-pole for a rohn tower?
tks ken w8ob

3462. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 13:50:03 UTC
From: richardharrison@webtv.net
Message-ID: <2007-3A92760B-74@storefull-115.iap.bryant.webtv.net>
Source record: 169938

Gary Peach wrote:
"Please explain the use of the word "surge".

Deposit a "potential difference" across a transmission line. There will be a difference of potential between the points of deposition and other points along the line. Current must flow to equalize the potential difference.

There was no current before charge was deposited on the line. Charge deposition abruptly initiates current. Thus we have a surge.

What is the magnitude of the surge current? It depends on the construction of the transmission line and the potential difference (voltage).

The ratio of voltage to current is named resistance when the current rises in lock step without delay just as the voltage rises. There doesn`t have to be any dissipation.

In the case of a surge on a transmission line, with insignificant loss, regardless of the magnitude of the voltage, the current will have a magnitude which is a constant percentage of the surge voltage. This voltage to current ratio is called the surge impedance, surge resistance, or characteristic impedance of the transmission line.

Best regards, Richard Harrison, KB5WZI

3463. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 13:52:06 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <aEuk6.14483$X61.1009873@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169936

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96t02g$r9c$3@lure.pipex.net...
>
> "VE9SRB" wrote
> > "Gary Peach" wrote
> > > By real it is implied that the Current and Voltage are in phase.
> > > Therefore there will be heating.
> > > If there is heating there is resistance. I^2 R it is real enough.
> > > Even if that resistance is only the 377 Ohm / square of free space.
> > > If there is no dissipation there is no propagation. :)
> > >
> > > The attenuation is purely inverse square law thinning of the field
> > > intensity.
> >
> > Propagation of EM waves in "free space" is not the same as
> > dissipation of EM energy in the form of "heat".
>
> From the narrow world view of the generator it can tell no difference.
> All that it knows that in a matched condition it has to give up half of
the
> nergy that it produces.
> It's a bit like a tax payer, who knows that he has to part with some of
his
> hard earned income and then has absolutely no control over how the
> government of the day wastes it.
> (The masculine case shall include the femanine; unless otherwise stated)
>
> > Assume a perfect isotropic radiator. Field density (or intensity)
> decreases
> > with distance away from the radiator because the total radiated energy
is
> > distributed evenly over a sphere of increasing radius.
>
> It was smart of Newton to spot that one.
> Oh for w afew simple drawings the square law loss is so much easier to
teach
> with a diagram. ASCII art just won't do justice to this one in particular.
>
> > This reduction in
> > field density is not really an attenuation or "loss" of energy. At any
> > distance, the total energy distributed over the sphere remains
unchanged.
> > We define this phenomenon as "path loss" only so that we can describe

the
> > decrease in the field density in terms of distance and wavelength.
>
> Precisely it is the diminution of field density available to the effective
> apperature of any receiving antenna place in its path. It is of course
loss
> in the true sens because the receiving antenna can not make any use of the
> other part of the 360 stradians that make up the surface of the sphere at
> that distance from the transmitter. All of that signal is lost,
unavailable
> for reception. From the Receivers view point it cares not if the lost
signal
> energy was gobbled up by a resistor as heat or is yet carrying on into the
> void of infinite space, that energy fraction from the transmitter is
> unavailable for communication.
> On these grounds we are justified, (on the square),
> in calling the path loss a loss.
>
> Loss that which is unavailable.
>
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>

Hi Gary:

I fully understand why its called "path loss". Most people understand the end result. Describing the process is where problems usually arise. My comments were directed at your statement "if there is no dissipation there is no propagation". Dissipation of energy in the form of heat is not a requirement for the propagation of EM energy. It may however, be part of the propagation process. The distribution of energy in space as it travels away from a source is not a heat dissipation issue as your statement might lead some to believe.

Steve VE9SRB

3464. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 14:03:33 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <VOuk6.14490$X61.1010452@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169937

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96t02e$r9c$2@lure.pipex.net...
>
> "VE9SRB" wrote
> > "Richard Harrison" wrote
> > > Gary Peach wrote:
> ...
> > The total "receiving resistance" is comprised of radiation resistance
and
> > loss resistance. It is the loss resistance component that converts
> received
> > energy into heat.
>
> Indeed Steve VE9SRB, however from the generators viewpoint, it only sees
> the universe looking up that bit of copper wire, it knows not the
> difference, it still has to give up half of the energy that it produces;
> whether it be as part heat and part wave going off into space forever, or
as
> all heat in the case of a dummy load, to the generator it knows no
> difference.
>
> Where things get a bit tacky is if some large reactive component that
shifts
> the phase of the current with respect to the phase of the voltage is
> introduced.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

Hi Gary:

From the generator's perspective (in the steady state), it sees an effective load impedance at the transmission line input. If we do not want to look beyond this point that's fine. If however, we want to understand the process of wave propagation in the transmission line and radiation from the antenna, we need to look beyond the generator's viewpoint.

Whether the generator gives up "half of the energy it produces" or some other level, is entirely a function of the generators internal components and the effective load impedance it sees.

Steve VE9SRB

3465. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 14:22:58 UTC
From: richardharrison@webtv.net
Message-ID: <28586-3A927DC2-141@storefull-113.iap.bryant.webtv.net>
Source record: 169941

Gary Peach wrote:
"What is being discussed here is the "just as well" component, small though it is , practical lines always have a little of it."

"just as well" implies loss in a transmission which is insignificant. This is possible. Lines exist which are wavelengths long but still have very small values of series resistance and shunt conductance as compared with their surge impedances.

There is no need here to complicate a discussion of impedance matching beyond saying we are going to correct the power factor or tune out the reactance.

Best regards, Richard Harrison, KB5WZI

3466. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 14:41:55 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Tmvk6.5754$TD1.455232@bgtnsc05-news.ops.worldnet.att.net>
Source record: 169940

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:96t02d$r9c$1@lure.pipex.net...
>
> "Richard Harrison" wrote
>
> <snip>
>
> > I am also amazed at how many who should know better think the
> > characteristic resistance of a transmission line is a loser.
>
> Only some of it is.
>
> Zo = R + jX
>
> Some of the people can be right some of the time,
> but all of the people can't be right all of the time.
>
> for illustartion consider jX to be zero at some particular frequency
> (resonance)
> then Zo = R and most of the problem resolves to seeing it in DC terms and
> the
> line loss is R.
>
> <snip>
>
> 73
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

Hi Gary:

The characteristic impedance of a transmission line Zo is, as you state, generally of the form R + jX. More appropriately, it is defined as Zo = Ro + jXo. There is however, more to understanding the loss of energy in the transmission line than just looking at Ro alone. The line loss at RF frequencies is not simply given by R (Ro). Different transmission lines with the same Ro may have different loss factors.

The loss factor for a transmission line is given by alpha which is expressed in nepers/meter. Loss in the transmission line is always a function of unit

length. The resistance of the transmission line R, is expressed in ohms/unit length. The real part of the characteristic impedance of the transmission line Ro, is expressed in ohms.

In general, the transmission line loss factor, alpha = 0.5 (R/Ro + G/Go) where G and Go are the conductance of the line/unit length and the conductive component of Yo in mhos, respectively. Ro and Go can be written as functions of the basic transmission line parameters R, L, G and C.

Steve VE9SRB

3467. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 14:46:18 UTC
From: richardharrison@webtv.net
Message-ID: <2006-3A92833A-178@storefull-115.iap.bryant.webtv.net>
Source record: 169944

Gary Peach wrote:
"For illustration consider jX to be zero at some particular frequency (resonance) then Zo=R and most of the problem resolves to seeing it in DC terms and the line loss is R."

Let`s look at it another way. Resonant lengths of transmission lines can be a wavelength or fractions thereof. Series resistance and shunt conductance can be negligible.

Let`s look at an infinitely long transmission line with negligible losses. It was Reg Edwards, I believe, who said you could just apply your d-c ohmmeter to such a line and read its surge impedance.

Best regards, Richard Harrison, KB5WZI

3468. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:01:30 UTC
From: richardharrison@webtv.net
Message-ID: <2007-3A9286CA-76@storefull-115.iap.bryant.webtv.net>
Source record: 169943

Gary Peach wrote:
"The energy is now converted to heat in the local environment instead of traveling away from the generator for ever."

The above is a correct statement of difference between a dummy load and an infinite transmission line. It misses the point that electrical energy is converted to heat by the dummy load but remains unconverted in the lossless transmission line.

Best regards, Richard Harrison, KB5WZI

3469. Palomar Loop Amp and HF-1 Loop FS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:10:17 UTC
From: Charles Hugg <chashugg@earthlink.net>
Message-ID: <tNvk6.790$I65.132733@newsread2.prod.itd.earthlink.net>
Source record: 169942

FS a Palomar Loop Amplifier and HF-1 plug in Loop for $75. This Loop covers 5-15 Mhz. Other Plug In Loops can be purchased to cover other frequencies. Works great. Charlie, K5MBX

3470. Re: Coax/Velocity Factor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:26:08 UTC
From: "Mr. Arthur Garabedian" <westernmobiletel@worldnet.att.net>
Message-ID: <3A925F46.12649FB3@worldnet.att.net>
Source record: 169945

HI Roy! Thank You for the information. I will try it.
Very Best Regards, Arthur KC6KUK

Roy Lewallen wrote:
>
> RG-174 (0.1 inch outside diameter) easily handles 100 watts with a
> moderate SWR. Your application, though, sounds like it might involve
> lines with high SWR.
>
> Roy Lewallen, W7EL
>
> "Mr. Arthur Garabedian" wrote:
> >
> > Hello, Can someone tell me how to determine the velocity factor of
> > co-ax? At present I am using RG-58. I am making a co-ax matching,
> > shorted stub tuner. Is there smaller diameter 50 ohm cable that will
> > carry 100 W, (I have a space problem)?
> >
> > Very Best Regards, Arthur KC6KUK

3471. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:27:41 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A928CED.8A50B8C7@IEEE.org>
Source record: 169947

Tom Twist wrote:
>
> On Tue, 20 Feb 2001 04:25:22 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:
> >Except the damn
> >numbers are all in some odd meteric form, instead of the US standard.
>
> Correction. The numbers are according to international standards ;)

One wonders why an Englishman doesn't use English units. :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3472. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:28:29 UTC
From: richardharrison@webtv.net
Message-ID: <28586-3A928D1D-146@storefull-113.iap.bryant.webtv.net>
Source record: 169948

Gary Peach wrote:
"Only half the time (A wave sweeping past an antenna induces a current), there is also an electric element to the traveling wave, electrophorus also occurs for the other half of the time."

I`ll quote Terman from Page One of "Radio Engineering":
""Electrical energy that has escaped into free space exists in the form of electromagnetic waves. These waves, which are commonly called radio waves, travel with the velocity of light and consist of magnetic and electrostatic fields at right angles to each other and also at right angles to the direction of travel."

Study that. It says it all.

Best rergards, Richard Harrison, KB5WZI

3473. Re: Where are you??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:31:32 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <o5wk6.812$I65.136433@newsread2.prod.itd.earthlink.net>
Source record: 169946

Well, how about yourself? Where are you?

Your post has that certain irony about it like the new "lifetime space heater" that comes with a one year warrantee, and how the "Otis Elevator" building in Minneapolis is only one story.

Stahr - W6NYC

"Dennis williams" <dwwillia@mail.newcastle.edu.au> wrote in message news:96t2nhotp1@seagoon.newcastle.edu.au...
> I have a problem helping. If users of this group could say where they are
> located it would help.. i,e. use your call sign
>
>

3474. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 15:51:31 UTC
From: richardharrison@webtv.net
Message-ID: <2006-3A929283-186@storefull-115.iap.bryant.webtv.net>
Source record: 169950

Gary Peach wrote:
"How does the current flow the distance within the medium in the time it takes for the free space wave to reverse polarity? Or does it?"

It does not. Like charges try to keep their distances from each other. They therefore pass along a shove without migration.

When a passing wave induces current, the current mimics the wave sweeping past an elemental section of the conductor. but a phase difference can occur.

Best regards, Richard Harrison, KB5WZI

3475. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:07:15 UTC
From: richardharrison@webtv.net
Message-ID: <2006-3A929633-189@storefull-115.iap.bryant.webtv.net>
Source record: 169949

Gary Peach wrote:
"What you are saying I think is that when the signal is no longer significant in magnitude with respect to the noise voltages naturally present at the receiver the signal is not recognizable as a separate entity."

I might strike the word "naturally".

Yes. I said a receiver has a sensitivity threshold. It could be set by either internal or external noise.

Best regards, Richard Harrison, KB5WZI

3476. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:17:02 UTC
From: richardharrison@webtv.net
Message-ID: <2006-3A92987E-190@storefull-115.iap.bryant.webtv.net>
Source record: 169952

Gary Peach wrote:
"Did I say that it was (sinks soaking up all the energy in a wave)?"

Someone speculated too many TV antennas in an area would produce snow in your picture. Gary may not be the author.

Too many TV antennas in an area are more likely to produce ghosts.

Best regards, Richard Harrison, KB5WZI

3477. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:35:39 UTC
From: richardharrison@webtv.net
Message-ID: <2008-3A929CDB-22@storefull-115.iap.bryant.webtv.net>
Source record: 169951

Gary Peach wrote:
"Was it Hercules or Atlas that was looking for a platform?"

Hercules performed a dozen great feats. Atlas was looking for the bully that kicked beach sand in his face. Newton was looking for a lever long enough and a place to stand so he could move the world.

Best regards, Richard Harrison, KB5WZI

3478. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:41:55 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A929E53.794BDF32@rupert.tds-az.lmco.com>
Source record: 169953

Big Ben wrote:
>
> I've seen and read stuff about wire antennas that are basically just a big
> horizontal loop or square of wire. Ok I'll try to draw it.
>
> [clip of ascii picture]
>
> Well that took a while. Now the questions. Please base it on 80 meters.
>
> 1) How long - total length or if a square, the length of each side?
>
> 2) What kind of wire is best to use?
>
> 3) Do these have to be a perfect square? I live in a mobile home and would
> like to mount it above the roof which is 14x67 feet.
>
> 4) Will the aluminum siding or rubber coated aluminum roof cause problems
> with the performance of the antenna?
>
> 5) Will this perform any better than a standard long wire? I am in a mobile
> home park so I would have to use an inverted vee.
>
> 6) If this will work, how high above the roof will it need to be mounted?
>
> Thank you,
> Ben Lee
> KC7UIP
> CN85

Ben,

I read all the other posts and thought I would add my $0.02. The
following
is how I understand a loop antenna, which could very well be wrong, and
a
description of the one that I made and used.

The intent of a loop antenna is to maximize the enclosed area. A circle
is the best, but that would require and infinite number of tie downs to
make that shape. A compromise is the square or rectangle, with the
square
being the best choice. Of course a triangle could also be used. But, if
all you can use is a rectangle, use it. Just remember that as the short
dimension of the rectangle gets smaller and smaller ,the antenna starts
resembling a folded dipole.

If a square shape is used, each side should be 1/4 wavelength at the lowest frequency of use. The total length would be 1 wavelength. I think the "total length = 1005/frequency(MHz)" formula should work. The exact length, at least in my experience, is not that critical.

I built one for 40 Meters and used about 140 feet of wire. For 80 Meters you will need twice that. I used a #14 stranded wire that sells in Radio Shack in 70 foot rolls. Four roll should be all you need. While you are in Radio Shack, they also carry ceramic insulators for the corners. I used two of the 70 foot rolls and made a sorta/kinda rectangle.
Three of the sides were out in the open but one side ran real close to a rain gutter. The whole thing was only about 15-20 feet off the ground.

The feed point was near a window and I used about 15 feet of 300 ohm twin lead. You should be able to use any kind of balanced feedline from 300 to 600 ohms. I tied the feedline to the balanced output of my tuner. It may have been better to use a 4:1 balun and then feed the balun from the coax output of the tuner.

When I built my loop antenna, I was portable and didn't have any test equipment available, however it did work very well. It was nice and quiet, noise wise, and sensitive. I found that it tuned up well on the fundamental design frequency and on all harmonically related bands, i.e. 20, and 15 Meters. I didn't try any other bands at the time but it should also work on 10 Meters.

I was only running a Heath HW-8 at about 1 watt output and managed to get a I1 station. It was a very short lived contact, but he did get my call correct. This led me to believe that the low angle radiation is fairly good even at the low height, 15-20 feet.

Your dimensions of "14x67 feet" will be a little short for 80 Meters but should be enough room to construct a 40 Meter loop. It might work on 80 Meters if you short the feedline wires together and operate the antenna as "end feed". You should probably get it as high above your mobile home as possible, to minimize any interaction.

I intend to re-construct mine and do some more testing. It did seem like a nice simple antenna that worked very nice on multiple bands.

Martin, K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

3479. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:42:31 UTC
From: richardharrison@webtv.net
Message-ID: <2008-3A929E77-23@storefull-115.iap.bryant.webtv.net>
Source record: 169956

Gary Peach wrote:
"If you want a train look for a crash."

With whistle blowing and brakes locked, "you
can`t blame the wreck on the train".

Best regards, Richard Harrison, KB5WZI

3480. Need photo of MT-3000a switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:44:23 UTC
From: David <k4zzr@gate.net>
Message-ID: <H9xk6.1$u34.3402@news>
Source record: 169954

I have an unusual request.....I need a closeup photo of the Antenna selector switch inside a Dentron MT-3000a tuner. The one I recently purchased has been modified and I'd like to put it back the way it was originally. If someone would be willing to attach a photo to an email of the wiring coming off that switch, it would be very much appreciated.

Thanks and 73,
David, K4ZZR
k4zzr@gate.net

3481. Re: Moxon antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 16:55:26 UTC
From: Kathy <kmustenospam@aol.com>
Message-ID: <3A92A175.C28311B2@aol.com>
Source record: 169955

Hi,
This article is based on the plans found at
http://www.cebik.com/

select technicals and then page down to vhf/uhf section
there you will find almost exact plan for this moxon 2 m.

73 from NY NY

Aleksandar wrote:

> I need article "A Compact Two-Element, 2-Meter Beam" by Lee Lumpkin,
> KB8WEV, and Bob Cerrito, WA1FXT. QST magazine.
>
> 73, Alexander

3482. Re: gin pole info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 17:17:04 UTC
From: "Adam T. Cately" <atcately@bright.net>
Message-ID: <3A92A690.68E9168B@bright.net>
Source record: 169939

There is a Rohn distributor in St. Mary's, Ohio, called Thomas
Shelby and Co. Inc. - phone: 1-888-868-8588. They sell Rohn tower
and ALL the accessories.

There is also a ham dealer by the name of WB0W, Inc., that sells
their own style of gin poles - really good-looking HEAVY stuff. About
$300 and change will get you a nice pole shipped to your door.
Phone: 1-800-626-0834 or surf to www.wb0w.com and look around

kenneth m cubilo wrote:
>
> anyone know a source to purchase a gin-pole for a rohn tower?
> tks ken w8ob

--

- Adam -

3483. WTB: Remote Antenna Coax Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 17:20:56 UTC
From: John Morris <moe@email.msn.com>
Message-ID: <#M9g#G2mAHA.381@cpmsnbbsa07>
Source record: 169898

Want to buy remote coax switch with control box ... e.g. Heathkit or similar.

Please state model, address and price.

Thanks

John-WB0RLD
moe@msn.com

3484. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 18:34:32 UTC
From: rwclark@seanet.com
Message-ID: <3a92a841.68815851@news.seanet.com>
Source record: 169957

On Tue, 20 Feb 2001 04:17:19 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>One thing that has puzzled me is the difference of the velocity of the wave
>in free space and the velocity of the currents in a medium.
>How does the current flow the distance within the medium in the time that it
>takes for the free space wave to reverse polarity?
>Or does it?
>

Hi Gary,

There's something here that few would pick up on. The velocity of the wave in free space and the velocity of the wave in a media different from free space are accountable by the media that is different. This is simply Snell's Law.

However, you slide into the speed of the current in the media and try to correlate it to the speed of the wave in free space. Two very different beasts. Let's simply stick with one media when we examine the speed of the wave and the speed of the current.

If, perchance, the speed of the current exceeds the speed of the wave (there are instances of this), then we find ourselves as witness to a new radiation - Cherenkov radiation, which appears as a blue wavefront much in the same style as the bow wave from a fast moving boat.

And then you slide into "distance." The only current that comes close to light speed over any distance is found in the conventional amplifier tube between the cathode and the plate. Current truly flies here in stark contrast to the "induced" current outside of the tube that's physical distance of travel over time is on the order of cM/second. That is, the speed of any electron in the current outside of a tube. The effect of the current movement propagates at the same near light speed, but the two speeds (the electron, and its effect) are distinctly different.

Now the really remarkable fact about this last near light speed current phenomenon in a tube is that it conforms in every sense to meeting a "dissipative" resistance INSIDE THE TUBE. That is, Plate Resistance is as real as a chunk of carbon and produces the heat to prove it. Back when Hams built their own rigs, you can be sure they were aware of their plate "dissipation" limit for ANY particular tube they designed around. Some may confuse the heat shedding of the plate as simply the process of being illuminated by the filament. That is,

a coffee pot gets hot because of the stove's burner - heat transfer by conduction, convection, or radiation.

In a sense, the plate of a tube also absorbs heat in the same manner (unless we have a tube with a cathode covering the filament) - however, this source is only a minor contributor to the total heat load suffered. The major heat load comes from the deceleration of electrons as they attempt to penetrate the metallic lattice of the plate (electron penetration rarely succeeds in traveling more than one to three atom's thickness). The deceleration from near light speed to a crawl in the space of angstroms yields heat - this is classic Newtonian Physics. Hence we have a paradox wherein the seemingly low resistance metal plate in fact exhibits the loss of carbon (or worse).

This paradox is a hard swallow for many (especially those who try to argue the source's non-dissipative characteristic). Those who choke generally sputter about perfect switches and current conduction angle. If researchers who attempt to measure the Z of a real transmitter as source fail to find a real R component strongly correlated to the specification for Tube Plate Resistance, then their method is highly suspect.

73's
Richard Clark, KB7QHC

3485. Re: Moxon antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 18:43:33 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <BUyk6.24076$Dd3.544499@monolith.news.easynet.net>
Source record: 169958

Aleksandar Stamenkovic <emadu@eunet.yu> wrote in message
news:96rupmrmg1@news.EUnet.yu...
> I need article "A Compact Two-Element, 2-Meter Beam" by Lee Lumpkin,
> KB8WEV, and Bob Cerrito, WA1FXT. QST magazine.
>
> 73, Alexander
>
>

3486. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 19:16:06 UTC
From: Michael Edelman <mje@spamcop.net>
Message-ID: <3A92C276.972691AF@spamcop.net>
Source record: 169959
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

```
Lorraine Wilson wrote:
>
> Quit paying them...I bet that will work.
> smiley o'riley <bummer-radio@licensing.org> wrote in message
> news:goodbye@goodbye...
> >
> > I find I can no longer support the ARRL by being a member. What's the
> best
> > way to cancel a membership?

Hmm. Well, next time the renewal card arrives, don't mail it in. That
ought to work.

-- ke8yy
-----------------------------------------------------------------
Michael Edelman mje@spamcop.net
http://www.foldingkayaks.org (nomadics)
http://www.findascope.com (choosing a telescope)
```

3487. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 20:25:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A92D2D3.B502AB9E@IEEE.org>
Source record: 169961

Richard Harrison wrote:
> Newton was looking for a lever long
> enough and a place to stand so he could move the world.

He must have found that lever. In addition to spinning and
revolving around the sun, the world is barreling along at
thousands of miles per hour in some obscure direction within
the known universe.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3488. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 20:28:53 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A92D385.F2A5B047@IEEE.org>
Source record: 169962

Richard Clark wrote:
> There's something here that few would pick up on. The velocity of the
> wave in free space and the velocity of the wave in a media different
> from free space are accountable by the media that is different. This
> is simply Snell's Law.

Did you hear that scientists have been able to stop photons dead in
their tracks?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3489. Re: gin pole info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 20:33:16 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <gwAk6.1552$yi6.168144@newsread1.prod.itd.earthlink.net>
Source record: 169960

Check with local electronics outlets that sell TV antennas. If they sell any Rohn stuff at all, they should be able to order anything you need. I stumbled across such a place about 50 miles from my home, and he was happy to order what I needed (Rohn 25 top section). I paid the full retail price, but HE picked up the shipping. A very good deal indeed. I had first tried various ham outlets who would ship to me, but it would have cost me as much for shipping as the piece cost.

K8AC
Floyd Sense - Angier, NC
"kenneth m cubilo" <kce@freeway.net> wrote in message
news:3a92758b$0$35013$2c3edae7@news.voyager.net...
> anyone know a source to purchase a gin-pole for a rohn tower?
> tks ken w8ob
>

3490. Re: RADAR+GPS Interference???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 21:02:35 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3A92DB8B.84C256FF@sympatico.ca>
Source record: 169963

No. But I have operated a handheld GPS unit within less than a mile of a RADAR operating both Primary and Secondary systems on L band with no apparent problems.

Dave

Greg Blair wrote:
>
> Has anyone ever observed interference between a X band, 3 CM RADAR
> transmitter antenna and an L band GPS receiver antenna due to close
> antenna proximity???

3491. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 21:19:07 UTC
From: jflanders2@home.com
Message-ID: <3a92deb3.4209311@news>
Source record: 169964

I would not have called an 8 foot high plant a tree. The pine trees in
my yard here in South Carolina run 50 - 80 feet tall.

On Tue, 20 Feb 2001 12:24:47 -0000, "Mark Turner" <mark@kram.org>
wrote:

>"Jerry Flanders" said....
>> BUT - I don't see how you can
>> install it unless you actually climb to the top, which might be risky.
>
>The tree is only about 8 feet tall so I think I'll be Ok up there. :)
>SNIP

3492. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 21:28:13 UTC
From: rwclark@seanet.com
Message-ID: <3a92dfef.83069878@news.seanet.com>
Source record: 169965

On Tue, 20 Feb 2001 14:28:53 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> There's something here that few would pick up on. The velocity of the
>> wave in free space and the velocity of the wave in a media different
>> from free space are accountable by the media that is different. This
>> is simply Snell's Law.
>
>Did you hear that scientists have been able to stop photons dead in
>their tracks?

Hi Cecil,

Yup, reported that fact here back last year when the U of W (my alma
mater) slowed it down to 45 mph. Recent news shows that a light pulse
train can be trapped in a dense media and then successfully prodded
out by a second, differentiable pulse.

The purpose of this is for optical computing and bus control. The
ability to store a segment of light is equivalent to storing data, the
purpose of which (for the practical side of this) is to allow routers
to parse the packets optically without turning the optics to
electronics and then back to optics. The turn-around conversion
process is death to the boon of fiber optic connectivity.

73's
Richard Clark, KB7QHC

3493. Downloadable DXCC countries list

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 21:41:24 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <6814594D0F921CD4.F5FA122DAA145D2F.0EC4988DA75EE91E@lp.airnews.net>
Source record: 169966
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

A corrected and updated DXCC countries list is available for download on
The DX Page of my site.....10K zip file

This is a simple text file that can be read with Notepad or your favorite
text editor.
Coupled with a desktop shortcut this becomes a very quick and handy DXCC
look-up tool.......

73 / DX
--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages
http://www.ab7sl.com

3494. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 21:43:11 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A92E4EF.492D@wt.net>
Source record: 169967

Don Putnick wrote:

>
> For an interesting study on the number of radials required for a
> vertical, take a look at:
>
> http://www.arising.com.au/people/Holland/Ralph/shortvert.htm

The amount of radials needed for an elevated ground plane depend on the height of the antennna. Also there are a few statements in his html that I don't agree with. Such as :

4.Large numbers of radials are not required for elevated groundplane systems. Three or four radials are sufficient, doubling the number does not double the efficiency.

This is malarky. Again, depends on the height in WL. Only if the antenna is at a 1/2 WL do 4 radials provide a radial system equal to 120 radials on the ground. At 1/4 WL you will need appx 10 to do the same. At 1/8 WL you will need appx 60 to do the same. On an average , every time you double the radials at a certain height, you gain appx .4 db or so, so only his last statement is accurate.

5.The elevated groundplane system is more efficient at lower frequencies.

I almost choked when I read this one. The elevated ground plane is equally efficient on any freq as long as the antenna is at the same height in WL. IE: a 1/4 gp with 4 radials on 160m at 1/4 wl up will have the same efficiency as a 2m 1/4 gp with 4 radials at 1/4 wl up. Of course on 2m a 1/4 wl up is 19 inches. On 160m a 1/4 wl up is 125 ft or so. MK
--
http://web.wt.net/~nm5k

3495. Hamshack Logging Software... Where?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 22:03:58 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <iRBk6.1721$l65.206174@newsread2.prod.itd.earthlink.net>
Source record: 169968

I have tried the demo of this "Hamshack" software and really like it. I attempted to email the guy to register and email came back. Does anyone have any idea if this guy is still in business.

I would like to purchase the product before the demo runs out, but if this is no longer produced then I would like to get a hold of a valid serial number for it. I think its a great program and do want to purchase it.

Thanks 73
Dennis W6NYC

Balti-N AS
Kraavi 14
EE2000 Narva
Republic of Estonia

Email: hamshack@balti-n.estpak.ee

Thank You for ordering HAMshack for Windows 1.0.

You may register your copy on
http://www.balti-n.estpak.ee/hamshack, online

73 de Balti-N Ltd!

3496. Ringo

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 22:15:37 UTC
From: Douglas <N8WWM@arrl.net>
Message-ID: <3a92ec89@news2.mibx.net>
Source record: 169869

Looking for a base Ringo capable of 440 and a used MFJ antenna tuner. Also have plenty of tubes to sell and lots of equipment I'm getting rid of and upgrading everything. Also collecting vintage grandfather clocks for top dollar, will pick up in Oh/Pa/Ky/WV area. Autographed Nascar jacket signed by Dale Earnhardt, serious inquiries only.

3497. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 22:19:50 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <ffqu69.f7r.ln@kram.org>
Source record: 169870

"Jerry Flanders" said....
> I would not have called an 8 foot high plant a tree. The pine trees in
> my yard here in South Carolina run 50 - 80 feet tall.

In East Anglia 8 feet is tall. The land around here is so flat that an anthill is a mountain! Unfortunately this means that there's aren't many hills to go buy a house on to get a good VHF site. :(

Cheers,

Mark.

p.s. You couldn't spare one of your pine tree could you? :)

3498. Downloadable ITU Prefixes List

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 22:29:30 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <edCk6.1899$yi6.190540@newsread1.prod.itd.earthlink.net>
Source record: 169871
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

A current ITU Prefixes list in text format is available for download on
The DX Page of my site listed below.......

Coupled with a desktop shortcut this list ,which can be read in Notepad or
your
own favorite text editor, becomes a very handy and useful DX tool......

It is a free download.......

--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages
http://www.ab7sl.com

3499. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-20 23:23:06 UTC
From: rwclark@seanet.com
Message-ID: <3a92f925.89523127@news.seanet.com>
Source record: 169872

On Sun, 18 Feb 2001 21:05:09 -0000, "Mark Turner" <mark@kram.org>
wrote:

>I'm considering painting a discone green (non-metallic paint of course) and
>using a pole to make it sit right on top of a conifer tree with the tip of
>the tree sticking up inside the cone so that the radials/legs/cone sit
>almost flush with the tree with very little clearance and possibly even
>touching the tree in places. The disc will be clear of the top of the tree
>by some but not many inches. I'll probably leave the vertical element on to
>help with performance on 6m.
>
>No prizes for guessing that I'm looking for a fairly subtle and low profile
>installation.
>
>Will the tree being inside the cone have any effect on the discone, for
>example by altering it's radiation pattern or SWR? My guess is that the
>proximity of the tree won't do any harm and may even improve the
>approximation that the discone's legs are making to a cone.
>
>Thanks,
>
>Mark.

Hi Mark,

I've followed the other entries into this thread of yours and if, as
you say, your "tree" of 8 feet is no stellar grower, then you probably
can get away with what you describe.

If on the other hand, the tree grows as do most trees, it will
probably penetrate the skirt and enter into the region that lies
between the skirt and the disk. This is not a favorable condition and
it is almost certain to happen - sometime. However, as it will
introduce loss, it could easily appear to "improve" performance (at
least the match part, not the radiation part). Don't be fooled by SWR
when it starts measuring that tree as a dummy load.

You also have to be aware that if you are strapping a mast to the tree
to support the discone, then you may easily kill the tree by
compression of its cambial layer beneath the bark. As the tree grows,
it also expands and if it has to work against a hoop (the strap around
the mast and the trunk), that hoop will strangle the growing tip. the
correct manner is to use stand-offs that screw into the trunk (and
seal those entry points against weather and insects). The screws (or
lag bolts) should be long enough to allow bark to grow around them
without compressing against the mast on the standoffs. For such a

small tree, this seems to be an unlikely design angle.

73's
Richard Clark, KB7QHC

3500. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 00:03:14 UTC
From: k1bqt@aol.com
Message-ID: <20010220190314.03038.00002065@ng-cs1.aol.com>
Source record: 169873

>Whether the generator gives up "half of the energy it produces" or some other level, is entirely a function of the generators internal components and the effective load impedance it sees.<

I like that, and it sounds....well....familiar. Perhaps Walter does have something to tell us?

Rick K1BQT

3501. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 00:21:09 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <3A9309F5.837BD423@alumni.caltech.edu>
Source record: 169875

Tom W8JI wrote:
> That isn't a "study", its a guess based on a NEC-2 model. Real world
> measurements disagree with the conclusions in that article.
[snip]
> The stark contrast in signals is enough to convince me small ground
> systems are far over-rated.

I have no reason to doubt your personal observation, or that of
anyone else. Does anyone know of a quality study or simulation that
refutes the one I referenced?

3502. Re: Jeep Cherokee Antenna & Mount Options

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 00:21:26 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <7lh59t4kno8s0oj64iqkan8hg1utobu5gr@4ax.com>
Source record: 169874

Real mobile stations *don't* fit in the garage. ;-P

Check out my web site http://www.dbbear.com/k0emt (mobile link) for
pictures on a "shelf-it" mounted in my truck. It supports several
transcievers/receiver & speakers. I also have pictures & descriptions
of a "homebrew" vertical for use on 6 and 2.

73,

Bryan - k0emt

>Second, does anyone have experience with an overhead storage shelf for
>trucks, specifically the ones that attach to your visor mounts? I was
>wondering if they are strong enough to hold a rig. My rig is a Yaesu 8100,
>not too heavy. Thoughts, comments on this type of mounting?

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

3503. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 01:26:42 UTC
From: richardharrison@webtv.net
Message-ID: <27417-3A931952-88@storefull-117.iap.bryant.webtv.net>
Source record: 169876

Rick, K1BQT wrote:
"Perhaps Walter does have something to tell us." (Whether the generator gives up "half of the energy it produces"---)

In the recent thread example of a receiving antenna it works that way. The receiving antenna extracts energy from a radio wave sweeping by. The best it can do is deliver 50% of the energy it gets from the wave into the receiver input. To do so it must be perfectly matched, antenna with receiver, that is. If the match is less than perfect, more than 50% of the energy is lost to the receiver input. Energy in the antenna system which is not absorbed in the receiver input is simply re-radiated.

Best regards, Richard Harrison, KB5WZI

3504. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 02:04:31 UTC
From: 2w8ji@akorn.net
Message-ID: <3a931ff8.316028039@news.accessunited.com>
Source record: 169877

On Tue, 20 Feb 2001 16:21:09 -0800, Don Putnick
<dputnick@alumni.caltech.edu> wrote:

>I have no reason to doubt your personal observation, or that of
>anyone else. Does anyone know of a quality study or simulation that
>refutes the one I referenced?

I find it interesting the "study" you quoted warns at the end it may
not be correct.

Well, I A-B'ed two antennas here and at another location and found
four elevate radials about even with 16 laid on the ground, and sixty
radials on the ground was about 5 dB better than the four elevated
radials.

A few BC stations have found the similar results.

As for a "quality study", these has been none as far as I know. The
basic problem is no one is all that interested except Hams. All I have
ever seen, and I've watched this extensively, is NEC models supporting
the claims that four radials are enough.

Everyone I know that has tried both systems at one location has found
a small elevated system lacking in performace.

73 Tom

3505. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 02:12:50 UTC
From: 2w8ji@akorn.net
Message-ID: <3a932202.316551006@news.accessunited.com>
Source record: 169878

On Tue, 20 Feb 2001 15:43:11 -0600, Mark Keith <nm5k@wt.net> wrote:

>I almost choked when I read this one. The elevated ground plane is
>equally efficient on any freq as long as the antenna is at the same
>height in WL. IE: a 1/4 gp with 4 radials on 160m at 1/4 wl up will have
>the same efficiency as a 2m 1/4 gp with 4 radials at 1/4 wl up. Of
>course on 2m a 1/4 wl up is 19 inches. On 160m a 1/4 wl up is 125 ft or
>so. MK

I found the part where he said 120 radials are necessary when on the
ground somewhat odd. It was almost like he was trying to exagerate the
work needed for a conventional system.

Anyone with any sense at all for this problem knows that once you get
to 50 or 60 radials efficiency is almost 100%. Even 30 radials gets
you pretty close to the flat part of the efficiency curve.

Even if all other things were equal, which they are not, I'd never
put up with the mess of having four wires that are radiating and
coupling into everything around them. Just the complexities of not
being able to properly ground the system for lightning, and the fact
it would only be good on one band, is more than enough to chill me on
the idea.

73 Tom

3506. Comet UHV-6

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 02:15:24 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3A9324BC.E8CEAB7F@datacomm.com>
Source record: 169879

Anyone have first hand experience, or know of reviews of Comet's new UHV-6 antenna? As I understand it covers much of the HF band, 6m, 2m, and 23 cm.

I would appreciate any input.

Louis

3507. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 02:25:02 UTC
From: "W3CDE Jerry L." <w3cde@bellsouth.net>
Message-ID: <3A9326FE.8AFE4975@bellsouth.net>
Source record: 169880
Cross-posted to: alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna

The 2 meter antenna is coupled as a capacitor to the car via the
antenna base...

Jerry
W3CDE

Michael wrote:
>
> As I was reading the SWR and impedance of my antenna on my MFJ-259B, I start
> to wonder,
>
> 1. Does SWR even matter for reception? Now correct me if I'm wrong, since
> most radios have 50ohm impedance, as long as I got 50ohm impedance at a
> frequency on my antenna, I would get the best signal on that frequency
> regardless of what the SWR is at that frequency, right?
>
> 2. My magnetic 2m mobile antenna on my car is not really connected to the
> car body as a ground(it's insulated by the magnet and paint), how can it
> utilize the car body as a ground plane? Thx.

3508. Re: RADAR+GPS Interference???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 02:27:36 UTC
From: richardharrison@webtv.net
Message-ID: <27416-3A932798-235@storefull-117.iap.bryant.webtv.net>
Source record: 169882

Greg Blair wrote:
"Has anyone ever observed interference between a X band, 3 CM RADAR transmitter and an L band GPS receiver antenna due to close proximity?"

Radar interference can irritate. A big radar pulse doesn`t need to be close geographically or in frequency to produce interference.

My company had a division office on the Houma, Louisiana air field. We had a 33 MHz company FM base station on a tower a couple of miles away from the airfield to get the height we needed which is not allowed at airports. We had a wireline control of the base station.

Every rotation of the FAA`s radar swept our radio tower and broke the squelch on our FM radio with a loud audio buzz. We could have used tone squelch to overcome the repetitive buzzes from the radio control console, but the office staff was content to turn down the volume and live with the regular noise spat from the loudspeaker. They seldom if ever missed a call in spite of the reduced speaker volume. It`s called adaptation.

Best regards, Richard Harrison, KB5WZI

3509. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 02:42:46 UTC
From: dputnick@alumni.caltech.edu
Message-ID: <3a932a8f.11216711@207.217.77.23>
Source record: 169881

On Wed, 21 Feb 2001 02:04:31 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:
[snip]
>
>Everyone I know that has tried both systems at one location has found
>a small elevated system lacking in performace.

Good enuff! My Butternut HF-6V is in my garage for "spring cleaning".
I'll give it a try with more radials than the four stub-tuned ones.

3510. NEED HELP BUILDING A MOBILE ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 03:59:57 UTC
From: Tommy and Lesia Herschlein <tmhlmh@bossig.com>
Message-ID: <3a93392f@news-out.newsnerds.com>
Source record: 169883

HELLO..I AM TRYING TO DESIGN A GOOD MOBILE ANTENNA THAT WILL WORK 10 THRU 80 METERS. I HAVE A 102 INCH WHIP THAT I WANT TO USE AS RADIATOR..I PLAN ON USING A 12 INCH CAPACITY HAT AND A COIL WOUND ON 2 INCH DIA. PVC. MY QUESTION IS HOW MANY TURNS OF #18 GAUGE WIRE WILL I NEED TO BE ABLE TO GET THE ANTENNA TO LOAD ON 80 METERS WITH AN ANTENNA TUNER. WHAT IS THE APPROX LENGTH OF THE PVC COIL USING THE ABOVE INFORMATION. PLEASE SEND ME AN EMAIL WITH THE INFO REQUESTED. I APPRECIATE THE HELP. PLEASE USE THE FOLLOWING EMAIL ADDRESS AND DO NOT REPLY TO SENDERS EMAIL..
REPLY TO..
kd7daw@yahoo.com
THANKS ALOT..
BEST,
TOM HERSCHLEIN
KD7DAW

3511. What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 04:00:05 UTC
From: Pervert_Extraordinair <valued_customer@att.com>
Message-ID: <3A933D4E.834E512C@att.com>
Source record: 169884

I was following a cop today with an odd antenna(?) on the trunk
of his car. It looked like a small construction hardhat but
circular and taller. It was perhaps 6"-8" in diamater.

Or if you take a two liter pop container, cut off the
top 2/3 and ,turn it upside down....

IN, USA

3512. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 04:09:23 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <96vf2i$fv0$1@slb2.atl.mindspring.net>
Source record: 169885

Reg:

I can only assume that your programs do what you say they do... however you are testing my assumptions about your good work now, because... from your observations below, I see that...

Your pique is showing...

That is a sure sign of insecurity. The retreat into denial and communications breakdown. What?

How about sharing with us some of your algorithms/formula and comparisons to actual measurements.

I't unfair of you to ask Tom to make measurements to verify your programs for you.

Thoughts, comments,

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:96pr15$rp7$1@plutonium.btinternet.com...
> Tom W8JI <2w8ji@contesting.com> wrote in message
> news:3a90051a.112511880@news.accessunited.com...
> > Hi Reg,
> >
> > On Sun, 18 Feb 2001 03:05:04 -0000, "Reg Edwards"
> > <g4fgq.regp@btinternet.com> wrote:
> >
> > >In your reply could you be quantitative and include some
> accurate
> > >numerical information? Otherwise words like "overestimate" and
> > >"negligible" have no meaning.
> >
> > You seem to think a definite number that is wrong is better than
> > saying "the result varies". I can't give any exact figures,
> because
> > the errors are all over the place. The software simply does not
> track
> > the real world, it isn't even remotely close as the frequency is
> moved
> > up towards the self-resonant frequency of the inductor.
> >
> > Have you measured inductors, and compared them to you software?
> What
> > is the highest Q you have measured in a reasonably sized inductor

> at
> > radio frequencies, and how did it compare to your program's
> "estimate"
> > of Q?
> >
> > 73 Tom
> ========================
>
> Sorry Tom, if you are unable, as I requested, to provide any
> quantitative evidence or solid facts about the uncertainty in your
> own calculations or in your own estimates or measurements of Q,
> then your criticism is clearly unfounded and there's nothing more
> to be said in the matter. Have a good day !
> ----
> Reg, G4FGQ
>
>
>
>

3513. Underground Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 04:15:47 UTC
From: Michael Connly <mconnly@mn.mediaone.net>
Message-ID: <3A9342C4.C3C5811E@mn.mediaone.net>
Source record: 169886

I am putting my shack together in my walkout basement. Here in Minnesota, it is really COLD right now, so putting in a ground rod outside is not an option--probably at least a couple feet of frozen soil.

However, I could put the ground rod under my shack. To do that I would simply drill (or in this cased hammerdrill) a 3/4" hole in the basement floor, then add some water to the hole, and pound the 8 ft. rod in.

Would such an underground ground work well???

Thanks

Mike

3514. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:22:16 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A935088.1A88@bellsouth.net>
Source record: 169888

Mark and Raymond,

If you are using the 5/8" dia stuff, here's a cheap but effective way
to connect it. First split the outer metal cover just to one side of
the center conductor about 1 1/2" back with a hacksaw. Then use a torch
to burn out about the same distance/amount of the dialectric. Clean out
whatever material may be remaining inside the metal cover. Insert one
of those double female "barrel" connectors into the space making sure
that the center conductor is inside the barrel about halfway thru. Then
use a small hose clamp to tighten the outer cover down onto the "barrel"
connector. Make certain it is tight and check for continuity. The clamp
will tighten the metal cover down firmly (the two split sides) and
you can screw on a PL 259. Hope that helps.

Jerry
K4KWH

Raymond Hansmeier wrote:
>
> Mark,
>
> CATV coaxial hardline is very easily obtained from your local cable company.
> You should be able to come up with 200 feet of .750 hardline or larger for next
> to nothing. As for the connectors you will have to improvise or buy expensive
> connectors, but if the cable is free what the heck. Get the underground
> varitiey and it can be buried for a neat installation. I used 350 feet of the
> stuff for many years on hf. It is 75 ohms, but if you worry about the minor
> mismatch just build a unun or purchase some sort of matching balun/unun. I
> spent 20 years in the cable biz and it is good stuff. The loss on HF is very
> minor, and if you have a good coaxial remote coax switch at the tower you can
> also use it for vhf.
>
> K7FU
>
> Mark Erbaugh wrote:
>
> > The XYL and I are in the process of building a new home on 4 acres and will
> > be moving in this spring. I'm starting to dream about my new farm (antenna,
> > that is). I haven't finalized the design of the antennas yet, but I will
> > probably initially put up the tower and antenna that I'm using here (once I
> > get some extra cash I do want to upgrade, but that may be a while). I'm
> > mainly interested in HF.
> >
> > I'm looking for advice on feedline. Obviously the more I pay for feedline,
> > the less loss, but what's the best bang for the buck. There will be 150 -

> > 175 feet of feedline from the shack to the top of the tower.
> >
> > 73,
> > Mark, N8ME

3515. Re: Where are you??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:23:24 UTC
From: Tommy and Lesia Herschlein <tmhlmh@bossig.com>
Message-ID: <3a934cbf@news-out.newsnerds.com>
Source record: 169889

TOM HERSCHLEIN, KD7DAW
OKANOGAN WA
PLEASE SEE MY MESSAGE ABOUT HELP ON MOBILE ANTENNA
TKS 73

"Dennis williams" <dwwillia@mail.newcastle.edu.au> wrote in message
news:96t2nhotp1@seagoon.newcastle.edu.au...
> I have a problem helping. If users of this group could say where they are
> located it would help.. i,e. use your call sign
>
>

3516. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:25:50 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A93515E.4E27@bellsouth.net>
Source record: 169887

I'm guessing it *may* be a camera, but then the trunk would be an
odd place to mount it. I know our city cars have infrared cams on
the roofs. Better yet, it may be an antenna for their on-board computer.

???????? don't know.

Jerry

Pervert_Extraordinair wrote:
>
> I was following a cop today with an odd antenna(?) on the trunk
> of his car. It looked like a small construction hardhat but
> circular and taller. It was perhaps 6"-8" in diamater.
>
> Or if you take a two liter pop container, cut off the
> top 2/3 and ,turn it upside down....
>
> IN, USA

3517. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:47:09 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <96vkot$7gi$0@208.207.71.168>
Source record: 169890

paul wrote:
>
>
> I've heard of a non salt type chemical that some people use but I can't
> remember the name. My VE told us about it when I was studying for the
> Novice so many years ago.
>
> Paul

Copper sulphate?

3518. Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:47:44 UTC
From: Bill Brannick <WmLB@prefer.net>
Message-ID: <i8l69t8b9bmpt4hblh1g0l66fkghej4lu0@4ax.com>
Source record: 169892

I would like to construct a telescoping PVC support for a Windom antenna.. Will top out at 40 feet. So the question is: using Schedule 80 PVC , what sizes will properly match up, with the O.D. of one segment sliding into the I.D. of the segment beneath it.

I do want a PL 259 to be able to fit inside the top section. (3/4" I.D. ??)

I looked for a resource on the web but couldn't find one..

Bill..

3519. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:52:49 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A9357B1.57A61751@bwcc.com>
Source record: 169891

```
Dick Carroll wrote:
> paul wrote:
> > I've heard of a non salt type chemical
> Copper sulphate?
I think I consider that a salt.
```

3520. Re: ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 05:58:04 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A9358EC.6B2373F6@bwcc.com>
Source record: 169893

Michael Connly wrote:
> To do that I would
> simply drill (or in this cased hammerdrill) a 3/4" hole in the basement
> floor, then add some water to the hole, and pound the 8 ft. rod in.

I would use the drill outside with a long auger bit to get the hole started.
With an outdoor hole, you won't have to add water when there is adequate natural
precipitation.

3521. RE: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 06:10:50 UTC
From: Juan <novalid@novalid.com>
Message-ID: <973kicjfr1@diana.bcn.ttd.net>
Source record: 169800

Thanks for your comments about radials number.
What about using a 7,5 meter vertical radiator? I think It can works for frequencies higher than 10 MHz, and its a compromise for 7 MHz. I want to adapt impedance with a remote L network tuner.

Juan, EA6NP
http://www.qsl.net/ea6np

3522. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 06:12:37 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A935C55.AC0ABAA9@bwcc.com>
Source record: 169894

Bill Brannick wrote:
> Will top out at 40 feet.
Four ten-foot sections?

> So the question is: using Schedule 80 PVC,
> what sizes will properly match up, with the O.D. of
> one segment sliding into the I.D. of the segment beneath it.

http://extolohio.com/DATA/CHARTS/pipe-covering.html

> I do want a PL 259 to be able to fit inside the top section. (3/4"
> I.D. ??)
Iron Pipe Sizes are the inside diameters.

You could use 4", 3.5", 3", and 2.5" with some reducers and bushings to get to 0.75" at the top.

You might need some cable grease to make it slide.
There will probably be a static electrical charge from the friction when you extend or collapse it.

3523. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 07:57:38 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704g6$7vm$1@lure.pipex.net>
Source record: 169899

"Richard Harrison" wrote
> Gary Peach wrote:
> Let`s look at an infinitely long transmission line with negligible
> losses. It was Reg Edwards, I believe, who said you could just apply
> your d-c ohmmeter to such a line and read its surge impedance.

Lets carry that contention a little further we'll flatten out the conductors into sheets and wind then up into a tube and we will still get an exponentially decreasing current when we apply a DC Voltage.

If we leave the distant end of a transmission line (co-ax, open line) open or shorted then a delay time later the applied voltage will double momentarily as the sign is reversed at the open/shorted end.

This is the Basis of a PFN (Pulse Forming Network) for deriving a very high voltage pulse to modulate a magnetron.

If we carry this idea a little further and use the step input of voltage as a test signal we can construct a time domain reflectometer.

For those unfamiliar with this type of instrument, a voltage step is continuously applied to the line under test, on the cathode ray display of the device pulses of reflected energy show on the time trace whose magnitude is proportional to the miss match of the discontinuity and whose time delay from the original step transition is proportional to twice the distance from the instrument to the discontinuity multiplied by the propagation velocity of the line.
If the line is left unterminated the double voltage is reflected diminished by twice the line loss (VE9SRB's alpha using natural logarithms e^(-alpha))

Oh! for the ability to display pictures!
At this point I would return to the VSWR measurement technique more familiar to Hams and show a plot of voltage minima and maxima as a voltage probe is moved down a long line terminated in a miss-match.

The maxima gradually become less as we approach the (?)
Well I'll leave that as a question for anyone to answer
Is it
a. approach the load?
b. approach the generator?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3524. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:05:32 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704g7$7vm$2@lure.pipex.net>
Source record: 169909

"Richard Harrison" wrote
> Gary Peach wrote:
> "The energy is now converted to heat in the local environment instead of
> traveling away from the generator for ever."
>
> The above is a correct statement of difference between a dummy load and
> an infinite transmission line. It misses the point that electrical
> energy is converted to heat by the dummy load but remains unconverted in
> the lossless transmission line.

Thank you Richard that is exactly my point, perhaps I didn't make it very clearly or the limitations of semantics obscured my intent.
As far as the generator looking out onto the universe through its narrow portal the transmission line it knows not whether the child which it has spawned goes forth bravely into limitless space or is consumed in some devilish fire. It only knows that when the child left it left as fast as it could go.

To the generator the dummy load placates the child as easily as the caverns of free space.

--
Gary7SLL
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http://www.gary.peach.dial.pipex.com/

I know that you believe that you understand what you think I said,
but I am not sure that you realise that what you heard is not what I meant.
C.
Mantics

3525. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:19:43 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704g8$7vm$3@lure.pipex.net>
Source record: 169900

"Richard Harrison" wrote
> Gary Peach wrote:
> "Only half the time (A wave sweeping past an antenna induces a current),
> there is also an electric element to the traveling wave, electrophorus
> also occurs for the other half of the time."
>
> I`ll quote Terman from Page One of "Radio Engineering":
> ""Electrical energy that has escaped into free space exists in the form
> of electromagnetic waves. These waves, which are commonly called radio
> waves, travel with the velocity of light and consist of magnetic and
> electrostatic fields at right angles to each other and also at right
> angles to the direction of travel."
>
> Study that. It says it all.

He was only repeating what James Clerk Maxwell (1831 - 1879) said years
before in mathematical form, so it is really hear-say evidence. ;)

Frederick Emmons Terman Sc.D.
goes on in 1937 to say:

" ... travel. If these electrostatic and magnetic fluxes could actually be
seen the wave would have the appearance indicated in Fig. 1. One-half of the
electrical energy contained in the wave exists in the form of electrostatic
energy, while the remaining half is in the form of magnetic energy."

Really Richard, if you are going to quote standard texts you should not edit
them to make some conceived point.

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3526. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:31:15 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704g9$7vm$4@lure.pipex.net>
Source record: 169901

"Richard Harrison" wrote
> Gary Peach wrote:
> "How does the current flow the distance within the medium in the time it
> takes for the free space wave to reverse polarity? Or does it?"
>
> It does not. Like charges try to keep their distances from each other.
> They therefore pass along a shove without migration.

Ah I see it now and resort to an analogue.
An Engine reverses sharply and stops the trucks transmit the shove clank clank clank without each individual truck moveing out of it's position.
If at the same time the shove were imparted to a free rolling ball along side the trucks would it keep pace with the clanks?

Of course we can not answer confidently for the ball as the parameters of the rolling surface have not been defined, if it is on sand the ball will shortly come to rest, however if it is on a pair of knife edges it will go some way gradually coming to rest possibly at some point further from the engine that the length of the train.
But the thing that interests me is how its relative position keeps pace with the transmitted clank.
Anybody that has lived close to a shunting yard and has lain awake in the dark of night listening to the sounds of industry, will recognise that they witnessed for themselves the reflection at the unterminated end of the line of trucks as the remnant of the clank travelled back towards the engine.

> When a passing wave induces current, the current mimics the wave
> sweeping past an elemental section of the conductor. but a phase
> difference can occur.

Yes now that phase difference is of interest, from Lenz's Law the induced current will have opposite polarity, How now does the couple between the freespace wave and the trapped wave react?
Is it a clever compromise here that produces an ideal AE?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
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3527. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:37:59 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704ga$7vm$5@lure.pipex.net>
Source record: 169902

"Richard Harrison" wrote
> Gary Peach wrote:
> "What you are saying I think is that when the signal is no longer
> significant in magnitude with respect to the noise voltages naturally
> present at the receiver the signal is not recognizable as a separate
> entity."
>
> I might strike the word "naturally".

I say naturally because the noise voltages occur in "ALL" receivers without
any effort on the part of the user.
That no matter how hard the user tries he can not completely eliminate those
noise voltages even should he resort to a hydrogen refrigerator and the
implied ex-pence!

> Yes. I said a receiver has a sensitivity threshold. It could be set by
> either internal or external noise.

In fact it is set by both, neither noise source is removable.
We have to live with it.
In it's, (the noises), abscence almost zero power would be useful for
communication at infinite distance.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3528. Austin Amateur Radio Supply

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:42:45 UTC
From: TruckDrivingMan <tansorg@cs.tu-berlin.de>
Message-ID: <96vv2g$5vk$02$1@news.t-online.com>
Source record: 169895

Hi OMs
Doews anyone know if that store above also ships to overseas ? (especially
D)

73
Tom

3529. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:43:36 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704gc$7vm$6@lure.pipex.net>
Source record: 169904

"Richard Harrison" wrote
> Gary Peach wrote:
> "Did I say that it was (sinks soaking up all the energy in a wave)?"
>
> Someone speculated too many TV antennas in an area would produce snow in
> your picture. Gary may not be the author.

I introduced that as an old lemon,
If the number of receiving AE in the city nearest the transmitting AE soaks up the transmitted energy, will the distant receivers loose signal?

> Too many TV antennas in an area are more likely to produce ghosts.

I would take issue with that one Richard assuming that the additional AE soak up the signal there is less available for reflection.
The one thing that you can be sure of that the increase of sets will increase the revenues raised, by the Industry, the advertisers, the broadcasters, HMG.

I'm not too keen on lemons myself. ;)
--
Gary7SLL PEACH
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http://www.gary.peach.dial.pipex.com/

3530. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:44:53 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704gd$7vm$7@lure.pipex.net>
Source record: 169903

```
"Richard Harrison" wrote
> Gary Peach wrote:
> "Was it Hercules or Atlas that was looking for a platform?"
>
> Hercules performed a dozen great feats. Atlas was looking for the bully
> that kicked beach sand in his face. Newton was looking for a lever long
> enough and a place to stand so he could move the world.

Looks like I missed the train this time. :)
```

--
Gary7SLL
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3531. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:48:31 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704ge$7vm$8@lure.pipex.net>
Source record: 169905

"Richard Harrison" wrote
> Gary Peach wrote:
> "If you want a train look for a crash."
>
> With whistle blowing and brakes locked, "you
> can`t blame the wreck on the train".

I trust that your news services have been carrying the story of the Hatfield Rail Crash and the ensuing chaos due to the discovered use of defective rails.

Shows to go what happens when you cut corners on spending associated with safety in the interests of stock holders dividends.

Certainly the train was not to blame on this occasion.

--
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3532. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 08:58:42 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704gg$7vm$9@lure.pipex.net>
Source record: 169906

"Richard Harrison" wrote
> Gary Peach wrote:
> "Please explain the use of the word "surge".
>
> Deposit a "potential difference" across a transmission line. There will
> be a difference of potential between the points of deposition and other
> points along the line. Current must flow to equalize the potential
> difference.

At that point the PD becomes an EMF

If you connect noting across the terminals of the battery it will remain a
PD.

> There was no current before charge was deposited on the line. Charge
> deposition abruptly initiates current. Thus we have a surge.

Yes, that is clear Richard.

> What is the magnitude of the surge current? It depends on the
> construction of the transmission line and the potential difference
> (voltage).

One might also what is the duration of the current, as I presume that you
are considering the DC case at this point in the discussion. An
instanteneous current would also flow if the EMF was applied to the
terminals of a capacitor. (no resistive element required) All done it many
times with the multimeter and the suspect capacitor. Kick, decay.

> The ratio of voltage to current is named resistance when the current
> rises in lock step without delay just as the voltage rises. There
> doesn`t have to be any dissipation.

The current will not remain constant it will decay exponentially so we can't
simply apply Ohms law.

> In the case of a surge on a transmission line, with insignificant loss,
> regardless of the magnitude of the voltage, the current will have a
> magnitude which is a constant percentage of the surge voltage.

But the Voltage is not constant

>This
> voltage to current ratio is called the surge impedance, surge
> resistance, or characteristic impedance of the transmission line.

I Think I understand what you are describing as the surge resistance but
this is only a transient, and is not therefore equivalent to the

Characteristic Impedance of the transmission line.
Drawing this comparison is the sort of mistake I might expect a computer to
make, you have failed the Turing Test Richard. ;)

--
Gary7SLL
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http://www.gary.peach.dial.pipex.com/

3533. Re: Underground Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 09:04:02 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A938482.E5BABCD5@oio.net>
Source record: 169896

Mike,
It ought to work fine. Try a 1" hole, though (minimum).
Don't re-fill the hole with concrete. Concrete and high
voltage do not mix well.
'Doc

3534. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 09:06:16 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A938508.88A12230@oio.net>
Source record: 169897

Pervert_Extraordinair wrote:
>
> I was following a cop today with an odd antenna(?) on the trunk
> of his car. It looked like a small construction hardhat but
> circular and taller. It was perhaps 6"-8" in diamater.
>
> Or if you take a two liter pop container, cut off the
> top 2/3 and ,turn it upside down....
>
> IN, USA

Some agencies use satelites for communications, or
even for tracking/monitoring.
'Doc

3535. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 09:15:18 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704gi$7vm$10@lure.pipex.net>
Source record: 169907

"VE9SRB" wrote
> "Gary Peach" wrote
> > "Richard Harrison" wrote
> > > I am also amazed at how many who should know better think the
> > > characteristic resistance of a transmission line is a loser.
> >
> > Only some of it is.
> > Zo = R + jX
> > Some of the people can be right some of the time,
> > but all of the people can't be right all of the time.
> >
> > for illustartion consider jX to be zero at some particular frequency
> > (resonance)
> > then Zo = R and most of the problem resolves to seeing it in DC terms
and
> > the line loss is R.
>
> Hi Gary:

Lo Steve, et al.,

> The characteristic impedance of a transmission line Zo is, as you state,
> generally of the form R + jX. More appropriately, it is defined as Zo =
Ro
> + jXo.

I'll admit the subscript ommitted in the interests of typeing speed,
which reminds me time to cut the nail on that finger.

>There is however, more to understanding the loss of energy in the
> transmission line than just looking at Ro alone. The line loss at RF
> frequencies is not simply given by R (Ro). Different transmission lines
> with the same Ro may have different loss factors.

Agreed.
That could be a loaded statement. :)

> The loss factor for a transmission line is given by alpha which is
expressed
> in nepers/meter.

Under the SI metric system yes, it may also be expressed in dB per foot if
you use logarithmes to base 10 instead of natural logarithmes to base e ,
and the Imperial System instead of the Metric System. Text books wil more
generally when covering this subject at this depth will be using natural
logarithms and values normalised to units of PI. I can hear Napier's Bones

clanking away in the background even now, that is a sliding rule.

>Loss in the transmission line is always a function of unit
> length. The resistance of the transmission line R, is expressed in
> ohms/unit length. The real part of the characteristic impedance of the
> transmission line Ro, is expressed in ohms.

So far so good.
>
> In general, the transmission line loss factor, alpha = 0.5 (R/Ro + G/Go)
> where G and Go are the conductance of the line/unit length and the
> conductive component of Yo in mhos, respectively. Ro and Go can be
written
> as functions of the basic transmission line parameters R, L, G and C.

Yes I agree with that.
If only we could show pictures, once again I would show the plot of a
voltage standing wave with a voltage probe moving down a long line,
waveguide. The maxima of voltage diminish the amount by which they diminish
is due to the line loss of which you speak. The magnitude of the peak is
primarily due to the mismatch of the terminating impedance. Were the
terminating impedance is a perfect match the maxima and minima become equal
and the voltage probe now traces out a straight line representing the
voltage on the line which gradually falls towards the load. This slope,
(fall off of indicated voltage), is the line loss of which you speak.
Oh! for pictures, it would be so clear.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3536. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 09:25:43 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <9704gj$7vm$11@lure.pipex.net>
Source record: 169908

"Mark Turner" wrote ...
> "Jerry Flanders" said....
> The tree is only about 8 feet tall so I think I'll be Ok up there. :)
> > Let us know how the installation goes if you get it up there.
>
> Will do.

Presumably if we hear nothing,
he fell off his ladder.
I'll let you decide which sort of smiley was appropriate there. :)

Should the fall prove to be fatal there are few better places to be buried
than Cambridge.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3537. Re: Hamshack Logging Software... Where?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 10:18:47 UTC
From: kelly@dvol
Message-ID: <3a9394a5.2879297@news2.dvol.com>
Source record: 169910

On Tue, 20 Feb 2001 22:03:58 GMT, "Dennis P. Stahr"
<irfutures@earthlink.net> wrote:

>I have tried the demo of this "Hamshack" software and really like it. I
>attempted to email the guy to register and email came back. Does anyone
>have any idea if this guy is still in business.
>
>I would like to purchase the product before the demo runs out, but if this
>is no longer produced then I would like to get a hold of a valid serial
>number for it. I think its a great program and do want to purchase it.
>
>Thanks 73
>Dennis W6NYC
>
Buying anything from one of the emerging countries is a dicey
proposition. Methinks you'd be much better off logging into the ac6v
website and doing a search for logging software, there are a gazillion
of them available from stable U.S. programmers.
>
w3rv

3538. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 11:37:56 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <qMNk6.80$yY.813@newsfeed.slurp.net>
Source record: 169911

Better check the pieces physically. Schedule 80 steel pipe has different
rules than '40, as I found out the difficult way recently.

--

73, Dave, K3BHJ

3539. Re: Substitute Antenna for Light Bulb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 11:42:41 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <VPNk6.82$yY.370@newsfeed.slurp.net>
Source record: 169912

In the spirit, it isn't 'light bulb', you dim bulb, it's 'lamp' or 'DS',
display signal :o)))))

--

73, Dave, K3BHJ

3540. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 11:58:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A93AD50.A9D7639F@eznec.com>
Source record: 169913

Gary Peach wrote:

> . . .

> If we carry this idea a little further and use the step input of voltage as
> a test signal we can construct a time domain reflectometer.
>
> For those unfamiliar with this type of instrument, a voltage step is
> continuously applied to the line under test, on the cathode ray display of
> the device pulses of reflected energy show on the time trace whose magnitude
> is proportional to the miss match of the discontinuity and whose time delay
> from the original step transition is proportional to twice the distance from
> the instrument to the discontinuity multiplied by the propagation velocity
> of the line.
> If the line is left unterminated the double voltage is reflected diminished
> by twice the line loss (VE9SRB's alpha using natural logarithms e^(-alpha))

The response of a TDR to a lossy line is a rising, not falling, value.

Here's a way to understand why. If the TDR step encounters an open circuit, you'll see a positive reflection come back which is equal to the amplitude of the original step (assuming the step generator source resistance equals the line's Z0, the usual case), for a total amplitude after the reflection of twice the initial step value. Now imagine a very long line which has loss, so that essentially none of the signal returns, and the DC ohmic resistance is very high. Initially, the TDR sees Z0, but the resistance increases as time goes on. In the limit, after a great deal of time, it'll see the same value as an ohmmeter. If the line is open, this will of course be infinite. If the line is terminated in a short circut, the resistance looking into the line will be the ohmic resistance of the line itself. For a long, lossy line, this will be a much higher value than Z0.

Reg is correct in saying that you could measure the Z0 of an infinitely long line with an ohmmeter. But only if the line has absolutely zero loss. Otherwise, you'll measure a resistance that increases with time until it eventually reads open. For ordinary cable, I imagine this would happen much faster than the meter could respond, but you'd have to have an impossibly long piece of it to do a test.

Roy Lewallen, W7EL

3541. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 12:13:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <970bd5$7b3$1@slb5.atl.mindspring.net>
Source record: 169914

Steve:

[snip]
> is no propagation". Dissipation of energy in the form of heat is not a
> requirement for the propagation of EM energy. It may however, be part of
> the propagation process. The distribution of energy in space as it
travels
> away from a source is not a heat dissipation issue as your statement might
> lead some to believe.
>
> Steve VE9SRB
[snip]

Dissipation of energy in the form of heat is definitely not a requirement
for the propagation of EM energy.

But then everywhere that radiant energy encounters matter, heat results...

Thanks to Sadi Carnot, and the Second Law, most of us are pretty sure that
is the inevitable destiny of all forms of energy...

As to our own destiny, well... I don't know about others, but... I commit my
own to the fist of that great CW Telegrapher in the Sky!

Cheers,

-Peter K1PO

3542. Antenna for Hotel room?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 12:37:48 UTC
From: dcollin@connix.com
Message-ID: <3a93b5cb.1532543@news.mybizz.net>
Source record: 169915

I'll be travelling with my new FT817 QRP rig. I guess I'll use a wire for HF, strung out a window if I can. Do I just run a wire from the center conductor of the SO239 out the window, and another to ground (or likely, the floor), and try to load it like a long wire?

Anyone got any tried and true antenna suggestions for this application?

Thanks!

Dennis (4B8)
PP-ASEL

3543. Re: HY-Gain 14avq

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 12:43:40 UTC
From: w5omr <no_mail@no_mail.org>
Message-ID: <0KOk6.47472$3B1.8551418@typhoon.austin.rr.com>
Source record: 169916

Not if it's DC Grounded.

But, the 14AVQ is not (I wouldn't think, given the age of the antenna) a
DC grounded antenna

"jayvan" <jayvan@jps.net> wrote in message news:3A91757E.2FEDB7EB@jps.net...
: Does anyone know if this vertical has a loading coil at the feed point
: or something else that would cause it to show a short between the center
: conductor and ground of the PL 239 connector. I would think that
: center conductor should be isolated from ground. Any help would be
: appreciated. Thanks
:
: KA6OTJ
: Jay
:

3544. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 12:57:34 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <6td079.vas.ln@kram.org>
Source record: 169917

"Richard Clark" said....
>
> If on the other hand, the tree grows as do most trees, it will
> probably penetrate the skirt and enter into the region that lies
> between the skirt and the disk. This is not a favorable condition and
> it is almost certain to happen - sometime. However, as it will
> introduce loss, it could easily appear to "improve" performance (at
> least the match part, not the radiation part). Don't be fooled by SWR
> when it starts measuring that tree as a dummy load.

Good point. I'll have to remember to adjust the pole a few times a year.

> You also have to be aware that if you are strapping a mast to the tree
> to support the discone, then you may easily kill the tree by
> compression of its cambial layer beneath the bark.

Not a problem. The "tree trunk" is about 9 inches away from a small concrete fence post. I'm currently using a pole strapped to the fence post using hose clips, which from a mechanical point of view works fine but it means that the higher up the pole you look the further from the "tree" it is so it's very visible. I plan to somehow mount the pole on the fencepost far enough out from the post that the pole is parallel to and only an inch or so away from the "trunk", so running it up inside the branches nicely out of sight. I'll probably do that with the brackets and wire normally used to lash a pole to a chimney, or at least something along those lines. The tree/plant won't be supporting the pole in any way.

Cheers,

Mark.

3545. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 13:20:00 UTC
From: "Rich Carlson, N9JIG" <rich@n9jig.com>
Message-ID: <rich-63278E.07200021022001@news.theramp.net>
Source record: 169918

In article <3A933D4E.834E512C@att.com>, Pervert_Extraordinair
<valued_customer@att.com> wrote:

> I was following a cop today with an odd antenna(?) on the trunk
> of his car. It looked like a small construction hardhat but
> circular and taller. It was perhaps 6"-8" in diamater.
>
> Or if you take a two liter pop container, cut off the
> top 2/3 and ,turn it upside down....
>
> IN, USA

I have seen similar antennas on cars from towns that are known to have
an AVLS system. That would be my first guess. I have seen similar
antennas on vans owned by nationwide courier companies like Roberts
Express as well.

--
Rich Carlson, N9JIG
Illinois Highways and Scanner Page
http://www.n9jig.com

3546. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 13:37:06 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A93C482.40BD481E@IEEE.org>
Source record: 169819

Bill Brannick wrote:
> I would like to construct a telescoping PVC support for a Windom
> antenna.. Will top out at 40 feet.

I tried it and found 40ft to be too long for reasonably sized PVC.
I switched to 2x4s and 2x2s.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3547. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 13:41:31 UTC
From: richardharrison@webtv.net
Message-ID: <3987-3A93C58B-8@storefull-117.iap.bryant.webtv.net>
Source record: 169820

Gary Peach wrote:
"The current will not remain constant it will decay exponentially so we can`t apply Ohm`s law."

Reg Edwards was applying an ohmmeter to an infinitely long lossless transmission line.

The line has distributed inductance in addition to distributed capacitance. We are not just charging a capacitor here.

The inductance allows current to rise but inhibits it. Capacitance readily accepts current but inhibits voltage rise.The long line with distributed iductance and capacitance does not appear as either an inductance or a capacitance. It appears as a resistance. Not the kind that eats energy, only the volts over amps kind.

There is no charge-up exponential decrease in current into the infinite lossless transmission line. Reg`s ohmmeter would continue supplying current into the line at a constant rate and the line would continue carrying the current away. The rate at which the line accepts current is only determined by its surge impedance.

The line is lossless so there is no exponential decay along the length of the line.

Best regards, Richard Harrison, KB5WZI

3548. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 14:14:10 UTC
From: richardharrison@webtv.net
Message-ID: <4196-3A93CD32-5@storefull-113.iap.bryant.webtv.net>
Source record: 169823

Gary Peach wrote:
"---if you are going to quote standard texts you should not edit them to make some conceived point."

It is impractical to quote the whole book. I agree with all of it. I don`t aim to twist Terman`s meaning.

I agree with you that half of the wave`s energy is contained in the E-field and half is contained in the H-field. The point is they are in quadrature. One field is not exciting an antenna for awhile, while the other field rests, and then alternating with the other field.

Best regards, Richard Harrison, KB5WZI

3549. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 14:36:15 UTC
From: richardharrison@webtv.net
Message-ID: <4196-3A93D25F-8@storefull-113.iap.bryant.webtv.net>
Source record: 169822

Gary Peach wrote:
"Yes now that phase difference is of interest, from Lenz`s Law the induced current will have opposite polarity."

Yes, opposite polarity if that is what is required to oppose the imposition. Gary has expanded the application of Lenz`s law for me.

Best regards, Richard Harrison, KB5WZI

3550. Re: Substitute Antenna for Light Bulb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 14:37:12 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3A93D297.1DA498F2@ix.netcom.com>
Source record: 169821

FYI: Mil specs defines DS as "Device Signalling"

"David J. Windisch" wrote:

> In the spirit, it isn't 'light bulb', you dim bulb, it's 'lamp' or 'DS',
> display signal :o)))))
>
> --
>
> 73, Dave, K3BHJ

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

3551. Re: Underground Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:01:49 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3a93dc3f$0$1521$2a0ee87e@news.tdin.com>
Source record: 169826

Mike,

I asked the same question recently. The problem with a ground rod under the house is that for a ground rod to work well, the soil around it needs to be moist. Hopefully, that is NOT the case with the soil under your basement floor.

73,
Mark

"Michael Connly" <mconnly@mn.mediaone.net> wrote in message news:3A9342C4.C3C5811E@mn.mediaone.net...
> I am putting my shack together in my walkout basement. Here in
> Minnesota, it is really COLD right now, so putting in a ground rod
> outside is not an option--probably at least a couple feet of frozen
> soil.
>
> However, I could put the ground rod under my shack. To do that I would
> simply drill (or in this cased hammerdrill) a 3/4" hole in the basement
> floor, then add some water to the hole, and pound the 8 ft. rod in.
>
> Would such an underground ground work well???
>
> Thanks
>
> Mike
>
>

3552. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:07:25 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3a93dc40$0$1521$2a0ee87e@news.tdin.com>
Source record: 169825

Jerry,

Thanks. That's certainly worth considering if I come up with some hardline.

73,
Mark

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:3A935088.1A88@bellsouth.net...
> Mark and Raymond,
>
> If you are using the 5/8" dia stuff, here's a cheap but effective way
> to connect it. First split the outer metal cover just to one side of
> the center conductor about 1 1/2" back with a hacksaw. Then use a torch
> to burn out about the same distance/amount of the dialectric. Clean out
> whatever material may be remaining inside the metal cover. Insert one
> of those double female "barrel" connectors into the space making sure
> that the center conductor is inside the barrel about halfway thru. Then
> use a small hose clamp to tighten the outer cover down onto the "barrel"
> connector. Make certain it is tight and check for continuity. The clamp
> will tighten the metal cover down firmly (the two split sides) and
> you can screw on a PL 259. Hope that helps.
>
> Jerry
> K4KWH
>
>
>
> Raymond Hansmeier wrote:
> >
> > Mark,
> >
> > CATV coaxial hardline is very easily obtained from your local cable
company.
> > You should be able to come up with 200 feet of .750 hardline or larger
for next
> > to nothing. As for the connectors you will have to improvise or buy
expensive
> > connectors, but if the cable is free what the heck. Get the underground
> > varitiey and it can be buried for a neat installation. I used 350 feet
of the
> > stuff for many years on hf. It is 75 ohms, but if you worry about the
minor
> > mismatch just build a unun or purchase some sort of matching balun/unun.
I

> > spent 20 years in the cable biz and it is good stuff. The loss on HF is
very
> > minor, and if you have a good coaxial remote coax switch at the tower
you can
> > also use it for vhf.
> >
> > K7FU
> >
> > Mark Erbaugh wrote:
> >
> > > The XYL and I are in the process of building a new home on 4 acres and
will
> > > be moving in this spring. I'm starting to dream about my new farm
(antenna,
> > > that is). I haven't finalized the design of the antennas yet, but I
will
> > > probably initially put up the tower and antenna that I'm using here
(once I
> > > get some extra cash I do want to upgrade, but that may be a while).
I'm
> > > mainly interested in HF.
> > >
> > > I'm looking for advice on feedline. Obviously the more I pay for
feedline,
> > > the less loss, but what's the best bang for the buck. There will be
150 -
> > > 175 feet of feedline from the shack to the top of the tower.
> > >
> > > 73,
> > > Mark, N8ME

3553. Kenwood antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:09:50 UTC
From: Richard Arnold <k8rja@netzero.net>
Message-ID: <2TQk6.12540$0u5.3002755@news1.rdc1.mi.home.com>
Source record: 169824

Does anyone have any information on the Kenwood MA-5 mobile antenna?
Please email direct.

--
Dick
k8rja@arrl.net

3554. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:23:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <970mg6cma1@uranium.btinternet.com>
Source record: 169827

Peter O. Brackett wrote -
> Reg:
>
> I can only assume that your programs do what you say they do
==========

Pete, there's a flaw in your first line. Regarding predicting accuracy I don't state say what my programs do. I leave it to users to discover for themselves they are accurate enough for the intended purposes.
==========

>... however you are testing my assumptions about your good work now, because... from your observations below, I see that - Your pique is showing...

==========

Not pique - just tiredness caused by evasive replies.

==========
>
> How about sharing with us some of your algorithms/formula and comparisons to
> actual measurements.
>
==========

I can assure you, you would be unable to understand the source code and and follow the track of reasoning! After a few months absence I have difficulty myself. There would be more quibbling and haggling and sidetracking between unqualified participants than has occurred with Conjugate Matches and Fractals put together. This would wreck the confidence which has accumulated during the last couple of years. In any case this is a radio amateur newsgroup - not a mathematics and computer programming training course.

==========
>
> It's unfair of you to ask Tom to make measurements to verify
> your programs for you.
>
==========

There are no rules to this game. ;o) I did not ask Tom to veryify my programs for me. I asked him to numerically quantify his criticisms rather than voice an opnion. In other words - what was

the source of HIS data with which he had compared programs. Everyone already knows the source of MY data - it's the programs themselves. And his criticism was of only one of the computed parameters in one of 35 or so programs.

To clarify your thoughts -

Tom originally said that all computer programs over-estimate Q and max Q occurs when coil turns are almost touching. He said this was due to programmers ignoring the effect of capacitance between turns. He specifically included my programs with the others. (I have never seen any others myself.) But he did not state what HIS measurement standards were.

I asked him to look at SOLNOID2 for the wire spacing at which maximum Q occurs. In another branch of this topic he then withdrew his criticism about my calculation of Q and replaced it with a criticism of the International Standards of Measurements. He also withdrew his view that Q decreases with close spacing because of increased capacitance between turns.

Tom did not replied to my question as to whether he had heard of the formula I gave which relates Q, L and R to stray capacitance. In reply to your request for the secret "algorithms" it is used in SOLNOID2. It implies that the effective Q of a coil depends on whether the coil is used in a series LC or a parallel LC circuit. Tom did not mention that important (in the present context) fact.

For example, the effective Q of a coil is lower in a Pi-match output circuit than the same coil when used in a tuned tank circuit.

A comment on Q measurements -

If, as Tom says, Q values at HF cannot be greater than 1000 or thereabouts, then to obtain any degree of accuracy the Q of the conventional Q-meter itself would have to be several times greater than that and accurately known. And to correct measurements calculations are unavoidable.

Working values of Q when inside a screening enclosure or adjacent to poor materials may be appreciably less than values measured on an isolated coil. Calculated values obviously apply to isolated coils. It is important to note it is not the coil which gets warm under enclosed conditions but the enclosure. When a magloop or dipole is near the ground it is not the magloop or dipole which warms up but the ground.

But accurate values of Q are not required for engineering purposes. It is sufficient to know Q is greater than some minimum value and calculated values are good enough. Indeed very high calculated values may be more accurate than the measured variety.

How is the intrinsic Q of a Q-meter determined ?

The only other use for Q values is to provide an enduring topic for
argument between perfectionists (bless them) on this newsgroup.
;o)

==========
>
> Thoughts, comments,
>
==========

See above.
Reg

3555. Re: Substitute Antenna for Light Bulb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:29:14 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6B948F7.3373%stewartx@sccoast.net>
Source record: 169828

David J. Windisch wrote:

> In the spirit, it isn't 'light bulb', you dim
> bulb, it's 'lamp' or 'DS', display signal :o))

In the same spirit, I have disagree. If you look at the following web site...

http://www.gesupplylight.com/

...you will see that General Electric (GE), the largest supplier of lighting solutions in the United States, calls it a "lightbulb."

In addition, lightbulb is one word, not two like you show it above. Again, GE, the acknowledged leader in this field, uses "lightbulb" throughout their web site.

To verify both of these claims, here is a quote directly from their website...

"We've made buying GE lightbulbs for
your business or facility easy!"

Now, are you disputing the words of this wonderful company, Dave? ;-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3556. Re: Substitute Antenna for Light Bulb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:34:46 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6B94A46.3374%stewartx@sccoast.net>
Source record: 169829

AC6V wrote:

> FYI: Mil specs defines DS as "Device Signalling"

Of course, the Random House Webster's dictionary says that just one "l"
can be used in signaling, though two appears to be equally acceptable.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3557. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:38:46 UTC
From: richardharrison@webtv.net
Message-ID: <7036-3A93E106-32@storefull-111.iap.bryant.webtv.net>
Source record: 169832

Reg`s statement: "It`s an old wives` tale that Q is poor when most of the capacitance is of the parasitic variety." evoked response.

My response concerned a self-resonant coil as compared with coils using external capacitors in parallel with the coil to resonate at at the same frequency.

I believe that Reg noted that in a series resonant circuit, the parasitic capacitance increases current in the coil by the amount of circulation between itself and the coil. Or, maybe his point was that the parasitic capacitance vitiates some of the inductance. I don`t remember now exactly what his response was, and I`m not clear how Q might be improved by parasitic capacitance.

I rediscovered that Terman has done all the work already and published it on page 67 of the second edition (1937) of his "Radio Engineering". As Reg might say: Maybe someone else did the work and Terman just copied it. If so, Terman checked the work and found it believable.

Terman doesn`t say Q is poor when most of the capacitance is of the parasitic variety. Terman does say: "It is to be noted that the apparent Q of a coil is decreased by self-capacitance."

Best regards, Richard Harrison, KB5WZI

3558. Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:42:43 UTC
From: Pete Holden <peholden@home.com>
Message-ID: <TIRk6.277041$ge4.95403409@news2.rdc2.tx.home.com>
Source record: 169830

As I sit here amidst the snow and fog, I am dreaming of better days.

I'm planning to get a QRP rig that I can carry with me on hikes. I've read a lot of articles on the Adventure Radio site about some of the elaborate antennas some take into the backcountry. But, I'm looking for simple and fast -- no wire beams, vertical arrays, etc.

Right now I'm thinking of making a telescoping walking stick to use as a mast for an inverted V on 20m. The apex would be up at maybe 15 feet with the ends at or near the ground. A rope would be the third guy line. The whole thing ought to go up in a minute or two.

What do you think? Any other ideas? Again, I want something quick and simple. Oh... I'm often hiking in country where the are few if any trees so I'll have to carry all the supporting stuff myself.

Thanks, Pete KA TZK Colorado

3559. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:44:39 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6B94C96.3375%stewartx@sccoast.net>
Source record: 169831

Gary Peach wrote:

> Presumably if we hear nothing, he fell off
> his ladder. I'll let you decide which sort
> of smiley was appropriate there. :)
>
> Should the fall prove to be fatal there
> are few better places to be buried
> than Cambridge.

If the fall from that tall ladder, needed to reach the top of his giant eight foot tree, proves to be fatal, I think question marks would be more appropriate than smiley faces. ;-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3560. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:49:28 UTC
From: gpewitt@execpc.com
Message-ID: <3a93e497$0$70811$272ea4a1@news.execpc.com>
Source record: 169833

MFJ has a 38 foot telescoping mast in their catalog. Not expensive.
It would probably cost as much to make one.
73 Gary

On Wed, 21 Feb 2001 05:47:44 GMT, Bill Brannick <WmLB@prefer.net>
wrote:

>I would like to construct a telescoping PVC support for a Windom
>antenna.. Will top out at 40 feet. So the question is: using
>Schedule 80 PVC , what sizes will properly match up, with the O.D. of
>one segment sliding into the I.D. of the segment beneath it.
>
>I do want a PL 259 to be able to fit inside the top section. (3/4"
>I.D. ??)
>
>I looked for a resource on the web but couldn't find one..
>
>Bill..
>

Gary Pewitt N9ZSV
414 355 8147

3561. Re: Underground Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 15:54:44 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A93E4C4.8961F38B@oio.net>
Source record: 169834

Mark,
It really isn't that the earth around a ground rod must
be moist, but that the ground rod should be long enough to
get into the local water-table to be affective. In a base-
ment, depending on where you are, the problem would be to
keep the moisture ~out~ of the basement.
'Doc

3562. Re: Yaesu ATAS100 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 16:02:26 UTC
From: gpewitt@execpc.com
Message-ID: <3a93e7a1$0$70812$272ea4a1@news.execpc.com>
Source record: 169836

Well, I got the ATAS-100 and it worked for about two days then it
stopped tuning. I took it back and exchanged it for two Isotron
combinations. 80/40 meter and 20/15/10 meter. They are
mounted on two 5 foot masts supported by rooftop type tripods.
Currently standing in my living room. Works well with a tuner.
Sure glad I got that MFJ-259 analyzer to set them up with.
I hope to transfer them to my second floor balcony when the
weather warms up a bit. Live and learn. 73 Gary

On Thu, 25 Jan 2001 17:16:50 GMT, gpewitt@execpc.com (Gary Pewitt)
wrote:

>Does anyone have experiance with the Yaesu ATAS100 antenna. It looks
>to be a version of the screwdriver. I am planning to buy a Yaesu
>FT-847 soon and this antenna is listed as an accessory. It's supposed
>to cover 160 meters to 440 mhz. That's asking a -lot- from one
>antenna. It's supposed to auto tune too I believe. If it works like
>a screwdriver and becomes resonent on each band then it won't need an
>antenna tunner right? I live in a condo and am thinking of cutting a
>small hole in the ceiling of a closet and poking the antenna up into
>the attic. I am not allowed any outdoor antennas at all. I've heard
>nothing but good things about the screwdriver antennas but the ones
>I've seen info on only cover 80 to 10 meters.
>Any information greatly appreciated. Thanks Gary N9ZSV
>
>Gary Pewitt N9ZSV
>414 355 8147

Gary Pewitt N9ZSV
414 355 8147

3563. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 16:04:07 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6B95124.3376%stewartx@sccoast.net>
Source record: 169835

Jerry Flanders wrote:

>> Mark Turner said...
>>> "Jerry Flanders" said....
>>> BUT - I don't see how you can install it
>>> unless you actually climb to the top,
>>> which might be risky.
>>
>> The tree is only about 8 feet tall so I
>> think I'll be Ok up there. :)
>
> I would not have called an 8 foot high plant
> a tree. The pine trees in my yard here in
> South Carolina run 50 - 80 feet tall.

I was thinking the same thing you were thinking. Jerry (how to get that antenna onto the top of a pine tree). Of course, since the "tree" is only eight foot tall, he has a couple of options - renting a bucket truck or purchasing the spiked boots used by telephone pole linesmen. The bucket truck is much safer at those heights, don't you think? ;-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3564. Re: Antenna for Hotel room?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 16:42:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <970r3mlvh1@uranium.btinternet.com>
Source record: 169837

I have used an attache-case, 160m, 50 watt, home-brew transceiver
on several occasions in hotel rooms.

Ask for a room at the rear of the hotel on the top floor (because
you like the view).

Throw a 22 awg, stranded, brown plastic covered wire out of the
window. Let it dangle down the wall as far as the garbage bins. As
long as possible up to 120 feet.

A tuner is essential. 350pF receiving-type variable plus
multi-tapped coil wound on toilet paper tube. Plus perhaps another
350pF varaiable or a few fixed values of mica capacitor.

For the ground connection take a big aligator clip and clip on to
the copper cold water pipe to the hand-wash basin. Or clip on to
the hot pipe feeding the central heating radiator. Better still -
both together.

If you don't want to risk disturbing the neighbors in the next
bedroom, take a morse key and a pair of headphones.

Set up the rig in your own bedroom at home and prepare a check list
of things to take several days before leaving home. Don't forget to
take an adapter or adapters for all types of power sockets you are
like to be confronted with. Screw driver. Side cutters. Odds and
ends of wire with crock clips. Log book. Licence. Ball point pen.
Wander plugs and sockets. Soldering iron and resin-filled solder.

Don't leave the iron on the bed clothes while you are waiting for
it to warm up.

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Dennis <dcollin@connix.com> wrote in message
news:3a93b5cb.1532543@news.mybizz.net...
> I'll be travelling with my new FT817 QRP rig. I guess I'll use a
wire
> for HF, strung out a window if I can. Do I just run a wire from
the
> center conductor of the SO239 out the window, and another to

ground
> (or likely, the floor), and try to load it like a long wire?
>
> Anyone got any tried and true antenna suggestions for this
> application?
>
> Thanks!
>
>
>
> Dennis (4B8)
> PP-ASEL

3565. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 16:43:32 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <phSk6.2122$Yx4.88286@news6.giganews.com>
Source record: 169838

Another alternative is to use the 20 some odd ft length of galvanized top rails for chain link fencing. Two or more can be snug fitted together and can be guyed at the joints. These are fairly stout as well as inexpensive.

Jack

"Gary Pewitt" <gpewitt@execpc.com> wrote in message news:3a93e497$0$70811$272ea4a1@news.execpc.com...
> MFJ has a 38 foot telescoping mast in their catalog. Not expensive.
> It would probably cost as much to make one.
> 73 Gary
>
>
>
>
> On Wed, 21 Feb 2001 05:47:44 GMT, Bill Brannick <WmLB@prefer.net>
> wrote:
>
> >I would like to construct a telescoping PVC support for a Windom
> >antenna.. Will top out at 40 feet. So the question is: using
> >Schedule 80 PVC , what sizes will properly match up, with the O.D. of
> >one segment sliding into the I.D. of the segment beneath it.
> >
> >I do want a PL 259 to be able to fit inside the top section. (3/4"
> >I.D. ??)
> >
> >I looked for a resource on the web but couldn't find one..
> >
> >Bill..
> >
>
> Gary Pewitt N9ZSV
> 414 355 8147

3566. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 16:49:49 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <970rjdadu1@agate.berkeley.edu>
Source record: 169839

Pete Holden <peholden@home.com> wrote:
> As I sit here amidst the snow and fog, I am dreaming of better days.

same here; I can't even see out my windows due to the snow!

> I'm planning to get a QRP rig that I can carry with me on hikes. I've read
<snip>
> Right now I'm thinking of making a telescoping walking stick to use as a
> mast for an inverted V on 20m. The apex would be up at maybe 15 feet with
<snip>

I like your inverted V idea. Another one I like the sound of is the St. Louis Pocket Vertical, a loaded vertical made from sections of kite rod. This is a compact version of the St. Louis Vertical; I am still trying to locate the QRPp construction article for it. Yet another antenna I am experimenting with is a continuously loaded vertical-- according to Antenna Handbook, wind 0.5-lambda of wire on an insulating support 0.05-lambda long, add a corona disk, radials, and L-match.

I've found various sources for telescoping masts. One can of course buy these meant for antennas but they are usually too big for backpacking. There are telescoping fishing poles and telescoping wind-sock supports. Both are lightweight and tall, but don't collapse small enough for my taste (4ft). What I'm considering now is using fiberglass kite tubing (www.intothewind.com), make some short (2.5ft) sections and connect them with ferrules to get desired length.

Where I go backpacking there are plenty of trees, but I am wanting to run QRP from the beach this spring, so I'm also looking for compact, quick and easy setup and no natural support structures.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3567. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 16:58:32 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <1tSk6.1104$yw6.74384@news1.atl>
Source record: 169840

Maybe a GPS, I have seen similar domes on sailboats.

--
73's from W4BEN,
Benjamin Blavat

"Pervert_Extraordinair" <valued_customer@att.com> wrote in message
news:3A933D4E.834E512C@att.com...
> I was following a cop today with an odd antenna(?) on the trunk
> of his car. It looked like a small construction hardhat but
> circular and taller. It was perhaps 6"-8" in diamater.
>
> Or if you take a two liter pop container, cut off the
> top 2/3 and ,turn it upside down....
>
> IN, USA

3568. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 17:04:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <970scooil1@uranium.btinternet.com>
Source record: 169841

Reg Edwards asked

> How is the intrinsic Q of a Q-meter determined ?

By connecting it to an inductor of even higher, accurately known Q
?

And how is - - - - ?

3569. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 17:09:06 UTC
From: Pie`` <picaruso@dontwriteme.com>
Message-ID: <SCSk6.3711$k55.43259@news.infostrada.it>
Source record: 169842

Years ago I had a chance to operate a 30 mt (or more) high double cone antenna and I compared it with a Windom for 160 mt mounted on two poles 25 mt high.
This happened two days before a contest and I decided to use the Windom, since signals was 2 S greather than the 'monster'. (I don't remember if it was on all the bands).
Just before the contest started I checked again the two antennas and... surprise: this time the monster gave 2 S more than the Windom on the same signal!!
After more checks with the same results and few hours thinking about the miracle, I realized that the days before it had rained a lot!!
Sure a wet ground is a great help.
I can't say much about salt; only that it should increase the conductivity of water, thus should helps. But what about the life of radials in a salt environment?
And wat about grass and plants, as should ask Greenpeace?!

--
73 de IK2VTJ, Piero.

http://www.infinito.it/utenti/ardf.it
http://ardfitalia.supereva.it
http://www.qsl.net/ik2vtj

"paul" <paul@nospam.com> ha scritto nel messaggio
news:3A902986.6BE2@nospam.com...
> Stephen Dobak wrote:
> >
> >
> >
> > Keith Zimmermann wrote:
> >
> > OK, I almost made through the whole month without asking a
> > dumb
> > question...
> >
> > Years ago, when I was a teen-novice, someone suggested that
> > I add salt
> > around my ground rod and radial system. Being a novice, I
> > of course
> > did. I would also water and really soak the ground system
> > prior to a
> > planned night of DX-ing. Anything to help my 5 watts!
> >
> > Now, I'm wondering if there is any benefit from doing either

> > of those
> > things. Dry, parched, rocky ground like we have in Texas
> > probably needs
> > some help...especially in the summer. I used verticals,
> > end-fed long
> > wires, and inverted vees back then. I had a short run from
> > my rig and
> > antenna tuner to the ground. I had a good radial system
> > below my
> > ground-mounted vertical. But no matter what, I was
> > convinced that
> > watering my ground improved my signal and reduced static.
> >
> > Thanks for any info.
> >
> > Keith K5WX
> >
>
> ---

> >
> > Good way to corrode ground systems, There has been more than a few
> > radio stations that tried the same
> > then when their signal goes down the toilet the staff or consultant
> > when checking the radials start to dig
> > and find green in the soil that use to be radials.
> >
> >
> > Steve WB3AMG
> >
>
>
> I've heard of a non salt type chemical that some people use but I can't
> remember the name. My VE told us about it when I was studying for the
> Novice so many years ago.
>
> Paul

3570. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 17:53:56 UTC
From: raiar@slacc.com.nospam
Message-ID: <3a93fd6b.467714517@news.galilei.com>
Source record: 169844

And you need to guy the ever lovin' out of it.
I built a 50 foot PVC push pole and it had to be guyed every 5 feet
and the guys kept quite taut.

TTUL
Gary

Denver Braughler <Braughler@bwcc.com> verbositized:

>Bill Brannick wrote:
>> Will top out at 40 feet.
>Four ten-foot sections?
>
>> So the question is: using Schedule 80 PVC,
>> what sizes will properly match up, with the O.D. of
>> one segment sliding into the I.D. of the segment beneath it.
>
>http://extolohio.com/DATA/CHARTS/pipe-covering.html
>
>> I do want a PL 259 to be able to fit inside the top section. (3/4"
>> I.D. ??)
>Iron Pipe Sizes are the inside diameters.
>
>You could use 4", 3.5", 3", and 2.5" with some reducers and bushings to get to 0.75" at
the top.
>
>You might need some cable grease to make it slide.
>There will probably be a static electrical charge from the friction when you extend or
collapse it.

3571. Re: Antenna for Hotel room?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 17:54:02 UTC
From: nielsen@remove_this.oz.net
Message-ID: <970vbqosr0@216.39.171.5>
Source record: 169843

On Wed, 21 Feb 2001 12:37:48 GMT, Dennis wrote:
>I'll be travelling with my new FT817 QRP rig. I guess I'll use a wire
>for HF, strung out a window if I can. Do I just run a wire from the
>center conductor of the SO239 out the window, and another to ground
>(or likely, the floor), and try to load it like a long wire?
>
>Anyone got any tried and true antenna suggestions for this
>application?

I would suggest a Z-match tuner for an application like this. There
are a couple of inexpensive kits (QRP-only) you might consider:

Emtech ZM-1 (http://emtech.steadynet.com/zmdesc.htm)

NorCal BLT (http://www.fix.net/~jparker/norcal/kits/kits.htm)

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen
IOTA NA-065, USI WA-028S

3572. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 20:37:24 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <971eba$so4$1@lure.pipex.net>
Source record: 169849

"Richard Clark" ...
> Gary Peach wrote:
> >One thing that has puzzled me is the difference of the velocity of the
wave
> >in free space and the velocity of the currents in a medium.
> >How does the current flow the distance within the medium in the time that
it
> >takes for the free space wave to reverse polarity?
> >Or does it?
> There's something here that few would pick up on. The velocity of the
> wave in free space and the velocity of the wave in a media different
> from free space are accountable by the media that is different.
> This is simply Snell's Law.

refraction, (r�-fr�k�shen) the deflection of a wave on passing *obliquely*
from one transparent medium into a second medium in which its speed is
different, as the passage of a light ray from air into glass.
The index of refraction of a transparent medium is equal to the ratio of the
speed of light in a vacuum to the speed of light in the medium.

Snell's law states that the ratio of the sine of the angle i of incidence
(angle between the incident ray and the normal, or line perpendicular to the
boundary between the two mediums at the point of refraction) to the sine of
the angle r of refraction (angle between the refracted ray and the normal)
is equal to the ratio of the refracting medium's index of refraction nr to
the original medium's index of refraction ni.

So if it is as simple as that why is the polar diagram of a half wave Dipole
different to the polar diagram of a whole wavelength antenna and so on?
The polar diagram of a simple dipole has the centre normal to the dipole, if
Snell's Law has a strong effect might one not expect two lobes not normal to
the dipole?

> However, you slide into the speed of the current in the media and try
> to correlate it to the speed of the wave in free space.

Snell's Law deals with the wave along the direction of travel of the wave.
The induced current is normal to the direction of travel of the Magnetic
flux. Or wher the magnetic flux comes from a direction not normal to the
wire then a vector proporition of current is induced. Untill the wave
arrives along the axis of the dipole and no current is induced in the wire.

>Two very different beasts. Let's simply stick with one media when we
examine
> the speed of the wave and the speed of the current.

OK the Speed of the wave in air is C the velocity of light,
approximately 3 x 10^8 m/s
The speed of the current in the medium (Cu) is 75 mm per nanosecond.
aprox 7.6 x 10^7
Or one tenth of the velocity of the wave in air.
And yet we cut the wire to a fraction of the wavelength in air.
How so?

> If, perchance, the speed of the current exceeds the speed of the wave
> (there are instances of this), then we find ourselves as witness to a
> new radiation - Cherenkov radiation, which appears as a blue wavefront
> much in the same style as the bow wave from a fast moving boat.

Ah! St Elmo's Fire :)

> And then you slide into "distance." The only current that comes close
> to light speed over any distance is found in the conventional
> amplifier tube between the cathode and the plate. Current truly flies
> here in stark contrast to the "induced" current outside of the tube
> that's physical distance of travel over time is on the order of
> cM/second. That is, the speed of any electron in the current outside
> of a tube. The effect of the current movement propagates at the same
> near light speed, but the two speeds (the electron, and its effect)
> are distinctly different.

Yet the speed of the electron in the tube was too slow for UHF,
thus the Klystron was born. Of course you are familiar with bunching and
velocity modulation of the electron stream.

> Now the really remarkable fact about this last near light speed
> current phenomenon in a tube is that it conforms in every sense to
> meeting a "dissipative" resistance INSIDE THE TUBE. That is, Plate
> Resistance is as real as a chunk of carbon and produces the heat to
> prove it.

In soft tubes may be.
Though I must admit to seeing a few red anodes in my time.

Ra = dVa / dIa
A rule of thmb the Plate resistance is aproximately inversly proportional to
the cube root of the plate current.
Thus when the tube is off Ia = 0; Ra approaches infinity.
Which is what we find in practice.

> Back when Hams built their own rigs, you can be sure they
> were aware of their plate "dissipation" limit for ANY particular tube
> they designed around.

Yes indeed and class C became very popular.
Clever designers arranged Rl and Ra such the the majority of the power was
not in the tube, but in the Tank. ;)

> Some may confuse the heat shedding of the plate
> as simply the process of being illuminated by the filament.

Ha, hi, I've never heard that one before. :)

>That is,
> a coffee pot gets hot because of the stove's burner - heat transfer by
> conduction, convection, or radiation.

We can't stand here gassing all day.

> In a sense, the plate of a tube also absorbs heat in the same manner
> (unless we have a tube with a cathode covering the filament) -

Thorium?

> however, this source is only a minor contributor to the total heat
> load suffered. The major heat load comes from the deceleration of
> electrons as they attempt to penetrate the metallic lattice of the
> plate (electron penetration rarely succeeds in traveling more than one
> to three atom's thickness).

Ah! Bremsstrahlung, careful I don't want to Bragg.

> The deceleration from near light speed to
> a crawl in the space of angstroms yields heat - this is classic
> Newtonian Physics. Hence we have a paradox wherein the seemingly low
> resistance metal plate in fact exhibits the loss of carbon (or worse).

Roentgen, must have witnessed plenty of this until Wolfram became available
for use in the anode.

> This paradox is a hard swallow for many (especially those who try to
> argue the source's non-dissipative characteristic). Those who choke
> generally sputter about perfect switches and current conduction angle.
> If researchers who attempt to measure the Z of a real transmitter as
> source fail to find a real R component strongly correlated to the
> specification for Tube Plate Resistance, then their method is highly
> suspect.

But what has this to do with the difference of velocity of the wave in free
space and the velocity of the current in the medium.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3573. Dow Key Relays

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 20:44:49 UTC
From: mlangen@earth.execpc.com
Message-ID: <3a9428c1$0$46006$272ea4a1@news.execpc.com>
Source record: 169845

Depending on who you talk to, Dow Key coaxial relays are either scarce as hen's teeth or relatively plentiful (my experience suggests something closer to the former). But, all that aside, does anyone know of a source of comparable and affordable new-manufacture relays?

Mark -- WA9ETW

3574. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 20:56:11 UTC
From: jflanders2@home.com
Message-ID: <3a942956.88864664@news>
Source record: 169846

On this same topic, I have had some thoughts of trying to install a vertical just above some of my trees by pushing a segmented pole up the center, assembling the pole as it goes up.

If I could figure out how to fasten the pole to the tree trunk without climbing up there, I think I would give it a try. I have looked up the trunks of several of them, hoping to find one with branches oriented in a way that would naturally "enclose" the pole, but haven't found a candidate yet.

Sure would be nice to have the tree doing all the guying work for me, with the pole just supporting the weight of the antenna.

Jerry W4UK

On Wed, 21 Feb 2001 11:04:07 -0500, Dwight Stewart <stewartx@sccoast.net> wrote:

>Jerry Flanders wrote:
>
>>
>> I would not have called an 8 foot high plant
>> a tree. The pine trees in my yard here in
>> South Carolina run 50 - 80 feet tall.
>
>
> I was thinking the same thing you were thinking. Jerry (how to get that
>antenna onto the top of a pine tree). Of course, since the "tree" is only
>eight foot tall, he has a couple of options - renting a bucket truck or
>purchasing the spiked boots used by telephone pole linesmen. The bucket
>truck is much safer at those heights, don't you think? ;-)
>
>
>Dwight Stewart (W5NET)
>
>http://www.qsl.net/w5net
>

3575. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 21:02:41 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <971ebd$so4$2@lure.pipex.net>
Source record: 169851

"VE9SRB" wrote
> "Gary Peach" wrote
> > "VE9SRB" wrote
> > > "Gary Peach" wrote
> > > > By real it is implied that the Current and Voltage are in phase.
> > > > Therefore there will be heating.
>
> I fully understand why its called "path loss".

Of course you do.

> Most people understand the end result.
> Describing the process is where problems usually arise. My
> comments were directed at your statement "if there is no dissipation there
> is no propagation".

The only thing that the operator can know of space is what he can see going
on on his instruments at the input to the antenna feed system. When it's
cold and dark outside the Ham cosseted in his candle lit shack
, unwilling to peer out into the frost covered world could have his AE
snipped from his feeder and a matched resistance substituted. His
instruments would tell him no more of what was going on outside in the dark
dark night.
Just how many measurements of a electromagnetic wave in full flight have
been made? Most of what we discuss is purely theoretical, and we trust it to
be correct in so much that our theory permits us to make certain limited
predictions about the behaviour of out apperatus. Unlike circuit theory
where imperical experiments are easily conducted, substitutions, variations
and measurements permit a measure of confirmation of our hypothesises. But
waves in freespace are not quite so easy.

> Dissipation of energy in the form of heat is not a
> requirement for the propagation of EM energy.

Of course not.

> It may however, be part of the propagation process.

It is the propagation process, just that the mass is almost zero at most
points, so the wave has to travel a very long way before it becomes
completely dissipated.
(I have a picture of a resistor exploded so that it's molecules distribute
themselves evenly thoroughout the universe. Will those molecules respond to
that E-M wave in the same way as they did when they formed a part of the
original resistor?)

Which raises the question;
does a 40 Watt wave travel twice as far as a 10 Watt wave?

>The distribution of energy in space as it travels
> away from a source is not a heat dissipation issue as your statement might
> lead some to believe.

Ah! the 'leading' is partly the Imp within me, but the root cause is wanting
to stimulate people to think.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3576. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 21:07:18 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <971ebf$so4$3@lure.pipex.net>
Source record: 169850

"Mark Turner" wrote ...
> "Jerry Flanders" said....
> > I would not have called an 8 foot high plant a tree. The pine trees in
> > my yard here in South Carolina run 50 - 80 feet tall.
>
> In East Anglia 8 feet is tall. The land around here is so flat that an
> anthill is a mountain! Unfortunately this means that there's aren't many
> hills to go buy a house on to get a good VHF site. :(

Ah! now I see what you're up to, install the AE at 8 feet and wait for the
tree to reach a descent height for an AE.

Boy you're in for a long wait.
Glad to see you using a Discone, as an acquisition aid they are ideal.
For radio mapping the site probably the quickest way.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3577. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 21:14:08 UTC
From: Ken Anderson <longrange2@home.com>
Message-ID: <3A942F92.A0D1B88D@home.com>
Source record: 169847

Try this link. I built one of these for about $30 but haven't tried it out yet. Gives nice coverage of 10 to 20 M. KC0INZ

http://www.qsl.net/w3ff/

Pete Holden wrote:

> As I sit here amidst the snow and fog, I am dreaming of better days.
>
> I'm planning to get a QRP rig that I can carry with me on hikes. I've read
> a lot of articles on the Adventure Radio site about some of the elaborate
> antennas some take into the backcountry. But, I'm looking for simple and
> fast -- no wire beams, vertical arrays, etc.
>
> Right now I'm thinking of making a telescoping walking stick to use as a
> mast for an inverted V on 20m. The apex would be up at maybe 15 feet with
> the ends at or near the ground. A rope would be the third guy line. The
> whole thing ought to go up in a minute or two.
>
> What do you think? Any other ideas? Again, I want something quick and
> simple. Oh... I'm often hiking in country where the are few if any trees
> so I'll have to carry all the supporting stuff myself.
>
> Thanks, Pete KAï¿½TZK Colorado

3578. Re: Antenna for Hotel room?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 21:42:48 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a943639$0$35018$44a10c7e@news.net-link.net>
Source record: 169848

I just had the greatest hotel room for radio but no time to play :(2nd Floor of 3 story hotel resort at top of a ski area. 3rd floor would have been better but the main thing was the nice tree growing about 25 feet from the balcony and the balcony has a metal railing the whole length of the building. I am going back this time with antenna coupler, wire, jumper cable rig and supply!
Dennis wrote in message <3a93b5cb.1532543@news.mybizz.net>...
>I'll be travelling with my new FT817 QRP rig. I guess I'll use a wire
>for HF, strung out a window if I can. Do I just run a wire from the
>center conductor of the SO239 out the window, and another to ground
>(or likely, the floor), and try to load it like a long wire?
>
>Anyone got any tried and true antenna suggestions for this
>application?
>
>Thanks!
>
>
>
>Dennis (4B8)
>PP-ASEL

3579. Disphased source under Nec4Win

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 22:06:55 UTC
From: Jean Schwoerer <jschwoer@ens.insa-rennes.fr>
Message-ID: <Pine.LNX.4.21.0102212256550.12530-100000@stang.ens.insa-rennes.fr>
Source record: 169853

Hi folks

I'm trying to simulate an antenna formed by two 90ï¿½ crossed dipoles and disphased of 90ï¿½ under Nec4Win

My problem is to create the two disphased sources. I don't know how to do this.

If someone has an idea or somme docs....

Thanks for your help

73's

--
Jean Schwoerer (F1UBF)

3580. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 22:32:37 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <cjf179.grs.ln@kram.org>
Source record: 169852

"Gary Peach" said....
>
> Ah! now I see what you're up to, install the AE at 8 feet and wait for the
> tree to reach a descent height for an AE.

Something like that.

Regarding the safety aspect of me climbing to those dizzy heights, I think I'll saw the trunk off low down, install a hinge, and lower the tree to a safe working height whenever I need to fiddle with the aerial. ;)

> Boy you're in for a long wait.

Maybe I could insert a section or two of pole above the hinge, painted brown of course so that the neighbours will think the tree just grew a little overnight.

> Glad to see you using a Discone, as an acquisition aid they are ideal.
> For radio mapping the site probably the quickest way.

This is my backup tx aerial, mainly used for rx of local airband. My main aerial is a Diamond V2000 on a 16 foot pole. Yes I know, that's not the highest aerial in the world either, but I can't get away with much higher on the bungalow before domestic planning permission is withdrawn.

Cheers,

Mark.

3581. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 22:36:05 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <972akp$q3n$1@lure.pipex.net>
Source record: 169777

"Dwight Stewart" wrote
> Gary Peach wrote:
> > Presumably if we hear nothing, he fell off
> > his ladder. I'll let you decide which sort
> > of smiley was appropriate there. :)
> >
> > Should the fall prove to be fatal there
> > are few better places to be buried
> > than Cambridge.
>
> If the fall from that tall ladder, needed to reach the top of his giant
> eight foot tree, proves to be fatal, I think question marks would be more
> appropriate than smiley faces. ;-)

<:?) duh! Stanley, another fine mess you got me into.

If you're going to the funeral look out for Quincy.
BTW it ain't how far you fall, but how hard you land that finishes you off.
Some people have fallen thousands of feet and survived whilst others have
merely tripped and kicked the bucket as a result.

As far as the original question, leave the pole tied to the fence and plant
an ivy plant at the foot.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3582. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 23:14:47 UTC
From: Ron <rlesan@cwnet.com>
Message-ID: <3a944c65_2@news2.cwnet.com>
Source record: 169854
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Quit paying - - -

==========
"smiley o'riley" <bummer-radio@licensing.org> wrote in message
news:goodbye@goodbye...
>
> I find I can no longer support the ARRL by being a member. What's the
best
> way to cancel a membership?
>
> TNX 73 de Smiley

3583. Re: Substitute Antenna for Light Bulb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 23:32:45 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <BdYk6.893$yY.2861@newsfeed.slurp.net>
Source record: 169855

'Preciate that, Rod. Memory fails .. first, or second. I forget :o)))

--

73, Dave, K3BHJ

3584. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-21 23:52:53 UTC
From: jgboyles@aol.com
Message-ID: <20010221185253.05971.00000004@ng-fk1.aol.com>
Source record: 169856

I tried to order this item a couple of times(33 foot fiberglass mast) and they do not have it. But they will put you on a waiting list for when they do have it, but who wants to do that? I guess I will get it from the German ham that has them at Dayton each year. Ideal portable, field day mast.
73 Gary N4AST

3585. Re: HY-Gain 14avq

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 00:16:20 UTC
From: markem@primenet.com
Message-ID: <904FA4476markemprimenetcom@206.165.3.80>
Source record: 169857

w5omr wrote:

>Not if it's DC Grounded.
>
>But, the 14AVQ is not (I wouldn't think, given the age of the antenna) a
>DC grounded antenna
>

Au contraire, OM...

Quoting from my 14AVQ Installation & Operating Instructions:

"
NOTE

If the terminals of the input connector are checked with an ohmeter they
will show a direct short. THIS IS NORMAL! The matching coil in the antanna
base puts the entire system at DC ground but presents a perfect 52 ohm
impedance to RF energy. "

Emphasis in original. Original in italics.

I bought mine new in 1970...cost $39.95, IIRC. It's pretty beat up now but
it still works, altho I don't use it any more.

Hope this helps...

73... Mark AA7TA

3586. Re: WTB: Remote Antenna Coax Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 00:52:13 UTC
From: bonnie ahrens <bjahrens@mhonline.net>
Message-ID: <3A9462BD.75DF69FD@mhonline.net>
Source record: 169858

kc2fxe
yes i'm also looking for remote coax sw and control
email me at kc2fxe@arrl.net
thanks

John Morris wrote:
>
> Want to buy remote coax switch with control box ... e.g. Heathkit or
> similar.
>
> Please state model, address and price.
>
> Thanks
>
> John-WB0RLD
> moe@msn.com

3587. Re: Another swr question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:07:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <971on4$6fa$1@slb7.atl.mindspring.net>
Source record: 169859

Reg et al:

The slope of X etc... very useful to know, and the properties that you describe in your posting were first noted by Hendrik W. Bode, many years ago, at least before the big one... WWII.

Bode was a very mathematical engineer who was one of the "guiding lights" at Bell Labs in its' glory days.

He was the first to name and describe the properties of "positive real functions".

These are the properties that you describe here below.

For those with a mathematical bent and acess to a library of "older" books, for a joyful rememberance of the golden era of Electrical Enginnering, take home and read on a weekend, heh, heh... Bode, Hendrik W. "Network analysis and feedback amplifier design." Copyright 1945 D. Van Nostrand Company, Inc. LCCatalog Call Number TK6175.B6 Bell Telephone Laboratories, Inc.

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:96rvg9$522$1@plutonium.btinternet.com...
> There is one more way of determining the sign of the impedance
> angle from the magnitude of Z and SWR. It involves varying the test
> frequency through an impedance resonance - if there is one.
>
> It is a fundamental property of resonant circuits, including
> resonant transmission lines and antennas, that -
>
> (1) As the magnitude of Z passes through a minimum in the Z/F curve
> with increasing frequency, the reactance of jX is negative on the
> low frequency side of resonance, jX is zero when exactly at
> resonant, and jX is positive on the high frequency side of
> resonance.
>
> (2) As the magnitude of Z passes through a maximum with increasing
> frequency, jX is positive on the the low frequency side of
> resonance and negative on the high frequency side.
>
> That (1) is true is demonstrated by considering the input impedance
> of a simple series L and C circuit, or a 1/4-wavelength of
> transmission line open-circuit at its other end.
>
> That (2) is true is demonstrated by considering the impedance of a

> simple parallel L and C circuit, or a 1/4-wavelength of
> transmission line short-circuit at its other end.
>
> At HF it is also a fair bet that as SWR varies with frequency, at a
> minimum SWR the line + antenna is resonant and jX is zero
> regardless of the value of R or the minimum SWR. But the accuracy
> of the usual SWR meter must be taken as a warning - don't bet
> your life on it !.
> ----
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
> news:96dtfaqii1@uranium.btinternet.com...
> > From Z and SWR, R and X can be calculated. But the sign of X is
> ambiguous.
> >
> > To determine the sign of X it is necessary to inspect the item
> being
> > measured. For example, if the antenna wire is open circuit at the
> other end
> > and its length is less than 1/4-wavelength, then input X must be
> negative.
> >
> > The sign of X can also be investigated by connecting a capacitor
> or coil in
> > series with the unknown Z and observing what happens to Z.
> >
> > Arithmetically -
> >
> > R = (2500 + Z^2) / 50 / (SWR + 1 / SWR)
> >
> > X = Sqrt(Z^2 - R^2)
> >
> > Angle = ArcCos(R / Z)
> >
> > However, measurement uncertainties can be greatly magnified when
> passing
> > through the arithmetic. X is related to the small difference
> between two
> > large quantities.
> >
> > ----
> > **********
> > Regards, Reg, G4FGQ
> > Free radio design & modelling software

> > http://www.btinternet.com/~g4fgq.regp
> >
> > **********
> >
> > Cecil <Cecil.A.Moore@IEEE.org> wrote in message
> > news:3A89D079.2AB041EA@IEEE.org...
> > > JGBOYLES wrote:
> > > > Still wondering if the Smith Chart can do it?
> > >
> > > Yep, the Smith Chart can do it. You need to draw constant-Z
> > > curves on the Chart and then draw SWR circles. The two
> > > points of intersection are the two solutions.
> > > --
> > > http://www.mindspring.com/~w6rca
> >
> >
>
>

3588. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:11:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <971oqohgf1@slb6.atl.mindspring.net>
Source record: 169860

Richard:

From your elegant post below, I see, what I have always suspected, you really do understand "surge resistance".

Now why would you want to mess with a silly term like "dissipationless resistance"? When you can have "surge resistance"! What?

Dammned IEEE Dictionary...

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:3987-3A93C58B-8@storefull-117.iap.bryant.webtv.net...
> Gary Peach wrote:
> "The current will not remain constant it will decay exponentially so we
> can`t apply Ohm`s law."
>
> Reg Edwards was applying an ohmmeter to an infinitely long lossless
> transmission line.
>
> The line has distributed inductance in addition to distributed
> capacitance. We are not just charging a capacitor here.
>
> The inductance allows current to rise but inhibits it. Capacitance
> readily accepts current but inhibits voltage rise.The long line with
> distributed iductance and capacitance does not appear as either an
> inductance or a capacitance. It appears as a resistance. Not the kind
> that eats energy, only the volts over amps kind.
>
> There is no charge-up exponential decrease in current into the infinite
> lossless transmission line. Reg`s ohmmeter would continue supplying
> current into the line at a constant rate and the line would continue
> carrying the current away. The rate at which the line accepts current is
> only determined by its surge impedance.
>
> The line is lossless so there is no exponential decay along the length
> of the line.
>
> Best regards, Richard Harrison, KB5WZI
>

3589. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:15:37 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <971p5c$23s$1@slb3.atl.mindspring.net>
Source record: 169861

Gary:

[snip]
> Ah! the 'leading' is partly the Imp within me, but the root cause is
wanting
> to stimulate people to think.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
[snip]

As the comedian Skip Wilson used to say, "the devil made me do it". Heh, heh ... with you it's the Imp.

Socrates would be proud.

-Peter K1PO

3590. Re: Disphased source under Nec4Win

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:20:29 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <xPZk6.440$Ea1.27552@bgtnsc05-news.ops.worldnet.att.net>
Source record: 169862

```
In the NEC file, create the two sources using two EX cards.

Set the voltage for one source at 1.0, 0.0

Set the voltage for the other source at 0.0, -1.0 for -90 degress or 0.0, +1
for +90 degrees.
```

"Jean Schwoerer" <jschwoer@ens.insa-rennes.fr> wrote in message
news:Pine.LNX.4.21.0102212256550.12530-100000@stang.ens.insa-rennes.fr...
>
> Hi folks
>
> I'm trying to simulate an antenna formed by two 90&#65533; crossed dipoles and
> disphased of 90&#65533; under Nec4Win
>
> My problem is to create the two dispased sources. I don't know how to do
> this.
>
> If someone has an idea or somme docs....
>
> Thanks for your help
>
> 73's
>
> --
> Jean Schwoerer (F1UBF)
>

3591. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:32:02 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <m_Zk6.465$Ea1.28475@bgtnsc05-news.ops.worldnet.att.net>
Source record: 169863

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:971ebd$so4$2@lure.pipex.net...
>
>
> Which raises the question;
> does a 40 Watt wave travel twice as far as a 10 Watt wave?
>

I guess this really depends mostly on the your perspective, the effective aperture of your receive antenna, your system losses, noise and your receiver sensitivity. If you can't receive the 10 watt wave, is it really even there?

> >The distribution of energy in space as it travels
> > away from a source is not a heat dissipation issue as your statement
might
> > lead some to believe.
>
> Ah! the 'leading' is partly the Imp within me, but the root cause is
wanting
> to stimulate people to think.
>

You do a fine job.

73,
Steve VE9SRB

3592. Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:33:48 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <971q9sffu1@news.netmar.com>
Source record: 169865

I need to make a balun using a 1/2-wave section of coax cable. I must take into consideration the velocity factory of the cable when measuring it. I know it is probably simple, but it escapes me at the moment. What is the equation for this?

Thanks.

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http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3593. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:35:57 UTC
From: Pervert_Extraordinair <valued_customer@att.com>
Message-ID: <3A946D09.459DFFD7@att.com>
Source record: 169864

Greg Blair wrote:
>
> The small half height pop bottle size sail boat domes are Inmarsat satellite
> telephones.
>
> [Image]

We have a winner! Thanks

3594. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 01:49:16 UTC
From: rwclark@seanet.com
Message-ID: <3a944567.174581985@news.seanet.com>
Source record: 169866

On Wed, 21 Feb 2001 20:37:24 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Richard Clark" ...
>> Gary Peach wrote:
>> >One thing that has puzzled me is the difference of the velocity of the
>wave
>> >in free space and the velocity of the currents in a medium.
>> >How does the current flow the distance within the medium in the time that
>it
>> >takes for the free space wave to reverse polarity?
>> >Or does it?
>> There's something here that few would pick up on. The velocity of the
>> wave in free space and the velocity of the wave in a media different
>> from free space are accountable by the media that is different.
>> This is simply Snell's Law.
>
>refraction, (rï¿½-frï¿½kï¿½shen) the deflection of a wave on passing *obliquely*
>from one transparent medium into a second medium in which its speed is
>different, as the passage of a light ray from air into glass.
>The index of refraction of a transparent medium is equal to the ratio of the
>speed of light in a vacuum to the speed of light in the medium.
>
>Snell's law states that the ratio of the sine of the angle i of incidence
>(angle between the incident ray and the normal, or line perpendicular to the
>boundary between the two mediums at the point of refraction) to the sine of
>the angle r of refraction (angle between the refracted ray and the normal)
>is equal to the ratio of the refracting medium's index of refraction nr to
>the original medium's index of refraction ni.
>
>So if it is as simple as that why is the polar diagram of a half wave Dipole
>different to the polar diagram of a whole wavelength antenna and so on?
>The polar diagram of a simple dipole has the centre normal to the dipole, if
>Snell's Law has a strong effect might one not expect two lobes not normal to
>the dipole?
>
There are mechanistic descriptions of how this happens (the difference
between the two structures and their lobe patterns); but they are
basically the same discussion from two points of view. The hinge to
turn this on is that for Snell's Law to work meaningfully, the scale
of the lens (or element) has to be large in relation to the
wavelength. With antenna elements, we are simply more used to
viewing small, small lenses for antennas and large, large lenses for

Optics. If you look at an Optical lens that is scaled similar with a very small geometry, then you would encounter the same issues we struggle with in antennas. Contrariwise, if you worked with an antenna that is very large in relation to wavelength (and with more than just a driven element), then you would observe classic Optical lobe patterns.

Snell's Law works equally effectively or ineffectively based upon the scale of the geometry (for which we often limit our discussions' geometries typically below one wavelength).

>> However, you slide into the speed of the current in the media and try
>> to correlate it to the speed of the wave in free space.
>
>Snell's Law deals with the wave along the direction of travel of the wave.
>The induced current is normal to the direction of travel of the Magnetic
>flux. Or wher the magnetic flux comes from a direction not normal to the
>wire then a vector proporition of current is induced. Untill the wave
>arrives along the axis of the dipole and no current is induced in the wire.
>
The statement above is a rather difficult read. I'm not sure if you have a question.

>>Two very different beasts. Let's simply stick with one media when we
>examine
>> the speed of the wave and the speed of the current.
>
>OK the Speed of the wave in air is C the velocity of light,
>approximately 3 x 10^8 m/s
>The speed of the current in the medium (Cu) is 75 mm per nanosecond.
>aprox 7.6 x 10^7

The speed of the current of electrons in Cu is at least 7 orders of magnitude slower. The speed of the current's effects is what you are describing.

>Or one tenth of the velocity of the wave in air.
>And yet we cut the wire to a fraction of the wavelength in air.
>How so?

This is to satisfy matching criteria more than launch characteristics. A practical small (or less than one wavelength geometry) element for either Optics or RF will present the same launch characteristics of a lambertian distribution. Do not confuse the practical element with a point source however.

>
>> If, perchance, the speed of the current exceeds the speed of the wave
>> (there are instances of this), then we find ourselves as witness to a
>> new radiation - Cherenkov radiation, which appears as a blue wavefront
>> much in the same style as the bow wave from a fast moving boat.
>

>Ah! St Elmo's Fire :)
Uh - yeah. :-)
>
>> And then you slide into "distance." The only current that comes close
>> to light speed over any distance is found in the conventional
>> amplifier tube between the cathode and the plate. Current truly flies
>> here in stark contrast to the "induced" current outside of the tube
>> that's physical distance of travel over time is on the order of
>> cM/second. That is, the speed of any electron in the current outside
>> of a tube. The effect of the current movement propagates at the same
>> near light speed, but the two speeds (the electron, and its effect)
>> are distinctly different.
>
>Yet the speed of the electron in the tube was too slow for UHF,
>thus the Klystron was born. Of course you are familiar with bunching and
>velocity modulation of the electron stream.

Yes, very familiar. But it still serves as an obvious example of near
light speed current, even if it is too slow for the scale of geometry
being imposed as a practical necessity.

>
>> Now the really remarkable fact about this last near light speed
>> current phenomenon in a tube is that it conforms in every sense to
>> meeting a "dissipative" resistance INSIDE THE TUBE. That is, Plate
>> Resistance is as real as a chunk of carbon and produces the heat to
>> prove it.
>
>In soft tubes may be.
>Though I must admit to seeing a few red anodes in my time.

As have I. However this obvious example of dissipation is wholly
discarded by some who maintain there is no dissipation within a source
(a transmitter being an example).

>
>Ra = dVa / dIa
>A rule of thmb the Plate resistance is aproximately inversly proportional to
>the cube root of the plate current.
>Thus when the tube is off Ia = 0; Ra approaches infinity.
>Which is what we find in practice.
>
There is even more compelling proof in simply doing Newton's math in
regard to the inertia of the beam's electrons. Speaking generally, if
you don't come up with the same answer, your method is wrong.

>> Back when Hams built their own rigs, you can be sure they
>> were aware of their plate "dissipation" limit for ANY particular tube
>> they designed around.
>
>Yes indeed and class C became very popular.
>Clever designers arranged Rl and Ra such the the majority of the power was

>not in the tube, but in the Tank. ;)
>
>> Some may confuse the heat shedding of the plate
>> as simply the process of being illuminated by the filament.
>
>Ha, hi, I've never heard that one before. :)
>
>>That is,
>> a coffee pot gets hot because of the stove's burner - heat transfer by
>> conduction, convection, or radiation.
>
>We can't stand here gassing all day.
>> In a sense, the plate of a tube also absorbs heat in the same manner
>> (unless we have a tube with a cathode covering the filament) -
>
>Thorium?
Yeah. However, I was simply stating the obvious that a filament
couldn't radiate a plate if there is a cathode.
>
>> however, this source is only a minor contributor to the total heat
>> load suffered. The major heat load comes from the deceleration of
>> electrons as they attempt to penetrate the metallic lattice of the
>> plate (electron penetration rarely succeeds in traveling more than one
>> to three atom's thickness).
>
>Ah! Bremsstrahlung, careful I don't want to Bragg.
>
>> The deceleration from near light speed to
>> a crawl in the space of angstroms yields heat - this is classic
>> Newtonian Physics. Hence we have a paradox wherein the seemingly low
>> resistance metal plate in fact exhibits the loss of carbon (or worse).
>
>Roentgen, must have witnessed plenty of this until Wolfram became available
>for use in the anode.
>
>> This paradox is a hard swallow for many (especially those who try to
>> argue the source's non-dissipative characteristic). Those who choke
>> generally sputter about perfect switches and current conduction angle.
>> If researchers who attempt to measure the Z of a real transmitter as
>> source fail to find a real R component strongly correlated to the
>> specification for Tube Plate Resistance, then their method is highly
>> suspect.
>
>But what has this to do with the difference of velocity of the wave in free
>space and the velocity of the current in the medium.

Hi Gary,

I would speculate that your question is not so much about tubes (my
focus for this discussion and the subject of this thread) but rather
with an antenna and the open space it is found in. This actually

changes nothing but the physical scale of the discussion. There is one point that can be fraught with problems: there is no current of electrons flowing in free space in the same manner as between the cathode and the anode of our tube. The current of free space is "induced" too. Being "induced," the effects are transmitted at a speed as a function of the media's density (a denser media will propagate either light or RF slower); however, the electrons in this induced current that move as a consequence of the initial current in the tube will never move as far, nor as fast as within that same tube.

The frequent homily heard here is that radiation is a product of the acceleration of charge. This only happens at the source, and everywhere else an induced current moves the effect as quickly (in relation to the media it is moving in), but not the charges (electrons). This warn aphorism has been tossed around so much, I am surprised that the same one's who use this crutch don't acknowledge that the deceleration of charge is a dissipative (their words) resistance already found in the source.

73's
Richard Clark, KB7QHC

3595. Omni Antenna and Point to Point

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 02:03:35 UTC
From: Kell Jemison <kjemison@tampabay.rr.com>
Message-ID: <Xr_k6.153795$TI3.29860741@typhoon.tampabay.rr.com>
Source record: 169867

Hello,

I wanted to know if 2 Omni antennas arecapable of being used as a point to point system?

example:
Building A - Omni antenna

Building B - Omni antenna

Or, does one of the antennas need to be of the directional type?

Thank you in advance
Kell Jemison

3596. Re: Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 02:18:30 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9476F6.1EAEC901@IEEE.org>
Source record: 169769

RanHefner wrote:
> I need to make a balun using a 1/2-wave section of coax cable. I must take
> into consideration the velocity factory of the cable when measuring it. I
> know it is probably simple, but it escapes me at the moment. What is the
> equation for this?

VF depends on the dielectic. It's 0.66 for RG8, RG58, RG213, RG214
RG174, and RG316. It's 0.84 for 9913, and RG8X. 0.85 for LM400.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3597. BEST VERTICAL ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 03:02:28 UTC
From: Richard <dr5492@hotmail.com>
Message-ID: <97208m$si1$1@dagobah.blueriver.net>
Source record: 169773

I am looking at purchasing a multiband vertical antenna. I am wanting some advice from those with previous experience regarding various multiband antennas. I am wondering what the best would be. Right now I am looking at one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for your help

3598. BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 03:05:22 UTC
From: Richard <dr5492@hotmail.com>
Message-ID: <9720e4$si5$1@dagobah.blueriver.net>
Source record: 169772

I am looking at purchasing a multiband vertical antenna. I am wanting some advice from those with previous experience regarding various multiband antennas. I am wondering what the best would be. Right now I am looking at one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for your help

3599. Re: Yaesu ATAS100 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 03:21:11 UTC
From: ik7565@erols.com
Message-ID: <3A9485A7.FE5B340D@erols.com>
Source record: 169770

Post some reports on your Isotrons! I'm antenna-challenged also and
looking for alternatives.

73 de N8IK

Gary Pewitt wrote:
>
> Well, I got the ATAS-100 and it worked for about two days then it
> stopped tuning. I took it back and exchanged it for two Isotron
> combinations. 80/40 meter and 20/15/10 meter. They are
> mounted on two 5 foot masts supported by rooftop type tripods.
> Currently standing in my living room. Works well with a tuner.
> Sure glad I got that MFJ-259 analyzer to set them up with.
> I hope to transfer them to my second floor balcony when the
> weather warms up a bit. Live and learn. 73 Gary
>
> On Thu, 25 Jan 2001 17:16:50 GMT, gpewitt@execpc.com (Gary Pewitt)
> wrote:
>
> >Does anyone have experiance with the Yaesu ATAS100 antenna. It looks
> >to be a version of the screwdriver. I am planning to buy a Yaesu
> >FT-847 soon and this antenna is listed as an accessory. It's supposed
> >to cover 160 meters to 440 mhz. That's asking a -lot- from one
> >antenna. It's supposed to auto tune too I believe. If it works like
> >a screwdriver and becomes resonent on each band then it won't need an
> >antenna tunner right? I live in a condo and am thinking of cutting a
> >small hole in the ceiling of a closet and poking the antenna up into
> >the attic. I am not allowed any outdoor antennas at all. I've heard
> >nothing but good things about the screwdriver antennas but the ones
> >I've seen info on only cover 80 to 10 meters.
> >Any information greatly appreciated. Thanks Gary N9ZSV
> >
> >Gary Pewitt N9ZSV
> >414 355 8147
>
> Gary Pewitt N9ZSV
> 414 355 8147

3600. Re: Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 03:27:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A94872F.4725A490@eznec.com>
Source record: 169771

The velocity factor is 1/sqrt(K) where K is the effective dielectric constant of the dielectric containing the field. In coax, the field is entirely within the dielectric, so K is the dielectric constant of the insulating material between the conductors. This works out to be a velocity factor of 0.66 for solid polyethylene and 0.69 for PTFE Teflon insulated cables. I've measured a number of foamed dielectric cables and have found them to vary a great deal. Apparently the manufacturers don't have very good control over how what percentage of air the mix has. (And, since they do seem to control the conductor diameters pretty well, this means that the Z0 varies quite a bit.) I measure the VF of a foamed cable if it's really important. I consider the manufacturer's specification for foamed dielectric cable only as a guideline, and expect to do some cut and try if that's all I've got to go by.

Roy Lewallen, W7EL

RanHefner wrote:
>
> I need to make a balun using a 1/2-wave section of coax cable. I must take
> into consideration the velocity factory of the cable when measuring it. I
> know it is probably simple, but it escapes me at the moment. What is the
> equation for this?
>
> Thanks.
>
> ----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
> http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
> NewsOne.Net prohibits users from posting spam. If this or other posts
> made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3601. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 04:49:37 UTC
From: dputnick@alumni.caltech.edu
Message-ID: <3a94998e.40014087@207.217.77.21>
Source record: 169774

On Wed, 21 Feb 2001 22:05:22 -0500, "Richard" <dr5492@hotmail.com>
wrote:
>I am looking at purchasing a multiband vertical antenna. I am wanting some
>advice from those with previous experience regarding various multiband
>antennas. I am wondering what the best would be. Right now I am looking at
>one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for your
>help

You'll need to tell us what you mean by "best". Best price, easiest
assembly, easiest tuning, best construction, highest gain, lowest
SWR, nicest looking, etc.

3602. Re: Remote-tuned multiband vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 05:47:22 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A94A7EA.73A0@wt.net>
Source record: 169775

Tom W8JI wrote:

>
> I found the part where he said 120 radials are necessary when on the
> ground somewhat odd. It was almost like he was trying to exagerate the
> work needed for a conventional system.
>
> Anyone with any sense at all for this problem knows that once you get
> to 50 or 60 radials efficiency is almost 100%. Even 30 radials gets
> you pretty close to the flat part of the efficiency curve.
>
> Even if all other things were equal, which they are not, I'd never
> put up with the mess of having four wires that are radiating and
> coupling into everything around them. Just the complexities of not
> being able to properly ground the system for lightning, and the fact
> it would only be good on one band, is more than enough to chill me on
> the idea.
>
> 73 Tom

I think an elevated ground plane has a place, but not on 160m. Or at least not unless you want to mount at a minimum of 125 ft in the air. And at that height even though 4 radials will do a good job, you really need 8-10 to equal the 120 on the ground. Add to that the 125 ft radiator if full size, and you are looking at a 250 ft high structure which likely won't be too much better than the antenna on the ground with 60-120 radials. I don't think it's worth it in most cases. I'd probably rather run try 250 ft structure as a 1/2 wl with 1/2 wl radials on the ground ala BC. But the higher bands, it's not too much trouble to run a ground plane. You can multi band to an extent. I ran my 40 gp on 17m as a 5/8, and it also did fairly decent on 15m even with the fairly high angles. But I had to run a 24v relay to switch bands by bypassing the coil for 17m when used on 40m. But if money or height were no object for one band, I'd probably rather have a GP at 1/2 wl with 4 radials, than a ground mount with 120 radials. I think the added benefit of being clear of the surroundings helps a bit. But of course on 160m, this is a appx 375 ft structure. Won't be happening here any time soon. Heck, even on 40m, you need an elevated GP 35 ft in the air to get by with 4 radials and have decent performance. I know that from trying it here. It did not do near as well when lowered to the 15-20 ft level. How people think they can use less than that height on 160m and do well is a mystery to me. I guess they think they do well, because they have never tried the many radials on the ground to compare to. Or they have never tried the elelvated antenna at a decent height for them to work properly. MK

--
http://web.wt.net/~nm5k

3603. Re: Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 05:52:38 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A94A926.2C46@wt.net>
Source record: 169776

RanHefner wrote:
>
> I need to make a balun using a 1/2-wave section of coax cable. I must take
> into consideration the velocity factory of the cable when measuring it. I
> know it is probably simple, but it escapes me at the moment. What is the
> equation for this?
>
> Thanks.

You mean the VF problem, or the 1/2 wave of coax problem? Tne formula
for the 1/2 wave of coax is
492 x VF / freq .MK

--
http://web.wt.net/~nm5k

3604. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 06:49:28 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <972h9tsca1@lure.pipex.net>
Source record: 169779

"Peter O. Brackett" wrote ..
> Gary:
> > Ah! the 'leading' is partly the Imp within me,
> > but the root cause is wanting to stimulate people to think.
>
> As the comedian Skip Wilson used to say, "the devil made me do it".

'advocatus diaboli' no doubt.

> Heh, heh ... with you it's the Imp.

Impetus activus

> Socrates would be proud.

Look, if I gotta live in a barrel,
make sure that you keep it well replenished. :)

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3605. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 07:37:58 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <972h9vsca2@lure.pipex.net>
Source record: 169778

"VE9SRB" wrote ...
> "Gary Peach" wrote ...
> > Which raises the question;
> > does a 40 Watt wave travel twice as far as a 10 Watt wave?
>
> I guess this really depends mostly on the your perspective, the effective
> aperture of your receive antenna, your system losses, noise and your
> receiver sensitivity.

Assume identical systems, in fact the same systems,
but with the wick turned up a bit on the transmitter.

> If you can't receive the 10 watt wave, is it really even there?

That is threshold, the thing is, can you move your receiver twice the
distance away if you use 4 times the power?

Now prove it, assuming an Rx with a noise temperature of 12°K, no
modulation?

Remember that those deep deep space spacecraft only have 10 Watt
transmitters on board.
What is the limit of their useful range, (assume unmodulated)?
note: space loss to 16,000 km at 2 Ghz = 183 dB

What is the duration of a mission [time to reach threshold]?
Assume a vector velocity away from the Earth of 29,250 MPH
[13,000 m/s]

Assume a useful 3 dB signal to noise ratio for data transmission at 8Hz,
how much shorter in time and distance is the mission?
Show calculations.

> > >The distribution of energy in space as it travels
> > > away from a source is not a heat dissipation issue as your statement
> > > > might lead some to believe.
> > Ah! the 'leading' is partly the Imp within me, but the root cause is
> > wanting to stimulate people to think.
>
> You do a fine job.

I hope that we can enjoy it together.
You guys are fine examples of remaining cool and calm in debate and not
resorting to personal insults, (the sure sign that the argument is lost).
It is nice to keep the conversation as light though serious as possible in a
hobby group like this. Hopefully remembering the meaning of the word hobby:

hob�by (h�b��) noun
plural hob�bies
An activity or interest pursued outside one's regular occupation
and engaged in primarily for pleasure.

[Middle English hobi, hobyn, small horse,
hobby horse, perhaps from Hobin, Hobby, nickname for Robert.]
� hob�by�ist noun

And ensuring that the primary purpose of 'pleasure' is served first and at
all times.
Of course my remarks are not aimed at you specifically,
please forgive me for using your post as a billboard.
--
Gary7SLL
51� 23' 50" N 1� 19' 58"W
http://www.gary.peach.dial.pipex.com/

-< trying out some superscript 13 x 10� ms�� >-

3606. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 09:40:45 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <972mm1$iu1$1@slb6.atl.mindspring.net>
Source record: 169780

Reg:

Thanks for the detailed explanation of the progress of the thread and Tom's and your positions. I had not been following as closely as I should have. You did a good job of summarizing the thread.

After due consideration, heere's my comments on your controversy over Q with Tom...

When it comes to measuring high values of Q, the most applicable "old wives wisdom" applicable is the old cliche, "in theory, theory and practice are the same, in practice they are different."

I do understand that the "accuracy" of a Q measurement or calculation depends critically upon stray or secondary parameters which are often difficult to measure and that the higher the value of Q, the more inaccurate the calculation or measurement must be.

The "perfect" Q is infinite, or at least very very large compared to our experience, but the closer one approaches the infinite the more difficult it becomes to measure or calculate, and the higher the inaccuracies in its' determination, both relative (%) and absolute!

Q suffers from that affliction common to many "difficult to determine quantities", which is that it can only really be determined as the difference between two large numbers which are very close in value. Generally determining such a difference is a thing you don't want to be doing!

Most laboratory measurements of Q are made by simple instruments by making use of the "approximate" formula Q = f0/(f2 - f1) where fo is the resonant frequency and f1 and f2 are the two "3dB down" frequencies on either side of a very sharp resonant peak.

Now if Q is very large, say up to 10,000 or more and f0 is in the MHz, then f1 and f2 are two very large numbers quite close together, and their numerical difference will dimish in signifigance so as to frustrate the most persistent of metrologists! Heh, heh.

In cases of very high Q's even 10 digit calculators won't be able to determine the difference between f1 and f2, even if f1 and f2 could be individually measured to the required accuracy.

Because of the nature of Q, i.e. perfection is immeasurable [infinite], and as Q approaches its' perfection, the accuracy with which one can know the precise value of Q decreases. Frustating! This is because it is essentially a strong function [reciprocal] of the tiny difference between

two very large numbers of approximately equal value. Thus all discussions of Q are destined for difficulties and controversy.

And so... for satisfactory resolution of these controversies, the protagonists, [Tom and Reg?] require the most candid and detailed sharing of both laboratory results and mathematical models.

To make progress, one must push forward into the details of both the lab measurements and their error analysis and with the mathematical models used for calculation.

I do understand that, because of these facts, low values of Q are easy to calculate and measure, in terms of their relative accuracy.

And that [extremely] high values of Q are extremely difficult to measure accurately.

For instance the Q of a quartz crystal [Which is the equivalent of a simple LC series tank circuit.] can often exceed a value of 25,000 - 100,000 or more! I challenge anyone here to produce for me a standard "off the shelf" Q meter made by any manufacturer that will even give a satisfactory "indication" of, let alone an accurate value for the Q of any quarz crystal.

Does anyone reading this thread know who makes Q meters for measuring the Q of quartz crystals? A very narrow field of instrument sales indeed.

And so, I agree that measuring, and indeed calculating, the values of Q, especially for high values, is fraught with difficulties and not for the faint of heart.

Getting agreement between measurement and calculation for high Q values is extremely difficult and depends critically upon a full understanding of all the things, both practical laboratory measureable things as well as mathematical model things, involved in the measurements and calculations. And as we know, most of those things are "secondary" or "stray", i.e. they are things like interwinding capacitances for example, that do not appear on anybody's schematic diagram. They are things which often no one knows are there until there is a disagreement between theory and practice. And so getting agreement on them is difficult.

Only when we get disagreement between theory [mathematical model] and practice [measurements] can we refine and perfect both!

And with Q, as with life, we are ultimately destined to "fail" for as we push forward to ever higher values of Q trying to reconcile theory and practice we will continue to find ever larger areas of disagreement. In life as we push forward we face death. That's exactly the end result for the final successful determination of very high Q's. We will all be dead by the time we can successfully measure a Q of 100 million! Ultimately the difference between theory and practice will itself become the difference between two very nearly equal large numbers... and once we reach that lofty level of disagreement, well...

Reg says the Q is infinite [Oops his computer registers just overflowed!]
and Tom agrees that he also measures an infinite value on his lab Q meter,
who among us will dare...

to punch those two infinities into their lowly desk calculator and press the
difference key (that's the "-") to find the difference between those two
infinities and determine the winner... Tom or Reg....

In theory, theory and practice are the same, in practice they are
different...

We are all presented with an opportunitiy to learn new things here... if
only theory (Reg) and practice (Tom) would collaborate on this thread, if
only they would share, and be more candid and open about their mathematical
models and their laboratory practice.

If you both hold your cards to the vest then no one will win! We all have
something to learn here. Cooperate, "just do it!"

Thoughts, comments?

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:970mg6cma1@uranium.btinternet.com...
>
> Peter O. Brackett wrote -
> > Reg:
> >
> > I can only assume that your programs do what you say they do
> ==========
>
> Pete, there's a flaw in your first line. Regarding predicting
> accuracy I don't state say what my programs do. I leave it to users
> to discover for themselves they are accurate enough for the
> intended purposes.
> ==========
>
> >... however you are testing my assumptions about your good work
> now, because... from your observations below, I see that - Your
> pique is showing...
>
> ==========
>
> Not pique - just tiredness caused by evasive replies.
>
> ==========
> >
> > How about sharing with us some of your algorithms/formula and
> comparisons to
> > actual measurements.
> >
> ==========

>
> I can assure you, you would be unable to understand the source code
> and and follow the track of reasoning! After a few months absence I
> have difficulty myself. There would be more quibbling and haggling
> and sidetracking between unqualified participants than has occurred
> with Conjugate Matches and Fractals put together. This would wreck
> the confidence which has accumulated during the last couple of
> years. In any case this is a radio amateur newsgroup - not a
> mathematics and computer programming training course.
>
> ==========
> >
> > It's unfair of you to ask Tom to make measurements to verify
> > your programs for you.
> >
> ==========
>
> There are no rules to this game. ;o) I did not ask Tom to veryify
> my programs for me. I asked him to numerically quantify his
> criticisms rather than voice an opnion. In other words - what was
> the source of HIS data with which he had compared programs.
> Everyone already knows the source of MY data - it's the programs
> themselves. And his criticism was of only one of the computed
> parameters in one of 35 or so programs.
>
> To clarify your thoughts -
>
> Tom originally said that all computer programs over-estimate Q and
> max Q occurs when coil turns are almost touching. He said this was
> due to programmers ignoring the effect of capacitance between
> turns. He specifically included my programs with the others. (I
> have never seen any others myself.) But he did not state what HIS
> measurement standards were.
>
> I asked him to look at SOLNOID2 for the wire spacing at which
> maximum Q occurs. In another branch of this topic he then withdrew
> his criticism about my calculation of Q and replaced it with a
> criticism of the International Standards of Measurements. He also
> withdrew his view that Q decreases with close spacing because of
> increased capacitance between turns.
>
> Tom did not replied to my question as to whether he had heard of
> the formula I gave which relates Q, L and R to stray capacitance.
> In reply to your request for the secret "algorithms" it is used in
> SOLNOID2. It implies that the effective Q of a coil depends on
> whether the coil is used in a series LC or a parallel LC circuit.
> Tom did not mention that important (in the present context) fact.
>
> For example, the effective Q of a coil is lower in a Pi-match
> output circuit than the same coil when used in a tuned tank

> circuit.
>
> A comment on Q measurements -
>
> If, as Tom says, Q values at HF cannot be greater than 1000 or
> thereabouts, then to obtain any degree of accuracy the Q of the
> conventional Q-meter itself would have to be several times greater
> than that and accurately known. And to correct measurements
> calculations are unavoidable.
>
> Working values of Q when inside a screening enclosure or adjacent
> to poor materials may be appreciably less than values measured on
> an isolated coil. Calculated values obviously apply to isolated
> coils. It is important to note it is not the coil which gets warm
> under enclosed conditions but the enclosure. When a magloop or
> dipole is near the ground it is not the magloop or dipole which
> warms up but the ground.
>
> But accurate values of Q are not required for engineering purposes.
> It is sufficient to know Q is greater than some minimum value and
> calculated values are good enough. Indeed very high calculated
> values may be more accurate than the measured variety.
>
> How is the intrinsic Q of a Q-meter determined ?
>
> The only other use for Q values is to provide an enduring topic for
> argument between perfectionists (bless them) on this newsgroup.
> ;o)
>
> ========================
> >
> > Thoughts, comments,
> >
> ========================
>
> See above.
> Reg
>
>

3607. Roof Radials on a Butternut HF6V Help??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 09:43:17 UTC
From: mmorjoseph@socal.rr.com
Message-ID: <ekn99t0716t9k37cif8em94753i5mutgpi@4ax.com>
Source record: 169781

I have a real nice HF6V vertical antenna ready to put up on my town house rood problem is that I can not run all the ground radials in 360 degrees pattern and I do not have like 33 ft on some sides for the 40meter ground I have like half a "Pie " shape to work with what do I do?? I really want to put the antenna up and have it work good.. I do see that there is a CPK Countpoise kit but not shure if I want to buy that and install it... how about the roof radial kit from Butternut is it work buying and waht do I do when I can not put some radials out using only half of my roof any help on this please...
Mike KC6 RDJ.. new General in so cal..

3608. Walter was .. writing a new book ..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 10:56:44 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Qe6l6.185$uW1.350@newsfeed.slurp.net>
Source record: 169782

.. where is it?

73, Dave, K3BHJ

3609. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 11:27:51 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a94f7bb_1@news.cybertours.com>
Source record: 169783

"Richard" <dr5492@hotmail.com> wrote in message
news:9720e4$si5$1@dagobah.blueriver.net...
> I am looking at purchasing a multiband vertical antenna. I am wanting some
> advice from those with previous experience regarding various multiband
> antennas. I am wondering what the best would be. Right now I am looking at
> one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for
your
> help

Hi Richard,
I would Checkout Butternut , you will most likey get all kinds of
conflicting advise . But in my book the Butternut is the best all round
vertical on the market today.
Web page at
http://www.bencher.com/ant_select.html
hope this is of some help in your search .
73 Dave kc1di/qrp

3610. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 11:40:20 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <973o5u$g76$1@lure.pipex.net>
Source record: 169810

"Roy Lewallen" wrote ...
> Gary Peach wrote:
> > If we carry this idea a little further and use the step input of voltage
as
> > a test signal we can construct a time domain reflectometer.
> >
> > For those unfamiliar with this type of instrument, a voltage step is
> > continuously applied to the line under test, on the cathode ray display
of
> > the device pulses of reflected energy show on the time trace whose
magnitude
> > is proportional to the miss match of the discontinuity and whose time
delay
> > from the original step transition is proportional to twice the distance
from
> > the instrument to the discontinuity multiplied by the propagation
velocity
> > of the line.
> > If the line is left unterminated the double voltage is reflected
diminished
> > by twice the line loss (VE9SRB's alpha using natural logarithms
e^(-alpha))
>
> The response of a TDR to a lossy line is a rising, not falling, value.

The attenuation is rising, but the voltage displayed is falling.

> Here's a way to understand why. If the TDR step encounters an open
> circuit, you'll see a positive reflection come back which is equal to
> the amplitude of the original step (assuming the step generator source
> resistance equals the line's Z0, the usual case), for a total amplitude
> after the reflection of twice the initial step value. Now imagine a very
> long line which has loss, so that essentially none of the signal
> returns, and the DC ohmic resistance is very high. Initially, the TDR
> sees Z0, but the resistance increases as time goes on. In the limit,
> after a great deal of time, it'll see the same value as an ohmmeter. If
> the line is open, this will of course be infinite. If the line is
> terminated in a short circut, the resistance looking into the line will
> be the ohmic resistance of the line itself. For a long, lossy line, this
> will be a much higher value than Z0.

Are not the losses in shunt with the line?
The dielectric losses generally being more signicant than the conduction los
ses in distributed series with the line.

> Reg is correct in saying that you could measure the Z0 of an infinitely
> long line with an ohmmeter.

Only if you are very quick. ;)
Whatever became or Evershed and Vignoles Megger bridges?

>But only if the line has absolutely zero loss.
> Otherwise, you'll measure a resistance that increases with time
> until it eventually reads open.

Just like a good quality capacitor

>For ordinary cable, I imagine this would
> happen much faster than the meter could respond, but you'd have to have
> an impossibly long piece of it to do a test.

And what type of Ohm Meter would you use?
a Multimeter
a Whetstone Bridge
a Megger

Each of these might be expected to have different internal resistance and
some would act as a voltage source and some a current source.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3611. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 11:55:05 UTC
From: Richard <dr5492@hotmail.com>
Message-ID: <972vfb$u29$1@dagobah.blueriver.net>
Source record: 169784

Mostly I am looking at performance based things. I don't want to buy
something cheap and it turn out bad. Looking for the best overall
performance for 400 dollars or less. I have heard a lot about GAP Antennas
but just wondering how good they are. I have seen the Butternut type of
antenna but looking for the best performer at a fair price. Hope this clears
up my question somewhat better. Construction and tuning is realy important
too. Thanks.

"Don Putnick" <dputnick@alumni.caltech.edu> wrote in message
news:3a94998e.40014087@207.217.77.21...
> On Wed, 21 Feb 2001 22:05:22 -0500, "Richard" <dr5492@hotmail.com>
> wrote:
> >I am looking at purchasing a multiband vertical antenna. I am wanting
some
> >advice from those with previous experience regarding various multiband
> >antennas. I am wondering what the best would be. Right now I am looking
at
> >one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for
your
> >help
>
> You'll need to tell us what you mean by "best". Best price, easiest
> assembly, easiest tuning, best construction, highest gain, lowest
> SWR, nicest looking, etc.

3612. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 12:13:51 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <973o60$g76$2@lure.pipex.net>
Source record: 169811

"Richard Harrison" wrote
> Gary Peach wrote:
> "The current will not remain constant it will decay exponentially so we
> can`t apply Ohm`s law."
>
> Reg Edwards was applying an ohmmeter to an infinitely long lossless
> transmission line.
>
> The line has distributed inductance in addition to distributed
> capacitance. We are not just charging a capacitor here.

Zo = SQRT(L/C)

What meaning does L have at DC once the steady state is reached
di/dt becomes zero therfore Ldi/dt becomes Zero and the voltage drop across
the series inductance is only that due to the resistance of the wire, for Cu
160 uOhm per metre.
Of course for an infinitely long line the nth minus one distributed
capacitor is not going to have a lot of voltage difference across the line
left to charge it.
So this wouldn't be a lossless line.
We would need to use a superconductor to realise such an animal.

> The inductance allows current to rise but inhibits it. Capacitance
> readily accepts current but inhibits voltage rise.The long line with
> distributed iductance and capacitance does not appear as either an
> inductance or a capacitance. It appears as a resistance. Not the kind
> that eats energy, only the volts over amps kind.

Volts over amps provided that both last for long enough to be measured is
surely energy eating.
What you are really saying is that the time span over which you wish to make
your measurement is to be limited.
If you blink whilst making this Ohm meter measurement you'll miss it.

Oh! I forgot it's an infinite line we'll never know if it is open, short or
matched.
We just keep supplying EMF and the line keeps on eating current.
I think the other end of this line must be dangling into a black hole and
all the electrons are being sucked in never to return.

> There is no charge-up exponential decrease in current into the infinite
> lossless transmission line. Reg`s ohmmeter would continue supplying
> current into the line at a constant rate and the line would continue
> carrying the current away. The rate at which the line accepts current is
> only determined by its surge impedance.

Is that SQRT(L/C) ?

> The line is lossless so there is no exponential decay along the length
> of the line.

I love that thought,
(E-1)-1)-1)-1)-1)-1)-1)
.............................-1)-1).........................-1)-1)...........
....

It's gonna be a BiiG fridge.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3613. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 12:18:31 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <973o61$g76$3@lure.pipex.net>
Source record: 169808

"Richard Harrison" wrote
> Gary Peach wrote:
> "---if you are going to quote standard texts you should not edit them to
> make some conceived point."
>
> It is impractical to quote the whole book. I agree with all of it. I
> don`t aim to twist Terman`s meaning.
>
> I agree with you that half of the wave`s energy is contained in the
> E-field and half is contained in the H-field. The point is they are in
> quadrature. One field is not exciting an antenna for awhile, while the
> other field rests, and then alternating with the other field.

It depends if you are considering the line a a point z "along the wave path"
in which case you are considering an alternating Voltage, or if you are
considering an instant in time in which case we will see a voltage varying
along the z axis gradually changing polarity.
There is no gap in the excitation; it is a smooth process in general
following a sine law.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3614. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 13:07:01 UTC
From: Huey Ohmer <hohmer@petronet.net>
Message-ID: <3A950EF5.4FA9F0A7@petronet.net>
Source record: 169786

Hi Richard,

I too had a Butternut vertical ground mounted. I got great results with it. If you have a melal type fence around the yard such as hurricane type fence, mount it on one of the post as the fence helped give it counterpoise. My buddy did the same after seeing the results of mine and he noticed a big difference and even worked dx with the big boys without any amp. I sold mine but am thinking about another one and taking down all the tower and antennas to go low profile.
Good luck and 73's.

de Huey(n5dvi)

KC1DI wrote:

> "Richard" <dr5492@hotmail.com> wrote in message
> news:9720e4$si5$1@dagobah.blueriver.net...
> > I am looking at purchasing a multiband vertical antenna. I am wanting some
> > advice from those with previous experience regarding various multiband
> > antennas. I am wondering what the best would be. Right now I am looking at
> > one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for
> your
> > help
>
> Hi Richard,
> I would Checkout Butternut , you will most likey get all kinds of
> conflicting advise . But in my book the Butternut is the best all round
> vertical on the market today.
> Web page at
> http://www.bencher.com/ant_select.html
> hope this is of some help in your search .
> 73 Dave kc1di/qrp

3615. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 13:11:08 UTC
From: lbratche <lbratche@swbell.net>
Message-ID: <4c8l6.607$1p6.214964@nnrp2.sbc.net>
Source record: 169785

You might consider the Butternut HF6V. In my opinion, it is the best
vertical out there! You can chck out reviews of the Butternut and others at
www.eham.com

"Richard" <dr5492@hotmail.com> wrote in message
news:9720e4$si5$1@dagobah.blueriver.net...
> I am looking at purchasing a multiband vertical antenna. I am wanting some
> advice from those with previous experience regarding various multiband
> antennas. I am wondering what the best would be. Right now I am looking at
> one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for
your
> help
>
>
>
>
>

3616. Re: Walter was .. writing a new book ..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 13:32:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A951503.F9619835@IEEE.org>
Source record: 169787

"David J. Windisch" wrote:
> .. where is it?

Health problems in Walt's family have caused a delay.
--
http://www.mindspring.com/~w6rca

3617. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 13:36:55 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9515F7.D175E3AD@IEEE.org>
Source record: 169788

Richard wrote:
> Mostly I am looking at performance based things. I don't want to buy
> something cheap and it turn out bad.

Lots of hams buy something expensive and it turns out bad. The
necessary ground plane for a vertical is more effort and expense
than a $20 dipole which may outperform it. Why not try the $20
dipole first?
--
http://www.mindspring.com/~w6rca

3618. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 14:40:41 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <973o63$g76$4@lure.pipex.net>
Source record: 169809

"Richard Clark" wrote ...
> Gary Peach wrote:
> >"Richard Clark" ...
> >> Gary Peach wrote:
> >> >One thing that has puzzled me is the difference of the velocity of the
> >wave
> >> >in free space and the velocity of the currents in a medium.
> >> >How does the current flow the distance within the medium in the time
that
> >it
> >> >takes for the free space wave to reverse polarity?
> >> >Or does it?
> >> There's something here that few would pick up on. The velocity of the
> >> wave in free space and the velocity of the wave in a media different
>
> I would speculate that your question is not so much about tubes (my
> focus for this discussion and the subject of this thread)

me 2, we've gone all around the houses and had a lot of fun, now lets get
down to the fun-de-mentals of propogation.

> but rather
> with an antenna and the open space it is found in. This actually
> changes nothing but the physical scale of the discussion.

Agreed and Snell's law didn't really help a lot here, as the physics of Ham
antenna are of the order one wavelength or less

>There is one
> point that can be fraught with problems: there is no current of
> electrons flowing in free space in the same manner as between the
> cathode and the anode of our tube. The current of free space is
> "induced" too.

Quite a difficult thing to get to grips with.
For instance as an Imp I travel on a magic sley on the front of a wave
traveling out from a virtual point source. The flux expands as the surface
of a sphere out into space at PI x C
Iin other words a little greater than three time the velocity of light.
When the wave gets some good distance away from the source that flux is
spreading instanteneously throughout space. (Magnetic or Electric applies
equally)

So what is the real nature of this flux?

What is the nature of the flux (gravity) that ties the motions of the
spheres so closely together.
How can the motion of the almost invisible planet Jupiter so affect the
orbit of the Moon?

How is it that the influence travels so rapidly across such vast distance.

> Being "induced," the effects are transmitted at a
> speed as a function of the media's density (a denser media will
> propagate either light or RF slower); however, the electrons in this
> induced current that move as a consequence of the initial current in
> the tube will never move as far, nor as fast as within that same tube.

Perhaps a better way to visualise this is to consider the Cathode Ray tube;
where the effects of the electrons and their kinetic energy may be easily
demonstrated.

> The frequent homily heard here is that radiation is a product of the
> acceleration of charge. This only happens at the source, and
> everywhere else an induced current moves the effect as quickly (in
> relation to the media it is moving in), but not the charges
> (electrons). This worn aphorism has been tossed around so much, I am
> surprised that the same one's who use this crutch don't acknowledge
> that the deceleration of charge is a dissipative (their words)
> resistance already found in the source.

And what happens as the electrons plough into the phospher of a CRT?
Energy is dissipated, but resistance can not be demonstrated.
The answer has been sitting in front of us un-noticed for years.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3619. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 15:01:27 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <973o64$g76$5@lure.pipex.net>
Source record: 169812

"Mark Turner" wrote ...
> "Gary Peach" said....
> > Ah! now I see what you're up to, install the AE at 8 feet and wait for
the
> > tree to reach a descent height for an AE.
> Something like that.

> I'll saw the trunk off low down, install a hinge, and lower the tree to a
> safe working height whenever I need to fiddle with the aerial. ;)

One tree doesn't seem much,
Nero sacrificed all of Rome so that he might fiddle.
What an artist the world is losing in your eight foot drop.

> > Boy you're in for a long wait.
>
> Maybe I could insert a section or two of pole above the hinge, painted
brown
> of course so that the neighbours will think the tree just grew a little
> overnight.

A pole a day keeps planning away.

> This is my backup tx aerial, mainly used for rx of local airband.

In that case don't forget the red light.

> My main aerial is a Diamond V2000 on a 16 foot pole.
> Yes I know, that's not the
> highest aerial in the world either, but I can't get away with much higher
on
> the bungalow before domestic planning permission is withdrawn.

You really would benefit if you could get a bit more height to bring the
radiation angle down a bit. Higher the better, bit like standing on a beer
crate so that you can see over the top of a high wall.

Can you hear Barkway from your QTH?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3620. Re: Underground Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 15:06:24 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <9739sd$ge6$1@news.tribune.com>
Source record: 169790

In my Basement, I have Galvanized coregated (sp) window well liners. 4 feet high and over 6 feet around. Lots of surface in contact with the ground. I use this for my station ground, then ran a bonding wire to the water service entrance to meet the requirement that all grounds should be bonded.
KA9CAR

Michael Connly <mconnly@mn.mediaone.net> wrote in message news:3A9342C4.C3C5811E@mn.mediaone.net...
> I am putting my shack together in my walkout basement. Here in
> Minnesota, it is really COLD right now, so putting in a ground rod
> outside is not an option--probably at least a couple feet of frozen
> soil.
>
> However, I could put the ground rod under my shack. To do that I would
> simply drill (or in this cased hammerdrill) a 3/4" hole in the basement
> floor, then add some water to the hole, and pound the 8 ft. rod in.
>
> Would such an underground ground work well???
>
> Thanks
>
> Mike
>
>

3621. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 15:08:00 UTC
From: richardharrison@webtv.net
Message-ID: <7728-3A952B50-165@storefull-116.iap.bryant.webtv.net>
Source record: 169789

Gary Peach wrote:
"What is the limit of their useful range (assume unmodulated)? note: space loss to 16,000km at 2GHz=183dB.

The signal is periodic. Processing to distinguish this periodicity may be improved making a weaker signal detectable. How much can sifting the signal from its background be improved?

Whatever the noise temperature of a receiver, is it the ultimate?

Do the antennas used have the most gain you can get?

Can more transmitter be used? Can it be saved up for a big pulse?

Gary asked previously if 4x the power would send the signal 2x the distance. In general, the answer is yes when all else is equal. Every time the distance from a signal source out there in space doubles its level drops by 6 db. If space loss is 183 db at 10,000 miles, at 20,000 miles the loss is 189 db.

The gain of a dish is proportional to its diameter in wavelengths squared. How about a larger dish?

A highly directional antenna needs to be located so it isn`t aimed at a big noise source. Point it at the sun`s 6000 degrees K surface and receive 8.28x10 to the minus 14th watts or -101 dBm. This happens to satellite earth stations in the spring and fall for a short time each year. Your cable TV company announces what is happening, I suppose.

The greater the distance between transmitter and receiver, the greater doubling the distance increments the distance. What`s the limit? Is there any limit?

Best regards, Richard Harrison, KB5WZI

3622. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 15:41:34 UTC
From: richardharrison@webtv.net
Message-ID: <20992-3A95332E-13@storefull-118.iap.bryant.webtv.net>
Source record: 169791

Peter, K1PO wrote:
"Now why would you want to mess with a silly term like "dissipationless resistance"?

Surge resistance is a good term for a transmission line because it is descriptive of the dissipationless resistance exhibited by the line.

Surge resistance doesn`t describe the resistance of an antenna`s radiation load because the energy fed the antenna is being projected forever along the antenna`s length.

Surge resistance doesn`t describe the average impedance caused by an open switch during a portion of an amplifier`s conduction cycle.

The generic term "dissipationless resistance" fits them all and helps understanding via the commonality of the in-phase voltage to current ratio which has no heat conversion.

Best regards, Richard Harrison, KB5WZI

3623. Coax traps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 16:59:49 UTC
From: trinity.church@eskom.co.za
Message-ID: <3A954585.3EAFE561@intekom.co.za>
Source record: 169792

Hi
I read an article recently on coax traps. He used 2 pieces of coax.
Can any
person assist me if they have read such an article and tell me what
magazine it is in.
I think it could have been in QST.
Thanks
Stan

3624. Coax traps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:01:55 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A954603.56FB964@eskom.co.za>
Source record: 169793

Hi
I read an article recently on coax traps. He used 2 pieces of coax.
Can any
person assist me if they have read such an article and tell me what
magazine it is in.
I think it could have been in QST.
Thanks
Stan

3625. Coax traps article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:08:26 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A954789.BE16A331@eskom.co.za>
Source record: 169794

Hi
I read an article recently on coax traps. He used 2 pieces of coax.
Can any
person assist me if they have read such an article and tell me what
magazine it is in.
I think it could have been in QST.
Thanks
Stan

3626. 5B Hex: How much of a compromise is it?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:25:45 UTC
From: jack <bb@ff.com>
Message-ID: <3A954B98.396C7F73@ff.com>
Source record: 169795

compared to a C3SS beam

3627. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:28:17 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <3A954C31.2BC88717@alumni.caltech.edu>
Source record: 169796

Richard wrote:
>
> Mostly I am looking at performance based things. I don't want to buy
> something cheap and it turn out bad. Looking for the best overall
> performance for 400 dollars or less. I have heard a lot about GAP Antennas
> but just wondering how good they are. I have seen the Butternut type of
> antenna but looking for the best performer at a fair price. Hope this clears
> up my question somewhat better. Construction and tuning is realy important
> too. Thanks.

Good, I hoped you didn't take my response as a smart-a** one. Like the
others who responded, I'd recommend the Butternut HF6V (or 9V if you
want the WARC bands and 6M). I have one, roof mounted with the roof
mount kit (includes tripod and radials). Excellent construction, easy
to assemble (if you follow the instructions), but I have to be honest:
tuning it can be a sub-hobby in itself. Once you have it tuned though
it's a great performer.

As a side note, one of my friends has a Gap Titan and he's very happy
with it.

don p KK6DP

3628. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:31:48 UTC
From: Pete <pete@etep.com>
Message-ID: <82cl6.801$t67.67396@news1.rdc1.il.home.com>
Source record: 169797

Check out the Butternut HF9V too. It works on 80 mtrs on down.

"lbratche" <lbratche@swbell.net> wrote in message
news:4c8l6.607$1p6.214964@nnrp2.sbc.net...
> You might consider the Butternut HF6V. In my opinion, it is the best
> vertical out there! You can chck out reviews of the Butternut and others
at
> www.eham.com
>
> "Richard" <dr5492@hotmail.com> wrote in message
> news:9720e4$si5$1@dagobah.blueriver.net...
> > I am looking at purchasing a multiband vertical antenna. I am wanting
some
> > advice from those with previous experience regarding various multiband
> > antennas. I am wondering what the best would be. Right now I am looking
at
> > one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for
> your
> > help
> >
> >
> >
> >
> >
>
>

3629. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:41:14 UTC
From: rwclark@seanet.com
Message-ID: <3a954749.240599834@news.seanet.com>
Source record: 169798

On Thu, 22 Feb 2001 04:40:45 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>
>For instance the Q of a quartz crystal [Which is the equivalent of a simple
>LC series tank circuit.] can often exceed a value of 25,000 - 100,000 or
>more! I challenge anyone here to produce for me a standard "off the shelf"
>Q meter made by any manufacturer that will even give a satisfactory
>"indication" of, let alone an accurate value for the Q of any quarz
>crystal.
>

Hi Peter,

You have succumbed to the old wive's tale of the Q meter posed in this thread (off the shelf instrumentation indeed!). The Q Meters that have passed over my calibration bench had incredible Q's by virtue of being cavity resonators. I doubt if this specie qualifies as what this board would consider as "off the shelf." For one it dismisses the artificial premises here as absurd.

Your question above can resolve itself in simply exciting that crystal and measuring its frequency spectrum. This is already responded to by Gary in the classic determination of Q. You pine away about 10 place measurements, and yet frequency can be measured out many more places without too much effort (but certainly at a lot of expense). Given that the frequency standard of the Cesium Beam is absolute, any measurement against it will result in a beat frequency that is easily measured. I am not going to hedge my bet with the native frequency of the Beam against a crystal of the same frequency, that would be a slam dunk (if you could in fact find such a crystal).

However this focuses on the obvious solution at the expense of a repertoire of other methods that can achieve the same end. I assure you that metrologists are not so easily discouraged at technical challenges. This, however, hardly rises to the merit of "technical challenge."

Industry and the marketplace care not a whit about super Q devices. Hence the quality of "off the shelf" instrumentation is limited to their less demanding needs. Science and Engineering is not limited to the marketplace for solutions. The tenor of the question of how to calibrate a Q Meter reveals a basic ignorance of measurement, or is offered as a troll.

73's
Richard Clark, KB7QHC

3630. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:47:41 UTC
From: "David Michael Kelly"
Message-ID: <itja9tgqqnuff7c6kpr0tq059nhof7qqfm@4ax.com>
Source record: 169799

On Thu, 22 Feb 2001 07:36:55 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Lots of hams buy something expensive and it turns out bad. The
>necessary ground plane for a vertical is more effort and expense
>than a $20 dipole which may outperform it. Why not try the $20
>dipole first?

Cecil,

Still theorizing (and negotiating with my wife<g>) about my first HF antenna. I am considering the possibilities of hybridizing your No-Tune dipole and your rotatable dipole into a helically wound rotatable dipole. Ideally I would wind heavy gauge copper (#10 or #8 or #6) on a form like a 4" PVC pipe and then remove the pipe and tune it with your ladder line tuner. What I am attempting to accomplish is having as much bandwidth as possible with an antenna that has somewhat stylish appearance I can sell to my wife. I am envisioning two self supporting coils protruding from opposite sides of a mast.

Can I use a 4" diameter helically wound antenna without having an insulating core and is there a limitation about how close the wraps can be to each other? Do you see any other gotchas in my thinking?

TIA

--
david
KD7LOP

3631. NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 17:54:07 UTC
From: T Man <tman427@hotmail.com>
Message-ID: <t9ao4t7mr3rg1d@corp.supernews.com>
Source record: 169806

Hey guys,
I'm re-designing my mobile setup and need some advice. I have 1 antenna that is a Larsen Kulrod for 440 MHz. It is an NMO with the magnet mount. I am thinking of using something other than an NMO. I also want to move away from a mag-mount and go to a permanently mounted antenna. I have seen another connector that is a direct "screw-on" type connector (Not BNC,SMA, or NMO), it seemed like it would be more durable than the small contact in the NMO because it was just a stub with threads. Any suggestions will be appreciated. TIA
73! T Man

3632. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 18:08:46 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9555AE.2F41A7B7@IEEE.org>
Source record: 169802

David Michael Kelly wrote:
> Still theorizing (and negotiating with my wife<g>) ...

Isn't your wife concerned about your happiness? :-)

> Can I use a 4" diameter helically wound antenna without having an
> insulating core and is there a limitation about how close the wraps
> can be to each other? Do you see any other gotchas in my thinking?

Use the helical coil form as the insulating core. Gamma/Delta feeding
an all-band antenna gets very tricky. Another thing to worry about is
self resonance in the helical antenna. I don't know how to predict
the self-resonant frequency of a helical. Does anybody else?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3633. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 18:15:31 UTC
From: Rick Scott <kf7qz@yahoo.com>
Message-ID: <3A955743.88FE958F@yahoo.com>
Source record: 169803

Hi Richard,

Well over my years of hamming Ive owned 3. Hustler, Cushcraft and Butternut HF6V. I consider the Butternut the absolute best of the models. The Hustler I had when I first started in Calif. I did ok, but was damaged when I shipped it to spain. So I ordered the Cushcraft on recommendation by the mags. It did ok, but while I was there a friend of mine bought the Butternut and since we lived about a mile from each other we did comparisions over a year. He consistantly KILLED me in pileups (as verts go) so when I got to Maine I used my vert about a year more then sold it at a hamfest and ordered the Butternut. I have beams now but the butter nut served me many a year.

Its a great antenna if you follow the instructions it works the first time up. Get a the roof mount kit, well worth it.

I hear the HF9V is just as good.

Good luck
Rick KF7QZ

3634. Satellite dish

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 18:17:23 UTC
From: Aamer Mahmood <aamer@homemail.com>
Message-ID: <3A9557B3.861A374B@homemail.com>
Source record: 169801

Hi all,
I need a standard 18" satellite dish antenna that has a separate horn
and LNB. All the present dishes have a composite assembly containing
both the horn and an LNB.
I'd appreciate some one telling me a source for one.

--
Aamer Mahmood

3635. Re: Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 18:41:45 UTC
From: Dale Parfitt <parinc@GTE.net>
Message-ID: <3A955D0B.D57B05DF@GTE.net>
Source record: 169804

RanHefner wrote:

> I need to make a balun using a 1/2-wave section of coax cable. I must take
> into consideration the velocity factory of the cable when measuring it. I
> know it is probably simple, but it escapes me at the moment. What is the
> equation for this?
>
> Thanks.

Because the velocity factor varies from run to run, simply plugging in a manufacturer's number may not be sufficient. If you have an antenna analyzer you can use it to determine the correct length. But to answer your question, calculate a free space half wave an multiply by the VF.

Dale W4OP

3636. Re: Coax traps article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 18:49:24 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A955F34.167EB0E7@rupert.tds-az.lmco.com>
Source record: 169807

stan.holmes@eskom.co.za wrote:
>
> Hi
> I read an article recently on coax traps. He used 2 pieces of coax.
> Can any
> person assist me if they have read such an article and tell me what
> magazine it is in.
> I think it could have been in QST.
> Thanks
> Stan

Try the ARRL web sites Technical Information Service page.

http://http://www.arrl.org/tis/tismenu.html

Then select "Antenna Projects" and then "Trapped Antennas".

There are 4 articles, from QST, on trap type antennas. What
you are looking for may be in there. The articles are in
PDF format.

Martin

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

3637. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 18:51:40 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a955a0a.90357095@news.aepnet.org>
Source record: 169805

On Thu, 22 Feb 2001 04:40:45 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

[snip]
>
>For instance the Q of a quartz crystal [Which is the equivalent of a simple
>LC series tank circuit.] can often exceed a value of 25,000 - 100,000 or
>more! I challenge anyone here to produce for me a standard "off the shelf"
>Q meter made by any manufacturer that will even give a satisfactory
>"indication" of, let alone an accurate value for the Q of any quarz
>crystal.
>
>Does anyone reading this thread know who makes Q meters for measuring the Q
>of quartz crystals? A very narrow field of instrument sales indeed.

Well, it didn't have a label on it reading "Q Meter", but I used an
H-P 3577 network analyzer and software I wrote to measure 1000s of
quartz crystals and calculate their motional parameters. From this, Q
is easily determined.

Saunders & Associates makes crystal measuring equipment to do this on
the fly during crystal processing. http://www.saunders-assoc.com/

Wes Stewart N7WS
>
[snip]

3638. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:00:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A9561DC.AEA42598@eznec.com>
Source record: 169814

"Peter O. Brackett" wrote:

>. . .

> Now if Q is very large, say up to 10,000 or more and f0 is in the MHz, then
> f1 and f2 are two very large numbers quite close together, and their
> numerical difference will dimish in signifigance so as to frustrate the most
> persistent of metrologists! Heh, heh.
>
> In cases of very high Q's even 10 digit calculators won't be able to
> determine the difference between f1 and f2, even if f1 and f2 could be
> individually measured to the required accuracy.

It's not at all difficult to resolve a 1.4 kHz difference between two frequencies at 14 MHz. Your receiver does it without strain, as does even a very inexpensive frequency counter. In any case, high accuracy isn't required, just moderate resolution.

>. . .

> For instance the Q of a quartz crystal [Which is the equivalent of a simple
> LC series tank circuit.] can often exceed a value of 25,000 - 100,000 or
> more! I challenge anyone here to produce for me a standard "off the shelf"
> Q meter made by any manufacturer that will even give a satisfactory
> "indication" of, let alone an accurate value for the Q of any quarz
> crystal.

Somewhere around 8-10 years ago Wes Hayward, W7ZOI, wrote some excellent articles on designing crystal ladder filters. I believe one was in QST and one in QEX. Some filters require selecting crystals, and in the article was a simple circuit for doing that, which anyone could build at home. I'm quite sure it could be used to get the crystal Q with reasonable accuracy. Perhaps someone with easy access to the article can confirm that.

> . . .

> In theory, theory and practice are the same, in practice they are
> different...

If theory and practice are different, the theory is faulty and should be revised or replaced.

>. . .

Roy Lewallen, W7EL

3639. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:06:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A95632F.6C0E41FF@eznec.com>
Source record: 169813

Is transresistance (amplifier output voltage divided by input current) dissipationless? How about the dynamic resistance of a diode (the reciprocal of the slope of the I-V curve)? The R0 of a lossless cable is obviously "dissipationless". How about the resistive part of the Z0 of a lossy cable or other transmission medium? It looks like we've got to stuff all resistances into two pigeonholes, "dissipative" and "dissipationless". So please help me out in deciding which hole to put these in.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Peter, K1PO wrote:
> "Now why would you want to mess with a silly term like "dissipationless
> resistance"?
>
> Surge resistance is a good term for a transmission line because it is
> descriptive of the dissipationless resistance exhibited by the line.
>
> Surge resistance doesn`t describe the resistance of an antenna`s
> radiation load because the energy fed the antenna is being projected
> forever along the antenna`s length.
>
> Surge resistance doesn`t describe the average impedance caused by an
> open switch during a portion of an amplifier`s conduction cycle.
>
> The generic term "dissipationless resistance" fits them all and helps
> understanding via the commonality of the in-phase voltage to current
> ratio which has no heat conversion.
>
> Best regards, Richard Harrison, KB5WZI

3640. Re: Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:14:55 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <973offapn1@news.netmar.com>
Source record: 169818

In article <3A94A926.2C46@wt.net>, Mark Keith <nm5k@wt.net> writes:
>
>You mean the VF problem, or the 1/2 wave of coax problem? Tne formula
>for the 1/2 wave of coax is
>492 x VF / freq .MK
>
>--
>http://web.wt.net/~nm5k

Thanks Mark.

----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3641. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:16:47 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A95659F.6099AF43@IEEE.org>
Source record: 169816

Roy Lewallen wrote:
> If theory and practice are different, the theory is faulty and should be
> revised or replaced.

Depends upon whether one subscribes to a primacy of existence concept
or a primacy of consciousness concept - Aristotle VS Plato. Some people
here on r.r.a.a believe that the math model *IS* the reality.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3642. How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:16:49 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <fbma9tc4nr9e6ojh32e02b0lqv6bdllaj8@4ax.com>
Source record: 169815

Dear readers,
am trying to solve a mystery.

Have surfed at about 20 WWW pages with description,
about helix antennas, but all, with no exception, avoid strictly to
explain the matching section. There are drawings without explanations,
there are photos with hide just the critical details.

Yes, there are references to the ARRL Antenna handbook.
Yes, I bought the ARRL Antenna Handbook 19th edition.

To anticipate the result:
The ARRL chapter about the Helix is complete BULLSHIT.

The helix is very critical to match, this I know from my experiments.
At higher frequencies, say 2450 MHz, the geometrical dimensions
must be within millimeters of tolerance. To match the 140 Ohms
to the 50 Ohm cable, several possibilities I found:

1.)Quarter wavelenght transformer, about 84 Ohms.
Helix ends 0.13 * lambda above reflector plate.
Theoretically easy to calculate the dimensions, but practically
difficult to make, because already the N connector
is of a considerable size compared to the geometrical dimensions.
Impossible to adjust correctly without measuring equipment.
ARRL shows an illustration with a "feed wire" running
from the helix end to the N connector page 19-23.
Thats no match, listen, its bullshit.

2.)Bending the lowest winding towards the reflector plate.
Contradictory to the 0.13 * lamda formula.
No theoretical insight how that would fit.

3.)Soldering a strip to the last quarter turn. ARRL does give
a picture, without the information how to dimension the strip.
No explanation given, just bend the wire, until you loose patience.

4.) Not given by ARRL: make a microwave impedance
transformer by cutting a metal sheet to the form of an
elongated triangle, wide end soldered to N connector,
tip of the triangle soldered to helix end opposite of N.
For this I would like to find the dimensions calculations.

Instead of giving detailed information about the technical
aspects of that antenna, the author goes astray and blusters
about how to make wood weather proof.
Would you use wetted wood in a microwave antenna?

Good luck then :-)

Its beyond my comprehension why the ARRL author insists
on matching to 52 Ohm cable. Am not quite sure about that,
but as I recall, my cable catalogue lists only 50 Ohm cables.

Dear reader, what we should go for is not a cooking recipe
"thats how I do things", we need some theoretical
insights before we start cutting and soldering
sheet metal. Hints to literature, www, or paper,
exact broadband and narrowband helix matching welcome.

Thanks for reading,
W.
OE8UWW

3643. Re: Velocity factor calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:16:53 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <973oj5$b3a$1@news.netmar.com>
Source record: 169817

In article <3A955D0B.D57B05DF@GTE.net>, Dale Parfitt <parinc@GTE.net>
writes:
>
>
>Because the velocity factor varies from run to run, simply plugging in a
>manufacturer's number may not be sufficient. If you have an antenna analyzer
you
>can use it to determine the correct length. But to answer your question,
calculate
>a free space half wave an multiply by the VF.
>
>Dale W4OP
>

Thanks Dale.

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http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

3644. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:29:13 UTC
From: Mark Turner <mark@kram.org>
Message-ID: <e7p379.mtu.ln@kram.org>
Source record: 169719

"Gary Peach"
>
> In that case don't forget the red light.

It's not that sort of neighbourhood!

> You really would benefit if you could get a bit more height to bring the
> radiation angle down a bit. Higher the better, bit like standing on a beer
> crate so that you can see over the top of a high wall.

I know. :(

> Can you hear Barkway from your QTH?

Yes, easy. I forget which of PI or PY is at Barkway but I can open 'em both
with just a few watts and on rx they're fully quieting with a good strong
signal.

Cheers,

Mark.

3645. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:49:36 UTC
From: rwclark@seanet.com
Message-ID: <3a956a7e.249612804@news.seanet.com>
Source record: 169720

On Thu, 22 Feb 2001 11:06:23 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>How about the dynamic resistance of a diode (the
>reciprocal of the slope of the I-V curve)?

Hi Roy,

This is a common failure mechanism of LEDs when you observe their
requirements for heat dissipation. The forward voltage times the
forward current is indeed rendered into destructive heat.

Early Blue LED designs having a very high forward voltage (on the
order of 3 Volts) could not sustain the industry standard of 20 mA
without catastrophic destruction.

73's
Richard Clark, KB7QHC

3646. Re: Where are you??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 19:57:29 UTC
From: cj <cj_johansson@xhp.com>
Message-ID: <3A956F29.7E90ADB3@xhp.com>
Source record: 169751

"Dennis P. Stahr" wrote:
>
> Well, how about yourself? Where are you?
>
> Your post has that certain irony about it like the new "lifetime space
> heater" that comes with a one year warrantee, and how the "Otis Elevator"
> building in Minneapolis is only one story.

Heay, but how many elevators do they have???

3647. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 20:06:58 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <973vaiktl1@lure.pipex.net>
Source record: 169724

"Richard Harrison" wrote
> Gary Peach wrote:
> "What is the limit of their useful range (assume unmodulated)? note:
> space loss to 16,000km at 2GHz=183dB.
>
> The signal is periodic. Processing to distinguish this periodicity may
> be improved making a weaker signal detectable. How much can sifting the
> signal from its background be improved?

There will eventually be a point when the wave has insufficient energy to make any difference to the input condition of the receiver, the wave will be spent.
Please do not complicate the issue by using FFT etc.
This is a question for Hams with elementary mathematics.

> Whatever the noise temperature of a receiver, is it the ultimate?

As far as we know no, but at this stage consideration of hitech system enhance ments such as MMT will not advance this discussion of propogation. I am trying to get to grips with the simple mechanics of propgation of a signal and the limiting physical factor.

> Do the antennas used have the most gain you can get?

Spacecraft 30 dB, ground Rx dish 60 dB, Ts 12K

> Can more transmitter be used? Can it be saved up for a big pulse?

That is not the question.
The transmitter is spacecraft bourne the launch restrictions limit the power to 10 Watts.

> Gary asked previously if 4x the power would send the signal 2x the
> distance. In general, the answer is yes when all else is equal. Every
> time the distance from a signal source out there in space doubles its
> level drops by 6 db. If space loss is 183 db at 10,000 miles, at 20,000
> miles the loss is 189 db.

OK at 10,000 miles the signal is

+40 dBm + 60 dB + 30 dB -183 dB = -53 dBm

> The gain of a dish is proportional to its diameter in wavelengths
> squared. How about a larger dish?

If you have 20 Million Dollars to splash around then you can have a slightly bigger dish, or you can hire Joderel Bank. Of course you will need more than the 20 Million cos once you've increased the Range by a number of dB you'll

have to pay the staff and the running costs of the station for the additional time. Remember that if it has already taken 50 years to get out to where you are and the Spacecraft vector velocity away from Earth has remained constant at 13,000 m/s to double the distance is going to take another 50 years. also the signal rate of decrease is falling off daily. by the time that you get out to this distance the signal is falling off at something less than 0.00001 dB per day (I might not have enough naughts in that, I just guessed the number, but as an exercise you can calculate the rate of signal decay with mission elapsed time.)
So be prepared for a big bill.

OK when you find the extreme range calculate the RTLT (Round Trip Light Time), you can use 3 x 10^8 m/s as the velocity of propogation.
When you derive this number you like me will be amused when you next see Captain Pickard phoning home for advice.
Imagine that you are on the Space ship and your means of communication is exactly the same as posting to this news group. Think how long it takes to get a reply to your posting and multiply the delay by a good bit, (if you know the RTLT you'll know how long a message will take) the 3 second delay between here and the Moon made life difficult, imagine how much more difficult would be the delay to Mars at its closest approach to Earth, Robot Wars control is nothing compared to that problem. Think how you might overcome the space delay for an unmanned mission to a planet.

> A highly directional antenna needs to be located so it isn`t aimed at a
> big noise source.

Assume that the whole aperature is illuminated by the 4°K background noise of the universe and is included within the 12°K Ts

>Point it at the sun`s 6000 degrees K surface and
> receive 8.28x10 to the minus 14th watts or -101 dBm.

The background noise of the Moon at 150°K , the moon subtends an angle 0.5 degrees at the Earth sufficient to completly fill the 0.3° or 0.1° beam width of the Earth antenna was sufficient to degrade the expected signal to noise of Surveyor by 10 log (150/40) = 5.7 dB, Real time TV from Apollo was nearly not a goer until the knitted gold wire parabolic dish was made to increase the ERP of the Apollo signal to be within the 30 dB communications margin.

>This happens to
> satellite earth stations in the spring and fall for a short time each
> year. Your cable TV company announces what is happening, I suppose.

What is the duration of this seasonal effect?

> The greater the distance between transmitter and receiver, the greater
> doubling the distance increments the distance. What`s the limit? Is
> there any limit?

I am asking the limit of range for a 10 Watt unmodulated carrier and a 12°K Ts.

assume a practical dish on the space craft gain 30 dB.
Dish gain for receiver 60 dB.
The limit is set by the noise threshold of the Receiver and the launch
constraints upon the Spacecraft transmitter being of the order 10 Watts.
More power bigger power supply, (for this mission only and onboard nuclear
generator will fit the bill cos the Sun is gonna get so far away that Solar
cells will not provide any power at all.)

Get a much bigger Rocket and you can carry a bigger spacecraft and may be a more powerful transmitter. Of course improvements in Transmitter efficiency will have the same effect as a bigger Rocket, but at a fraction of the cost. The same is true of Ham communications, a little money spent on a good Receiveing antenna and a good Noise Figure receiver (reasonably cheap these days) is worth a lot of money spent on Linear amplifiers. Of course at low HF the limiting factor is Sky |Noise and for a given path in order to improve the communications Signal to Noise ratio Only more transmitter power and a better transmitting AE will acheive the desired improvement in a given communications mode. Change the mode of communication to say PSK31 and the same old transmitter will have to have its power wound down to pack in the numbers of transmitters that can now occupy the old bit of spectrum and still have excellent communication margins.

But to really get a feel for flying a Deep Space spacecraft do the sums
yourself and feel the vastness of space.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3648. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 20:29:10 UTC
From: rwclark@seanet.com
Message-ID: <3a9875ac.252474459@news.seanet.com>
Source record: 169721

On Thu, 22 Feb 2001 14:40:41 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>And what happens as the electrons plough into the phospher of a CRT?
>Energy is dissipated, but resistance can not be demonstrated.
>The answer has been sitting in front of us un-noticed for years.
>
>--
>Gary7SLL
> 51ï¿½ 23' 50" N 1ï¿½ 19' 58"W
>http://www.gary.peach.dial.pipex.com/

Hi Gary,

No resistance? That begs the question: why do you expect it for this scenario (this is the danger of switching the focus and maintaining the same argument)?

When an electron encounters the phosphor, it reacts at the atomic scale (as so it does with the tube's plate) where the energy is converted into a photon. Given that the plate of a triode does not exhibit phosphorescence (normally), there is no option to total conversion of the Beam's inertia into heat (the plate dissipation factor). The resistance in the phosphor is found in the efficiency of its conversion of an electron to a photon, but now we introduce yet more parameters where the simple Triode sufficed. If the new scenario presents a completely efficient conversion (unlikely) there is no heat shed.

This is simply another Q issue. However it is the Q of an atomic resonance related to the De Broglie Wave.

As I reach up and touch the screen of my monitor, I note that the temperature is in excess of ambient. This heat is not coming from the filament, but there is admittedly a component of it due to the electronics within the enclosure. Perhaps you should re-consider the issue of this being "un-noticed." Then again, perhaps not. You certainly have the background to perform a caloric measurement, but this tangent is off-scale.

73's
Richard Clark, KB7QHC

3649. Re: NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 20:31:49 UTC
From: w9vhe1@email.msn.com
Message-ID: <3a957715.88067356@netnews.msn.com>
Source record: 169671

There are adapterf for NMO to PL258/9 plugs somewhere.

On Thu, 22 Feb 2001 11:54:07 -0600, "T Man" <tman427@hotmail.com>
wrote:

>Hey guys,
>I'm re-designing my mobile setup and need some advice. I have 1 antenna that
>is a Larsen Kulrod for 440 MHz. It is an NMO with the magnet mount. I am
>thinking of using something other than an NMO. I also want to move away from
>a mag-mount and go to a permanently mounted antenna. I have seen another
>connector that is a direct "screw-on" type connector (Not BNC,SMA, or NMO),
>it seemed like it would be more durable than the small contact in the NMO
>because it was just a stub with threads. Any suggestions will be
>appreciated. TIA
>73! T Man
>
>
>

3650. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 20:54:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A957C8B.2EB8BC44@eznec.com>
Source record: 169722

Ah, but the forward voltage divided by the forward current isn't the
dynamic resistance.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Thu, 22 Feb 2001 11:06:23 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >How about the dynamic resistance of a diode (the
> >reciprocal of the slope of the I-V curve)?
>
> Hi Roy,
>
> This is a common failure mechanism of LEDs when you observe their
> requirements for heat dissipation. The forward voltage times the
> forward current is indeed rendered into destructive heat.
>
> Early Blue LED designs having a very high forward voltage (on the
> order of 3 Volts) could not sustain the industry standard of 20 mA
> without catastrophic destruction.
>
> 73's
> Richard Clark, KB7QHC

3651. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 21:05:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A957F22.C5EF440A@eznec.com>
Source record: 169723

Gary Peach wrote:
> . . .

> Are not the losses in shunt with the line?
> The dielectric losses generally being more signicant than the conduction los
> ses in distributed series with the line.

Up to about 1-10 GHz in ordinary coaxial cables (ones using decent insulation like PE or PTFE), the loss is almost entirely series, due to conductor resistance. Above this, dielectric loss becomes dominant. (The dielectric loss increases about linearly with frequency, while the resistive loss increases as the square root of frequency. At low frequency, the resistive loss is much greater, but because of the different slopes, dielectric loss eventually catches up.) But you'll see the rising TDR response also on things like PC board traces. It really complicates the job of determining a line's characteristic impedance with a TDR, which is something modern PC board manufacturers are increasingly being asked to do.

> . . .

> And what type of Ohm Meter would you use? [to measure an infinitely long cable]
> a Multimeter
> a Whetstone Bridge
> a Megger
>
> Each of these might be expected to have different internal resistance and
> some would act as a voltage source and some a current source.

It's a good assumption that the cable is a linear device, so the final resistance measured by any means should be the same. However, I'm not really interested in haggling over what kind of instrument you'd use to make an impossible theoretical measurement.

Roy Lewallen, W7EL

3652. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 21:06:59 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A957F72.747@pacbell.net>
Source record: 169727

Roy Lewallen wrote:
>
> Is transresistance (amplifier output voltage divided by input current)
> dissipationless? How about the dynamic resistance of a diode (the
> reciprocal of the slope of the I-V curve)? The R0 of a lossless cable is
> obviously "dissipationless". How about the resistive part of the Z0 of a
> lossy cable or other transmission medium? It looks like we've got to
> stuff all resistances into two pigeonholes, "dissipative" and
> "dissipationless". So please help me out in deciding which hole to put
> these in.
>
> Roy Lewallen, W7EL
>

I don't know how to sort all resistances into dissipative and
dissipationless, but I would like to see someone who does
substitute one of his "dissipationless" resistors for the source
resistance in a voltage divider and use it to prove the complex
conjugate theorem analytically. It seems that some of us believe
that because the maximum power theorem is proven for ordinary
dissipative resistors that that automatically proves it for everything
else that has units in ohms.

Tom Donaly KA6RUH

3653. Satellite Dish

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 21:31:29 UTC
From: Aamer Mahmood <aamer@homemail.com>
Message-ID: <3A958531.63D75FE8@homemail.com>
Source record: 169725
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.antenna

Hi all,
I need a standard 18" satellite dish antenna that has a separate horn
and LNB. All the present dishes have a composite assembly containing
both the horn and an LNB.
I'd appreciate some one telling me a source for one.

--
Aamer Mahmood

3654. 40 meter super loop problem, any ideas from the group?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 21:53:28 UTC
From: pwerfel <pwerfel@epo.hsc.sunysb.edu>
Message-ID: <3A958A57.FF638AD4@epo.hsc.sunysb.edu>
Source record: 169726
Body handling: Binary attachment payload not displayed: pwerfel.vcf

Hi Folks,

I have been using the radio works 40 meter super loop for a while with excellent result, suddenly the SWR has gone beyond 2:1 and that is the lowest that the matcher will bring it to.

Balun is not discolored or appear fried...

Any Ideas?

Thanks

Paul WB2LBQ

Please respond directly to pwerfel@epo.hsc.sunysb.edu

[One or more binary attachments are retained only in the source text.]

3655. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 22:45:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A959691.B939099B@eznec.com>
Source record: 169728

I don't think the problem of misapplication of the maximum power transfer principle is so much one of dissipative and non-dissipative resistors as it is using the wrong model. The principle is easily shown only for a Thevenin or Norton source model. But these are certainly not adequate models for a transistor or vacuum tube output. Special care has to be used when attempting to use linear models for nonlinear circuits. Linear models can often be useful, but you always have to keep in mind that they really don't represent the real circuit and are at best an approximation and then only under some set of very limited conditions.

Roy Lewallen, W7EL

Donaly wrote:
>
> I don't know how to sort all resistances into dissipative and
> dissipationless, but I would like to see someone who does
> substitute one of his "dissipationless" resistors for the source
> resistance in a voltage divider and use it to prove the complex
> conjugate theorem analytically. It seems that some of us believe
> that because the maximum power theorem is proven for ordinary
> dissipative resistors that that automatically proves it for everything
> else that has units in ohms.
>
> Tom Donaly KA6RUH

3656. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 22:51:44 UTC
From: rwclark@seanet.com
Message-ID: <3a9592b5.259908007@news.seanet.com>
Source record: 169729

On Thu, 22 Feb 2001 12:54:35 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Ah, but the forward voltage divided by the forward current isn't the
>dynamic resistance.
>
>Roy Lewallen, W7EL
>
>Richard Clark wrote:
>>
>> On Thu, 22 Feb 2001 11:06:23 -0800, Roy Lewallen <w7el@eznec.com>
>> wrote:
>>
>> >How about the dynamic resistance of a diode (the
>> >reciprocal of the slope of the I-V curve)?
>>
>> Hi Roy,
>>
>> This is a common failure mechanism of LEDs when you observe their
>> requirements for heat dissipation. The forward voltage times the
>> forward current is indeed rendered into destructive heat.
>>
>> Early Blue LED designs having a very high forward voltage (on the
>> order of 3 Volts) could not sustain the industry standard of 20 mA
>> without catastrophic destruction.
>>
>> 73's
>> Richard Clark, KB7QHC

Hi Roy,

Yes, you are right. I have used dynamic resistance as a filter
element in the RC decoupling of power supply and active device (the
voltage rail to an OpAmp). It works wonderfully in passing enough DC
current while inhibiting high frequency spurs. That is, I typically
use a diode in series from the power supply feeding a cap that in turn
is the voltage rail source (the typical device decoupling). The diode
presents a high Z to RF and a low R to DC (acts like inductive
reactance, but without the storage). If I recall correctly, even the
roll-off is not the classic 6 dB/Octave (but rather much better if
memory serves).

I would have to say that if it exhibits a quasi reactance and no
storage, there must be heat involved. I have likened it to an
inductor, but the mechanics of the depletion zone would suggest in the

high RF I had two capacitors in series and the diode having a smaller capacitance naturally exhibits the greater drop to spurs. If this is the correct operational criteria, then there would be no issue of heat.

So, there is a quasi inductor or a real capacitor that might be argued. Neither is wholly supportable - leave it to non-linear devices to throw a sabot into the gears.

73's
Richard Clark, KB7QHC

3657. Re: Walter was .. writing a new book ..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 22:57:17 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <mOgl6.568$uW1.2673@newsfeed.slurp.net>
Source record: 169730

Tks, Cec. Sorry to read that.

73, Dave, K3BHJ

3658. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-22 23:46:34 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97489v$3dk$1@plutonium.btinternet.com>
Source record: 169731

There's no controversy between me and Tom. Its just that he hasn't
come up with any solid, numerical, quantitative, support in favour
of his assertions. Which he has dropped anyway. So let's forget
about it !

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3659. Re: NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 00:28:02 UTC
From: Matt Zundel <mzundel@sisna.com>
Message-ID: <3A95AE92.56F79C6B@sisna.com>
Source record: 169732

I could be wrong but I think you might be comparing apples and oranges.
BNC and SMA should be connectors that connect to a transceiver. The NMO
mount should be used to mount an antenna. Again, this is to my
knowledge.

I 3 NMO mount antennas for my truck and car. I started out using the
mag mount much like you. I found that I like the NMO mount very well.
I now have two permanent mounts on both vehicles.

Matt
KD7HHW

T Man wrote:
>
> Hey guys,
> I'm re-designing my mobile setup and need some advice. I have 1 antenna that
> is a Larsen Kulrod for 440 MHz. It is an NMO with the magnet mount. I am
> thinking of using something other than an NMO. I also want to move away from
> a mag-mount and go to a permanently mounted antenna. I have seen another
> connector that is a direct "screw-on" type connector (Not BNC,SMA, or NMO),
> it seemed like it would be more durable than the small contact in the NMO
> because it was just a stub with threads. Any suggestions will be
> appreciated. TIA
> 73! T Man

3660. Wanted Telex TB6EM traps

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 00:43:35 UTC
From: "Edgar Brown, N6OU" <yungthor@mediaone.net>
Message-ID: <Xmil6.54060$_D.9710567@typhoon.we.rr.com>
Source record: 169733

Wanted Telex TB6EM director traps for 10 meters. email n6ou@arrl.net

3661. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 00:46:58 UTC
From: 2w8ji@akorn.net
Message-ID: <3a95b1ee.35741942@news.accessunited.com>
Source record: 169734

On Thu, 22 Feb 2001 23:46:34 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>There's no controversy between me and Tom. Its just that he hasn't
>come up with any solid, numerical, quantitative, support in favour
>of his assertions. Which he has dropped anyway. So let's forget
>about it !

I haven't modified or dropped my assertions, it just isn't possible to
discuss anything with you.

Your programs show Q increasing all the way up to resonance, my test
equipment does not.

73 Tom

3662. Dish Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 00:57:45 UTC
From: Aamer Mahmood <aamer@homemail.com>
Message-ID: <3A95B589.8451D746@homemail.com>
Source record: 169737

Hi all,
I need a standard 18" satellite dish antenna that has a separate horn
and LNB. All the present dishes have a composite assembly containing
both the horn and an LNB.
I'd appreciate some one telling me a source for one in the D/FW area.

--
Aamer Mahmood

3663. Dish Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 00:58:17 UTC
From: Aamer Mahmood <aamer@homemail.com>
Message-ID: <3A95B5A9.58987C10@homemail.com>
Source record: 169735

Hi all,
I need a standard 18" satellite dish antenna that has a separate horn
and LNB. All the present dishes have a composite assembly containing
both the horn and an LNB.
I'd appreciate some one telling me a source for one in the D/FW area.

--
Aamer Mahmood

3664. Dish Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 00:58:38 UTC
From: Aamer Mahmood <aamer@homemail.com>
Message-ID: <3A95B5BD.6B690873@homemail.com>
Source record: 169736

Hi all,
I need a standard 18" satellite dish antenna that has a separate horn
and LNB. All the present dishes have a composite assembly containing
both the horn and an LNB.
I'd appreciate some one telling me a source for one in the D/FW area.

--
Aamer Mahmood

3665. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:22:33 UTC
From: w1rfi@aol.com
Message-ID: <20010222202233.09708.00000161@ng-fl1.aol.com>
Source record: 169738

>From: Helmut Wabnig

>Yes, I bought the ARRL Antenna Handbook 19th edition.

>To anticipate the result:
>The ARRL chapter about the Helix is complete BULLSHIT.

Hello, Helmut,

I forwarded your post to the ARRL Antenna Book editor, Dean Straw. Dean may be able to help fill in some of the info. I also expect he can look closely at this for a future edition.

73, Ed Hare, W1RFI

3666. Re: Does salt improve ground system?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:34:03 UTC
From: Russell Van Hees <Rvanhees@tamu.edu>
Message-ID: <971qb9$9vj$1@news.tamu.edu>
Source record: 169868

copper sulfate will kill the roots of any plant that is in the ground around
the ground rod but any salt will make it harder for any thing to take up
the water so I would be careful if you want any thing to grow around there
Pie�� <picaruso@dontwriteme.com> wrote in message
news:SCSk6.3711$k55.43259@news.infostrada.it...
> Years ago I had a chance to operate a 30 mt (or more) high double cone
> antenna and I compared it with a Windom for 160 mt mounted on two poles 25
> mt high.
> This happened two days before a contest and I decided to use the Windom,
> since signals was 2 S greather than the 'monster'. (I don't remember if it
> was on all the bands).
> Just before the contest started I checked again the two antennas and...
> surprise: this time the monster gave 2 S more than the Windom on the same
> signal!!
> After more checks with the same results and few hours thinking about the
> miracle, I realized that the days before it had rained a lot!!
> Sure a wet ground is a great help.
> I can't say much about salt; only that it should increase the conductivity
> of water, thus should helps. But what about the life of radials in a salt
> environment?
> And wat about grass and plants, as should ask Greenpeace?!
>
>
> --
> 73 de IK2VTJ, Piero.
>
> http://www.infinito.it/utenti/ardf.it
> http://ardfitalia.supereva.it
> http://www.qsl.net/ik2vtj
>
>
> "paul" <paul@nospam.com> ha scritto nel messaggio
> news:3A902986.6BE2@nospam.com...
> > Stephen Dobak wrote:
> > >
> > >
> > >
> > > Keith Zimmermann wrote:
> > >
> > > OK, I almost made through the whole month without asking a
> > > dumb
> > > question...
> > >

> > > Years ago, when I was a teen-novice, someone suggested that
> > > I add salt
> > > around my ground rod and radial system. Being a novice, I
> > > of course
> > > did. I would also water and really soak the ground system
> > > prior to a
> > > planned night of DX-ing. Anything to help my 5 watts!
> > >
> > > Now, I'm wondering if there is any benefit from doing either
> > > of those
> > > things. Dry, parched, rocky ground like we have in Texas
> > > probably needs
> > > some help...especially in the summer. I used verticals,
> > > end-fed long
> > > wires, and inverted vees back then. I had a short run from
> > > my rig and
> > > antenna tuner to the ground. I had a good radial system
> > > below my
> > > ground-mounted vertical. But no matter what, I was
> > > convinced that
> > > watering my ground improved my signal and reduced static.
> > >
> > > Thanks for any info.
> > >
> > > Keith K5WX
> > >
> >
>
> ---
> ---
> > >
> > > Good way to corrode ground systems, There has been more than a few
> > > radio stations that tried the same
> > > then when their signal goes down the toilet the staff or consultant
> > > when checking the radials start to dig
> > > and find green in the soil that use to be radials.
> > >
> > >
> > > Steve WB3AMG
> > >
> >
> >
> > I've heard of a non salt type chemical that some people use but I can't
> > remember the name. My VE told us about it when I was studying for the
> > Novice so many years ago.
> >
> > Paul
>
>

3667. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:34:38 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <974en1$3lr$1@nntp9.atl.mindspring.net>
Source record: 169740

Cecil:

Aristotle vs Plato... What?

Wow!

It has taken me this long to discover, from your pithy postings, that
indeed, they are civilized at TX A & M. Long live the "Aggies".

Now if only we could get Tom and Reg to be so philosophical.

Tom, what is the name rank and serial number of YOUR Q-Meter?

Just askin?

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A95659F.6099AF43@IEEE.org...
> Roy Lewallen wrote:
> > If theory and practice are different, the theory is faulty and should be
> > revised or replaced.
>
> Depends upon whether one subscribes to a primacy of existence concept
> or a primacy of consciousness concept - Aristotle VS Plato. Some people
> here on r.r.a.a believe that the math model *IS* the reality.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3668. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:34:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <974eli$rc9$1@slb3.atl.mindspring.net>
Source record: 169739

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:97489v$3dk$1@plutonium.btinternet.com...
> There's no controversy between me and Tom. Its just that he hasn't
> come up with any solid, numerical, quantitative, support in favour
> of his assertions. Which he has dropped anyway. So let's forget
> about it !
> ----
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
>
>

3669. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:36:23 UTC
From: w1rfi@aol.com
Message-ID: <20010222203623.09708.00000167@ng-fl1.aol.com>
Source record: 169741

>From: jgboyles@aol.com

>I tried to order this item a couple of times(33 foot fiberglass mast) and
>they
>do not have it. But they will put you on a waiting list for when they do
>have
>it, but who wants to do that? I guess I will get it from the German ham that
>has them at Dayton each year. Ideal portable, field day mast.

I ordered mine from Kanga US. BTW, I absolutely love it for a
portable/backpacking mast.

73,
Ed Hare, W1RFI

3670. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:40:49 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <974f2rkn1@slb5.atl.mindspring.net>
Source record: 169742

Reg:

[SNIP]
So let's forget
> about it !
> ----
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
[SNIP]

Fugetaboutid! What kind of "cop out" is that?

Reg, you can't get off so easy, and neither can Tom. Come back here and fight it out!

Theory versus Practice, Mathematics versus Laboratory, Software versus Hardware, Aristotle versus Plato, Ali versus Liston...

We want it now!

Reg what is the mathematical model that you are using for Q, and Tom what is the manufacturer, model number, serial number and last calibration date of your Q-Meter?

Best,

-Peter K1PO

3671. Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:41:44 UTC
From: Michael Connly <mconnly@mn.mediaone.net>
Message-ID: <3A95C1C7.A180C512@mn.mediaone.net>
Source record: 169743

I have a fairly large (about 150 linear feet) Chain Link Fence. How well will that work as a ground???

3672. WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:43:38 UTC
From: Bill N0MNB <N0MNB@MINN.NET>
Message-ID: <974f7s$ev0$1@newsfeed.minn.net>
Source record: 169744
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

NEEDED A VARIABLE 50 OHM ATTENUATOR. 0-100DB OR SO.
DIAL TYPE ASAP....

73'S N0MNB

3673. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:44:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <974f8r$44a$1@slb0.atl.mindspring.net>
Source record: 169745

Wes: Too bad that all of that HP stuff is no longer valid! I would have
been impressed by HP Instrumentation, but now, thanks to Carly, I don't know
what to expect... We now have about 50 years to establish the veracity of
Aigilent Instruments I guess. -Peter K1PO

"Wes Stewart " <nospam_n7ws@arrl.net> wrote in message
news:3a955a0a.90357095@news.aepnet.org...
> On Thu, 22 Feb 2001 04:40:45 -0500, "Peter O. Brackett"
> <ab4bc@ix.netcom.com> wrote:
>
> [snip]
> >
> >For instance the Q of a quartz crystal [Which is the equivalent of a
simple
> >LC series tank circuit.] can often exceed a value of 25,000 - 100,000 or
> >more! I challenge anyone here to produce for me a standard "off the
shelf"
> >Q meter made by any manufacturer that will even give a satisfactory
> >"indication" of, let alone an accurate value for the Q of any quarz
> >crystal.
> >
> >Does anyone reading this thread know who makes Q meters for measuring the
Q
> >of quartz crystals? A very narrow field of instrument sales indeed.
>
> Well, it didn't have a label on it reading "Q Meter", but I used an
> H-P 3577 network analyzer and software I wrote to measure 1000s of
> quartz crystals and calculate their motional parameters. From this, Q
> is easily determined.
>
> Saunders & Associates makes crystal measuring equipment to do this on
> the fly during crystal processing. http://www.saunders-assoc.com/
>
>
> Wes Stewart N7WS
> >
> [snip]
>

3674. Re: SWR and Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:46:54 UTC
From: w1rfi@aol.com
Message-ID: <20010222204654.09708.00000170@ng-fl1.aol.com>
Source record: 169746

>From: "B-Squared" rbethman@home.com

>> 1. Does SWR even matter for reception?

>SWR does matter for reception.

Maybe, but on HF, probably not. On HF, with any kind of a reasonable antenna and feed line, the system sensitivity is not determined by receiver noise, but by external noise (atmospheric, local noise, etc). SWR on the feed line will result in attenuation of the signal you are trying to receive, but it will reduce the signal and external noise by the same amount. As long as the resultant signal and external noise is much greater than the receiver noise, the S/N output of the receiver remains essentially unchanged with such external "attenuation" applied. The change in overall S/N is usually fractional dB on HF.

In fact, adding attenuation in front of an HF receiver can actually help improve reception, not by changing S/N, but by reducing the level of strong signals outside the receiver passband below the receiver's non-linear range. If you have a good antenna system and operate in major contests, you may want to add attenuation to your receiver. It matters little whether the attenuation is in the form of an attenuator or in the form of SWR on your feed line.

>> 2. My magnetic 2m mobile antenna on my car is not really connected to the
>> car body as a ground(it's insulated by the magnet and paint), how can it
>> utilize the car body as a ground plane? Thx.

>Your mag mount may not be directly connected to the car body, but the
>negative power lead to the battery is, in turn the shield of the coax is,
>and there is the capacitive coupling through the mag mount to the body.

On VHF, the capacitive coupling of the mag mount will predominate. Even on HF, it is the primary coupling mechanism most of the time. I have a 4-magnet mag mount for my HF mobile whip and it operates just fine on 20 meters and up, but on 40 meters, I get a lot of "RF in the shack" problems. On that band and lower, the series capacitor in the capacitive coupling of the mount to the vehicle body is too small. I use a combination of a ferrite common-mode choke on the feed line, right at the antenna, and a short jumper from the mount "ground" to the vehicle chassis.

Now, with my "Deathmobile," I wonder if the rust is adding any non-linear factors. :-)

73,
Ed Hare, W1RFI

3675. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:47:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <974fe2$1lm$1@slb7.atl.mindspring.net>
Source record: 169747

Roy:

Talk about "Technology Jocks", hey... give us a break.

Wes Haywood is a God!

What about the rest of us mere mortals. How shall we measure Q?

What is the Q-Meter that Tom W8JI uses in his daily Q measurements?

Boonton, model x, serial no. y, last calibrated by ??? on 12/21/41? What?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3A9561DC.AEA42598@eznec.com...
> "Peter O. Brackett" wrote:
>
> >. . .
>
> > Now if Q is very large, say up to 10,000 or more and f0 is in the MHz,
then
> > f1 and f2 are two very large numbers quite close together, and their
> > numerical difference will dimish in signifigance so as to frustrate the
most
> > persistent of metrologists! Heh, heh.
> >
> > In cases of very high Q's even 10 digit calculators won't be able to
> > determine the difference between f1 and f2, even if f1 and f2 could be
> > individually measured to the required accuracy.
>
> It's not at all difficult to resolve a 1.4 kHz difference between two
> frequencies at 14 MHz. Your receiver does it without strain, as does
> even a very inexpensive frequency counter. In any case, high accuracy
> isn't required, just moderate resolution.
>
> >. . .
>
> > For instance the Q of a quartz crystal [Which is the equivalent of a
simple
> > LC series tank circuit.] can often exceed a value of 25,000 - 100,000 or
> > more! I challenge anyone here to produce for me a standard "off the
shelf"
> > Q meter made by any manufacturer that will even give a satisfactory
> > "indication" of, let alone an accurate value for the Q of any quarz
> > crystal.

>
> Somewhere around 8-10 years ago Wes Hayward, W7ZOI, wrote some excellent
> articles on designing crystal ladder filters. I believe one was in QST
> and one in QEX. Some filters require selecting crystals, and in the
> article was a simple circuit for doing that, which anyone could build at
> home. I'm quite sure it could be used to get the crystal Q with
> reasonable accuracy. Perhaps someone with easy access to the article can
> confirm that.
>
> > . . .
>
> > In theory, theory and practice are the same, in practice they are
> > different...
>
> If theory and practice are different, the theory is faulty and should be
> revised or replaced.
>
> >. . .
>
> Roy Lewallen, W7EL

3676. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 01:52:34 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <974fnkkol1@slb7.atl.mindspring.net>
Source record: 169748

Richard:

What's wrong with "radiation resistance", what's wrong with "surge resistance", what's wrong with... ?

None of those descriptive terms dare to juxtapose the lack of dissipation with dissipation.

Get with it... "dissipationless resistance" is an abomination and should not be allowed.

Some amateur hack article writer hired by a sloppy IEEE editor came up with that "crap" it was not critiqued by anyone who understood Electrical Engineering and the English language, and you help to perpetuate it. What?

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:20992-3A95332E-13@storefull-118.iap.bryant.webtv.net...
> Peter, K1PO wrote:
> "Now why would you want to mess with a silly term like "dissipationless
> resistance"?
>
> Surge resistance is a good term for a transmission line because it is
> descriptive of the dissipationless resistance exhibited by the line.
>
> Surge resistance doesn`t describe the resistance of an antenna`s
> radiation load because the energy fed the antenna is being projected
> forever along the antenna`s length.
>
> Surge resistance doesn`t describe the average impedance caused by an
> open switch during a portion of an amplifier`s conduction cycle.
>
> The generic term "dissipationless resistance" fits them all and helps
> understanding via the commonality of the in-phase voltage to current
> ratio which has no heat conversion.
>
> Best regards, Richard Harrison, KB5WZI
>

3677. Re: NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 02:02:21 UTC
From: Barry D <x123x123@yahoo.com>
Message-ID: <Nwjl6.6427$XZ6.2832379@news4.rdc1.on.home.com>
Source record: 169749

> T Man wrote:
> >
> > Hey guys,
> > I'm re-designing my mobile setup and need some advice. I have 1 antenna
that
> > is a Larsen Kulrod for 440 MHz. It is an NMO with the magnet mount. I am
> > thinking of using something other than an NMO. I also want to move away
from
> > a mag-mount and go to a permanently mounted antenna. I have seen another
> > connector that is a direct "screw-on" type connector (Not BNC,SMA, or
NMO),
> > it seemed like it would be more durable than the small contact in the
NMO
> > because it was just a stub with threads. Any suggestions will be
> > appreciated. TIA
> > 73! T Man

I think you mean a SO-239 (259?) connector. Same thats used on some CB
Antennas and some Amateur anttennas. I use NMO haven't had any probs.
Check out Comet's website and you see the antennas that have both mounts.

Barry D.

3678. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 02:06:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A95C5A2.F0C59C02@eznec.com>
Source record: 169750

I guess I wasn't clear in my posting. In one of his articles, Wes included a simple circuit that any mere mortal, presumably even you and I, can build and use to measure crystal Q.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy:
>
> Talk about "Technology Jocks", hey... give us a break.
>
> Wes Haywood is a God!
>
> What about the rest of us mere mortals. How shall we measure Q?
> . . .

3679. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 02:22:25 UTC
From: richardharrison@webtv.net
Message-ID: <10595-3A95C961-44@storefull-112.iap.bryant.webtv.net>
Source record: 169752

Roy, W7EL wrote:
"Is transresistance (amplifier output voltage divided by input current) dissipationless?"

Just as transconductance depends on vacuum tube amplification factor, transresistance depends depends on gain. More change in output voltage will happen with the same change in input current if only we have more gain.

Transresistance does not quantify an amount of heat produced by an output voltage, nor does it represent a load value that does not directly produce heat. Transresistance is a type of "ringer"

Roy also questioned the series resistive part of Zo. Like the conductive and other shunt dielectric losses, the series resistance of the transmission line is dissipative.

Best regards, Richard Harrison, KB5WZI

3680. Re: Satellite dish

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 03:00:13 UTC
From: Pete <pete@etep.com>
Message-ID: <1nkl6.3129$t67.140956@news1.rdc1.il.home.com>
Source record: 169753

HOW MANY TIMES ARE YOU GOING TO POST YOUR REQUEST?? ONCE IS ENOUGH!

"Aamer Mahmood" <aamer@homemail.com> wrote in message
news:3A9557B3.861A374B@homemail.com...
> Hi all,
> I need a standard 18" satellite dish antenna that has a separate horn
> and LNB. All the present dishes have a composite assembly containing
> both the horn and an LNB.
> I'd appreciate some one telling me a source for one.
>
> --
> Aamer Mahmood
>
>

3681. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 03:23:30 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A95D7B2.20D41ABA@IEEE.org>
Source record: 169755

"Peter O. Brackett" wrote:
> It has taken me this long to discover, from your pithy postings, that
> indeed, they are civilized at TX A & M. Long live the "Aggies".

My ex-wife says the only class I'll ever have is the one I took
at Texas A&M.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3682. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 03:33:14 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <t9bmc034gk6k96@corp.supernews.com>
Source record: 169754

A friend of mine loads his chain link fence and does very
well on 160 meters. Go figure.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"Irv Finkleman" <finkirvNOSPAM@home.com> wrote in message
news:3A95C234.7E585C20@home.com...
> Michael Connly wrote:
> I have a fairly large (about 150 linear feet) Chain Link
Fence. How
> well will that work as a ground???
>
> I would be tempted to try it as an antenna! Then, if you
are not happy with the results, you could try it as a
ground. I know it sounds odd, but with antennas you never
know.
>
>
> --
>
> Please hit 'REPLY TO' e-mail address before sending.
Thanks.
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada
>
>
>

3683. Re: Coax traps article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 03:57:53 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <3a95df84_1@news.pacifier.com>
Source record: 169756

<stan.holmes@eskom.co.za> wrote in message
news:3A954789.BE16A331@eskom.co.za...
> Hi
> I read an article recently on coax traps. He used 2 pieces of coax.
> Can any
> person assist me if they have read such an article and tell me what
> magazine it is in.
> I think it could have been in QST.

There are articles in the May 1981 and December 1984 QST, as well as the
October 1981 Ham Radio.

- 73 Bob W7OV

3684. Re: Qui utilise l'antenne Sommer T-25 ou T-25S ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 04:09:41 UTC
From: Janice and Ed Senior <senior@best.com>
Message-ID: <974o9r$1kh7$1@nntp1.ba.best.com>
Source record: 169757

Hello -

I have to admit I don't speak your language.
But I could tell what you're talking about.
Maybe you can check this link:
http://www.eham.net/reviews/detail/203
I just bought a Sommer T-25, but I have not installed it yet.
I should have a review of my own in another two weeks or so.

73, Ed W6LOL

"Francis Pinson" <F6BLP@wanadoo.fr> wrote in message
news:96mlu4$g66$1@wanadoo.fr...
> Bonsoir ï¿½ tous
>
> Je recherche des oms utilisant l'antenne verticale dï¿½camï¿½trique multibande
> de
> marque Sommer T-25 ou T-25S.
>
> Ayant utilisï¿½ la R7000 Cushcraf et la GAP Eagle, je recherche une antenne
> verticale sans radians qui pourrait me donner d'autres satisfactions que
les
> antennes prï¿½cï¿½dentes....
>
> Si vous avez utilisï¿½ la T-25 je vous remercie de bien vouloir me donner
vos
> impressions ï¿½ F6BLP@wanadoo.fr
>
> Cordiales 73
>
> Francis **F6BLP**
>
>
>

3685. Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 04:15:46 UTC
From: Salesman <Salesman@Store.com>
Message-ID: <38785C11B9EB5DCF.5CA2D31E5FB0652D.63A03E2CD421D450@lp.airnews.net>
Source record: 169758

I have a Yaesu FT-990 which has an internal antenna tuner which I believe will help minimize the SWR if it is below about 3:1. I use a Gap vertical antenna which matches by itself pretty well on most of the bands. I also happen to have an MFJ Versa-tuner in-line with the antenna which I run in by-pass mode just to monitor the SWR.

I notice that If I kick in the internal tuner in the radio it will usually bring the match to a flat 1:1 on the SWR meter on the radio but the SWR meter on the Versa-tuner may still read 1.5 or 2.0 to 1.

The SWR differential seems to be higher on the high bands such as 10 meters whereas down on 80 meters the 2 readings tend to be much closer.

I guess my question is: Should I have the Versa-Tuner in line (even on by-pass) and if so, which SWR reading should I believe?

Any insight would be appreciated.

Dave Alden - KB8VJD

dalden@home.com

3686. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 04:25:14 UTC
From: richardharrison@webtv.net
Message-ID: <20989-3A95E62A-234@storefull-118.iap.bryant.webtv.net>
Source record: 169760

Peter, K1PO wrote:
"None of these descriptive terms (radiation resistance, surge resistance, average resistance value resulting from part-time conduction) dare to juxtapose the lack of dissipation with dissipation."

Peter raises a good point. There is widespread supposition that resistance is identical to a resistor and a resistor is a heat producer. This is wrong. A resistor does produce resistance (voltage to current ratio) and it does produce heat, but a resistor is a special case. A resistor immediately converts all the electrical energy it accepts into heat. Other types of resistance are in-phase voltage to current ratios which don`t immediately convert electricity into heat.

I`ve been surprised that some serious authors have declared that resistance is the ratio of voltage to current at which the conversion of electricity to heat takes place. They are wrong because they don`t point out that resistances exist that do not produce instant heat. Many accept and repeat this wrong information.

IEEE just tried to bring order from chaos.

Best regards, Richard Harrison, KB5WZI

3687. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 04:26:59 UTC
From: Richard Fitzgerald <r.fitzgerald@worldnet.att.net>
Message-ID: <3A95E6C5.86116428@worldnet.att.net>
Source record: 169759

I suggest that you have an auto electrical shop check your alternator.
Sounds like one of the diodes is defective.

Rich

Excalibur@camelot.net wrote:
>
> I want to replace the am-fm antenna in my 95 GMC pickup with a
> different one. Could someone tell me what the coax running from the
> antenna to the radio is? (RG-58)? Am I correct in thinking that the
> coax end going to the radio is a motorola plug? I like to listen to
> talk radio on the am band. The fm band works perfectly. I am replacing
> this antenna because I have an engine noise problem. This noise
> increases in pitch as the engine revs up. I have tried grounding the
> antenna, coax, connections, hood, and radio every way that it can be
> grounded. I bought an expensive silver conductivity paste to ensure a
> good connection. I have cleaned every connection thoroughly with a
> small stainless steel brush all to no avail. I installed an inline
> power filter and as a last resort, I installed a new radio, thinking
> that the other on must have had a bad filter in it. All that is left
> is the antenna and coax. This vehicle has factory plugs and wires in
> it and they are new and in good condition. Does anyone have any
> recommendations for an antenna and/or coax? Or is there anything else
> that I am overlooking? Thanks for any advice.
>
> Jody Sorrell
> Eclectic, AL.

3688. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 04:50:07 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <3a95ebc2_2@news.pacifier.com>
Source record: 169761

"Salesman" <Salesman@Store.com> wrote in message
news:38785C11B9EB5DCF.5CA2D31E5FB0652D.63A03E2CD421D450@lp.airnews.net...
> I have a Yaesu FT-990 which has an internal antenna tuner which I
> believe will help minimize the SWR if it is below about 3:1. I use a
> Gap vertical antenna which matches by itself pretty well on most of
> the bands. I also happen to have an MFJ Versa-tuner in-line with the
> antenna which I run in by-pass mode just to monitor the SWR.
>
> I notice that If I kick in the internal tuner in the radio it will
> usually bring the match to a flat 1:1 on the SWR meter on the radio
> but the SWR meter on the Versa-tuner may still read 1.5 or 2.0 to 1.
>
> The SWR differential seems to be higher on the high bands such as 10
> meters whereas down on 80 meters the 2 readings tend to be much
> closer.
>
> I guess my question is: Should I have the Versa-Tuner in line (even
> on by-pass) and if so, which SWR reading should I believe?

It does not hurt to have the SWR meter in line. In fact, both readings are probably correct. The internal SWR meter is giving you the SWR that the radio sees, looking into the internal antenna tuner. If this is all working correctly the SWR you read here will be very close to 1:1. The external SWR meter is reading the actual SWR of the line and antenna, which reflects the "real" SWR.

- 73 Bob W7OV

3689. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 04:58:28 UTC
From: Salesman <Salesman@Store.com>
Message-ID: <3FCD927782714BBF.C70C1D3371F892C7.45CF656B9458DA70@lp.airnews.net>
Source record: 169762

Thanks Bob, What you said is kind of what I suspected.

But what does it mean if I remove the external meter and the internal meter on the radio still reads 1:1? Is the internal tuner just trying to match the short distance between the external meter and the radio and not affecting the system past the external meter? If the external meter is not there, am I matching to the entire antenna system? Is this then the "real" SWR?

The dynamics here are kind of confusing to me. It seems that he external meter (Versa-Tuner on by-pass) should have some effect on how the radio's antenna tuner views the antenna system.

- Dave

On Thu, 22 Feb 2001 20:50:07 -0800, "Bob Headrick" <bobh@proaxis.com> wrote:

>
>"Salesman" <Salesman@Store.com> wrote in message
>news:38785C11B9EB5DCF.5CA2D31E5FB0652D.63A03E2CD421D450@lp.airnews.net...
>> I have a Yaesu FT-990 which has an internal antenna tuner which I
>> believe will help minimize the SWR if it is below about 3:1. I use a
>> Gap vertical antenna which matches by itself pretty well on most of
>> the bands. I also happen to have an MFJ Versa-tuner in-line with the
>> antenna which I run in by-pass mode just to monitor the SWR.
>>
>> I notice that If I kick in the internal tuner in the radio it will
>> usually bring the match to a flat 1:1 on the SWR meter on the radio
>> but the SWR meter on the Versa-tuner may still read 1.5 or 2.0 to 1.
>>
>> The SWR differential seems to be higher on the high bands such as 10
>> meters whereas down on 80 meters the 2 readings tend to be much
>> closer.
>>
>> I guess my question is: Should I have the Versa-Tuner in line (even
>> on by-pass) and if so, which SWR reading should I believe?
>
>It does not hurt to have the SWR meter in line. In fact, both readings are
>probably correct. The internal SWR meter is giving you the SWR that the radio
>sees, looking into the internal antenna tuner. If this is all working
>correctly the SWR you read here will be very close to 1:1. The external SWR
>meter is reading the actual SWR of the line and antenna, which reflects the
>"real" SWR.
>
>- 73 Bob W7OV

>
>

3690. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 05:05:16 UTC
From: richardharrison@webtv.net
Message-ID: <20990-3A95EF8C-98@storefull-118.iap.bryant.webtv.net>
Source record: 169764

Peter, K1PO wrote:
"What meaning does L have at DC once the steady state is reached di/dt becomes zero therefore Ldi/dt becomes Zero---."

Point is in an infinite lossless line the wavefront moves ever forward generating opposition in the same way and amplitude.

Reg will need to refresh the battery in his ohmmeter from time to time to keep up the energy supply to the ever hungry transmission line.

Best regards, Richard Harrison, KB5WZI

3691. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 05:07:43 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3a95f023$0$46008$1dc6e903@news.corecomm.net>
Source record: 169763

Your Versa-Tuner is showing you what the antenna looks like. The 1:1 SWR your Yeasu FT-990 is showing is what the transmitter thinks the antenna looks like. I would remove the Versa-Tuner and use a dedicated two needle SWR meter is you feel that you need to. Otherwise don't worry about the post Yeasu antenna tuner readings. The built in AT is doing it's job and all else is unnecessary.

Dave Nagel
WD9BDZ

Salesman wrote:
>
> I have a Yaesu FT-990 which has an internal antenna tuner which I
> believe will help minimize the SWR if it is below about 3:1. I use a
> Gap vertical antenna which matches by itself pretty well on most of
> the bands. I also happen to have an MFJ Versa-tuner in-line with the
> antenna which I run in by-pass mode just to monitor the SWR.
>
> I notice that If I kick in the internal tuner in the radio it will
> usually bring the match to a flat 1:1 on the SWR meter on the radio
> but the SWR meter on the Versa-tuner may still read 1.5 or 2.0 to 1.
>
> The SWR differential seems to be higher on the high bands such as 10
> meters whereas down on 80 meters the 2 readings tend to be much
> closer.
>
> I guess my question is: Should I have the Versa-Tuner in line (even
> on by-pass) and if so, which SWR reading should I believe?
>
> Any insight would be appreciated.
>
> Dave Alden - KB8VJD
>
> dalden@home.com

3692. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 05:12:05 UTC
From: richardharrison@webtv.net
Message-ID: <20989-3A95F125-238@storefull-118.iap.bryant.webtv.net>
Source record: 169766

I think I just attributed a question from Gary Peach: "What meaning does
L have at DC----?"
to Peter K1PO. I apologize to all concerned.

Best regards, Roichard Harrison, KB5WZI

3693. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 05:22:52 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A95F3AC.BA1E9AC9@IEEE.org>
Source record: 169765

Salesman wrote:
> But what does it mean if I remove the external meter and the internal
> meter on the radio still reads 1:1? Is the internal tuner just trying
> to match the short distance between the external meter and the radio
> and not affecting the system past the external meter? If the external
> meter is not there, am I matching to the entire antenna system? Is
> this then the "real" SWR?

The antenna tuner does not change the SWR between the antenna tuner
and the antenna. It only changes the 'SWR' between the tuner and
the transmitter. The external meter (in bypass mode) is reading the
SWR between the tuner and the antenna which cannot be changed at
the tuner end. For any given frequency, the SWR between the antenna
tuner and the antenna can only be changed by doing something at
the antenna (assuming an unbroken run of transmission line).
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3694. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 07:48:23 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A9615C7.2D74ED21@oio.net>
Source record: 169768

Michael Connly wrote:
>
> I have a fairly large (about 150 linear feet) Chain Link Fence. How
> well will that work as a ground???

Michael,
Let me ask you this, is the fence connected to your neighbor's
fence? If so, it's a bad idea to use it as a ground. Since the
ground is part of your antenna system, your running your antenna
around your neighbor's house...not good. The fence really doesn't
ast as a very good ground anyway, depending on how you make a
connection to it. If you don't bond all the top rails to the posts,
and posts to the 'links', you have a variable ground system... that's
not good either. It's a tempting idea, but...
'Doc

3695. 3 ele yagi for 6m feed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 07:51:11 UTC
From: Gary <heppu@boxi.net>
Message-ID: <9754js$7li$1@news.kolumbus.fi>
Source record: 169767

Does anyone have any, good and practical drawings for a 3 element yagi for six meters? Gamma or folded dipole, or even T-match would suit our needs.

73, Kari, oh8mfh in KP34UG

3696. Re: Yaesu ATAS100 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 08:10:43 UTC
From: Keith McQueen <kb7m@arrl.net>
Message-ID: <EUol6.5159$m82.713126@news.uswest.net>
Source record: 169669

The ATAS-100 antenna MUST be well grounded or the internal circuitry will fry. I found this out the hard way. The symptom is usually that the antenna will extend fully, and then stay there refusing to retract. If still under warrenty, Yaesu will fix it.

"Gary Pewitt" <gpewitt@execpc.com> wrote in message news:3a93e7a1$0$70812$272ea4a1@news.execpc.com...
> Well, I got the ATAS-100 and it worked for about two days then it
> stopped tuning. I took it back and exchanged it for two Isotron
> combinations. 80/40 meter and 20/15/10 meter. They are
> mounted on two 5 foot masts supported by rooftop type tripods.
> Currently standing in my living room. Works well with a tuner.
> Sure glad I got that MFJ-259 analyzer to set them up with.
> I hope to transfer them to my second floor balcony when the
> weather warms up a bit. Live and learn. 73 Gary
>
>
>
>
>
> On Thu, 25 Jan 2001 17:16:50 GMT, gpewitt@execpc.com (Gary Pewitt)
> wrote:
>
> >Does anyone have experiance with the Yaesu ATAS100 antenna. It looks
> >to be a version of the screwdriver. I am planning to buy a Yaesu
> >FT-847 soon and this antenna is listed as an accessory. It's supposed
> >to cover 160 meters to 440 mhz. That's asking a -lot- from one
> >antenna. It's supposed to auto tune too I believe. If it works like
> >a screwdriver and becomes resonent on each band then it won't need an
> >antenna tunner right? I live in a condo and am thinking of cutting a
> >small hole in the ceiling of a closet and poking the antenna up into
> >the attic. I am not allowed any outdoor antennas at all. I've heard
> >nothing but good things about the screwdriver antennas but the ones
> >I've seen info on only cover 80 to 10 meters.
> >Any information greatly appreciated. Thanks Gary N9ZSV
> >
> >Gary Pewitt N9ZSV
> >414 355 8147
>
> Gary Pewitt N9ZSV
> 414 355 8147

3697. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 09:29:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A962D6A.8143E20C@eznec.com>
Source record: 169670

But,

Is transresistance dissipationless? Or do we now have three kinds of resistance, "dissipative", "dissipationless", and "ringer"?

I disagree that the series resistive part of the Z0 of all transmission lines is dissipative. A lossless line has a purely real Z0. How can a lossless line contain a dissipative resistance?

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy, W7EL wrote:
> "Is transresistance (amplifier output voltage divided by input current)
> dissipationless?"
>
> Just as transconductance depends on vacuum tube amplification factor,
> transresistance depends depends on gain. More change in output voltage
> will happen with the same change in input current if only we have more
> gain.
>
> Transresistance does not quantify an amount of heat produced by an
> output voltage, nor does it represent a load value that does not
> directly produce heat. Transresistance is a type of "ringer"
>
> Roy also questioned the series resistive part of Zo. Like the conductive
> and other shunt dielectric losses, the series resistance of the
> transmission line is dissipative.
>
> Best regards, Richard Harrison, KB5WZI

3698. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 11:04:13 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <975g2ibdn1@lure.pipex.net>
Source record: 169672

"Mark Turner" wrote ...
> "Gary Peach"
> > In that case don't forget the red light.
>
> It's not that sort of neighbourhood!

As my sister is a near neighbour to you, I'm so pleased to hear that .
Also my married niece, (same Sire name as yer good self.)

> > You really would benefit if you could get a bit more height to bring the
> > radiation angle down a bit. Higher the better, bit like standing on a
beer
> > crate so that you can see over the top of a high wall.
>
> I know. :(

Never mind you can have fun emptying the crate while you're waiting for the
tree to grow.

> > Can you hear Barkway from your QTH?
>
> Yes, easy. I forget which of PI or PY is at Barkway but I can open 'em
both

PI is 2 m location given as Barkway. I remember something hanging onto our
tower when I was with PYE. Lightening struck our waveguide at that site and
took the circuit breaker right off the wall and left a hole about 4 foot
square.
PY is 70 cm and location is given as Cambridge, I have no idea if it is at
the same site as the 2m repeater. Probaly up on the Gogs. :-)

> with just a few watts and on rx they're fully quieting with a good strong
> signal.

How much does it take to fully quieten your Rx?

A good limiter should already be operating on noise if there is sufficient
Gain in front of it.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3699. Re: Coax traps article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 11:52:17 UTC
From: ON4CLN <on4cln@qsl.net>
Message-ID: <R9sl6.20126$Ut1.1730711@afrodite.telenet-ops.be>
Source record: 169673

Take a look here:

http://www.nucleus.com/~field/

download "coaxtrap.zip" ==> usefull to calculate traps with different types
of cable

73s de Franki ON4CLN
http://www.qsl.net/on4cln/

3700. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 11:57:18 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <975j46$5m4$1@neptunium.btinternet.com>
Source record: 169674

The value of Q, whatever it might be, is not of any direct practical use. It is just a ratio. It may be used to calculate or estimate some other circuit parameter. In the case of quartz crystals the other circuit parameter is usually the series loss resistance which, in any case, can be more easily measured directly.

An accurate way of determining coil Q, if anyone should insist on knowing the value of Q, is to measure the coil's loss resistance at resonance using an impedance bridge - then CALCULATE it !

Why am I reminded of the method of determining ground conductivity by setting up a high power radio transmitter and measuring ground-wave field strength at various distances up to several hundred miles ? Having tediously determined ground conductivity it is then possible to predict field strength at various distances from a transmitter of known power output.

But it does keep the philosophical conversation going ;o)

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3701. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 12:12:08 UTC
From: les <lesbod@lesbod.fsnet.co.uk>
Message-ID: <975k5r$q64$1@newsg3.svr.pol.co.uk>
Source record: 169675

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20010221185253.05971.00000004@ng-fk1.aol.com...
> I tried to order this item a couple of times(33 foot fiberglass mast) and they
> do not have it. But they will put you on a waiting list for when they do have
> it, but who wants to do that? I guess I will get it from the German ham that
> has them at Dayton each year. Ideal portable, field day mast.
> 73 Gary N4AST

Here in the UK these telescoping poles can be purchased from
fishermans tackle shops for App $1.50 per foot.

I use a 33 ft when out portable with my my K2.

Les G4JDC G-QRP 9440

3702. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 13:07:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <975n9q$69h$1@plutonium.btinternet.com>
Source record: 169676

Pete, there is no controversy. Please desist from stirring it up.
Joke, joke.

I do not have a Q-meter. Like SWR and S-meters I don't trust them.
I have my own, more reliable methods of determining Q.

But in any case I (and very few others) seldom need to know the
value of Q. It's not a particularly useful quantity. As I have said
elsewhere, Q is just a ratio, an intermediate value in the
calculation of some other parameter of more practical interest. It
also provides a topic of conversation.

My relatively recent interest in Q arose only because I wanted to
check the accuracy of some software. Before throwing my SOLNOID2
program to the wolves I wound 20 or 30 coils of various dimensions
to check what you would refer to as 'algorithms'. The algorithms
were developed from basic engineering and mathematical
rinciples - the tools of any electrical/mechanical engineer worthy
of the name. On these coils, 1 inch to 5 feet long, 1 inch to 6
feet diameter, I determined, where feasible, inductance,
self-resonant frequency and that nuisance parameter Q. Having
served their purpose I tossed the scribbled measurement results
into the garbage bin.

So I do not have a calibration certificate for a non-existent Q
meter. But having during my career set up from an empty floor an
electricaI standards and calibration laboratory on an echelon
imediately beneath the British National Physical Laboratory
(equivalent to NBS), I am familiar with assessment of statistical
measurements uncertainties and the need for traceabilty to national
and international standards.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:974f2rkn1@slb5.atl.mindspring.net...
> Reg:
>
> [SNIP]
> So let's forget
> > about it !

> > ----
> > **********
> > Regards, Reg, G4FGQ
> > Free radio design & modelling software
> > http://www.btinternet.com/~g4fgq.regp
> >
> > **********
> [SNIP]
>
> Fugetaboutid! What kind of "cop out" is that?
>
> Reg, you can't get off so easy, and neither can Tom. Come back
here and
> fight it out!
>
> Theory versus Practice, Mathematics versus Laboratory, Software
versus
> Hardware, Aristotle versus Plato, Ali versus Liston...
>
> We want it now!
>
> Reg what is the mathematical model that you are using for Q, and
Tom what is
> the manufacturer, model number, serial number and last
calibration date of
> your Q-Meter?
>
> Best,
>
> -Peter K1PO
>
>

3703. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 13:11:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <975ng1$f5d$1@neptunium.btinternet.com>
Source record: 169677

SWR meters should be banned. They don't even measure SWR. And the
SWR they purport to measure is in any case on a non-existent line.

Reg

3704. Re: Telescoping PVC Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 13:28:59 UTC
From: les <lesbod@lesbod.fsnet.co.uk>
Message-ID: <975om2$h3q$1@newsg2.svr.pol.co.uk>
Source record: 169678

oops that should have been App $1.50 a meter. my 9 meter cost 10 UK Pounds
App $13.50
Les G4JDC
"les" <lesbod@lesbod.fsnet.co.uk> wrote in message news:...
>
> "JGBOYLES" <jgboyles@aol.com> wrote in message
> news:20010221185253.05971.00000004@ng-fk1.aol.com...
> > I tried to order this item a couple of times(33 foot fiberglass mast) and they
> > do not have it. But they will put you on a waiting list for when they do have
> > it, but who wants to do that? I guess I will get it from the German ham that
> > has them at Dayton each year. Ideal portable, field day mast.
> > 73 Gary N4AST
>
> Here in the UK these telescoping poles can be purchased from
> fishermans tackle shops for App $1.50 a meter
>
> I use a 33 ft when out portable with my K2.
>
> Les G4JDC G-QRP 9440
>
>

3705. Advice on grounding for end-fed ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 15:10:53 UTC
From: jwg6@cornell.edu
Message-ID: <975uht$383$1@news01.cit.cornell.edu>
Source record: 169679

Scenario: Putting up end fed Zepp; station is located in 40-ft trailer (mobile home); one end of the 130' wire will be supported at the edge of the bldg. Feeder will be 450-ohm ladder line, going to balanced coupler. Either that, or a single wire feeder to a matching network.

Problem is, how to provide a proper gnd for the coupler. I don't think the water line coming into the home is accessible. The plumbing is plastic, for the most part. My options for grounding might be:

-use the aluminum siding (but the panels are probably not electrically continuous across the bldg.

-use the electrical service ground

-use a counterpoise(?)

An 8' ground rod is probably out of the question, at least at this time of year. The place is a rental, so the installation should be as discreet as possible. The ant. itself will be thin, like #26 and so not very visible. I intend to use it mainly on 75 and 40m.

Not sure how to proceed, and looking for any suggestions...

mni tks
Joel
n1aep

3706. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 15:34:24 UTC
From: Bill Turner <w7ti@jps.net>
Message-ID: <lk0d9tkkrsp828gl6tlb1p5t1og8p57mj2@4ax.com>
Source record: 169680

>Could someone tell me what the coax running from the
>> antenna to the radio is? (RG-58)?

It's been a few years since I did car radio repair, but back then the coax was definitely NOT RG-58 or anything similar. They use a hair-fine center conductor to reduce capacitance per foot. Using "ordinary" coax will upset the input tuning especially on AM.

73, Bill W7TI

3707. Re: BEST VERTICAL ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 15:57:35 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a968856$0$30012$44a10c7e@news.net-link.net>
Source record: 169681

A friend has a GAP and he does not like it. Kind of flimsy. Does not perform well in his installation. I have a Hustler 5BTV (80/40/20/15/10) that has served well for over 15 years. It needs a good counterpoise or several ground radials, although it will work on just a pipe and ground rod, elevated with radials cut for lowest band work well. Good lower angle for dx. I have Cushcraft R7 that has its own 7 radial counterpoise and covers all bands 40 to 10 meters. It works well and should be elevated--higher is better--but you can make contacts with it about 8 feet or so off the ground. Good low angle for DX. Both 5BTV and R7 have good band width without tuner (not recommended) but gets narrower the lower in freq you go. Of the 3 antennas you mention, the Hustler is by far the most rugged and easiest to install if you have space for radials. The Cushcraft would be next, and may perform a bit better--but not sure about the new ones. You can find good used R7's for about $100.00 The Hustler 6BTV covers 30 meters as well and elimiates some capacitance hats for a more streamlined look.
Richard wrote in message <97208m$si1$1@dagobah.blueriver.net>...
>I am looking at purchasing a multiband vertical antenna. I am wanting some
>advice from those with previous experience regarding various multiband
>antennas. I am wondering what the best would be. Right now I am looking at
>one of the GAP series, Cushcraft, and a Hustler BTV Series. Thanks for your
>help
>
>

3708. UHF Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 16:44:43 UTC
From: w5omr <no_mail@no_mail.org>
Message-ID: <%rwl6.3230$D9.478863@typhoon.austin.rr.com>
Source record: 169682

I'm looking to repair some commercially produced
vertical antennas. They're made by Decibel Products
and what I need is the little phoenelic/fiberglass rod
that fits into the end of the loop.

Does anyone have a source for these?

ADVthanksANC

--
73 = Best Regards,
-=Jeff/W5OMR=-

3709. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 16:59:25 UTC
From: rwclark@seanet.com
Message-ID: <3a979684.326418875@news.seanet.com>
Source record: 169683

On Fri, 23 Feb 2001 13:07:03 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>So I do not have a calibration certificate for a non-existent Q
>meter. But having during my career set up from an empty floor an
>electricaI standards and calibration laboratory on an echelon
>imediately beneath the British National Physical Laboratory
>(equivalent to NBS), I am familiar with assessment of statistical
>measurements uncertainties and the need for traceabilty to national
>and international standards.

Ah, Yes!

Then that explains it, not necessarily a lack of knowledge so much as
a troll.

...as if there were any doubt about Punchinello :->

73's
Richard Clark, KB7QHC

3710. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 17:52:44 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a96a11c.4465976@news.aepnet.org>
Source record: 169684

A few weeks ago, while taking a short "reading break" from a DX pileup, I was flipping through one of the electronics trade magazines and browsed an article.

The premise, if I remember correctly was that turn-to-turn capacitance in an inductor was more-or-less a myth because, and this is fuzzy, there wasn't a significant difference in signal phase and amplitude between adjacent turns and self capacitance was really just capacitance between the inductor and the measuring instrument.

I said to myself, "Self, that is interesting you should study this more later." Unfortunately, the library was rearranged before I remembered to look this up and now I can't remember where I saw it.

Any comments?

Wes Stewart, N7WS

3711. VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 18:23:18 UTC
From: JT <pescador@NOSPAMticnet.com>
Message-ID: <535F535A77CC6BA4.F70AEE08A5A2C2F7.9EC3C28617DB5C61@lp.airnews.net>
Source record: 169685

I've read catalogs and handbooks until I've completely confused myself, so it's time to seek the opinions of others wiser than I...

I have a 19' fiberglass boat. I'd like to put my 2M multimode onboard so that I can fish, boat and play radio at the same time. I'm leaning towards stacked HoLoops from M2 for SSB, but I'd like a simple vertical for working FM. The problem is obvious: very little ground plane.

I'd really appreciate your recommendations! Thanks!

JT (KB6WIJ/5)

3712. Re: NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 18:26:40 UTC
From: Old Biker <enfield@3n.net>
Message-ID: <3A96AB60.CD0FDBBD@3n.net>
Source record: 169687

T Man wrote:
>
> Hey guys,
> I'm re-designing my mobile setup ... for 440 MHz. .. I am
> thinking of using something other than an NMO. .. I have seen another
> connector that is a direct "screw-on" type connector (Not BNC,SMA, or NMO),
> it seemed like it would be more durable than the small contact in the NMO
> because it was just a stub with threads.

I think know what you mean: antenna is female and threads onto a
stud about 1/4 inch in diameter and 1/2 long ???. I have two of
them hanging in the garage which I use with 2 meter quarter-wave
antennae on my motorcycles but can't recall who made them. I got
them from HRO about 10 years ago. I think their small "L"
brackets were meant to mount to the lip of a car trunk with
sheet metal screws. <http://www.hamradio.com/> Good hunting.

KA3DWW

3713. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 18:30:53 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <976a9i$o3om4$1@ID-52642.news.dfncis.de>
Source record: 169686

Arrow antennas makes a very nice dual band j-pole that would fill the bill nicely.

URL:

http://hometown.aol.com/Arrow146

We have several up in this area and they work rather nicely. Built like a tank, but light weight. Being a true half wave antenna, you don't have to worrry about ground...can be mounted on either a metal or insulating mast and you get two bands for the price of one. Price is in the high thirties.

73

...hasan

"JT" <pescador@NOSPAMticnet.com> wrote in message
news:535F535A77CC6BA4.F70AEE08A5A2C2F7.9EC3C28617DB5C61@lp.airnews.net...
>
> I've read catalogs and handbooks until I've completely confused myself, so
> it's time to seek the opinions of others wiser than I...
>
> I have a 19' fiberglass boat. I'd like to put my 2M multimode onboard so
> that I can fish, boat and play radio at the same time. I'm leaning
> towards stacked HoLoops from M2 for SSB, but I'd like a simple vertical
> for working FM. The problem is obvious: very little ground plane.
>
> I'd really appreciate your recommendations! Thanks!
>
> JT (KB6WIJ/5)
>

3714. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 18:43:06 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <e8bd9t4tpfvh7ns1let6ikp173tkouusqm@4ax.com>
Source record: 169688

On 23 Feb 2001 01:22:33 GMT, w1rfi@aol.com (W1RFI) wrote:

>>From: Helmut Wabnig
>
>>Yes, I bought the ARRL Antenna Handbook 19th edition.
>
>>To anticipate the result:
>>The ARRL chapter about the Helix is complete BULLSHIT.
>
>Hello, Helmut,
>
>I forwarded your post to the ARRL Antenna Book editor, Dean Straw. Dean may be
>able to help fill in some of the info. I also expect he can look closely at
>this for a future edition.
>
>73, Ed Hare, W1RFI

I may sound a little too angry, the thing is, I want my 18 dB .
Made a 29 turn antenna and it's performance is bad.
Structure is made of PVC, which should be ok,
according to the microwave oven tests.
Suspect the matching.

http://www.tuc.nrao.edu/~demerson/helixgain/helix.htm

They simulated 10 000 helixes and their data show,
that 18 dB is realistic.

Look at the data which show gain versus length
and gain versus diameter.
Very interesting, and we can see that mechanical
tolerances are to be kept low.

Am working on that, will buy Kraus' book.
This is a *must* anyway, has to be in every antenna book collection
:-)

thanks,
w.

3715. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 18:55:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A96B23F.FA60C174@eznec.com>
Source record: 169689

That's an interesting thought. But extending the argument, it appears
that inductors couldn't be self resonant. But they are.

Roy Lewallen, W7EL

Wes Stewart wrote:
>
> A few weeks ago, while taking a short "reading break" from a DX
> pileup, I was flipping through one of the electronics trade magazines
> and browsed an article.
>
> The premise, if I remember correctly was that turn-to-turn capacitance
> in an inductor was more-or-less a myth because, and this is fuzzy,
> there wasn't a significant difference in signal phase and amplitude
> between adjacent turns and self capacitance was really just
> capacitance between the inductor and the measuring instrument.
>
> I said to myself, "Self, that is interesting you should study this
> more later." Unfortunately, the library was rearranged before I
> remembered to look this up and now I can't remember where I saw it.
>
> Any comments?
>
> Wes Stewart, N7WS

3716. Re: Advice on grounding for end-fed ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 19:29:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A96BA22.F99CC8EC@oio.net>
Source record: 169690

JG,
I think maybe the counterpoise would be your best bet.
'Doc

3717. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 19:47:19 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <5ifd9t0d20bl0a97vkm23k4n55dd65921n@4ax.com>
Source record: 169692

On Thu, 22 Feb 2001 20:16:49 +0100, Helmut Wabnig <hwabnig@aon.at>
wrote:

>
>Dear readers,
>am trying to solve a mystery.
>
>......snip

See this, got the link mailed by Henry W.
(Thanks)

http://home.iprimus.com.au/jhecker/
The most easy to manufacture match,
uses the triangular microwave transformer strip
which I mentioned as 4.) in the first posting.
Look, how carefully Jhecker hides the details <grin>
Strip is 73 or 71 mm long, why?
How do I calculate the strip for a DIFFERENT FREQUENCY?
look at the photo, where it is half-covered.
How did jhecker calculate the 71 millimeters?
This is more than a quarter turn but less than a half turn.

Cannot copy.

w.

3718. Re: Advice on grounding for end-fed ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 19:51:49 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <t9dfmqigh5ktd4@corp.supernews.com>
Source record: 169691

All of the below, excluding the electrical ground.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"JG in NY" <jwg6@cornell.edu> wrote in message
news:975uht$383$1@news01.cit.cornell.edu...
> Scenario: Putting up end fed Zepp; station is located in
40-ft trailer
> (mobile home); one end of the 130' wire will be supported
at the edge of the
> bldg. Feeder will be 450-ohm ladder line, going to
balanced coupler. Either
> that, or a single wire feeder to a matching network.
>
> Problem is, how to provide a proper gnd for the coupler.
I don't think the
> water line coming into the home is accessible. The
plumbing is plastic, for
> the most part. My options for grounding might be:
>
> -use the aluminum siding (but the panels are probably not
electrically
> continuous across the bldg.
>
> -use the electrical service ground
>
> -use a counterpoise(?)
>
> An 8' ground rod is probably out of the question, at least
at this time of
> year. The place is a rental, so the installation should
be as discreet as
> possible. The ant. itself will be thin, like #26 and so
not very visible. I
> intend to use it mainly on 75 and 40m.
>
> Not sure how to proceed, and looking for any
suggestions...
>
> mni tks
> Joel
> n1aep

>
>
>
>

3719. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 19:54:55 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn99dg0e.72q.QSB@animas.frontier.net>
Source record: 169693

On Fri, 23 Feb 2001 01:48:23 -0600, 'Doc scribbled:
>> I have a fairly large (about 150 linear feet) Chain Link Fence. How
>> well will that work as a ground???
>
> 8<.... If you don't bond all the top rails to the posts,
>and posts to the 'links', you have a variable ground system... that's
>not good either.

And, if the posts are set in concrete, then the posts are
almost as good as being *insulated* from ground.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

3720. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 20:28:45 UTC
From: rwclark@seanet.com
Message-ID: <3a96c6aa.338744929@news.seanet.com>
Source record: 169694

On Thu, 22 Feb 2001 22:33:14 -0500, "Ed Cregger" <nuke663jlm@vei.net>
wrote:

>A friend of mine loads his chain link fence and does very
>well on 160 meters. Go figure.
>--
>Ed Cregger, NM2K

Hi Ed,

Imagine his surprise if it worked better using the usual radials.

The problem with chain link is that the wire mesh is not necessarily
conductive at the intersections of the chain links. In fact, there is
every opportunity of generating spurs and encountering problems due to
the variable nature of conductivity (and issues of corrosion at these
cross points introducing intermod). However, having said that, I did
observe one fellow at field day had considerable success using a ball
field backstop as his ground connection to a balloon launched vertical
for 160M. He surprised other 160M users with his big signal (they,
unfortunately used the usual radials).

Go figure. ;->

73's
Richard Clark, KB7QHC

3721. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 20:40:13 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3A96CADD.7CEEA680@earthlink.net>
Source record: 169695

Richard Clark wrote:

> However, having said that, I did
> observe one fellow at field day had considerable success using a ball
> field backstop as his ground connection to a balloon launched vertical
> for 160M. He surprised other 160M users with his big signal (they,
> unfortunately used the usual radials).
>

What's a ball field backstop?

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

3722. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 20:42:38 UTC
From: gpewitt@execpc.com
Message-ID: <3a96cc4f$0$70808$272ea4a1@news.execpc.com>
Source record: 169696

Cushcraft AR-270 has radials needs no other counterpoise.

On Fri, 23 Feb 2001 12:23:18 -0600, JT <pescador@NOSPAMticnet.com>
wrote:

>Lines: 13
>Message-ID: <535F535A77CC6BA4.F70AEE08A5A2C2F7.9EC3C28617DB5C61@lp.airnews.net>
>X-Orig-Message-ID: <Pine.LNX.4.33.0102231216220.1842-100000@localhost.localdomain>
>Abuse-Reports-To: abuse at waymark.net to report improper postings
>NNTP-Proxy-Relay: library2.airnews.net
>NNTP-Posting-Time: Fri Feb 23 12:22:36 2001
>NNTP-Posting-Host: ![4s41k-W#>+=$s (Encoded at Airnews!)
>Mime-Version: 1.0
>Content-Type: TEXT/PLAIN; charset=US-ASCII
>X-X-Sender: <jt@localhost.localdomain>
>Xref: news.execpc.com rec.radio.amateur.antenna:150601
>
>
>I've read catalogs and handbooks until I've completely confused myself, so
>it's time to seek the opinions of others wiser than I...
>
>I have a 19' fiberglass boat. I'd like to put my 2M multimode onboard so
>that I can fish, boat and play radio at the same time. I'm leaning
>towards stacked HoLoops from M2 for SSB, but I'd like a simple vertical
>for working FM. The problem is obvious: very little ground plane.
>
>I'd really appreciate your recommendations! Thanks!
>
> JT (KB6WIJ/5)
>

Gary Pewitt N9ZSV
414 355 8147

3723. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 20:51:00 UTC
From: rwclark@seanet.com
Message-ID: <3a97c8c6.339284024@news.seanet.com>
Source record: 169698

On Fri, 23 Feb 2001 17:52:44 GMT, nospam_n7ws@arrl.net (Wes Stewart)
wrote:

>
>A few weeks ago, while taking a short "reading break" from a DX
>pileup, I was flipping through one of the electronics trade magazines
>and browsed an article.
>
>The premise, if I remember correctly was that turn-to-turn capacitance
>in an inductor was more-or-less a myth because, and this is fuzzy,
>there wasn't a significant difference in signal phase and amplitude
>between adjacent turns and self capacitance was really just
>capacitance between the inductor and the measuring instrument.
>
>I said to myself, "Self, that is interesting you should study this
>more later." Unfortunately, the library was rearranged before I
>remembered to look this up and now I can't remember where I saw it.
>
>Any comments?
>
>Wes Stewart, N7WS

Hi Wes,

Comments follow.

Strange observation indeed, and probably argued from a perspective
where this issue is marginal at best (in other words they don't worry
about it because it isn't a problem at their scale of operation). I
say this because of their provisos offered insofar as signal phase and
such (rather an exotic consideration that does not exist at all
scales).

There are clear and simple solutions working in a billion dollars
worth of gear. In my own 6M rig (a Motorola mobile converted from
public service) are a string of at least 6 shielded inductors that
each show considerably more Q than if they were simply sitting on an
open PC board (or in free space for that matter). There is a better,
technical name for them, but I am not close to my resource to
resurrect that term right now. The point of the matter is that all
capacitance is overwhelmed by the surrounding shield, but that shield
is made part of the resonant circuit and would certainly swamp the
inter-turn capacitance.

In the Nav, I taught a course on what was then called the TED and the
RED (UHF transmitter and Receiver). One of the amusing tuned circuits

was a simple metal post in the middle of a cavity (no, the cavity was not resonant in the conventional expectation of modes excited by the physical dimensions - more probably another example of my 6M rig's design). No turns at all, nor any capacitors. Knowing the specs demanded by the Nav, I would say that the Q was very good.

73's
Richard Clark, KB7QHC

3724. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 20:52:15 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <53Al6.63080$Dd3.845423@monolith.news.easynet.net>
Source record: 169697

get a marine band VHF antenna that has a plain steel whip about 36 inches long. (Some have much shorter whips and some are enclosed in Fiber-glass - ignore those) . Extend the top of the whip with about 4" of stiff wire. Set it all up with SWR meter in line. Use lowest power setting. Using 146.1 Mhz . Snip bits off the wire extension until you get lowest SWR. [probably end up with around 3 inches but easier to start long and snip than start short and try to add)
Bingo..you're in business.

Bryan - G3GVB

JT <pescador@NOSPAMticnet.com> wrote in message news:535F535A77CC6BA4.F70AEE08A5A2C2F7.9EC3C28617DB5C61@lp.airnews.net...
>
> I've read catalogs and handbooks until I've completely confused myself, so
> it's time to seek the opinions of others wiser than I...
>
> I have a 19' fiberglass boat. I'd like to put my 2M multimode onboard so
> that I can fish, boat and play radio at the same time. I'm leaning
> towards stacked HoLoops from M2 for SSB, but I'd like a simple vertical
> for working FM. The problem is obvious: very little ground plane.
>
> I'd really appreciate your recommendations! Thanks!
>
> JT (KB6WIJ/5)
>

3725. Need Antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:01:04 UTC
From: Jeff <younotme@superhappy.com>
Message-ID: <kcAl6.284166$j6.38912316@news1.rdc1.va.home.com>
Source record: 169699

Hello All,

I have two Cobra PR1000 2-way portables that I want to use in vehicles. I'm looking for a magnetic mount antenna for a channel in the 462Mhz range. Know where I can get one? The radio has SMA female connector on radio. Or do I have to make it? Should I just buy the $25 special at Radio Shack and then try to cut (tune) it myself? And find a BNC to SMA female adapter? What should the length be?

The Cobra literature mentions being able to attach a mobile antenna for use in a car but, so far I can't find anything on finding one.

Jeff

--

National Rifle Association, Endowment Member
KeepandBearArms.com, Member
North American Hunting Club, Member
Society of the First Infantry Division, Life Member
My Home Page is WorldNetDaily.com. For Real News.

=Patriots are not revolutionaries trying to =
=overthrow the government.=
=Patriots are counter revolutionaries trying =
=to prevent the government from overthrowing =
=The Constitution.=
by x ring

VeriSign capable (digital sig a/o encryption), if need be. Just let me know.

3726. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:03:21 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <976j77$e24@r02n01.cac.psu.edu>
Source record: 169701

As I remember, it's a 93 ohm cable designed to have a very low capacitance.
And Bill is right if you use anything else the performance of the radio will
be hurt. The reason is that a car antenna is more like a capacitance probe
or an active antenna than anything else.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Bill Turner" <w7ti@jps.net> wrote in message
news:lk0d9tkkrsp828gl6tlb1p5t1og8p57mj2@4ax.com...
>
> >Could someone tell me what the coax running from the
> >> antenna to the radio is? (RG-58)?
>
> ____
>
> It's been a few years since I did car radio repair, but back then the coax
was
> definitely NOT RG-58 or anything similar. They use a hair-fine center
conductor
> to reduce capacitance per foot. Using "ordinary" coax will upset the
input
> tuning especially on AM.
>
> 73, Bill W7TI

3727. Re: Advice on grounding for end-fed ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:03:49 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a96d01d$0$35009$44a10c7e@news.net-link.net>
Source record: 169700

Get under the trailer and find the steel I beam frames. There should be at least 2 of them, 4 if you have a "double-wide." Make sure these are bonded together with copper braid or strap. Grind off outer paint down to bare metal and use star washers to get a bite. Hook up a ground rod at each end of trailer and tie into beams. Pull back carpet and make a hole in the floor near base board and run you ground braid up though the hole to your tuner and other equipment. Hopefully your radio set up is near the service panels and service ground--tie all that together to fram as well. The bigger metal foot print you can make the better your signal will be. Don't let the "hot" wire touch any thing metal and use stand off insulators if necessary. What you are basically doing is making a "big mobile" installation--so picture a big car with a big (130 foot) whip on it!
JG in NY wrote in message <975uht$383$1@news01.cit.cornell.edu>...
>Scenario: Putting up end fed Zepp; station is located in 40-ft trailer
>(mobile home); one end of the 130' wire will be supported at the edge of
the
>bldg. Feeder will be 450-ohm ladder line, going to balanced coupler.
Either
>that, or a single wire feeder to a matching network.
>
>Problem is, how to provide a proper gnd for the coupler. I don't think the
>water line coming into the home is accessible. The plumbing is plastic, for
>the most part. My options for grounding might be:
>
>-use the aluminum siding (but the panels are probably not electrically
>continuous across the bldg.
>
>-use the electrical service ground
>
>-use a counterpoise(?)
>
>An 8' ground rod is probably out of the question, at least at this time of
>year. The place is a rental, so the installation should be as discreet as
>possible. The ant. itself will be thin, like #26 and so not very visible.
I
>intend to use it mainly on 75 and 40m.
>
>Not sure how to proceed, and looking for any suggestions...
>
>mni tks
>Joel
>n1aep
>
>

>
>

3728. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:17:39 UTC
From: richardharrison@webtv.net
Message-ID: <15190-3A96D373-1@storefull-112.iap.bryant.webtv.net>
Source record: 169705

Roy, W7EL wrote:
"I disagree that the series resistive part of Zo of all transmission lines is doissipative. A lossless line has a purely real Zo. How can a lossless line contain a dissipative resistance?"

I wrote: "the series resistance of the transmission line is dissipative."

Roy is right. I used the generic word (resistance). I should have used the more specific word (resistor). Then: the series resistor part of the resistance of a transmission line is dissipative. Isn`t there a redundancy there? Or: the copper loss in a transmission line is dissipative,

Point is, a transmission line`s distributed inductance and capacitance don`t cause loss, but they do cause a characteristic resistance which is lossless. Characteristic resistance is built of distributed inductance and capacitance, both of which are lossless in their pure forms.

Real conductors in transmission lines have loss but it can be so low as to be disregarded in many practical situations.

I know which resistance I mean by the context I write it in. Why doesn`t everyone else?

Best regards, Richard Harrison, KB5WZI

3729. Re: 5B Hex: How much of a compromise is it?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:18:17 UTC
From: kelly@dvol
Message-ID: <3a96d167.11970671@news2.dvol.com>
Source record: 169704

On Thu, 22 Feb 2001 09:25:45 -0800, jack <bb@ff.com> wrote:

>compared to a C3SS beam
>
You're asking for a comparison between apples & oranges. The Hexbeam
is about as good as it can get given it's size and weight. It's market
is hams who are cramped and tower-limited. It has a few dB forward
gain and a useful F/B ratio. The Force 12 is a much bigger antenna,
you can assume the rest per usual.
>
w3rv

3730. Looking for antenna projects using Heliax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:24:21 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <xAAl6.790$m8.110140@news.direcpc.com>
Source record: 169702

Does anyone know of an antenna project book/site/source that utilizes Heliax as a construction material? I seem to remember Ken Sessions (73 Magazine) having a publication years ago with vertical collinear projects that replicated commercial antenna construction?

Any help would be appreciated.

Thanks and 73

3731. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 21:31:45 UTC
From: rwclark@seanet.com
Message-ID: <3a98d502.342416659@news.seanet.com>
Source record: 169703

On Fri, 23 Feb 2001 20:40:13 GMT, Zoran Brlecic
<zbrlecic@earthlink.net> wrote:

>Richard Clark wrote:
>
>> However, having said that, I did
>> observe one fellow at field day had considerable success using a ball
>> field backstop as his ground connection to a balloon launched vertical
>> for 160M. He surprised other 160M users with his big signal (they,
>> unfortunately used the usual radials).
>>
>
>What's a ball field backstop?
>
>73 ..... Zoran WA7AA

Hi Zoran,

That big truncated cone of mesh wire behind the umpire, behind the catcher, behind home plate, in front of the pitcher, in front of second base, in front of center field, in one corner of the base ball stadium (or a school ground play field).

It is so called because it is at the back of play and stops the ball if the pitch is wild and is missed by the catcher (and does not strike either the batter, the catcher, or the umpire). It also stops tip fouls and pop ups on occasions.

In school grounds it is often extended out along both base lines to each team's "dug out." This was just such the case for the results reported above.

73's
Richard Clark, KB7QHC

3732. Re: Beware of Tom Sevart N2UHC

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 22:06:43 UTC
From: Walton Hackman <Walton205@hotmail.com>
Message-ID: <976mtn$9qu$1@mozo.cc.purdue.edu>
Source record: 169706

"caddoo" <caddoo@earthlink.net> wrote in message
news:3a9da350.40288594@news.earthlink.net...
> To anyone who intends to deal with Tom Sevart, please read this
> message first!
>
> I purchased a Icom R71A, which Tom advertised right here on
> RecRadioSwap. He advertised that it was in excellent condition and
> from a non-smoker.
>
> I sent him the money he asked for, he would not ship COD, so he had my
> money first, which would be fine if he sent what he advertised.
>
> But when the radio arrived, it did not work, all the screws were loose
> and odd colors. He obviously had been in the radio and there was an
> obvious problem with it working.

Yes, it looks to me like you have been screwed. Let us know when and if you
get your money back.
Walton

3733. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 22:06:46 UTC
From: richardharrison@webtv.net
Message-ID: <15187-3A96DEF6-18@storefull-112.iap.bryant.webtv.net>
Source record: 169707

Helmut Wabnig wrote:
"Hints to literature, www, or paper, exact broadband and narrowband helix welcome."

Try RSGB "VHF / UHF" Manual (3rd edition) page 7.21. Their aerials come out with 140-Ohm drivepoint impedance for which they suggest a Q-section transformer to the desired impedance.

Best regards, Richard Harrison, KB5WZI

3734. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 22:10:08 UTC
From: Walton Hackman <Walton205@hotmail.com>
Message-ID: <976n41$a1d$1@mozo.cc.purdue.edu>
Source record: 169708
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

```
Write to the ARRL and tell them you are willing to make a deal. Offer them
$100 if they will remove your name from the membership rolls.
Walton, W3NYT
==============
"smiley o'riley" <bummer-radio@licensing.org> wrote in message
news:goodbye@goodbye...
>
> I find I can no longer support the ARRL by being a member. What's the
best
> way to cancel a membership?
>
> TNX 73 de Smiley
```

3735. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 23:38:55 UTC
From: rwclark@seanet.com
Message-ID: <3a96e2c0.345934597@news.seanet.com>
Source record: 169709

On Fri, 23 Feb 2001 15:17:39 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Roy, W7EL wrote:
>"I disagree that the series resistive part of Zo of all transmission
>lines is doissipative. A lossless line has a purely real Zo. How can a
>lossless line contain a dissipative resistance?"
>
>I wrote: "the series resistance of the transmission line is
>dissipative."
>
>Roy is right. I used the generic word (resistance). I should have used
>the more specific word (resistor). Then: the series resistor part of the
>resistance of a transmission line is dissipative. Isn`t there a
>redundancy there? Or: the copper loss in a transmission line is
>dissipative,
>
>Point is, a transmission line`s distributed inductance and capacitance
>don`t cause loss, but they do cause a characteristic resistance which is
>lossless. Characteristic resistance is built of distributed inductance
>and capacitance, both of which are lossless in their pure forms.
>
>Real conductors in transmission lines have loss but it can be so low as
>to be disregarded in many practical situations.
>
>I know which resistance I mean by the context I write it in. Why doesn`t
>everyone else?
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I will weigh in (again) to this "dissipationless" term without merit.

To answer your last question first, context is unnecessary if you simply state that the resistance is reactance instead (which no one would argue with the unit being Ohms).

This absurd differentiation with "resistance" ignores the established dissipationless aspect already part and parcel to reactance.

When Thevenin is confused by users with requiring an R to work, it is pointed out that the correct definition is Z. If a Thevenin source does not apply all available power, that power which is withheld is done with reactance - who needs to create a special artifice of dissipationless resistance when reactance already covers that, is part

of Z, is measured in Ohms, and is already understood to be non-dissipative! This absurd distinction of a separate meaning for "resistance" is simply gutting the Lily and pandering the Rose. Consider, as Roy suggests elsewhere, we have resistance, reactance, and non-dissipative resistance? How does one distinguish between reactance and this non-dissipative resistance? As much as they are similar, I have not observed any mention of how they are different. If they are not different, then one term is unnecessary. I vote "dissipationless resistance" off the Island.

Now to weight into the transmission line Z, which is described as being 50 Ohms (or choose your own). The 50 Ohms comes from where? I think I saw Gary quote the standard sqrt of L/C. Do these separate reactances for each (L and C) not exist? Of course they do, and they are equal and opposite. Can we imagine that they may each be 50 Ohms? Even with Tanks, there is a Z that is exhibited that is unrelated to the loss presented by any R present (well maybe not entirely unrelated if you choose a poor Tank design). A Tank circuit for a Triode is not the best design solution for a Tetrode and the difference is in the Z of both the Tube and the Tank.

OK, back to the line. At 50 Ohms, and without the annoying R, there is no conversion to heat (BFD!) and yet to satisfy the 50 Ohm spec the line must be infinite, or terminated in a carbon resistor of... 50 Ohms! Either way, the signal is not recoverable and completely lost - or in the words of the english speaking world: dissipated. There is only one exception: where the carbon resistor is replaced with an active device that in turn dissipates (turns to heat for engineers who cannot cope with english and need remedial aids to communicate) that applied power for the purpose of detection and amplification. In nearly every instance, that active device sees a 50 Ohm carbon resistor terminating the line anyway! (Are receivers heat amplifiers? I will bet some, on a summers day in a small airless shack, may think their linear is.)

And to turn the thread back to the topic, Walter and the Triode, as I have already posted elsewhere, the Plate is a perfect example of a nearly 0 Ohm structure that turns current into heat. Some in this group refuse to acknowledge this fact because it would dash their logic of a source not containing a dissipative (their words) resistance. And yet such physics is classic and satisfies every known definition offered by every correspondent to this topic. For these individuals, I must suspect that there is a yet undisclosed third meaning for "dissipative" for which the Plate Dissipation Factor is not related (yeah - sure).

One of our references, Terman, uses the term "Real" resistance when he describes the Z of a line. Note he did not use "dissipationless" except as an adjunct to explain that the power loss was not to heat. And just what distinction does Heat have in this, or any other regard? Terman merely comments on this as a distinction to be noted but not

taken as a religious expression. What does he mean by "Real?" In just the way we would interpret it: not reactive (and he specifically says so). Geez - that's too simple! Converted to heat or lost to outer space is indistinguishable to the transmitter or the receiver (which by definition can't observe the signal anyway and we must insert an artificial observer with a thermometer to confirm - what happened to Occam's razor fellows?).

And one last tag. If EVERY living person on this planet (and a few of the dead ones) had an antenna and a radio and was listening to you without any problem of propagation (yeah impossible - I said "if"). And you were transmitting 100W and each and every receiver indicated 10dB over S9 (yeah impossible - I said "if"). Then, something like 90% of the power transmitted would be lost to dissipation (and no one could argue if it were spent in heat or simply trapped in a bus queue). The difference here is that the english speaking world would understand exactly what dissipation meant, and the religious sycophants would be running the length and breadth of the terrain with thermometers to proclaim a distinction without merit. In the process of their proselytizing, they would dissipate not only the heat of their frustration, but also dissipate their credibility.

73's
Richard Clark, KB7QHC

3736. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 23:48:57 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <978nls$n5e$1@lure.pipex.net>
Source record: 169643

"Richard Clark" wrote ...
> "Gary Peach wrote:
> >And what happens as the electrons plough into the phospher of a CRT?
> >Energy is dissipated, but resistance can not be demonstrated.
> >The answer has been sitting in front of us un-noticed for years.
> No resistance? That begs the question: why do you expect it for this
> scenario (this is the danger of switching the focus and maintaining
> the same argument)?

I think that you brought up the kinetic energy of an electron ploughing into the anode of a vacuum tube and releasing its energy in the form of heat. I was attempting to give an example that might be more familiar to the younger contributers of this group. Many still have cathode ray monitors and most will have seen a TV set with a CRT. Here is a prime example of an electron accelerated to with several kilovolts and then brought to a sudden stop in a coating of material that has the property of liberating light when excess energy is applied.

> As I reach up and touch the screen of my monitor, I note that the
> temperature is in excess of ambient. This heat is not coming from the
> filament, but there is admittedly a component of it due to the
> electronics within the enclosure.

Did you notice the little hairs on the back of your hand stand up and induce a sensation into the hand?
This new monitor doesn't do that I guess the glass is coated to conduct away the charge.

> Perhaps you should re-consider the issue of this being "un-noticed."

I'm afraid that being a Peach with branches everywhere,
once seen never forgotten.

> Then again, perhaps not. You
> certainly have the background to perform a caloric measurement, but
> this tangent is off-scale.

Yes, a load of bol'ometery. :)

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3737. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-23 23:53:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A96F80C.65EC329D@eznec.com>
Source record: 169710

Richard Clark wrote:
> . . .

> When Thevenin is confused by users with requiring an R to work, it is
> pointed out that the correct definition is Z. If a Thevenin source
> does not apply all available power, that power which is withheld is
> done with reactance - who needs to create a special artifice of
> dissipationless resistance when reactance already covers that, is part
> of Z, is measured in Ohms, and is already understood to be
> non-dissipative! This absurd distinction of a separate meaning for
> "resistance" is simply gutting the Lily and pandering the Rose.
> Consider, as Roy suggests elsewhere, we have resistance, reactance,
> and non-dissipative resistance? How does one distinguish between
> reactance and this non-dissipative resistance? As much as they are
> similar, I have not observed any mention of how they are different.
> If they are not different, then one term is unnecessary. I vote
> "dissipationless resistance" off the Island.

>. . .

I believe that the purveyors of the term "dissipationless resistance"
use it to describe a quantity for which the voltage and current are in
phase -- as opposed to a reactance in which they're in quadrature. That
is, as I understand it, "disspationless resistance" is purely real in a
mathematical sense rather than purely imaginary like reactance.

Roy Lewallen, W7EL

3738. Surplus Transco antenna switch query

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 00:05:53 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <BVCl6.5681$M_1.463782@news1.rdc1.ct.home.com>
Source record: 169711

Anyone have any experience with the Transco antenna switches--the style that has N fittings and use a stepping switch mechanism to index to each port (normally made with 2 to 6 ports). I picked up a few on eBay and I am thinking of using them on the top of the tower to select various VHF/UHF antennas down to one good hardline going to the shack..

How reliable are these units, are they suited for long-term exposure to elements (temperature, I will mount it in an aluminum box)? I am looking for something that approaches military quality and needs zero maintenance. Appreciate any advice.

73

Peter

3739. Re: Surplus Transco antenna switch query

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 00:12:12 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a96fb35.27533801@news.aepnet.org>
Source record: 169712

On Sat, 24 Feb 2001 00:05:53 GMT, "Peter J. Bertini"
<commquart@home.com> wrote:

>Anyone have any experience with the Transco antenna switches--the style that
>has N fittings and use a stepping switch mechanism to index to each port
>(normally made with 2 to 6 ports). I picked up a few on eBay and I am
>thinking of using them on the top of the tower to select various VHF/UHF
>antennas down to one good hardline going to the shack..
>
>How reliable are these units, are they suited for long-term exposure to
>elements (temperature, I will mount it in an aluminum box)? I am looking
>for something that approaches military quality and needs zero maintenance.
>Appreciate any advice.

A lot of what Transco made _was_ mil qualified. I doubt that you can
find anything more reliable. I have some old catalogs, if you supply
the P/N, I may even have the specs for you.

Wes

>
>73
>
>Peter
>
>

3740. 40 meter super loop proble, Any body had this happen

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 00:17:17 UTC
From: paul werfel <pwerfel@epo.hsc.sunysb.edu>
Message-ID: <3a96fd3a_3@dilbert.ic.sunysb.edu>
Source record: 169713

Folks,

In re my posting of 2 days ago, the balun is burned out. Is this supposed to happen when running 800-1000 watts?

This antenna was only purchaced in oct, 2000, I guess it would be dreaming to think that there is a warrantee on such items.
Thanks to all that sent me messages

73

Paul
wb2lbq

3741. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 03:33:09 UTC
From: richardharrison@webtv.net
Message-ID: <15187-3A972B75-44@storefull-112.iap.bryant.webtv.net>
Source record: 169715

Rchard Clark wrote:
"How does one distinguish between reactance and this non-dissipative resistance?"

Reactance responds with current which eiher leads or lags the voltage across it by 90 degrees.

Resistance responds with a current in-phase with the voltage across it regardless of whether the resistance immediately converts the electricity to heat or does not.

Best regards, Richard Harrison, KB5WZI

3742. MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 03:38:03 UTC
From: eborys <eborys@home.com>
Message-ID: <v0Gl6.6824$t67.193040@news1.rdc1.il.home.com>
Source record: 169714

Does anyone here own of the MFJ loops? How is it working out for you?
Thanks,
Emil
ak9i

3743. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 04:35:36 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <nl8e9to4ug44tq68688h18r59f9fp4dbar@4ax.com>
Source record: 169716

On Fri, 23 Feb 2001 15:53:48 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Richard Clark wrote:
>> . . .
>
>> When Thevenin is confused by users with requiring an R to work, it is
>> pointed out that the correct definition is Z. If a Thevenin source
>> does not apply all available power, that power which is withheld is
>> done with reactance - who needs to create a special artifice of
>> dissipationless resistance when reactance already covers that, is part
>> of Z, is measured in Ohms, and is already understood to be
>> non-dissipative! This absurd distinction of a separate meaning for
>> "resistance" is simply gutting the Lily and pandering the Rose.
>> Consider, as Roy suggests elsewhere, we have resistance, reactance,
>> and non-dissipative resistance? How does one distinguish between
>> reactance and this non-dissipative resistance? As much as they are
>> similar, I have not observed any mention of how they are different.
>> If they are not different, then one term is unnecessary. I vote
>> "dissipationless resistance" off the Island.
>
>>. . .
>
>I believe that the purveyors of the term "dissipationless resistance"
>use it to describe a quantity for which the voltage and current are in
>phase -- as opposed to a reactance in which they're in quadrature. That
>is, as I understand it, "disspationless resistance" is purely real in a
>mathematical sense rather than purely imaginary like reactance.
>
>Roy Lewallen, W7EL

Hi Roy,

You are going way out on a limb to suppose what someone else "might"
be thinking. But it serves.

The Real resistance that Terman speaks of characterizing the Z of a
transmission line is neither reactive nor does it decelerate charge
(how could it? this imaginative line is loss less and infinite). As
such I and E are always in phase (which is a derivative principle, not
a first principle of dissipation).

But when we examine the source for dissipative loss, and find it (real
heat, first principle of dissipation), we are presented an argument
that devolves to the logic above and appeals to an artifice creating a
reality. To see the conjectures that the R in a source Z measured by

Walter, in a transmitter, is actually evidence of dissipationless resistance is a logical perversion.

This, of course, is my not so mumbled opinion.

73's
Richard Clark, KB7QHC

p.s. you may note a change in my ISP.
@Home is a blast (as long as my neighbors don't catch on I suppose). My mumbling now comes at you at 1.67 MBaud (but the typing doesn't seem to be any quicker).
A middlin' state of the art 866 MHz Pentium 500 MB RAM system with a cable modem on the open highway can support full screen video on demand and still leave more than 50% of the CPU horsepower available for other work.
Now when I say video on demand I mean I can watch the classic B&W comedies of 50's TV and Hollywood Films with about the quality of a VHS tape in its 6 hour format seen the tenth time. A shameless plug:
http://www.liketelevsion.com
is a source of a jillion shows and films in full length.... I should burn out soon.
and to cap it off, it costs no more than the old way. Less in fact.

3744. question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 05:35:04 UTC
From: ogardner@uiuc.edu
Message-ID: <cKHl6.4909$dL4.61849@vixen.cso.uiuc.edu>
Source record: 169717

An earlier article describing a new feed system for a W8JK antenna (by Zimmermanin QST Jun 99...with a dimension correction in July 99) prompted me to press his idea further. He moved the feed points away from center to get a higher resistive feed point. He chose 25 ohms which he converted to 100 ohms via an electrical quarter-wave section of 50 ohms. (i.e 25 is to 50, as 50 is to 100). He then paralled the two similar configurations to get the 50 ohm feed point, apparently unbalanced to accommodate the 50
ohm feed-coax.
I saw later reference by him, where he suggested a W8JK wire antenna where he moved the feed points out to the 100 ohm resisive points (16.5% of the way from the ends), both on the same direction from center, and fed them with 100 ohm balanced transmission line (hard to find?), with one of them transposed, of course to get the two W8JK half-waves out of phase. These were joined somewhere to provide 50 ohms balanced (two 100's in parallel), but then I suppose a choke-balun would be in order.
He aroused my curiosity, and I wondered how far this scheme could be pushed.
On EZNEC, I found the positions for 450 ohm feed points (W8JK-type), which occured at 6% of the way in from the ends. (458 -j15) for a SWR of 1.03 referred to
450 ohm balanced line. These are paralled at some point (one transposed) to offer 225 ohms, which is suitable for a 1:4 unbalanced-to- balanced ferrite balun.
I was thinking of the old days when many hams used "end-fed ZEPPS" and was always wondering what the theory was.
On this 450 ohm version, one would like to think that feeding this "450 ohm resistive" load shown by EZNEC would mean equal currents in the 450 ohm feed lines.....and that they are not radiating. BUT MY INTUITION tells me that it is unlikely this can be true, when 6% of the half-wave attaches to one side, and 94% attaches to the other.
Things really get temperamental in EZNEC when you try to find higher resistive values even closer to the end.
SO WHAT'S WRONG WITH THIS PICTURE ??

3745. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 05:37:34 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <44he9t4cuppovbl7mjq16phiss4fna1jrm@4ax.com>
Source record: 169718

On Fri, 23 Feb 2001 21:33:09 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Rchard Clark wrote:
>"How does one distinguish between reactance and this non-dissipative
>resistance?"
>
>Reactance responds with current which eiher leads or lags the voltage
>across it by 90 degrees.
>
>Resistance responds with a current in-phase with the voltage across it
>regardless of whether the resistance immediately converts the
>electricity to heat or does not.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

So, I will agree there is a discriminating factor of phase that has no impact whatsoever on the issue of dissipation (except for boundry conditions). Which is to say that an X satisfies as easily as an R for a Thevenin Source Z (or an admixture of those three) and that R is clearly distinguishable, and unambiguous by clearly revealing itself in heat which in turn is evidence of dissipation. Further, that there is the speculation of a "dissipationless" resistance as a physical reality, and it somehow answers to the name R in this Z - THAT has not been demonstrated.

Your mileage may vary. ;-)

73's
Richard Clark, KB7QHC

3746. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 06:09:56 UTC
From: "John S. Dyson" <dyson@iquest.net>
Message-ID: <zcll6.264$Uh4.121170@news1.iquest.net>
Source record: 169620

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a97c8c6.339284024@news.seanet.com...
> scales).
>
> There are clear and simple solutions working in a billion dollars
> worth of gear. In my own 6M rig (a Motorola mobile converted from
> public service) are a string of at least 6 shielded inductors that
> each show considerably more Q than if they were simply sitting on an
> open PC board (or in free space for that matter). There is a better,
> technical name for them, but I am not close to my resource to
> resurrect that term right now. The point of the matter is that all
> capacitance is overwhelmed by the surrounding shield, but that shield
> is made part of the resonant circuit and would certainly swamp the
> inter-turn capacitance.
>
Is it a helical resonator?

John

3747. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 06:17:13 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3A9751E8.D8551399@haertig.com>
Source record: 169619

But why would a cop car need an Inmarsat terminal?

There are also GPS antennas that look quite similar, which makes much more sense since automatic vehicle location systems are commonly included in cop cars.

Gray

Greg Blair wrote:
> The small half height pop bottle size sail boat domes are Inmarsat
> satellite telephones.
>
> [Image]
>
> Talk all you want, $5-$7 USD per minute.
>
> The small half height pop bottle size cone antennas are Inmarsat
> satellite data (email+fax) antennas.
>
> [Image]
>
> Now, just to complicate antenna identification, here is a data system
> that is 1/2 cone and 1/2 dome:
>
> [Image]
>
> Email all you want at 1 cent per char, or $20 per page (2000
> char/page)
>
> Benjamin Blavat wrote:
>
> > Maybe a GPS, I have seen similar domes on sailboats.
> >
> > --
> > 73's from W4BEN,
> > Benjamin Blavat
> >
> > "Pervert_Extraordinair" <valued_customer@att.com> wrote in message
> > news:3A933D4E.834E512C@att.com...
> > > I was following a cop today with an odd antenna(?) on the trunk
> > > of his car. It looked like a small construction hardhat but
> > > circular and taller. It was perhaps 6"-8" in diamater.
> > >
> > > Or if you take a two liter pop container, cut off the

> > > top 2/3 and ,turn it upside down....
> > >
> > > IN, USA

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

3748. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 07:46:12 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3A9766EC.2F977C74@earthlink.net>
Source record: 169621

Richard Clark wrote:

> >What's a ball field backstop?
> >
> >73 .... Zoran WA7AA
>
> Hi Zoran,
>
> That big truncated cone of mesh wire behind the umpire, behind the
> catcher, behind home plate, in front of the pitcher, in front of
> second base, in front of center field, in one corner of the base ball
> stadium (or a school ground play field).

Ahhh, please excuse my ignorance when it comes to our national pastime. It's the euro-trash in me: the only sport I follow is basketball. Now, if you had said that his radials were "in the paint" or that his signal was like an "alley-oop after a three second violation", that would have been a different story.

Thanks and 73 .... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

3749. Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 07:54:53 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <60pe9to55lpu8l0i5klkobios5qcaj2lqd@4ax.com>
Source record: 169622
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 22 Feb 2001 19:43:38 -0600, "Bill N0MNB" <N0MNB@MINN.NET>
wrote:

>NEEDED A VARIABLE 50 OHM ATTENUATOR.

What frequency range ?

>0-100DB OR SO.

How do you expect to get such attenuations when cable leakage is much
more than that above audio frequencies.

3750. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 08:49:51 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <977sj1$3cg$1@slb1.atl.mindspring.net>
Source record: 169623

Reg:

As you know, I heartily agree with your comments/sentiments below on SWR and SWR meters. Seldom are they used properly, and seldom do they indicate anything about the "reality" of the wave conditions of antennas and lines.

What is more, besides giving indications which are irrelevant and almost meaningless, they also have a great potential for causing ElectroMagnetic Compatibility (EMC) or ElectroMagnetic Interference (EMI) when left "in line" because the "diodes" used in the devices create a whole spectrum of harmonics when they rectify the residual RF that they use to operate the SWR circuitry.

But... on the other hand don't you agree that leaving an SWR meter "in line" is somewhat "comforting"? They do have a certain appeal to those who need "indications" that things are happening. Something like the "ignition" light on the dasboard of your automobile, completely irrelevant for most purposes... but comforting.

Having those needles on the SWR meters bounce up and down across the scales of the meter faces while you are talking or keying the rig, gives a visual indication that "something" is happening. It lets the operator know that RF is flowing somewhere. I believe that is the "appeal" of so-called SWR meters.

Sort of like having one of those old fashioned "On The Air" signs that illuminate whenever the transmitter is keyed. Heh, heh.

Of course an "On The Air" meter actuated by the PTT switch or CW Key would have a lot less potential for causing interference.

An operator friend of mine was having problems interfering with the family TV reception whenever he operated his ham radio. He always ran with an "in line" SWR meter. I advised him to take the "in line" SWR meter out, and presto the interference dissapeared!

The readings on the SWR meter were irrelevant to his situation anyway, he just liked to see the "indication" of power output. A small pilot light bulb tapped across the antenna feeders would do as well with a lot less interference.

I say, get rid of those "in line" SWR meters...

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:975ng1$f5d$1@neptunium.btinternet.com...
> SWR meters should be banned. They don't even measure SWR. And the

> SWR they purport to measure is in any case on a non-existent line.
> ----
> Reg
>
>
>

3751. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 09:00:01 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <977t7gffu1@slb2.atl.mindspring.net>
Source record: 169624

```
Richard: I just reached over and touched my monitor, I'm sitting at a
laptop, and it is stone cold! -Peter K1PO
```

"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a9875ac.252474459@news.seanet.com...
> On Thu, 22 Feb 2001 14:40:41 -0000, "Gary Peach"
> <xcg34@dial.pipex.com> wrote:
>
> >
> > >And what happens as the electrons plough into the phospher of a CRT?
> > >Energy is dissipated, but resistance can not be demonstrated.
> > >The answer has been sitting in front of us un-noticed for years.
> > >
> > >--
> > >Gary7SLL
> > > 51° 23' 50" N 1° 19' 58"W
> > >http://www.gary.peach.dial.pipex.com/
>
>
> Hi Gary,
>
> No resistance? That begs the question: why do you expect it for this
> scenario (this is the danger of switching the focus and maintaining
> the same argument)?
>
> When an electron encounters the phosphor, it reacts at the atomic
> scale (as so it does with the tube's plate) where the energy is
> converted into a photon. Given that the plate of a triode does not
> exhibit phosphorescence (normally), there is no option to total
> conversion of the Beam's inertia into heat (the plate dissipation
> factor). The resistance in the phosphor is found in the efficiency of
> its conversion of an electron to a photon, but now we introduce yet
> more parameters where the simple Triode sufficed. If the new scenario
> presents a completely efficient conversion (unlikely) there is no heat
> shed.
>
> This is simply another Q issue. However it is the Q of an atomic
> resonance related to the De Broglie Wave.
>
> As I reach up and touch the screen of my monitor, I note that the
> temperature is in excess of ambient. This heat is not coming from the
> filament, but there is admittedly a component of it due to the
> electronics within the enclosure. Perhaps you should re-consider the

> issue of this being "un-noticed." Then again, perhaps not. You
> certainly have the background to perform a caloric measurement, but
> this tangent is off-scale.
>
> 73's
> Richard Clark, KB7QHC

3752. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 09:09:03 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <978nlv$n5e$2@lure.pipex.net>
Source record: 169646

Use Fixed font
"Peter O. Brackett" wrote ...
> Richard:

Table Resistance and Skin Depth of Various Metals
Sigma delta Rs
Metal (mhos/meter) (meters) (ohms)
0.0642
Silver 6.17 X 10^7 SQRT(f) 2.52 X 10^-7 SQRT(f)

0.0660
Copper 5.80 X 10^7 SQRT(f) 2.61 X 10^-7 SQRT(f)

0.0826
Aluminum 3.72 X 10^7 SQRT(f) 3.26 X 10^-7 SQRT(f)

0.127
Brass 1.57 X 10^7 SQRT(f) 5.01 X 10^-7 SQRT(f)

0.185
Solder 0.706 X 10^7 SQRT(f) 7.73 X 10^-7 SQRT(f)

3753. Re: MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 12:20:37 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3a97a715_2@news.cybertours.com>
Source record: 169625

I've Used both the MFJ , and home brew small transmitting loops several
times. They work supriningly well for their size, but are still down from
most dipole installations.. if you can get a dipole up say at least a
quarter wave it will do better. but if you cant the the small loop will
give plenty of
contacts.
73 DAVE

"eborys" <eborys@home.com> wrote in message
news:v0Gl6.6824$t67.193040@news1.rdc1.il.home.com...
> Does anyone here own of the MFJ loops? How is it working out for you?
> Thanks,
> Emil
> ak9i
>
>

3754. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 13:17:41 UTC
From: Egon Zürrer <egon.zuerrer@balcab.ch>
Message-ID: <3A97B475.9D94B844@balcab.ch>
Source record: 169626

Hi David,
taking up the words 'helically wound antenna' I wonder what you think
about the HFV1 vertical antenna provided by Chelcom
(http://www.chelcom.co.uk) which - together with a Smartuner - could be a
serious alternative to other vertical antennas.
73
Egon (HB9EBB)

David Michael Kelly schrieb:

> On Thu, 22 Feb 2001 07:36:55 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> Cecil,
>
> Still theorizing (and negotiating with my wife<g>) about my first HF
> antenna. I am considering the possibilities of hybridizing your
> No-Tune dipole and your rotatable dipole into a helically wound
> rotatable dipole. Ideally I would wind heavy gauge copper (#10 or #8
> or #6) on a form like a 4" PVC pipe and then remove the pipe and tune
> it with your ladder line tuner. What I am attempting to accomplish is
> having as much bandwidth as possible with an antenna that has somewhat
> stylish appearance I can sell to my wife. I am envisioning two self
> supporting coils protruding from opposite sides of a mast.
>
> Can I use a 4" diameter helically wound antenna without having an
> insulating core and is there a limitation about how close the wraps
> can be to each other? Do you see any other gotchas in my thinking?
>
> TIA
>
> --
> david
> KD7LOP

3755. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 13:19:57 UTC
From: Egon Zürrer <egon.zuerrer@balcab.ch>
Message-ID: <3A97B4FD.40C9D07A@balcab.ch>
Source record: 169627

Hi David,
taking up the words 'helically wound antenna' I wonder what you think
about the HFV1 vertical antenna provided by Chelcom
(http://www.chelcom.co.uk) which - together with a Smartuner - could be a
serious alternative to other vertical antennas.
73
Egon (HB9EBB)

David Michael Kelly schrieb:

> On Thu, 22 Feb 2001 07:36:55 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> Cecil,
>
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> No-Tune dipole and your rotatable dipole into a helically wound
> rotatable dipole. Ideally I would wind heavy gauge copper (#10 or #8
> or #6) on a form like a 4" PVC pipe and then remove the pipe and tune
> it with your ladder line tuner. What I am attempting to accomplish is
> having as much bandwidth as possible with an antenna that has somewhat
> stylish appearance I can sell to my wife. I am envisioning two self
> supporting coils protruding from opposite sides of a mast.
>
> Can I use a 4" diameter helically wound antenna without having an
> insulating core and is there a limitation about how close the wraps
> can be to each other? Do you see any other gotchas in my thinking?
>
> TIA
>
> --
> david
> KD7LOP

3756. Re: question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 13:26:14 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97B676.5F848BBB@IEEE.org>
Source record: 169629

gardner oral e wrote:
> On this 450 ohm version, one would like to think that feeding this "450 ohm resistive" load shown by EZNEC would mean equal currents in the 450 ohm feed lines.....and that they are not radiating. BUT MY INTUITION tells me that it is unlikely this can be true, when 6% of the half-wave attaches to one side, and 94% attaches to the other. SO WHAT'S WRONG WITH THIS PICTURE ??

Your intuition is correct. The more unbalanced the dimensions of the 1/2WL dipole are, the more unbalanced the ladder-line currents will be, and the more the feedline will radiate. The radiation pattern will also be affected.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3757. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 13:29:22 UTC
From: Egon Zürrer <egon.zuerrer@balcab.ch>
Message-ID: <3A97B732.FAB2349E@balcab.ch>
Source record: 169628

Hi David,
(addressing you directly via
David Michael Kelly <avid@nospam@home.com>
was refused with an error message, so I try it this way):

taking up the words 'helically wound antenna' I wonder what you think
about the HFV1 vertical antenna provided by Chelcom
(http://www.chelcom.co.uk) which - together with a Smartuner - could be a
serious alternative to other vertical antennas.
73
Egon (HB9EBB)

David Michael Kelly schrieb:

> On Thu, 22 Feb 2001 07:36:55 -0600, Cecil <Cecil.A.Moore@IEEE.org>
> wrote:
>
> Cecil,
>
> Still theorizing (and negotiating with my wife<g>) about my first HF
> antenna. I am considering the possibilities of hybridizing your
> No-Tune dipole and your rotatable dipole into a helically wound
> rotatable dipole. Ideally I would wind heavy gauge copper (#10 or #8
> or #6) on a form like a 4" PVC pipe and then remove the pipe and tune
> it with your ladder line tuner. What I am attempting to accomplish is
> having as much bandwidth as possible with an antenna that has somewhat
> stylish appearance I can sell to my wife. I am envisioning two self
> supporting coils protruding from opposite sides of a mast.
>
> Can I use a 4" diameter helically wound antenna without having an
> insulating core and is there a limitation about how close the wraps
> can be to each other? Do you see any other gotchas in my thinking?
>
> TIA
> --
> david
> KD7LOP

3758. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 13:35:18 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97B896.E1390AB7@IEEE.org>
Source record: 169630

"Peter O. Brackett" wrote:
> What is more, besides giving indications which are irrelevant and almost
> meaningless, they also have a great potential for causing ElectroMagnetic
> Compatibility (EMC) or ElectroMagnetic Interference (EMI) when left "in
> line" because the "diodes" used in the devices create a whole spectrum of
> harmonics when they rectify the residual RF that they use to operate the SWR
> circuitry.

Wouldn't the smoothing caps charge up to a mostly DC level thus
back biasing the diodes for most of the RF cycle?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3759. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 14:04:39 UTC
From: GaryH <garyhendricks@hotmail.com>
Message-ID: <aaPl6.2768$Wj6.150690@news3.atl>
Source record: 169631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

I don't keep up with this newsgroup on a daily basis, probably more like every couple weeks due to my work schedule. After reading this one though thought I'd better respond. Not sure how long ago it came in but I had a very bad experience with Texas Towers when buying a Yeasu FT 100-D. You'd think that after paying over a 1000 clams for something that you could expect better than "very" rude behavior from the salesperson. The red flag went up in my brain the first time I spoke to him, he was a little curt, but the other salesman had been so nice that I kind of pushed it to the back of my mind and figured he might be acting that way because I was a woman. Then after purchasing the radio and paying over 50 dollars to get it overnight, it didn't come in until Monday. I wanted it for the contest that weekend. I had payed $30 for over night and didn't get it. I also did not get the extra back. He flatly told me he had made one call to ups and he was not wasting anymore of his time calling again. Mind you I had just spent quite a bit of money. I told him that was a pretty bad attitude to take towards a customer and he wouldn't get anymore of my business if he wanted to act that way, his answer to me was I don't want any more of your business. Since then have had several reports from others of similar bad experiences so you might try another source for this antenna if you want one.
After that if you get it I'd love to hear from you how it works out. We have thought of buying one for similar reasons. Sorry so long, Thanks, 73' Kathy AC4LB

<jason_hsu@my-deja.com> wrote in message news:9528eagcs1@nnrp1.deja.com...
> Some of the questions I have include:
> 1. Can I use one if I only have 8 feet of clearance on the small patio
> (8 feet wide, 8 feet tall, 6 feet wide) outside my sliding door? Is it
> possible to mount the antenna at a slant? I want to hear about any
> creative solutions from you.
> 2. What type of mount/tripod would be appropriate? (I don't have a
> railing.)
> 3. How quickly can I assemble and disassemble the antenna? (For
> stealth and security reasons, I need to remove the antenna when I am
> not operating.)
> 4. Which versions (original DK-3, ElectraSlide, etc.) of the
> Screwdriver are most appropriate for me? What advantages do the more
> expensive versions have over the original? Can some versions (like the
> D&K KH-600 HF MOBILE ANTENNA) really operate on 160m?
>
> SOME BACKGROUND:
> I am seriously considering a Screwdriver antenna for operating HF from
> my ground floor apartment (no big trees or bushes close enough to
> conceal wires and keep them out of the way of people or dogs passing

> by). A mobile antenna would be less cumbersome to work with than a big
> wire antenna. The Screwdriver seems to be the best antenna for me.
>
> I have had modest success with Hamsticks I am borrowing, but I know
> that Screwdrivers are more efficient. Also, Screwdrivers are multi-
> band and are easier to tune (due to the automatic tuning aspect). Has
> anyone used a Screwdriver antenna for non-mobile operation?
>
> I was considering a Texas Bugcatcher, but I am not sure about the
> quality of the version from Texas Radio Products, and the version from
> GLA Systems is too expensive. Screwdriver antennas are almost as
> efficient, and several versions sell for near or below $200.
>
> --
> Jason Hsu, AG4DG
> jason_hsu@@@@@@@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>
>
> Sent via Deja.com
> http://www.deja.com/

3760. Commerical Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 14:07:43 UTC
From: ac5ez@webtv.net
Message-ID: <14804-3A97C02F-3@storefull-114.iap.bryant.webtv.net>
Source record: 169632

Anyone using one of the Barker&Williamsom trappd dipoles such as the as-80 (80-40-20). Can these be adjusted for the cw portion of the band with ease?

K1zw
Larry
Qcwa

3761. Re: question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:12:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <978iv7$51i$1@slb3.atl.mindspring.net>
Source record: 169633

Cecil:

But... but...

If one places a choke balun [aka common mode choke] on those offset feeders cannot the unbalance on the feeders be eliminated and so help to correct the radiation pattern?

Initially I like the thoughts of getting a higher feedpoint impedance/resistance for an 8JK array. Even Kraus would agree that its' feedpoint impedance is dicey! One of the main problems that I have noted with closely coupled "super-gain" driven arrays such as the 8JK is the low feedpoint impedance and the consequent matching problems.

Traditionally I believe that 8JK experimenters have addressed this deficiency, among others, with lumped impedance transformers, i.e. networks or transformers/baluns...

What is being suggested here is to address the feedpoint impedance transformation issue for an 8JK array by means of a simple offset feed, analogous to how a Windom or other such is fed.

When I read it, I hit myself on the forehead, and I said, "now why didn't I think of that"?

Thoughts, comments?

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A97B676.5F848BBB@IEEE.org...
> gardner oral e wrote:
> > On this 450 ohm version, one would like to think that feeding this "450 ohm resistive" load shown by EZNEC would mean equal currents in the 450 ohm feed lines.....and that they are not radiating. BUT MY INTUITION tells me that it is unlikely this can be true, when 6% of the half-wave attaches to one side, and 94% attaches to the other. SO WHAT'S WRONG WITH THIS PICTURE ??
> >
> > Your intuition is correct. The more unbalanced the dimensions of the 1/2WL
> > dipole are, the more unbalanced the ladder-line currents will be, and the
> > more the feedline will radiate. The radiation pattern will also be affected.
> > --
> > http://www.mindspring.com/~w6rca
> >
> >

> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3762. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:18:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <978j9fcmm1@slb3.atl.mindspring.net>
Source record: 169634

Cecil:

OK, I admit it.

I don't really know what was causing the interference, but when the "in line" SWR meter was taken out of the line, magically the TV Interference went away, never to be seen again. It came back whenever the SWR meter was put back in line.

Suggestions as to the reason for the elimination of the EMI appreciated, I only guessed it was the diodes in the metering circuitry.

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A97B896.E1390AB7@IEEE.org...
> "Peter O. Brackett" wrote:
> > What is more, besides giving indications which are irrelevant and almost
> > meaningless, they also have a great potential for causing ElectroMagnetic
> > Compatibility (EMC) or ElectroMagnetic Interference (EMI) when left "in
> > line" because the "diodes" used in the devices create a whole spectrum of
> > harmonics when they rectify the residual RF that they use to operate the SWR
> > circuitry.
>
> Wouldn't the smoothing caps charge up to a mostly DC level thus
> back biasing the diodes for most of the RF cycle?
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3763. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:41:06 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <978nm1$n5e$3@lure.pipex.net>
Source record: 169644

"Richard Harrison" wrote
> I think I just attributed a question from Gary Peach:
> "What meaning does L have at DC----?"
> to Peter K1PO. I apologize to all concerned.

Never mind Roichard* if people are on their metal,
it'll be a big draw anyway.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

* your typing, not mine.

3764. Radio Broadcast Engineering Reflector?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:41:16 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <ilYwZpAcY9l6Ewu0@invest.fsbusiness.co.uk>
Source record: 169635

Can someone point me towards the reflector that I once subscribed to.

It's subject matter deals with AM/FM Broadcasting?

Many thanks.

Phil G4ZOW

3765. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:46:47 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <978nm2$n5e$4@lure.pipex.net>
Source record: 169645

"Peter O. Brackett" wrote ..
> Roy:
> What about the rest of us mere mortals. How shall we measure Q?

By whether you get into the cinema or not before the big picture starts.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3766. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:56:03 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97D993.B3EDB0B1@IEEE.org>
Source record: 169637

"Peter O. Brackett" wrote:
>
> Cecil:
>
> OK, I admit it.
>
> I don't really know what was causing the interference, but when the "in
> line" SWR meter was taken out of the line, magically the TV Interference
> went away, never to be seen again. It came back whenever the SWR meter was
> put back in line.
>
> Suggestions as to the reason for the elimination of the EMI appreciated, I
> only guessed it was the diodes in the metering circuitry.

If the SWR meter was not properly shielded, it could leak primary
RF. If common-mode currents were present, the SWR box might have
a different radiation pattern than a piece of coax.

I didn't mean to shoot down your theory, Peter. But charging a
DC cap is not nearly as effective at TVI as frequency doubling
by rectifying only.
--
http://www.mindspring.com/~w6rca

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3767. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 15:59:32 UTC
From: richardharrison@webtv.net
Message-ID: <29086-3A97DA64-9@storefull-117.iap.bryant.webtv.net>
Source record: 169639

Richard Clark wrote:
"Further, that there is a speculation of dissipationless resistance as a physical reality, and it some how answers to the name R in this Z - THAT has not been demonstrated."

Physical reality is something we sense by sight, sound, smell, taste, touch, or something like that. Electrical impedance is sensed indirectly by its effects.

There is ample verification of large values of transmission line impedance which take little of the energy away from the total they carry. That large impedance which saps little energy is sufficient proof of "dissipationless resistance" in a transmission line. It`s not reactive because the drop it causes has the voltage and current in-phase, So, it has to be classified as a resistance, not a reactance.

Similarly, we can measure power into an antenna by I squared R, the FCC prescribed method, and note that the measured R at r-f is much greater than the d-c conductor resistance, even when this d-c resistance is incremented by the "skin effect" produced by r-f. Further, we may determine by the lack of heating that conversion of r-f to heat in the antenna is low. So, where does this resistance come from? It isn`t from reactance. In our example we will specify a resonant antenna load. The antenna resistance we measure comes from radiation which takes antenna current in-phase with the antenna voltage. Antenna resistance is dissipationless because it doesn`t heat the antenna.

Similarly, d-c can be rapidly switched on and off into a load on a 50% duty cycle. A d-c meter will display the average current. A practical application is the "dwell meter" used to measure % ignition point closure time in the Kettering ignition system for gasoline engines. The % dwell time may be quite different from 50% by design, but if the current is effectively cut in half without a resistor, no heat is produced during the 50% off-time. This is effectively another "dissipationless resistance". This same on and off switching is used when a diode is placed in series with an a-c lamp. This same mechanism is used by the reduced conduction angle of a "Class C" amplifier.

"Dissipationless resistance" is why Walter can measure a source resistance in his "Class C" amplifier which matches his load while the indicated efficiency runs around 70%. If all the output resistance of his amplifier were of the heat generating kind, his efficiency would be limited to 50%.

Best regards, Richard Harrison, KB5WZI

3768. Re: Surplus Transco antenna switch query

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:01:53 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <RVQl6.6042$M_1.581221@news1.rdc1.ct.home.com>
Source record: 169636

Gary

I know they were used in aircraft, and I've seen them come in voltages between 28VDC up to 80VDC. My concern was arcing as the wafer wiper is stepping through its positions to index the rotary coaxial switch--I'm looking for something that will take daily use over a period of 10 or 15 years without needing attention. Early ones used a wax cap with a series resistor as an arc suppressor. I was sort of fishing to see this was a long term problem, or if folks may have replaced the earlier vintage caps with more modern plastic ones. I'd also be tempted to add a solid-state device to alleviate the wear on the wiper and contact blades, but then lightning induced spikes becomes a consideration...

Peter

<mcduffie.spamcop@nospam.actcom.net> wrote in message news:fuke9tg3s2vtc3tirun1a9fgq8pttqoefs@4ax.com...
> On Sat, 24 Feb 2001 00:05:53 GMT, "Peter J. Bertini"
> <commquart@home.com> wrote:
>
> > Anyone have any experience with the Transco antenna switches
>
> I used an 6 position Transco-built switch just as you describe for many
> years. It cost all of us (via USAF) $550 each for these things. I
> bought 3 of them for $25 at a military auction some 25 years ago. They
> were brand new, sealed. They are a great switch and I never had any
> problem with it at all. I made the mistake of giving one to a friend
> and trading the other one, so I only have the one. I haven't used it
> the last 10 years, but plan on putting it back in service. You apply
> voltage (48VDC I think) to a common pin and then ground the pin that you
> want to activate. The motor spins up, engages the switch, stops at that
> position, and then turns off again. Always rotates same direction.
> Select 6 when you are on 1 and it rotates all the way around. Worth
> whatever you have to pay for it within reason. I would recommend an
> enclosure. If you happen to find one of the cannon plugs to fit the
> control connector, I could use one.
>
> Gary
> --
> Delete obvious anti-spam garbage from the address (if present).

3769. Re: question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:06:51 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97DC1B.440531D9@IEEE.org>
Source record: 169640

"Peter O. Brackett" wrote:
>
> Cecil:
>
> But... but...
>
> If one places a choke balun [aka common mode choke] on those offset feeders
> cannot the unbalance on the feeders be eliminated and so help to correct the
> radiation pattern?

Let's say one has a 1/2WL dipole fed 10% from the end. What is the impedance looking into the 10% part? What is the impedance looking into the 90% part. I would suggest that one would have a lot of trouble designing a choke that will cause equal currents into those two impedances. Seems to me, the 10% part would have a very high reactance which would require a choke with a super high impedance. Ever seen a choke with 10k ohms of choking impedance?
--
http://www.mindspring.com/~w6rca

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3770. Re: gin pole info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:12:49 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <54Rl6.62$9d.7364@newshog.newsread.com>
Source record: 169638

"Adam T. Cately" <atcately@bright.net> wrote in message
news:3A92A690.68E9168B@bright.net...
> There is a Rohn distributor in St. Mary's, Ohio, called Thomas
> Shelby and Co. Inc. - phone: 1-888-868-8588. They sell Rohn tower
> and ALL the accessories.
>
> There is also a ham dealer by the name of WB0W, Inc., that sells
> their own style of gin poles - really good-looking HEAVY stuff. About
> $300 and change will get you a nice pole shipped to your door.
> Phone: 1-800-626-0834 or surf to www.wb0w.com and look around
>
I built my own from scratch (bit heavy), but works great. I made it a few
feet longer than the typical commercial ones and found that, even with the
extra weight to be well worth the extra effort required. I fount too, that
although a gin pole may be a simple device, it takes quite a few hours to
build.

As to the commercial one at $300. Sounds like a good deal. That is far,
far, less expensive than the Rohn unit.

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

> kenneth m cubilo wrote:
> >
> > anyone know a source to purchase a gin-pole for a rohn tower?
> > tks ken w8ob
>
> --
>
> - Adam -

3771. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:22:43 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ndRl6.64$9d.7503@newshog.newsread.com>
Source record: 169641

"Raymond Hansmeier" <rhansmeier@home.com> wrote in message
news:3A91F579.385054E7@home.com...
> Mark,
>
> CATV coaxial hardline is very easily obtained from your local cable
company.
> You should be able to come up with 200 feet of .750 hardline or larger for
next
> to nothing. As for the connectors you will have to improvise or buy
expensive
> connectors, but if the cable is free what the heck.

I had nearly a full coil given to me. It had fallen off a truck and
crunched the outer turns. aparently they didn't want to mess with it.

I used 3/4 inch copper tubing compression fittings to MPT. Clean the
threads off one end of a barrell connector (brass) and solder in place. The
inner connector of the hard line nicely fits the connector.

I know that's not a complete description, but the connectors are simple,
cheap, and relatively easy to make.

If your soild conditions are dry, and/or neutral you can bury the plain
aluminum stuff. I had some buried for 10 years with no deterioration. If
your soild is either acedic, or alkaline...don't even think about direct
burial of the plain aluminuim...

>Get the underground
> varitiey and it can be buried for a neat installation. I used 350 feet of
the
> stuff for many years on hf.

That is about the same run I had. The only difference was I buried the plain
old aluminum jacked stuff. (Neurtal soil)

> It is 75 ohms, but if you worry about the minor
> mismatch just build a unun or purchase some sort of matching balun/unun. I
> spent 20 years in the cable biz and it is good stuff. The loss on HF is
very
> minor, and if you have a good coaxial remote coax switch at the tower you
can
> also use it for vhf.
>

Worked good for me.

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

> K7FU
>
> Mark Erbaugh wrote:
>
> > The XYL and I are in the process of building a new home on 4 acres and
will
> > be moving in this spring. I'm starting to dream about my new farm
(antenna,
> > that is). I haven't finalized the design of the antennas yet, but I will
> > probably initially put up the tower and antenna that I'm using here
(once I
> > get some extra cash I do want to upgrade, but that may be a while). I'm
> > mainly interested in HF.
> >
> > I'm looking for advice on feedline. Obviously the more I pay for
feedline,
> > the less loss, but what's the best bang for the buck. There will be
150 -
> > 175 feet of feedline from the shack to the top of the tower.
> >
> > 73,
> > Mark, N8ME
>

3772. Re: Optimum feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:28:46 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <2jRl6.66$9d.7583@newshog.newsread.com>
Source record: 169642

"Wes Stewart" <nospam_n7ws@arrl.net> wrote in message
news:3a909488.99003046@news.aepnet.com...
> On Sun, 18 Feb 2001 17:49:35 -0500, "Mark Erbaugh"
<mark@nospam.microenh.com>
> wrote:
>
> 7/8" Heliax

Although the 7/8" stuff is good and sometimes available pretty cheap (with
connectors), it really isn't needed for HF. It's also a bear to handle
(heavy and takes a large radius bend)
If you have to purchase connectors, the last ones I bought were something
over $80 each.

If purchasing new cable, I'd go for the LMR 400 which typically runs 59
cents a foot, has slightly less loss than 9913, uses standard PL-259
connectors, and is less prone to having water run out in the shack.

I now have five 175 foot runs (shack to top of tower).

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)
>
> Wes Stewart N7WS
>
> >The XYL and I are in the process of building a new home on 4 acres and
will
> >be moving in this spring. I'm starting to dream about my new farm
(antenna,
> >that is). I haven't finalized the design of the antennas yet, but I will
> >probably initially put up the tower and antenna that I'm using here (once
I
> >get some extra cash I do want to upgrade, but that may be a while). I'm
> >mainly interested in HF.
> >
> >I'm looking for advice on feedline. Obviously the more I pay for
feedline,
> >the less loss, but what's the best bang for the buck. There will be
150 -
> >175 feet of feedline from the shack to the top of the tower.
> >
> >73,
> >Mark, N8ME
> >

> >
>

3773. Re: question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:31:35 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <978nje$52p$1@slb3.atl.mindspring.net>
Source record: 169647

Cecil:

Agreed...if offset far enough then the left and right side feeder impedances would present a terrific imbalance, and the choking impedance would have to be quite high to be effective.

But is that not true only if both elements of the 8JK were offset in the same physical direction? What if the offsets were in opposite directions on the elements?

Now consider... what if one was offset say 10% from the left end of one driven element, and the other was offset 10% from the right end of the other driven 8JK array element.

Now... since the feeders to the two driven 8JK elements are "paralleled" or "bridged" wouldn't the impedances from either side of the main feeder be roughly balanced and therefore not need a really demanding common mode choke?

I'm probably missing something here, probably because of the phasing, etc... but is seems that it might work.

Maybe the originator of this thread has "invented' a new super directive antenna, let's call it the, "Windom-8JK", heh, heh.

Since you are retired and I'm still working for a living, why don't you try to code this up on EZENEC and see what happens.

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A97DC1B.440531D9@IEEE.org...
> "Peter O. Brackett" wrote:
> >
> > Cecil:
> >
> > But... but...
> >
> > If one places a choke balun [aka common mode choke] on those offset
feeders
> > cannot the unbalance on the feeders be eliminated and so help to correct
the
> > radiation pattern?
>
> Let's say one has a 1/2WL dipole fed 10% from the end. What is the
impedance
> looking into the 10% part? What is the impedance looking into the 90%

part.
> I would suggest that one would have a lot of trouble designing a choke
that
> will cause equal currents into those two impedances. Seems to me, the 10%
> part would have a very high reactance which would require a choke with a
> super high impedance. Ever seen a choke with 10k ohms of choking
impedance?
> --
> http://www.mindspring.com/~w6rca
>
>
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3774. Re: Coax traps article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:49:22 UTC
From: n2ey@aol.com
Message-ID: <20010224114922.02078.00000452@nso-ck.aol.com>
Source record: 169648

In article <R9sl6.20126$Ut1.1730711@afrodite.telenet-ops.be>, "ON4CLN"
<on4cln@qsl.net> writes:

>Take a look here:
>
>http://www.nucleus.com/~field/
>
>download "coaxtrap.zip" ==> usefull to calculate traps with different types
>of cable

I have downloaded this and it works GREAT!!!! It is based on the N4UU article
in QST for December, 1984.

Thanks, Franki. Saves a lot of cut and try work.

If you want the traps to be right on, you still have to do some cut and try,
but the software gets you very close on the first go.

73 de Jim, N2EY

3775. Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:51:47 UTC
From: richardharrison@webtv.net
Message-ID: <15813-3A97E6A3-18@storefull-112.iap.bryant.webtv.net>
Source record: 169652

Paul Keinman wrote:
"How do you expect to get such attenuators when cable leakage is much more than that above audio frequencies?"

I have no equipment to sell, but here are some reasonable expectations.

My Weinschell Engineering Model 933 continuously variable attenuator has a range of 3,7 db to 120 db and can handle 1 watt between 0 and 1 GHz.

My Measurements Model 80 VHF signal generator has an output attenuator calibrated down to -128 dbm or less than 0.1 microvolt at 50 ohms. Most Motorola radios are specified to have better than 0.25 microvolt sensitivity.

I have often used the Model 80 to measure the sensitivity of VHF radios without problems of coax radiation spoiling my measurements. These receivers are often good enough to meet or beat their quieting specs. at near the .01 microvolt calibration mark without help from r-f leakage.

Best regards, Richard Harrison, KB5WZI

3776. Re: MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:56:36 UTC
From: eborys <eborys@home.com>
Message-ID: <8JRl6.10334$t67.220878@news1.rdc1.il.home.com>
Source record: 169649

Thanks Dave,
I suffer from big house-small lot syndrome. A dipole for 10-15 might be a possibility. But the trees must have been planted by some landscaper ignorant of ham requirements.
Sounds like a loop or two, up two stories is my answer.
Thanks,
Emil
ak9i

"KC1DI" <elbc@pivot.net> wrote in message
news:3a97a715_2@news.cybertours.com...
> I've Used both the MFJ , and home brew small transmitting loops several
> times. They work supriningly well for their size, but are still down from
> most dipole installations.. if you can get a dipole up say at least a
> quarter wave it will do better. but if you cant the the small loop will
> give plenty of
> contacts.
> 73 DAVE
>
> "eborys" <eborys@home.com> wrote in message
> news:v0Gl6.6824$t67.193040@news1.rdc1.il.home.com...
> > > Does anyone here own of the MFJ loops? How is it working out for you?
> > > Thanks,
> > > Emil
> > > ak9i
> > >
> > >
>
>

3777. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 16:58:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <978p71$4mm$1@nntp9.atl.mindspring.net>
Source record: 169650

Richard:

This "dissipationless resistance" stuff smacks of Lewis Carol's "Turtle Soup".

Surely the good old terms "radiation resistance" or "surge resistance" or "plate resistance" or "collector resistance", etc... are sufficiently descriptive of the phenomena in question.

We all know that they are not "resistors"!

We all know that those "effects" are not caused by resistors.

We all know that they do not necessarily involve electrical energy dissipation into heat energy.

We all know that there are numerous ways in which electrical energy can be dissipated into other forms of energy.

Why introduce a "new name" for "old stuff"?

Why do you, and others, including Walter, continue this attempt, abetted by incompetent editors at the IEEE Dictionary, to confuse everyone by renaming these well known and understood phenomena as "dissipationless resistors" without any other adjectival differentiation?

My only conclusion for this unecessary distinction is related to something Lewis Carol wrote and I quote...

.....

"When I use a word", Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean, neither more nor less."

"The question is", said Alice, "whether you can make words mean so many different things."

"The question is", said Humpty Dumpty, "Who is to be master: - that's all."

Lewis Carol, "Alice in Wonderland - The Turtle soup"
.....

Richard my man... "you are the Master"! And so, for that matter, is Walter.

"Dissipationless Resistance", can we now, fuggedaboudit?

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:29086-3A97DA64-9@storefull-117.iap.bryant.webtv.net...

> Richard Clark wrote:
> "Further, that there is a speculation of dissipationless resistance as a
> physical reality, and it some how answers to the name R in this Z - THAT
> has not been demonstrated."
>
> Physical reality is something we sense by sight, sound, smell, taste,
> touch, or something like that. Electrical impedance is sensed indirectly
> by its effects.
>
> There is ample verification of large values of transmission line
> impedance which take little of the energy away from the total they
> carry. That large impedance which saps little energy is sufficient proof
> of "dissipationless resistance" in a transmission line. It`s not
> reactive because the drop it causes has the voltage and current
> in-phase, So, it has to be classified as a resistance, not a reactance.
>
> Similarly, we can measure power into an antenna by I squared R, the FCC
> prescribed method, and note that the measured R at r-f is much greater
> than the d-c conductor resistance, even when this d-c resistance is
> incremented by the "skin effect" produced by r-f. Further, we may
> determine by the lack of heating that conversion of r-f to heat in the
> antenna is low. So, where does this resistance come from? It isn`t from
> reactance. In our example we will specify a resonant antenna load. The
> antenna resistance we measure comes from radiation which takes antenna
> current in-phase with the antenna voltage. Antenna resistance is
> dissipationless because it doesn`t heat the antenna.
>
> Similarly, d-c can be rapidly switched on and off into a load on a 50%
> duty cycle. A d-c meter will display the average current. A practical
> application is the "dwell meter" used to measure % ignition point
> closure time in the Kettering ignition system for gasoline engines.
> The % dwell time may be quite different from 50% by design, but if the
> current is effectively cut in half without a resistor, no heat is
> produced during the 50% off-time. This is effectively another
> "dissipationless resistance". This same on and off switching is used
> when a diode is placed in series with an a-c lamp. This same mechanism
> is used by the reduced conduction angle of a "Class C" amplifier.
>
> "Dissipationless resistance" is why Walter can measure a source
> resistance in his "Class C" amplifier which matches his load while the
> indicated efficiency runs around 70%. If all the output resistance of
> his amplifier were of the heat generating kind, his efficiency would be
> limited to 50%.
>
> Best regards, Richard Harrison, KB5WZI
>

3778. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 17:09:09 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <9hqf9t0j93600cupq0g6voeh9lpgbavhii@4ax.com>
Source record: 169651

On Sat, 24 Feb 2001 09:59:32 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"Further, that there is a speculation of dissipationless resistance as a
>physical reality, and it some how answers to the name R in this Z - THAT
>has not been demonstrated."
>
> Physical reality is something we sense by sight, sound, smell, taste,
>touch, or something like that. Electrical impedance is sensed indirectly
>by its effects.
>

Hi Richard,

All very nice, but to ignore physical reality and replace it with an artifice, however compelling the math, does not suffice. Occam's razor is not that dull.

73's
Richard Clark, KB7QHC

3779. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 17:25:48 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <kpqf9tkkvn1npqdl0imlrgu5kt8vjqn52o@4ax.com>
Source record: 169653

On Fri, 23 Feb 2001 23:48:57 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>Did you notice the little hairs on the back of your hand stand up and induce
>a sensation into the hand?
>This new monitor doesn't do that I guess the glass is coated to conduct away
>the charge.
>

Hi Gary,

Coated? There's so much lead in these Tubes that they should conduct
freely (5 Lbs of lead, or so claimed in the newspaper).

When I was a youngster, my first electronics lessons were with my
hands in the back of a TV. Lesson One was about the relationship
between power, capacitance, the volt, and the Aquadag. I can attest
to several successful measurements of physical heat as a result of
decelerating the stored charge of several thousand volts. No
instrumentation was used or was necessary to confirm dissipation. I
also learned my first lesson in phase shift and an RC circuit. I also
came to understand how VERRRY long one time constant can be after
turning off a TV.

Then the Navy trained me to keep one hand behind my back and the
dissipation went away - or perhaps I should say my dissipation turned
to other activities....

73's
Richard Clark, KB7QHC

3780. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 17:28:05 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <hnrf9t04l0tpn86rp5p2dqef07u200s8vf@4ax.com>
Source record: 169654

On Sat, 24 Feb 2001 04:00:01 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Richard: I just reached over and touched my monitor, I'm sitting at a
>laptop, and it is stone cold! -Peter K1PO

Hi Peter,

I hesitate to suggest perhaps you should warm your stones.

Hmmm, did you check the filament?

73's
Richard Clark, KB7QHC

3781. FS: 1000 foot spool new Belden 9118 75 ohm coax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 17:49:04 UTC
From: Bruce Brackin <bbrackin@bellsouth.net>
Message-ID: <3A97F410.F7198430@bellsouth.net>
Source record: 169656

Have new, full 1000' wrapped spool of Belden 9118 (RG-6/U) 75 ohm Duobond III cable for sale. Came as part of "package deal". 18 gauage copper covered steel, 0.275 OD. VF=83% and 16.2 pf/ft., 100% foil + 60% Al braid. Cable+spool weight about 31 pounds. $75 plus shipping from 39047.

http://ecom.belden.com/static/ZZBLDNTD01FROMCATA.HTM?P0=9118 for full specs

Thanks - Bruce, KD5IUG

3782. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 17:49:46 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <1urf9tkst84ho44hn6e1chv761g5k38p3c@4ax.com>
Source record: 169655

On Sat, 24 Feb 2001 09:59:32 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>
>There is ample verification of large values of transmission line
>impedance which take little of the energy away from the total they
>carry. That large impedance which saps little energy is sufficient proof
>of "dissipationless resistance" in a transmission line. It`s not
>reactive because the drop it causes has the voltage and current
>in-phase, So, it has to be classified as a resistance, not a reactance.

Hi Richard,

That is a rather nebulous statement.

> large values of transmission line
>impedance
High Z

>take little of the energy away from the total they
>carry.
low loss

>is sufficient proof
>of "dissipationless resistance"

What is an example of good engineering practices now becomes the proof
of an artificial concept? To what end? To then turn around and
decree the artificial is now real?

Lacking is the context of
>There is ample verification
In what field? Power Transmission across the grid, or my 100W down
the RG-8?

I can verify that if I put 100W into RG-8 and find it coming out the
other end, that yes, I live a charmed life with a lossless line. If I
look backward into that source of 100W and observe that there was more
available, and there was heat loss; then I must resign myself to life
that is less charmed and more real.

73's
Richard Clark, KB7QHC

3783. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 17:58:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <978sq2fdc1@plutonium.btinternet.com>
Source record: 169657

Yes, I do feel the need the need to glance occasionally at a meter and be reassured all is OK as the needle bounces about. I can live with a small amount of Electromagnetic Incompatibility. And I have no desire to decry the importance of the standing wave ratio on transmission lines.

But the most insidious thing about an SWR meter is its name. The confusion and misunderstandings suffered by novices, as their experienced friends attempt mostly unsuccessfully to explain in terms of SWR the how and why of radio, could be eliminated just by renaming it.

The instrument actually responds to and indicates the magnitude of the reflection coefficient with respect to 50-ohms. It can be calibrated with a linear scale from 0 to 1. It provides a very useful measure of the departure from the Standard 50 ohms of the load presented to the transmitter. There's no need to confuse matters by mentioning the SWR on a non-existent line between the meter and the transmitter. It means very little unless that line is at least 1/4-waveelngth long and is also a 50-ohm line.

It is a Reflection Coefficient = RC meter.

Reg.
==========

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message news:977sj1$3cg$1@slb1.atl.mindspring.net...
> Reg:
>
> As you know, I heartily agree with your comments/sentiments below on SWR and
> SWR meters. Seldom are they used properly, and seldom do they indicate
> anything about the "reality" of the wave conditions of antennas and lines.
>
> What is more, besides giving indications which are irrelevant and almost
> meaningless, they also have a great potential for causing ElectroMagnetic
> Compatibility (EMC) or ElectroMagnetic Interference (EMI) when left "in
> line" because the "diodes" used in the devices create a whole spectrum of

> harmonics when they rectify the residual RF that they use to
operate the SWR
> circuitry.
>
> But... on the other hand don't you agree that leaving an SWR
meter "in line"
> is somewhat "comforting"? They do have a certain appeal to
those who need
> "indications" that things are happening. Something like the
"ignition"
> light on the dasboard of your automobile, completely irrelevant
for most
> purposes... but comforting.
>
> Having those needles on the SWR meters bounce up and down across
the scales
> of the meter faces while you are talking or keying the rig, gives
a visual
> indication that "something" is happening. It lets the operator
know that RF
> is flowing somewhere. I believe that is the "appeal" of
so-called SWR
> meters.
>
> Sort of like having one of those old fashioned "On The Air" signs
that
> illuminate whenever the transmitter is keyed. Heh, heh.
>
> Of course an "On The Air" meter actuated by the PTT switch or CW
Key would
> have a lot less potential for causing interference.
>
> An operator friend of mine was having problems interfering with
the family
> TV reception whenever he operated his ham radio. He always ran
with an "in
> line" SWR meter. I advised him to take the "in line" SWR meter
out, and
> presto the interference dissapeared!
>
> The readings on the SWR meter were irrelevant to his situation
anyway, he
> just liked to see the "indication" of power output. A small
pilot light
> bulb tapped across the antenna feeders would do as well with a
lot less
> interference.
>
> I say, get rid of those "in line" SWR meters...
>

> -Peter K1PO
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:975ng1$f5d$1@neptunium.btinternet.com...
> > SWR meters should be banned. They don't even measure SWR. And
the
> > SWR they purport to measure is in any case on a non-existent
line.
> > ----
> > Reg
> >
> >
> >
>
>

3784. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 18:11:57 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97F96D.7C770E55@IEEE.org>
Source record: 169658

Reg Edwards wrote:
> The instrument actually responds to and indicates the magnitude of
> the reflection coefficient with respect to 50-ohms.

Actually, a reflected power meter is all one really needs. We
generally know the generated power assuming foldback is avoided.
Seems all we need to do is minimize the absolute value of the
reflected power (referenced to 50 ohms). My 'SWR meter' reads
forward and reflected power referenced to 50 ohms. The SWR
scale on the meter is an afterthought.
--
http://www.mindspring.com/~w6rca

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3785. CORRECTION Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 18:12:05 UTC
From: richardharrison@webtv.net
Message-ID: <29087-3A97F975-11@storefull-117.iap.bryant.webtv.net>
Source record: 169661

I wrote:
"These receivers are often good enough to meet or beat their quieting specs. at near the .01 microvolt calibration mark without help from r-f leakage."

01 microvolt was a "typo". The calibration mark is at 0.1 microvolt. Those receivers are plenty good, but they aren`t that good.

Best regards, Richard Harrison, KB5WZI

3786. Re: gin pole info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 18:21:56 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97FBC4.D672B423@IEEE.org>
Source record: 169659

Roger Halstead wrote:
> I built my own from scratch (bit heavy), but works great.

A section of Rohn 25G is ten feet long and weighs 40 pounds.
I use a 16ft long 2x4 for a gin pole. It has brackets that
fit over the horizontal members of the 25G section. I just
grab the 2x4 and lift it straight up from horizontal member
to horizontal member until I get it up the tower into position.
The weight of the 2x4 holds it in place.

Someone at the El Paso hamfest was telling about a guy who
erects 25G towers by hand without a gin pole.
--
http://www.mindspring.com/~w6rca

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3787. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 18:27:01 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A97FCF5.59EE7296@IEEE.org>
Source record: 169660

Richard Clark wrote:
> All very nice, but to ignore physical reality and replace it with an
> artifice, however compelling the math, does not suffice. Occam's
> razor is not that dull.

But Richard, I am told that such an attitude violates accepted
field theory. Are you telling me that waves that cancel at a point
do NOT continue moving down the transmission line?
(The devil made me do it)
--
http://www.mindspring.com/~w6rca

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3788. Re: NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 18:44:56 UTC
From: Leonard <louis@mail.snider.net>
Message-ID: <ppvf9tgmt73nn7tq8fp5a86u394o1i6q9e@4ax.com>
Source record: 169662

I have used NMO for years with no problems. Our police mobile radios
all use NMO mounts. I had an impact with a piece of ply wood that
came off a truck in front of me on a Larson 2-70 base loaded whip six
or seven years ago. It broke the antenna off at the NMO mount, and
bent the sheet metal around the mount, but the mount was not damaged.
I screwed another antenna on it and bent the sheet metal back as best
as I could. I am still using the same mount on the same vehicle with
no problems.

On Fri, 23 Feb 2001 02:02:21 GMT, "Barry D" <x123x123@yahoo.com>
wrote:

>> T Man wrote:
>> >
>> > Hey guys,
>> > I'm re-designing my mobile setup and need some advice. I have 1 antenna
>that
>> > is a Larsen Kulrod for 440 MHz. It is an NMO with the magnet mount. I am
>> > thinking of using something other than an NMO. I also want to move away
>from
>> > a mag-mount and go to a permanently mounted antenna. I have seen another
>> > connector that is a direct "screw-on" type connector (Not BNC,SMA, or
>NMO),
>> > it seemed like it would be more durable than the small contact in the
>NMO
>> > because it was just a stub with threads. Any suggestions will be
>> > appreciated. TIA
>> > 73! T Man
>
>I think you mean a SO-239 (259?) connector. Same thats used on some CB
>Antennas and some Amateur anttennas. I use NMO haven't had any probs.
>Check out Comet's website and you see the antennas that have both mounts.
>
>
>Barry D.
>

3789. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 19:15:59 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A98086F.12D5@wt.net>
Source record: 169664

Egon Zï¿½rrer wrote:
>
> Hi David,
> taking up the words 'helically wound antenna' I wonder what you think
> about the HFV1 vertical antenna provided by Chelcom
> (http://www.chelcom.co.uk) which - together with a Smartuner - could be a
> serious alternative to other vertical antennas.
> 73
> Egon (HB9EBB)
>

Hummmm, I don't think it would be too serious. Not against a butternut anyway for all band use. For 80m only, as this antenna is sold, I'd rather run a butternut HF2V. I guess the HFV1 could do ok, but it will still need radials for each band used, and performance on the higher bands could be funky due to the long electrical length. Would be much like tuning my 40m mobile on 15m. Sure , it will work, but my resonant 15m antenna is better. Then for the low bands you have to think about the lossy helical winding compared to a lumped coil. For an all band vertical, I'd want to go with the butternut HF6V-HF9V. For a low band vertical 160,80,40 etc, I'd use a HF2V."with the top loading wires if used on 160m" For a high band vertical 20-10 I'd prefer a half wave design such as an R7 etc. In my lowly opinion, these are the best of each type that are made commercially. MK
--
http://web.wt.net/~nm5k

3790. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 19:24:31 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A980A6F.2E45@bellsouth.net>
Source record: 169663
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Thanks for the heads up!

Such boorish sales people, I am afraid, can set me off pretty badly. That just happens to be one of the "buttons" that *can* set me off. I once called a local attorney's office looking for my own attorney. Instead, I got a particularly grouchy old buzzard who was, in the absence of my normal lawyer, filling in--and VERY unhappy about it. Upon asking very politely some questions, I felt I was under assault by a boar HOG! He was VERY rude, condescending, and even took a threatening tone with me as if he was quite put out because I disturbed his nap(?). I asked him, "Sir, are you having a bad day?", to which it sounded like I was assailed by a junk yard dog--ARF, ARF, ARF, WOOF, GROWL!!!

I hung up the phone and I felt it start. A feeling that begins almost in my feet and, like Old Faithful, rises to the top of my head! I was shaking like a leaf! Not from fear, but from RAGE! I grabbed my jacket and made for the car. I drove uptown and parked the car, then went into the offices of these attorneys. I was still mad, but not like I was at first. But I walked right into the old geezer's office, brushing past the secretary and I pointed my finger right in that old SOB's face and told him this: "Mr. Whitesides, if you worked for my corporation and even looked like you were going to talk to a customer the way you just got thru talking to me, you'd be out on your keister within the hour! Next, if you EVER, EVER talk to me like that again, you old buzzard, you had better file a flight plan because you WILL go on a short TRIP. I WILL bust you right in the mouth and send you skidding across the floor! You have an alligator mouth and a canary a**, and you're fixin' to write a check that canary a** can't cash!"

The old guy was rigid against the back of his leather office chair, knuckles whitely gripping the arms. I scared the dickens out of him! All during this diatribe, all he coud say was, "WHA--, WHA--, WHA--!" I also reported him to the local bar association which put a black mark on his record.

Now that WAS an ugly exchange that I probably shouldn't have engaged in. But. you know, that lawyer has been exceptionally nice to me ever since! LOL!

Best,

Jerry
K4KWH

GaryH wrote:
>
> I don't keep up with this newsgroup on a daily basis, probably more like
> every couple weeks due to my work schedule. After reading this one though
> thought I'd better respond. Not sure how long ago it came in but I had a
> very bad experience with Texas Towers when buying a Yeasu FT 100-D. You'd
> think that after paying over a 1000 clams for something that you could
> expect better than "very" rude behavior from the salesperson. The red flag
> went up in my brain the first time I spoke to him, he was a little curt, but
> the other salesman had been so nice that I kind of pushed it to the back of
> my mind and figured he might be acting that way because I was a woman. Then
> after purchasing the radio and paying over 50 dollars to get it overnight,
> it didn't come in until Monday. I wanted it for the contest that weekend. I
> had payed $30 for over night and didn't get it. I also did not get the extra
> back. He flatly told me he had made one call to ups and he was not wasting
> anymore of his time calling again. Mind you I had just spent quite a bit of
> money. I told him that was a pretty bad attitude to take towards a customer
> and he wouldn't get anymore of my business if he wanted to act that way, his
> answer to me was I don't want any more of your business. Since then have
> had several reports from others of similar bad experiences so you might try
> another source for this antenna if you want one.
> After that if you get it I'd love to hear from you how it works out. We have
> thought of buying one for similar reasons. Sorry so long, Thanks, 73' Kathy
> AC4LB
>
> <jason_hsu@my-deja.com> wrote in message news:9528eagcs1@nnrp1.deja.com...
> > Some of the questions I have include:
> > 1. Can I use one if I only have 8 feet of clearance on the small patio
> > (8 feet wide, 8 feet tall, 6 feet wide) outside my sliding door? Is it
> > possible to mount the antenna at a slant? I want to hear about any
> > creative solutions from you.
> > 2. What type of mount/tripod would be appropriate? (I don't have a
> > railing.)
> > 3. How quickly can I assemble and disassemble the antenna? (For
> > stealth and security reasons, I need to remove the antenna when I am
> > not operating.)
> > 4. Which versions (original DK-3, ElectraSlide, etc.) of the
> > Screwdriver are most appropriate for me? What advantages do the more
> > expensive versions have over the original? Can some versions (like the
> > D&K KH-600 HF MOBILE ANTENNA) really operate on 160m?
> >
> > SOME BACKGROUND:
> > I am seriously considering a Screwdriver antenna for operating HF from
> > my ground floor apartment (no big trees or bushes close enough to
> > conceal wires and keep them out of the way of people or dogs passing
> > by). A mobile antenna would be less cumbersome to work with than a big
> > wire antenna. The Screwdriver seems to be the best antenna for me.
> >
> > I have had modest success with Hamsticks I am borrowing, but I know
> > that Screwdrivers are more efficient. Also, Screwdrivers are multi-
> > band and are easier to tune (due to the automatic tuning aspect). Has

> > anyone used a Screwdriver antenna for non-mobile operation?
> >
> > I was considering a Texas Bugcatcher, but I am not sure about the
> > quality of the version from Texas Radio Products, and the version from
> > GLA Systems is too expensive. Screwdriver antennas are almost as
> > efficient, and several versions sell for near or below $200.
> >
> > --
> > Jason Hsu, AG4DG
> > jason_hsu@@@@@@@@@@planetmail.com
> > http://www.bigfoot.com/~jason_hsu/
> >
> >
> > Sent via Deja.com
> > http://www.deja.com/

3791. Re: Commerical Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 19:36:37 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A980D45.897DD3C8@oio.net>
Source record: 169665

Larry wrote:
>
> Anyone using one of the Barker&Williamsom trappd dipoles such as the
> as-80 (80-40-20). Can these be adjusted for the cw portion of the band
> with ease?
>
> K1zw
> Larry
> Qcwa

Larry,
Sure. And in exactly the same way you would adjust the resonance
frequency of any other dipole.
'Doc

3792. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 19:41:43 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <u83g9tgl9j9440686hd1e5inkddbtc9gap@4ax.com>
Source record: 169666

On Fri, 23 Feb 2001 23:48:57 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>I think that you brought up the kinetic energy of an electron ploughing into
>the anode of a vacuum tube and releasing its energy in the form of heat. I
>was attempting to give an example that might be more familiar to the younger
>contributers of this group. Many still have cathode ray monitors and most
>will have seen a TV set with a CRT. Here is a prime example of an electron
>accelerated to with several kilovolts and then brought to a sudden stop in a
>coating of material that has the property of liberating light when excess
>energy is applied.
>

Hi Gary,

Yes, your point above is well taken. I was rather too focused at the
atomic level. The lack of heat is more a matter of an efficient
conversion to shorter wavelengths in the phosphor's atomic resonance.

Hewlett Packard, a premier LED (another source of cold light)
developer, has recently achieved one of the highest efficient
conversion rates of 55% (well perhaps I should modify to a source of
lukewarm light). Just can't seem to shake that pesky matching
condition!

73's
Richard Clark, KB7QHC

3793. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 19:59:41 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <u5tf9tsiudl97a5ogm9lupe58f1k32v910@4ax.com>
Source record: 169667

On Sat, 24 Feb 2001 09:59:32 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

> Antenna resistance is
>dissipationless because it doesn`t heat the antenna.

Hi Richard,

This is simply the perversion of language to abrogate the meaning of dissipation. Newtonian Mechanics holds original claim, in the field of science, to the intent and meaning of the word dissipation.

To quote Feynman on "12-2 Friction" :
"the mechanism of power loss ... generate waves and atomic motions and, after a while, heat...."

Classically, in the Newtonian Mechanics we all so dearly hold to, heat is an unrecoverable loss of energy. The source having once expended the energy cannot acquire any part of it back. (I won't quote Feynman on Carnot.) This goes to first class in freshman physics where we observe that a sliding block that encounters friction loses power to heat THAT being a form of energy, is in a state of imbalance, flows toward a cooler mass and thus DISSIPATES the energy by spreading it out of recoverable reach across a growing radius as long as there is a temperature gradient. ...then we get into entropy.

Do we speculate about the existence of a non-entropic resistance?

Dissipation means unrecoverable.

HEAT is an unrecoverable loss of energy.

Radiation is an unrecoverable loss of energy (for the same reason).

Radiation HEATs anything it illuminates IF what it illuminates can absorb the wavelength of the radiation. The simple proof of absorbtion is found in the deceleration of a charge and the rise in temperature.

HEAT in turn Radiates any region cooler than it.

There is absolutely no difference in physics between the radiation of HEAT and the radiation of your signal.

These HEAT appealed arguments forget that HEAT is not a physical entity! It is a state of perception arrived at through sensation. Throughout the Universe there is a continuum of temperature, for which there is very small band of thermal activity where we smugly reside

and arrogantly create an island of physics called HEAT. Each and every step wholly subjective and fully impossible to accurately describe. If you simply accepted the bare math and dismiss this subjective snuggly warm term of HEAT then all the logic of dissipationlessness would collapse.

73's
Richard Clark, KB7QHC

3794. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 20:30:47 UTC
From: richardharrison@webtv.net
Message-ID: <15820-3A9819F7-61@storefull-116.iap.bryant.webtv.net>
Source record: 169668

Richard Clark wrote:
"That is a rather nebulous statement." Richard Clark suggests large values of transmission line impedance are simply "High Z". That is a good simplification. I should have said that characteristic impedance is usually much larger than line loss resistance.
Richard Clark also suggested that High Z which takes away little of the energy from the total carried is simply "low loss". Again, a good simplification.

Richard Clark also wrote:
"Lacking is the context of: There is ample verification."

It is self-evident to me that a high characteristic resistance that eats no energy is lossless, though it is High Z by comparison with copper resistance in the transmission line. This is true for the Electric Company`s line and for Richard Clark`s RG-8.

I beat around the bush with "large values of transmission line impedance" because I didn`t want to call RG-8 High Z cable. Next time I`ll try to clarify with fewer, shorter words.
Best regards, Richard Harrison, KB5WZI

3795. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 20:58:21 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <jp4g9tk5jddo6sbij1nrhm0pfuq2th0u5v@4ax.com>
Source record: 169569

On Sat, 24 Feb 2001 01:09:56 -0500, "John S. Dyson" <dyson@iquest.net>
wrote:

>
>"Richard Clark" <rwclark@seanet.com> wrote in message
news:3a97c8c6.339284024@news.seanet.com...
>> scales).
>>
>> There are clear and simple solutions working in a billion dollars
>> worth of gear. In my own 6M rig (a Motorola mobile converted from
>> public service) are a string of at least 6 shielded inductors that
>> each show considerably more Q than if they were simply sitting on an
>> open PC board (or in free space for that matter). There is a better,
>> technical name for them, but I am not close to my resource to
>> resurrect that term right now. The point of the matter is that all
>> capacitance is overwhelmed by the surrounding shield, but that shield
>> is made part of the resonant circuit and would certainly swamp the
>> inter-turn capacitance.
>>
>Is it a helical resonator?
>
>John

Hi John,

Thank you, yes, helical resonators. My reference is "Reference Data
for Radio Engineers," Chapter. 22 Transmission lines.

If you wanted to optimize the Q of the coil (this is largely the only
structure if you don't count the walls) there are nomographs for any
consideration.

I will simply use the already illustrated exercise found in the book.
We have a 30 turn inductor for resonance at 10 MHz. The unloaded Q is
the desired engineering goal (or marketing goal, what have you...) and
for this example is idling at 1000.

To fulfill the expectations of the preceding paragraph we come up with
that we need a 30 turn 3 inch diameter coil inside a 6 inch diameter
can. To obtain the unloaded Q of 1000 the turns pitch needs to be
0.16 inch.

The geometry of this clearly reveals that the turn to turn capacitance
is much more dominant (by nearly 10:1). However:
"It operates as a distributed-parameter system equivalent to a
quarter wave co axial transmission line resonator."

This quote becomes obvious when the coil unwinds to maximize Q with a straight wire in a coaxial, quarter wave length cavity.

Let's examine that defining tenet recently expressed:
>Its an old wives' tale that Q is poor when most of the capacitance is of the >parasitic variety.

A straight wire is nature's way of minimizing parasitic capacitance.

73's
Richard Clark, KB7QHC

3796. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 21:01:13 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <m68g9tsentdbqhb70locu9bb3vf0jmoppa@4ax.com>
Source record: 169570

On Sat, 24 Feb 2001 07:46:12 GMT, Zoran Brlecic
<zbrlecic@earthlink.net> wrote:

>Richard Clark wrote:
>
>> >What's a ball field backstop?
>> >
>> >73 .... Zoran WA7AA
>>
>> Hi Zoran,
>>
>> That big truncated cone of mesh wire behind the umpire, behind the
>> catcher, behind home plate, in front of the pitcher, in front of
>> second base, in front of center field, in one corner of the base ball
>> stadium (or a school ground play field).
>
>Ahhh, please excuse my ignorance when it comes to our national pastime. It's the
>euro-trash in me: the only sport I follow is basketball. Now, if you had said
>that his radials were "in the paint" or that his signal was like an "alley-oop
>after a three second violation", that would have been a different story.
>
>Thanks and 73 .... Zoran WA7AA

Hi Zoran,

"in the paint" I like that. ;-)

73's
Richard Clark, KB7QHC

3797. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 21:09:51 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <be8g9tkhhfb593ba934sdfh22bv7gn9j85@4ax.com>
Source record: 169571

On Sat, 24 Feb 2001 09:56:03 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>"Peter O. Brackett" wrote:
>>
>> Cecil:
>>
>> OK, I admit it.
>>
>> I don't really know what was causing the interference, but when the "in
>> line" SWR meter was taken out of the line, magically the TV Interference
>> went away, never to be seen again. It came back whenever the SWR meter was
>> put back in line.
>>
>> Suggestions as to the reason for the elimination of the EMI appreciated, I
>> only guessed it was the diodes in the metering circuitry.
>
>If the SWR meter was not properly shielded, it could leak primary
>RF. If common-mode currents were present, the SWR box might have
>a different radiation pattern than a piece of coax.
>
>I didn't mean to shoot down your theory, Peter. But charging a
>DC cap is not nearly as effective at TVI as frequency doubling
>by rectifying only.

Hi Guys,

Sounds like an open ground (in a secondary path) to me. You'd be
lucky to get harmonic components of more than 1 mW out of them. And
the only way to support that meager power would be in a resonant (at
the freq of the RFI) structure - presumably your antenna this meter is
connected to. That puts this 1 mW very distant from the house (I
presume) and least likely as a specific source of that RFI. The
general source being the meter assembly is obvious.

Is this a remote reading head SWR Meter?

3798. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 21:15:13 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <e29g9tkssm6hs4gaqn9tst4mdsr7stehka@4ax.com>
Source record: 169572

On Sat, 24 Feb 2001 12:27:01 -0600, Cecil <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> All very nice, but to ignore physical reality and replace it with an
>> artifice, however compelling the math, does not suffice. Occam's
>> razor is not that dull.
>
>But Richard, I am told that such an attitude violates accepted
>field theory. Are you telling me that waves that cancel at a point
>do NOT continue moving down the transmission line?
all of them?
>(The devil made me do it)

Hi Cecil :-)

(Satan, get thee behind me!)

73's
Richard Clark, KB7QHC

3799. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 21:22:20 UTC
From: richardharrison@webtv.net
Message-ID: <15821-3A98260C-24@storefull-116.iap.bryant.webtv.net>
Source record: 169573

Richard Clark wrote:
"This is simply a perversion of the language to abrogate the meaning of dissipation."

Good! So now I`m a pervert!

We distinguish between radiation resistance and loss resistance in an antenna. Dispersion of radio energy is not called dissipation. Conversion of radio energy to heat by antenna inefficiency is called dissipation.

Energy eventually degrades to heat we can`t use. It isn`t hot enough to do us any good. The unavailability of energy to be used is inevitably increasing and thus it seems the entropy of the universe grows.

Richard Clark also wrote;
"Heat in turn Radiates any region cooler than it."

Didn`t keep my thermodynamics books but my recollection is that all warm bodies radiate heat according to their temperatures and exchange heat energy with surrounding bodies and space. A hotter body transmits more heat to a cooler body than it receives from the cooler body.

Best regards, Richard Harrison, KB5WZI

3800. Re: question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 21:52:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A982D18.4B1DC817@eznec.com>
Source record: 169574

A few years ago, Jack Belrose, VE2CV published an article in QST on
off-center fed dipoles. I recall his mentioning that it was very
difficult to get the feedline currents balanced, even with current
baluns. I think Cecil's right.

Roy Lewallen, W7EL

Cecil wrote:
>
> "Peter O. Brackett" wrote:
> >
> > Cecil:
> >
> > But... but...
> >
> > If one places a choke balun [aka common mode choke] on those offset feeders
> > cannot the unbalance on the feeders be eliminated and so help to correct the
> > radiation pattern?
>
> Let's say one has a 1/2WL dipole fed 10% from the end. What is the impedance
> looking into the 10% part? What is the impedance looking into the 90% part.
> I would suggest that one would have a lot of trouble designing a choke that
> will cause equal currents into those two impedances. Seems to me, the 10%
> part would have a very high reactance which would require a choke with a
> super high impedance. Ever seen a choke with 10k ohms of choking impedance?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3801. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 22:04:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A982FE8.77A56CF1@eznec.com>
Source record: 169575

Reg Edwards wrote:
> . . .
> But the most insidious thing about an SWR meter is its name. The
> confusion and misunderstandings suffered by novices, as their
> experienced friends attempt mostly unsuccessfully to explain in
> terms of SWR the how and why of radio, could be eliminated just by
> renaming it.
> . . .

Why, that's exactly my argument against using the term "S-Unit". Welcome aboard, Reg!

Roy Lewallen, W7EL

3802. HF Antenna Survey

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-24 22:56:17 UTC
From: Mark Roberts <marob@bellsouth.net>
Message-ID: <gveg9tk8qitpcetb6un20krer3hnrcvfc4@4ax.com>
Source record: 169576

4 years ago, I dropped my tower at the old QTH, and packed everything up to begin the transition to our new home. The new residence is complete, and I have finally gotten everything ready to raise the tower again. The old Mosley Pro-57 is still in the storage shed, but, since I always considered it the world's best vertical, I am looking for some opinions on multi-band beams. I am looking for the best 10-40 beam, so all opinions will be appreciated.
N4ROL

3803. WTB MFJ-931

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 00:03:52 UTC
From: peterchristensen <peter.christensen@home.com>
Message-ID: <3A984CA6.1A6964D4@home.com>
Source record: 169577

A friend of mine wishes to purchase a MFJ-931 artificial ground.
His name is Merv Colley, his telephone number is 1 403 278 3551,
and his Email address is 61583206@3web.net
Thank you. Peter.

3804. Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 00:04:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <979i50jqm1@uranium.btinternet.com>
Source record: 169578
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Such attenuators do exist. I have in the shack a 0-100 dB
attenuator in 1 dB steps. It was manufactured by Pascall, UK, about
5 years back. I forget the price but it was quite expensive. Don't
know whether the firm still exists. Built into a solid die-cast
aluminium-alloy box.

Cable leakage does not increase with frequency - it decreases.
Worst of all at DC and audio frequencies. Leakage occurs mostly at
connectors. Use threaded types, not simple plug and socket.
Impedance mismatch at connectors is no problem with attenuation
measurements.

I have made measurements up to 160 dB at up to 5 MHz by comparison
with variable attenuators. A 10 watt signal generator is needed.
Without any extraordinary precautions it is possible to make
measurements with an uncertainty of a few tenths of a decibel at
100 dB.

I have also made measurements with a precision of 0.001 decibels at
frequencies up to 10 MHz. Such measurements are necessary to
determining the loss vs temperature coefficients of components and
systems when it is possible to vary the temperature only a few
degrees C. A high precision is also needed when calibrating field
attenuators against laboratory standards.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Paul Keinanen <keinanen@sci.fi> wrote in message
news:60pe9to55lpu8l0i5klkobios5qcaj2lqd@4ax.com...
> On Thu, 22 Feb 2001 19:43:38 -0600, "Bill N0MNB" <N0MNB@MINN.NET>
> wrote:
>
> >NEEDED A VARIABLE 50 OHM ATTENUATOR.
>
> What frequency range ?
>
> >0-100DB OR SO.
>
> How do you expect to get such attenuations when cable leakage is

much
> more than that above audio frequencies.
>

3805. Re: question on theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 00:54:49 UTC
From: k1bqt@aol.com
Message-ID: <20010224195449.16082.00003019@ng-cu1.aol.com>
Source record: 169579

Hi Roy--

>A few years ago, Jack Belrose, VE2CV published an article in QST on off-center fed dipoles. I recall his mentioning that it was very difficult to get the feedline currents balanced, even with current baluns. I think Cecil's right.<

Jack is half right, but based on my experience with the discpole, the job isn't impossible or even difficult at HF and VHF frequencies. As a practival rule, I've found wound choke baluns work a lot better than beads or sleeves. I don't know what Cecil said, but I wouldn't make the blanket statement that you can't cool out the feedline of a OFC because I regularly accomplish this. I DO know a coaxial choke is the only thing that has worked well for me. None of the solutions that depend on a balanced feedpoint performed successfully.

Rick K1BQT

3806. Re: gin pole info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 01:05:06 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <6TYl6.1261$Hg.130922@monger.newsread.com>
Source record: 169580

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A97FBC4.D672B423@IEEE.org...
> Roger Halstead wrote:
> > I built my own from scratch (bit heavy), but works great.
>
> A section of Rohn 25G is ten feet long and weighs 40 pounds.

Yah, but...

I used mine for installing 45G at 90# a section.

> I use a 16ft long 2x4 for a gin pole. It has brackets that
> fit over the horizontal members of the 25G section. I just
> grab the 2x4 and lift it straight up from horizontal member
> to horizontal member until I get it up the tower into position.
> The weight of the 2x4 holds it in place.
>
> Someone at the El Paso hamfest was telling about a guy who
> erects 25G towers by hand without a gin pole.

That guy sure must have a good sense of balance.
It's easy enough to lift the sections, but them little buggers take on a
life of their own when standing on end above your head. <LOL>

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3807. Short HT antennas any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 03:58:05 UTC
From: Martin Walker <mbwalker@netonecom.net>
Message-ID: <3a988239$0$65503$45beb828@newscene.com>
Source record: 169581

I'm considering a Comet/Maldol MH-209SMA antenna for my Yaesu FT-50. The short length would be nice for stuffing the radio in the small bag under my bicycle seat or in a jacket pocket when snowmobiling. The original antenna got damaged beyond repair doing these things and the Comet SMA-503 that I bought as a replacement is getting bent too often near its base, although it performs very well. I'm lucky to live and play near the local repeaters so I really don't need a long range antenna, just a rugged one. I like the idea of the MH-209SMA being short and flexible. Has anybody tried one?

Martin KC8CFP

3808. Re: Walter was .. writing a new book ..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 04:22:40 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <IL%l6.19166$rO3.718990@e3500-chi1.usenetserver.com>
Source record: 169582

My illness was some time ago. Part of the delay was due to problems in page setting, but the problems are gone and the manuscript is completely page set. The entire page setup is due to go to the printer late next week, and hopefully copies will be available at Dayton. That's what we're shooting for.

Walt, W2DU

3809. Re: CORRECTION Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 04:42:41 UTC
From: richardharrison@webtv.net
Message-ID: <15812-3A988D41-105@storefull-112.iap.bryant.webtv.net>
Source record: 169583

I wrote Weinschell Engineering Model 933. That was ok except it is Weinschel with only one "l".

Weinschel was at Gaithersburg, MD. It was years ago when I had a nice conversation with Mr. Weinschel. He said that although only each db is marked, the accuracy is good enough to resolve the scale to 0.3 db. Mr. Weinschel was very enthusiastic about what he did and very proud of his accomplishments. It made you feel good just to talk to him.

Best regards, Richard Harrison, KB5WZI

3810. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 06:21:36 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <97a89g$a17$0@208.206.142.68>
Source record: 169584

The Drake meters all read forward and reflected power in watts, not SWR.

Dick

Cecil wrote:
>
> Reg Edwards wrote:
> > The instrument actually responds to and indicates the magnitude of
> > the reflection coefficient with respect to 50-ohms.
>
> Actually, a reflected power meter is all one really needs. We
> generally know the generated power assuming foldback is avoided.
> Seems all we need to do is minimize the absolute value of the
> reflected power (referenced to 50 ohms). My 'SWR meter' reads
> forward and reflected power referenced to 50 ohms. The SWR
> scale on the meter is an afterthought.
>

3811. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 06:49:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97a9ul$78q$1@slb4.atl.mindspring.net>
Source record: 169585

Reg:

Agreed.

Actually most of the "cheap" so called SWR meters really only indicate a "reflected voltage" [with respect to a 50 Ohm reference resistance] and not the reflection coefficient. Since the reflection coefficient is defined to be a ratio of two voltages, that is the reflection coefficient is the ratio of the reflected voltage to the incident voltage, but the meters usually only sense and indicate a version of the reflected voltage, they do not really compute the ratio.

It would be nice to have such instruments with a built in capability so that one could adjust and set up a reference impedance and could measure reflected voltages with respect to an arbitrary reference impedance say Zr instead of a 50 Ohm resistor.

In my non-HF work I have often needed such an instrument and had to build my own from time to time.

For instance in wire line transmission engineering in telephone plant, we encounter cases of very long lines at low frequencies, the transmission line "surge impedance" may be complex and actually vary over an order of magnitude throughout the band of interest.

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:978sq2fdc1@plutonium.btinternet.com...
> Yes, I do feel the need the need to glance occasionally at a meter
> and be reassured all is OK as the needle bounces about. I can live
> with a small amount of Electromagnetic Incompatibility. And I have
> no desire to decry the importance of the standing wave ratio on
> transmission lines.
>
> But the most insidious thing about an SWR meter is its name. The
> confusion and misunderstandings suffered by novices, as their
> experienced friends attempt mostly unsuccessfully to explain in
> terms of SWR the how and why of radio, could be eliminated just by
> renaming it.
>
> The instrument actually responds to and indicates the magnitude of
> the reflection coefficient with respect to 50-ohms. It can be
> calibrated with a linear scale from 0 to 1. It provides a very
> useful measure of the departure from the Standard 50 ohms of the
> load presented to the transmitter. There's no need to confuse

> matters by mentioning the SWR on a non-existent line between the
> meter and the transmitter. It means very little unless that line is
> at least 1/4-waveelngth long and is also a 50-ohm line.
>
> It is a Reflection Coefficient = RC meter.
> ----
> Reg.
> ==============================
>
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
> news:977sj1$3cg$1@slb1.atl.mindspring.net...
> > Reg:
> >
> > As you know, I heartily agree with your comments/sentiments below
> on SWR and
> > SWR meters. Seldom are they used properly, and seldom do they
> indicate
> > anything about the "reality" of the wave conditions of antennas
> and lines.
> >
> > What is more, besides giving indications which are irrelevant and
> almost
> > meaningless, they also have a great potential for causing
> ElectroMagnetic
> > Compatibility (EMC) or ElectroMagnetic Interference (EMI) when
> left "in
> > line" because the "diodes" used in the devices create a whole
> spectrum of
> > harmonics when they rectify the residual RF that they use to
> operate the SWR
> > circuitry.
> >
> > But... on the other hand don't you agree that leaving an SWR
> meter "in line"
> > is somewhat "comforting"? They do have a certain appeal to
> those who need
> > "indications" that things are happening. Something like the
> "ignition"
> > light on the dasboard of your automobile, completely irrelevant
> for most
> > purposes... but comforting.
> >
> > Having those needles on the SWR meters bounce up and down across
> the scales
> > of the meter faces while you are talking or keying the rig, gives
> a visual
> > indication that "something" is happening. It lets the operator
> know that RF
> > is flowing somewhere. I believe that is the "appeal" of
> so-called SWR

> > meters.
> >
> > Sort of like having one of those old fashioned "On The Air" signs
> that
> > illuminate whenever the transmitter is keyed. Heh, heh.
> >
> > Of course an "On The Air" meter actuated by the PTT switch or CW
> Key would
> > have a lot less potential for causing interference.
> >
> > An operator friend of mine was having problems interfering with
> the family
> > TV reception whenever he operated his ham radio. He always ran
> with an "in
> > line" SWR meter. I advised him to take the "in line" SWR meter
> out, and
> > presto the interference dissapeared!
> >
> > The readings on the SWR meter were irrelevant to his situation
> anyway, he
> > just liked to see the "indication" of power output. A small
> pilot light
> > bulb tapped across the antenna feeders would do as well with a
> lot less
> > interference.
> >
> > I say, get rid of those "in line" SWR meters...
> >
> > -Peter K1PO
> >
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:975ng1$f5d$1@neptunium.btinternet.com...
> > > SWR meters should be banned. They don't even measure SWR. And
> the
> > > SWR they purport to measure is in any case on a non-existent
> line.
> > > ----
> > > Reg
> > >
> > >
> > >
> >
> >
>
>

3812. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 06:54:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97aa4dqst1@slb3.atl.mindspring.net>
Source record: 169586

Cecil:

I like those "cross needle" beauties... they indicate the SWR at the point where two needles cross, as well as incident and reflected voltages and display it all simultaneously!

Cross needle SWR meter... one of the neatest ideas I've seen, just wish I'd have thought of that concept.

Proves once again the oft forgotten superiority of analog computation over digital... that's why I "pine" for my old log log slide rule.

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message news:3A97F96D.7C770E55@IEEE.org...
> Reg Edwards wrote:
> > The instrument actually responds to and indicates the magnitude of
> > the reflection coefficient with respect to 50-ohms.
>
> Actually, a reflected power meter is all one really needs. We
> generally know the generated power assuming foldback is avoided.
> Seems all we need to do is minimize the absolute value of the
> reflected power (referenced to 50 ohms). My 'SWR meter' reads
> forward and reflected power referenced to 50 ohms. The SWR
> scale on the meter is an afterthought.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3813. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 07:02:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97aanq$1l4$1@slb2.atl.mindspring.net>
Source record: 169587

Dick:

I have a couple of those Drake meters. The Drake meters have their scales marked in Watts, but they are not measuring watts, an examination of their circuitry reveals that they measure only reflected and/or incident voltages, not power.

If the impedance they work into/with is fixed at 50 Ohms resitive then they give a close indication of the correct power because in that case power will be proportional to the square of the voltage. But if the impedance is off 50 Ohms resistive, the power indication on those scales is not accurate!

To measure watts, the meters would have to measure both voltage and current simultaneously and multiply them together to get to watts. Or... like the "bolometer" measure the power by measuring the heat in a resistance or some other such technique.

-Peter K1PO

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:97a89g$a17$0@208.206.142.68...
> The Drake meters all read forward and reflected power in watts, not SWR.
>
> Dick
>
>
> Cecil wrote:
> >
> > Reg Edwards wrote:
> > > The instrument actually responds to and indicates the magnitude of
> > > the reflection coefficient with respect to 50-ohms.
> >
> > Actually, a reflected power meter is all one really needs. We
> > generally know the generated power assuming foldback is avoided.
> > Seems all we need to do is minimize the absolute value of the
> > reflected power (referenced to 50 ohms). My 'SWR meter' reads
> > forward and reflected power referenced to 50 ohms. The SWR
> > scale on the meter is an afterthought.
> >

3814. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 07:08:15 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97aaug$2f5$1@slb3.atl.mindspring.net>
Source record: 169588

Gary:

What is the Q of a queue? Or indeed of a cue? MI5 had a "Q", but got no respect from Bond. Does that make him a low Q?

-Peter K1PO

"Gary Peach" <xcg34@dial.pipex.com> wrote in message news:978nm2$n5e$4@lure.pipex.net...
>
> "Peter O. Brackett" wrote ..
> > Roy:
> > What about the rest of us mere mortals. How shall we measure Q?
>
> By whether you get into the cinema or not before the big picture starts.
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
>

3815. Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 07:33:39 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <vn7h9ts7lvt8647kcnbelj3tiik2mf108c@4ax.com>
Source record: 169589
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 25 Feb 2001 00:04:50 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Such attenuators do exist. I have in the shack a 0-100 dB
>attenuator in 1 dB steps. It was manufactured by Pascall, UK, about
>5 years back. I forget the price but it was quite expensive.

I guess that it must be quite expensive if you really get such
accuracy as you later claim, even in a controlled constant
temperature.

I also suspect that the VHF/UHF performance is not that spectacular
and since the original poster did not specify the required frequency
range, I originally asked about it.

>Cable leakage does not increase with frequency - it decreases.
>Worst of all at DC and audio frequencies. Leakage occurs mostly at
>connectors. Use threaded types, not simple plug and socket.

DC and audio circuits generally have a much higher impedance levels
than 50 or 75 ohms used in RF circuits, so the capacitive coupling is
a much worse problem. At very low frequencies the coaxial cable does
not work properly as a transmission line, thus the isolation is not
very good. However, due to losses at very high frequencies, the shield
no longer act as a perfect conductor and you can get different
currents flowing on the inside and outside of the shield.

>I have also made measurements with a precision of 0.001 decibels at
>frequencies up to 10 MHz.

I guess that must be the readout resolution in some comparative
measurements but not an actual precision. A 0.001 dB voltage ratio is
115 ppm (0.015 %), so I wonder how this accuracy could be maintained,
especially if some real power levels are involved heating the
attenuator.

Paul OH3LWR

3816. Re: PROVEN Program-ENLARGE Your Penis (Guaranteed) 4565

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 09:04:22 UTC
From: Big Ben <bigbensblazer@NOSPAMyahoo.com>
Message-ID: <kW3m6.5361$kZ1.906978@news.uswest.net>
Source record: 169590

Well i guess if it was long enuff it would make a good antenna. Could use some viagra for those long QSO's.

--
Ben Lee
KC7UIP
CN85
Remove NOSPAM to Reply

3817. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 09:06:02 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97aklt$ju3$1@lure.pipex.net>
Source record: 169592

"Richard Clark" wrote ...
> "Gary Peach" wrote:
> >Did you notice the little hairs ...
> Coated? There's so much lead in these Tubes that they should conduct
> freely (5 Lbs of lead, or so claimed in the newspaper).

Oh! blow, Actually I attended Whitefriars when the Galss works was still operating there. I think that most if not all of their glass was lead glass. I had done w bit of glass blowing with that soda glass that one could get from Timothy White's and it was very forgiving. Then I tried a bit of the lead glass and all I got was a scaley black mass. I guess I need lessons. Still for the stuff that I'd like to do lead glass would probably not be ideal.
I didn't know that lead glass conducted electricity. I suppose tey use lead to decrease the effects of long wavelength X-Rays off big colour tubes.

> When I was a youngster, my first electronics lessons were with my
> hands in the back of a TV.

I did a few of those, old 405 machines before I went into the mob. self taught I even made my own components, much to the amazement of a friend who had done his National Service in a Radio trade, he said that they had never taught him to do anything like that. When my turn came I found just how true that was.

>Lesson One was about the relationship between power, capacitance,
>the volt, and the Aquadag.

And the backed on dust coating that turns into conductive carbon and leaks away all of the EHT once it goes really solid. Just cleaning that coating off and applying some fresh Vasaline acround the tube connection, and a good clean of the screen inside the safety glass increased the apparenr brightness of an old set sufficient to get a few bob off the owner. What did annoy me was supplying parts and not getting paid for them, and of course in those day the other trap of fixing a fault in the line circuit and a month later the frame circuit fails and you get the whinging "What have you done to may set" syndrom, or the knock on the door just as you wee sitting down to Christmas dinner, my sets playing up can you come and look at it we want to see the Queen's speech. After I married The Dragon would chase such calls away. Still in those days every suite and sports jacket had money in it.

> I can attest to several successful measurements of physical heat as a
result of
> decelerating the stored charge of several thousand volts.

My most unfavourite way of discovering heat was the unmistakeable odour of wool burning. Those leather patches on the elbows had their uses when Solons were around.

> No instrumentation was used or was necessary to confirm dissipation.
> I also learned my first lesson in phase shift and an RC circuit.

And also the 6 dB per octave frequency penalty for RC coupling, and the integrating and diferentiating qualities of those early flywheel timebase sync seperators.

> I also came to understand how VERRRY long one time constant can be
> after turning off a TV.

So did I till I discovered the crock clip long wire and resistor.
Of course a faulty earth connection to the aqua dag coating was another trap.
You could also get quite a nasty nip off the scan coils.
You weren't a tradesman until you'd had a belt or two.
RF burns were another thing, I didn't like the smell much, I smell a bit like chicken, pity really cos my missus thinks I'm a pig or is it an old bore. (sic)

> Then the Navy trained me to keep one hand behind my back and the
> dissipation went away - or perhaps I should say my dissipation turned
> to other activities....

The RAF trained me to keep one hand in my pocket,
since I left the air force I don't bother; can't get it in
the Government always have their hand in my pocket instead.

Yes, the service also trained me in various forms of dissipation, smoking, drinking, and filthy women. But I have never used drugs and don't intend to start when I see first hand what it does for those that do.
Well that's taxed yer brains enough for this session,
I'll be getting to OT brigade going in a minute.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

Stingo, Dragon's Blood, Arctic Ale, Worthington, Bass, ...
I don't get to the pub now, can't mix it with the medication,
but do they still do the once popular Barley Wine?

3818. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 09:12:47 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97aklv$ju3$2@lure.pipex.net>
Source record: 169593

"Richard Clark" wrote ...
> Gary Peach" wrote:...
> Yes, your point above is well taken. I was rather too focused at the
> atomic level.

No pun intended I hope :)

>The lack of heat is more a matter of an efficient
> conversion to shorter wavelengths in the phosphor's atomic resonance.

Apart from noise considerations the only other matter is of course
efficiency, we don't see enough of it recognized directly in the topics in
this group. If it crops up at all it is usually in another guise.

> Hewlett Packard, a premier LED (another source of cold light)
> developer, has recently achieved one of the highest efficient
> conversion rates of 55% (well perhaps I should modify to a source of
> lukewarm light). Just can't seem to shake that pesky matching
> condition!

55% that's beginning to be promising, when they get above 80% we'll perhaps
have some confidence that they know what they are doing.
I guess then they'll be going into the lightbulb business in the interests
of ecology.

What incidentally is the light efficiency of the old filament lamp?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3819. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 09:36:47 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97akm0$ju3$3@lure.pipex.net>
Source record: 169591

"Peter O. Brackett" wrote ...

> > > What about the rest of us mere mortals. How shall we measure Q?
> > By whether you get into the cinema or not before the big picture starts.

> What is the Q of a queue? Or indeed of a cue?

Oh! balls can't get out from the 8

> MI5 had a "Q", but got no respect from Bond.
> Does that make him a low Q?

No, a fur cue.

For the answer go down to Kew at Lilac Time, it isn't far from London.
While you're there pop into the PRO and look up Bond.
Is an educated agent a Unibond?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

For our American Cousins Unibond is a product line of building materials
mostly paints and plasters and fillers and things; hope this helps you get a
grip on this subject.
Oops! America doesn't have Subjects. :)

3820. CA 350DB Comet 10M & 6M

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 09:58:27 UTC
From: "Shannon P. McGauley" <mcgauley@onramp.net>
Message-ID: <uE4m6.456308$w61.542597@dfw-read.news.verio.net>
Source record: 169594

I'm currently looking for this dualband base antenna. I would pay a very good price for this antenna.

http://rampages.onramp.net/~mcgauley/n5kou

3821. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 11:25:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97aq0v$2n7$1@plutonium.btinternet.com>
Source record: 169595

Stray capacitance of a solenoid is the sum of two components. Their relative contributions depend on the number of turns.

The strays can be lumped together to form an equivalent capacitance in parallel with the coil's inductance at the natural self-resonant frequency. Depending on an isolated coil's length/diameter ratio, the strays can also be considered to be uniformly distributed along the length of the coil which then behaves as 1/2-wave transmission line at its self resonant frequency.

The principal component can crudely be decribed as the capacitance between the two half-cylinders when the coil is cut at its center. The electrostic field spreads out into the surrounding space in a manner similar to the magnetic lines of force around a bar magnet.

The other component is due to capacitance between turns. With a single turn, as in a magloop, the between-turn capacitance is obviously zero. With two turns the capacitance in shunt with the the coil is a maximum. The two components are one and the same.

But with N turns the equivalent parallel capacitance is only 1/Nth of the capacitance between adjacent turns because the individual capcitances are all in series with each other. So as coil length and N increase, the first component rapidly predominates.

In any case, if the insulating material between turns is of high quality, even with only two turns, turn-to-turn capacitance will not degrade Q any more than any other sort of circuit component.

When a helical resonator is enclosed in a screen it increases capacitance somewhat and distributes it more uniformly along its length. But the screen does NOT increase coil Q - it merely maintains the natural high Q of the coil it by preventing the external field from interacting with poor uncontrolled dielectric materials and lossy conductors in the immediate vicinity.

It is the interaction of a coil with its environment which makes the working Q of a tuned circuit less than that which may be calculated on the assumption that the coil is isolated in space. Q meters are part of the environment !
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3822. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 12:04:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97as9i$73u$1@plutonium.btinternet.com>
Source record: 169596

Peter, the division sum is performed by the moving coil meter scale. It follows from the method of calibration. The meter reads a FRACTION of full scale.

Meter calibration could not be more simple : open circuit or short circuit the antenna side of the RC meter and set meter sensitivity for full-scale deflection = RC = Unity.

It is, of course, the magnitude of RC. It gives no indication of phase angle. I think your desire for indications relative to a whole range of reference impedances can be satisfied only by a complex impedance bridge and a built-in computer. Even the MFJ-259B cannot tell you the vitally-important sign of the phase angle.
--
Regards, Reg, G4FGQ

****

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message news:97a9ul$78q$1@slb4.atl.mindspring.net...
> Reg:
>
> Agreed.
>
> Actually most of the "cheap" so called SWR meters really only indicate a
> "reflected voltage" [with respect to a 50 Ohm reference resistance] and not
> the reflection coefficient. Since the reflection coefficient is defined to
> be a ratio of two voltages, that is the reflection coefficient is the ratio
> of the reflected voltage to the incident voltage, but the meters usually
> only sense and indicate a version of the reflected voltage, they do not
> really compute the ratio.
>
> It would be nice to have such instruments with a built in capability so that
> one could adjust and set up a reference impedance and could measure
> reflected voltages with respect to an arbitrary reference impedance say Zr
> instead of a 50 Ohm resistor.

>
> In my non-HF work I have often needed such an instrument and had
to build my
> own from time to time.
>
> For instance in wire line transmission engineering in telephone
plant, we
> encounter cases of very long lines at low frequencies, the
transmission line
> "surge impedance" may be complex and actually vary over an order
of
> magnitude throughout the band of interest.
>
> -Peter K1PO
>
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:978sq2fdc1@plutonium.btinternet.com...
> > Yes, I do feel the need the need to glance occasionally at a
meter
> > and be reassured all is OK as the needle bounces about. I can
live
> > with a small amount of Electromagnetic Incompatibility. And I
have
> > no desire to decry the importance of the standing wave ratio on
> > transmission lines.
> >
> > But the most insidious thing about an SWR meter is its name.
The
> > confusion and misunderstandings suffered by novices, as their
> > experienced friends attempt mostly unsuccessfully to explain in
> > terms of SWR the how and why of radio, could be eliminated just
by
> > renaming it.
> >
> > The instrument actually responds to and indicates the magnitude
of
> > the reflection coefficient with respect to 50-ohms. It can be
> > calibrated with a linear scale from 0 to 1. It provides a very
> > useful measure of the departure from the Standard 50 ohms of
the
> > load presented to the transmitter. There's no need to confuse
> > matters by mentioning the SWR on a non-existent line between
the
> > meter and the transmitter. It means very little unless that
line is
> > at least 1/4-waveelngth long and is also a 50-ohm line.
> >
> > It is a Reflection Coefficient = RC meter.
> > ----

> > Reg.
> > ==========
> >
> > Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
> > news:977sj1$3cg$1@slb1.atl.mindspring.net...
> > > Reg:
> > >
> > > As you know, I heartily agree with your comments/sentiments
below
> > on SWR and
> > > SWR meters. Seldom are they used properly, and seldom do
they
> > indicate
> > > anything about the "reality" of the wave conditions of
antennas
> > and lines.
> > >
> > > What is more, besides giving indications which are irrelevant
and
> > almost
> > > meaningless, they also have a great potential for causing
> > ElectroMagnetic
> > > Compatibility (EMC) or ElectroMagnetic Interference (EMI)
when
> > left "in
> > > line" because the "diodes" used in the devices create a whole
> > spectrum of
> > > harmonics when they rectify the residual RF that they use to
> > operate the SWR
> > > circuitry.
> > >
> > > But... on the other hand don't you agree that leaving an SWR
> > meter "in line"
> > > is somewhat "comforting"? They do have a certain appeal to
> > those who need
> > > "indications" that things are happening. Something like the
> > "ignition"
> > > light on the dasboard of your automobile, completely
irrelevant
> > for most
> > > purposes... but comforting.
> > >
> > > Having those needles on the SWR meters bounce up and down
across
> > the scales
> > > of the meter faces while you are talking or keying the rig,
gives
> > a visual
> > > indication that "something" is happening. It lets the
operator

> > know that RF
> > > is flowing somewhere. I believe that is the "appeal" of
> > so-called SWR
> > > meters.
> > >
> > > Sort of like having one of those old fashioned "On The Air"
signs
> > that
> > > illuminate whenever the transmitter is keyed. Heh, heh.
> > >
> > > Of course an "On The Air" meter actuated by the PTT switch or
CW
> > Key would
> > > have a lot less potential for causing interference.
> > >
> > > An operator friend of mine was having problems interfering
with
> > the family
> > > TV reception whenever he operated his ham radio. He always
ran
> > with an "in
> > > line" SWR meter. I advised him to take the "in line" SWR
meter
> > out, and
> > > presto the interference dissapeared!
> > >
> > > The readings on the SWR meter were irrelevant to his
situation
> > anyway, he
> > > just liked to see the "indication" of power output. A small
> > pilot light
> > > bulb tapped across the antenna feeders would do as well with
a
> > lot less
> > > interference.
> > >
> > > I say, get rid of those "in line" SWR meters...
> > >
> > > -Peter K1PO
> > >
> > > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > > news:975ng1$f5d$1@neptunium.btinternet.com...
> > > > SWR meters should be banned. They don't even measure SWR.
And
> > the
> > > > > SWR they purport to measure is in any case on a
non-existent
> > line.
> > > > > ----
> > > > > Reg

> > > >
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3823. Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 12:55:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97avaa$dt0$1@neptunium.btinternet.com>
Source record: 169597
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Absolute accuracy should not be confused with precision.

To measure attenuation within "a few tenths of a dB" (at any attenuation level) entails detecting a difference between two voltages which are a few percent different from each other. This is an easy job for any voltmeter. Errors are not due to the comparing voltmeter but to the measuring components, cables, connectors and layout.

Accuracy entails comparison with a local standard. There will be uncertainty in the local standard in addition to errors introduced during the comparison process. There will also be uncertainties introduced at each calibration level up to the International standard.

Precision is related only to local effects such as signal to noise ratios. It is relatively easy to detect a difference of 10 microvolts between two voltages of about 1 volt each. This corresponds to a precision better than +/- 0.0001 dB
--
Regards, Reg, G4FGQ
http://www.btinternet.com/~g4fgq.regp

****

Paul Keinanen <keinanen@sci.fi> wrote in message
news:vn7h9ts7lvt8647kcnbelj3tiik2mf108c@4ax.com...
> On Sun, 25 Feb 2001 00:04:50 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >Such attenuators do exist. I have in the shack a 0-100 dB
> >attenuator in 1 dB steps. It was manufactured by Pascall, UK,
about
> >5 years back. I forget the price but it was quite expensive.
>
> I guess that it must be quite expensive if you really get such
> accuracy as you later claim, even in a controlled constant
> temperature.
>
> I also suspect that the VHF/UHF performance is not that
spectacular
> and since the original poster did not specify the required
frequency
> range, I originally asked about it.

>
>
> >Cable leakage does not increase with frequency - it decreases.
> >Worst of all at DC and audio frequencies. Leakage occurs mostly
at
> >connectors. Use threaded types, not simple plug and socket.
>
> DC and audio circuits generally have a much higher impedance
levels
> than 50 or 75 ohms used in RF circuits, so the capacitive
coupling is
> a much worse problem. At very low frequencies the coaxial cable
does
> not work properly as a transmission line, thus the isolation is
not
> very good. However, due to losses at very high frequencies, the
shield
> no longer act as a perfect conductor and you can get different
> currents flowing on the inside and outside of the shield.
>
>
> >I have also made measurements with a precision of 0.001 decibels
at
> >frequencies up to 10 MHz.
>
> I guess that must be the readout resolution in some comparative
> measurements but not an actual precision. A 0.001 dB voltage
ratio is
> 115 ppm (0.015 %), so I wonder how this accuracy could be
maintained,
> especially if some real power levels are involved heating the
> attenuator.
>
> Paul OH3LWR
>
>

3824. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 14:07:14 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A991192.24E14B90@IEEE.org>
Source record: 169598

"Peter O. Brackett" wrote:
> I have a couple of those Drake meters. The Drake meters have their scales
> marked in Watts, but they are not measuring watts, an examination of their
> circuitry reveals that they measure only reflected and/or incident voltages,
> not power.

A wattmeter needs a phase angle. Are you sure they don't sample current
and voltage and add/subtract them vectorally? My wattmeter obtains a
sample of current with a toroid and that sample is in volts. It also
uses a capacitive divider to obtain a sample of volts. It assumes it
is in a 50 ohm circuit and vectorally adds those two values to get
forward power and vectorally subtracts those two values to get
reflected power. The vector addition/subtraction takes care of
the phase angle.
--
http://www.mindspring.com/~w6rca

3825. Help with possible new antenna set-up

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 14:22:12 UTC
From: "Tracy L. Brooks" <rescue@wilkes.net>
Message-ID: <97b4ne$6lfo$1@news3.infoave.net>
Source record: 169599

Greetings all,

I'm thinking about making a new (used) multi-functioning tower for my
new house.
If anyone can offer advise, I'd be most appreciated.

This antenna will be used mainly (90% +) for receive. It may be however
be used
for tranmitting in the future.

The specs are as follows:

Tower height: at least 40 ft.
Distance from house to bottom of tower: approx. 300 ft.
Frequencies (devices) on tower:
1- VHF hi band antenna (tx and rx) (Public safety and business
bands)
1- UHF antenna (tx and rx) (Public safety and business bands)
1- 800 antenna (tx and rx)
1- conventional TV antenna (for local TV stations)
1- Mini dish satellite antenna (Dish 500)

Reason: My home is in a hole and I would like the antennas to be at the
highest spot on my
property. I was interested in finding out what type of coax would best be
suited for running
such long lenths. Also, should I separate the coax into different conduits
or will they
all work in one? One more thing: I don't have the tower yet, I would
prefer a free standing
tower but a guidewire will work. Where is the best place to find used ones?

Thanks for any help,

Tracy L. Brooks,
rescue@wilkes.net

3826. Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 14:39:05 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <BO8m6.9560$4f.19625920@news1.mia>
Source record: 169600

Noting the interest in the "Warner was right .." and "question on theory" threads the group might enjoy entertaining the following question which was offered to me in a job interview many years ago.

Given two equal capacitors (C1 and C2) arranged in parallel but separated by a normally open switch. With the switch open C1 is charged to voltage (V). C2 has no charge. Also given is that all circuitry is lossless. Then the switch is closed.

Before the closure note that the energy in the circuit is

Ebefore = C1 * (V^2) / 2 + 0

After the switch is closed, the charge Q is equally shared by both capacitors. The voltage on each capacitor is now V/2.

Now the total energy is

Eafter = C1 * (V^2) / 4

Where did the energy go?

(BTW, I did get the job)

regards,

Bill Manley KB4XE

3827. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 16:50:29 UTC
From: JT <pescador@NOSPAMticnet.com>
Message-ID: <E63E9F83EF3CABFD.F9A2124D27513AE3.4BBEEBCF5753B806@lp.airnews.net>
Source record: 169601

Thanks for the advice! The Arrow J-pole is looking better and better:

-- should be easy to waterproof
-- no passengers impaled on radials
-- many options for homebrew mountings
-- the price is right!

If I have any particularly good or bad experiences, I'll post them.

Thanks again!

JT (KB6WIJ/5)

3828. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 17:08:50 UTC
From: Greg Blair <gblair@sympatico.ca>
Message-ID: <3A993C20.5AE1834F@sympatico.ca>
Source record: 169602

Use your 156.8 MHz with an A-B antenna switch.
SWR is under 2:1 and my 2M FT2500 loads just fine...

Conversely, if you come up with a hot 2M antenna, use it with your marine band
VHF radio...

JT wrote:

> I've read catalogs and handbooks until I've completely confused myself, so
> it's time to seek the opinions of others wiser than I...
>
> I have a 19' fiberglass boat. I'd like to put my 2M multimode onboard so
> that I can fish, boat and play radio at the same time. I'm leaning
> towards stacked HoLoops from M2 for SSB, but I'd like a simple vertical
> for working FM. The problem is obvious: very little ground plane.
>
> I'd really appreciate your recommendations! Thanks!
>
> JT (KB6WIJ/5)

3829. Phoenix SX/VO9 Info?????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 17:21:55 UTC
From: M <M.bright@sympatico.ca>
Message-ID: <3A99410B.ABB0D58E@sympatico.ca>
Source record: 169603

Does anyone have programing info for this radio?????

3830. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 19:14:21 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <m1ii9tgdcmum6rc5oubch8mp0hl9jim49c@4ax.com>
Source record: 169604

On Sat, 24 Feb 2001 15:22:20 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark also wrote;
>"Heat in turn Radiates any region cooler than it."
>
>Didn`t keep my thermodynamics books but my recollection is that all warm
>bodies radiate heat according to their temperatures and exchange heat
>energy with surrounding bodies and space. A hotter body transmits more
>heat to a cooler body than it receives from the cooler body.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Your cooler body, presumably shy of absolute zero, adequately fulfills the spirit of my statement.

However, we agree that HEAT radiates as easily as RF.

Now, if I were to load up into my dummy load - a complete conversion to heat - Energy would still be radiated, and it too would be unrecoverable by the source of this emission.

Now we have an infinite line, actually any line, a resistor, an antenna, all dissipating energy (and so will a tank).

Again Dissipate, as a technical term, reaches further back than one century. Per the Oxford English Dictionary, one usage (and the principle entry for this word) dates to 1532:
"To scatter, to cause to go off in all directions; to disperse...."

Well, what about Dissipation (given we have dissipationless)? The OED has an entry on that (of course, it has 750,000 entries) from 1615:
"The wasting of a substance, or form of energy, through continuous dispersion...."

Radiation weighs in from 1812 with:
"The manner in which the energy of a vibrating body is transmitted in all directions by a surrounding medium; the emission and diffusion of heat rays; the process by which heat passes from a heated body...."

And lest we forget, your BEST antenna for your largest audience wasted more than 99% of the power applied to it, in getting that power to its load. And what is worse, the load had to amplify your power (and thus

driving the efficiency further into the toilet) to make your power useful! Your antennas could've fallen to the ground half way through your broadcast and efficiency of power transfer wouldn't have changed more than a percent. Now tell me about loss in the rivets as compared to the call of free space. :-)

If there were a prize for gold plating resistors, then Hams would have more blue ribbons than qsl cards. An antenna represents the one good resistor in our tool box, and to purify it, return its sanctity so to speak; we cannot say that it dissipates as it did faithfully for centuries in the past.

As for:
>Good! So now I`m a pervert!

Not yet, my lotus eater - you have yet some time to learn from the master.

73's
Richard Clark, KB7QHC

3831. Wanted Specs for 2m "Pounder" Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 19:20:49 UTC
From: va3jpx@honk.org
Message-ID: <3a995a2a.1439034@news.flfrd1.on.wave.home.com>
Source record: 169605
Cross-posted to: rec.radio.amateur.antenna,alt.radio.antennas

Hello Everyone,

I have been searching for the specs of the 2m 4 element Pounder
Antenna that was published in the ARRL magazine, a while back.
I have not been successfull in locating information on this!

Does anyone have the specs and building information for this?

If you can pass it onto me, it would be greatly appreciated.

Thanks,

73

James Poulin
VA3JPX

3832. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 19:23:26 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <bnmi9t4kg7mclq7i1li33qjaqgf0h1951n@4ax.com>
Source record: 169606

On Sun, 25 Feb 2001 09:12:47 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Richard Clark" wrote ...
>> Gary Peach" wrote:...
>> Yes, your point above is well taken. I was rather too focused at the
>> atomic level.
>
>No pun intended I hope :)
>
>>The lack of heat is more a matter of an efficient
>> conversion to shorter wavelengths in the phosphor's atomic resonance.
>
>Apart from noise considerations the only other matter is of course
>efficiency, we don't see enough of it recognized directly in the topics in
>this group. If it crops up at all it is usually in another guise.
>
>> Hewlett Packard, a premier LED (another source of cold light)
>> developer, has recently achieved one of the highest efficient
>> conversion rates of 55% (well perhaps I should modify to a source of
>> lukewarm light). Just can't seem to shake that pesky matching
>> condition!
>
>55% that's beginning to be promising, when they get above 80% we'll perhaps
>have some confidence that they know what they are doing.
>I guess then they'll be going into the lightbulb business in the interests
>of ecology.

Next time you are on the road, look at the lorry tail lighs. There's
a better than 50% chance they are LEDs! Europe is running at about
66% and the US about 40%.

Take a look at the control lights at the intersection. Same there
too. LEDs can pay for themselves in one year of use, and last 10
times longer (at that higher efficiency).
>
>What incidentally is the light efficiency of the old filament lamp?

Hi Gary,

10 - 20%

73's
Richard Clark, KB7QHC

3833. Re: Dipole for 144MHz-indoors??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 19:39:02 UTC
From: va3jpx@honk.org
Message-ID: <3a995f08.2685106@news.flfrd1.on.wave.home.com>
Source record: 169607

On Sun, 11 Feb 2001 14:10:44 -0500, "Frizz" <none@none.com> wrote:

>Well, thanks to all that replied about my CB antenna question but I have yet
>another one. I currently am running a discone in my attic for 2m and
>because of the way the cable and satellite lines were run, I interfere with
>them both and can't really do anything about it until I am able to re-run
>those cables when it warms up. However, I want to try and build a dipole in
>my attic in hopes of correcting this TVI problem. First off, will this do
>it? Or am I just going to be stuck in the same boat with the interference
>problems? Second, I have read about how wire diameter affects the resonance
>of the dipole. What are some recommended diameters or lengths for those
>different diameters on 2 meters? Any help is appreciated. THanks!

You know, you may want to try building a J-Pole Antenna.

They fit nicely in the attic, and they are small enough to fit
verticaly.

James
VA3JPX

3834. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 19:46:45 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <58oi9tgvgg232k1ufoe0f36gtak857oran@4ax.com>
Source record: 169608

On Sun, 25 Feb 2001 09:39:05 -0500, "Bill Manley"
<b_manley@bellsouth.net> wrote:

hehe, that's an old one :-)

w.

>Noting the interest in the "Warner was right .." and "question on theory"
>threads the group might enjoy entertaining the following question which was
>offered to me in a job interview many years ago.
>
>Given two equal capacitors (C1 and C2) arranged in parallel but separated by
>a normally open switch. With the switch open C1 is charged to voltage (V).
>C2 has no charge. Also given is that all circuitry is lossless. Then the
>switch is closed.
>
>Before the closure note that the energy in the circuit is
>
> Ebefore = C1 * (V^2) / 2 + 0
>
>After the switch is closed, the charge Q is equally shared by both
>capacitors. The voltage on each capacitor is now V/2.
>
>Now the total energy is
>
> Eafter = C1 * (V^2) / 4
>
>Where did the energy go?
>
>(BTW, I did get the job)
>
>regards,
>
>Bill Manley KB4XE
>

3835. Re: Mobile HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 19:56:55 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <t9iot8flr9hef2@corp.supernews.com>
Source record: 169609

Yes, spider antennas are multi-band, designed for any 4 bands, with no need to swap coils. I put a second ring on mine about a foot below the top one and put three more resonators so I can go mobile INSTANTLY changing bands between 10, 12, 15,17, 20 , 30, and 40. As I am almost 100 % mobile CW, I just tune them to the middle of the CW portion and never have to tune again. If I do decide to go SSB, I just use the internal tuner on my TS440sat. No, it won't outperform the Texas bug catchers or screwdrivers, but I don't have to take my eyes off the road or get out of the car to tune each band.

But 7-band spiders are for real hams, not wimps, as you will get plenty of stares at your upside down Christmas tree! :-) If you don't mind that, and guy it well, it should last you for many years.

Greg, N6GK

"Dennis Collin" <dcollin@connix.com> wrote in message
news:3a89e4e4.38107062@news.mybizz.net...
> On Tue, 13 Feb 2001 00:45:54 GMT, "dapastaguy"
> <dapastaguy@hotmail.com> wrote:
>
> >I am new and looking for a mobile HF antenna to easily mount on a Pontiac
> >Transport van (1997). I read with interest an earlier post about
Hamsticks,
> >but want multiband. I saw someone referenced a spider antenna. Are these
> >true multiband, or do you have to swap the coils? My local ham club has
> >suggested a screwdriver, and the expense is not a problem, but the
mounting
> >would be a concern. Any suggestions?
>
> Probably stating the obvious, but you do realize those vehicles do not
> have a steel body, right? You'll have to carry the ground to the
> frame, and bond as much metal to it (engine, etc) as you can.

3836. Re: WANTED 50 OHM ATTENUATIOR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 20:02:23 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <kdni9t87fudq7v6tvtipks5gfq83i8i24v@4ax.com>
Source record: 169610
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 25 Feb 2001 09:33:39 +0200, Paul Keinanen <keinanen@sci.fi>
wrote:

>>I have also made measurements with a precision of 0.001 decibels at
>>frequencies up to 10 MHz.
>
>I guess that must be the readout resolution in some comparative
>measurements but not an actual precision. A 0.001 dB voltage ratio is
>115 ppm (0.015 %), so I wonder how this accuracy could be maintained,
>especially if some real power levels are involved heating the
>attenuator.
>
>Paul OH3LWR
>

Hi Paul,

Precision, Resolution. These can be the same thing or different;
however neither are a statement of accuracy.

When my old Drake TR-7 VFO gets buggy, I might note some one at
47.1652 MHz and smile at the precision of that reading, and yet it is
off by 40 MHz (an errant 4 is showing). Lots of precision, lots of
error.

However, as your question lies dormant:
> I wonder how this accuracy could be maintained,
>especially if some real power levels are involved heating the
>attenuator.
which is a concern shared by any metrologist. The load is the
defining point of a power measurement. The load must be known and
with power applied - it changes.

The first, and simplest, solution is to over engineer the load's
ability to "DISSIPATE" energy. (sorry to scream in your ear, but
others here needed to hear that) That would suggest using a 100W
continuous service Dummy Load to measure 10W period limited power
measurements. Or simply measure the load under the power applied.

Attenuators, on the other hand, are not 100W and few are 10W devices.
Most are on the order of 0.1-5W. So, I presume you wonder how to get
one of these into the signal path of a 100W rig? You use a
directional coupler to tap a portion of the power (and you need to
know the portion, but accurate determinations are fairly simple) and

feed that tap through the attenuator and add the coupling loss (or that portion) to make a total.

In short, you have a 100W Source, a 100W Load, a 20 dB Directional coupler, a variable attenuator, an attenuator Load (how many miss this one?) and a detector. You can now read applied power at a 1W level instead of the 100W level. And you can measure the variation from that level with reference to your 100W reading to the resolution of the detector. Resolution or precision could run quite high. A measurements of change would also find high "relative" accuracy.

Relative accuracy means you do not need to know where you are, or where you started in absolute terms, merely how far apart they are. There is an interesting implication here in this subject. As we are interested in attenuation, any measurement of an attenuator is both "relatively" and "absolutely" accurate. This is one of Gary Peach's link pins to the absolute measure of received power.

73's
Richard Clark, KB7QHC

3837. Mobile Whips

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 20:23:35 UTC
From: fazamy@aol.com
Message-ID: <20010225152335.05502.00000775@ng-bj1.aol.com>
Source record: 169611

I was thinking about using a mobile whip antenna for vacation use. It would be used as a base station antenna. It wouldn't be mounted on a car or rv or suv. Its important points would be that it gets out, and it is portable.

1. What is a source of instructions for contructing one homebrew?
2. With the conditions I described above, what kind of ground system would I need?

Thanks and 73,
KB2AMY
Evan

3838. Re: Mobile Whips

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 20:44:14 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A996E9E.5AB9E16C@zylay.com>
Source record: 169612

FAZAMY wrote:

> I was thinking about using a mobile whip antenna for vacation use. It would be
> used as a base station antenna. It wouldn't be mounted on a car or rv or suv.
> Its important points would be that it gets out, and it is portable.
>
> 1. What is a source of instructions for contructing one homebrew?
> 2. With the conditions I described above, what kind of ground system would I
> need?
>
> Thanks and 73,
> KB2AMY
> Evan

Use an SO-239 - 3/8x24 adapter with a mirror-mount bracket and put it on a short piece of mast. On the base of the bracket, put 4 pieces of speaker wire as long as you can get. When you get somewhere, attach the piece of mast to something and uncoil the wire as much as you can.

Personally, I think you'd do better with a simple dipole.

3839. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 21:17:47 UTC
From: richardharrison@webtv.net
Message-ID: <9590-3A99767B-62@storefull-113.iap.bryant.webtv.net>
Source record: 169613

Richard Clark wrote:
"Again Dissipate, as a technical term reaches further back than a century."

Yes, and memory wasn`t hardware more than a century ago, either.

Best regards, Richard Harrison, KB5WZI

3840. Re: Looking for antenna projects using Heliax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 21:32:38 UTC
From: Jon M0BQQ <jon.m0bqq@ntlworld.com>
Message-ID: <gMzm6.29524$5n4.659785@news6-win.server.ntlworld.com>
Source record: 169505

Heliax makes a great loop part of a mag loop antenna!

Jon M0BQQ

Paul <pvanasse@mail.direcpc.com> wrote in message
news:xAAl6.790$m8.110140@news.direcpc.com...
> Does anyone know of an antenna project book/site/source that utilizes
Heliax
> as a construction material? I seem to remember Ken Sessions (73 Magazine)
> having a publication years ago with vertical collinear projects that
> replicated commercial antenna construction?
>
> Any help would be appreciated.
>
> Thanks and 73
>
>

3841. Newby help needed on selection of Receiving antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 21:56:32 UTC
From: mwalkord@att.net
Message-ID: <3a997b42.21786335@netnews.worldnet.att.net>
Source record: 169614

I am looking for an antenna to attach to a few antique and 1960 era radios. I listen to these radios on AM/FM/ and SW bands. I have been told to just run a long wire on the roof, but there is not a good location for this wire without my wife making an issue of it. Is there another solution? I have seen comments about wide band vertical antennas. Will this work and if so which ones do you recommend and where would I purchase it?

Thanks for any help
Mike

3842. Finally put some of that old ethernet cable to work

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 22:03:04 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3A998118.D3212BA0@ix.netcom.com>
Source record: 169615

Had some ethernet cable from the old computer days. Stuff is equivalent

to foam RG8U, with lots of shielding. Put it to work on my attic HF dipole
antenna, replacing some RG58. Of course the SWR got worse, but that's the less lossyness of the ethernet doing that. I varied the feedline length to
get my TS440S automatic tuner to tune everything except 10 meters.

I don't think any MIS people use thick ethernet anymore for computer work. Presense of vampire tap holes doesn't seem to matter much at HF.

3843. Antenna Switch.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-25 22:38:45 UTC
From: Jim Henson <jhhenson@bellsouth.net>
Message-ID: <VPfm6.155$421.10657@news2.atl>
Source record: 169616

I want to build an antenna switch to switch between 2 or 3 different sources (one antenna, 3 different radios). Two of those radios would be ham radios, one would be a scanner. The maximum power transmitted would be 50 watts. I need to know what kind of switch I need to use that won't mess up my SWRs and end up burning the switch or a radio.

Respond in email if possible, I rarely get to check the newsgroups.

3844. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 00:14:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A999FF4.C5A1DCB1@eznec.com>
Source record: 169618

We've done this one before on the newsgroup -- or maybe it was
rec.radio.amateur.homebrew.

Connect the capacitors with any finite resistance. It's easy to show
that the "missing" energy is dissipated in the resistance. In the limit
as the resistance goes to zero, the current increases to an infinite
amount. However, you'll find that the integral of I^2 * R remains
constant, and always equals the "missing" energy.

Roy Lewallen, W7EL

(A variation of that question was also on my P.E. exam.)

Bill Manley wrote:
>
> Noting the interest in the "Warner was right .." and "question on theory"
> threads the group might enjoy entertaining the following question which was
> offered to me in a job interview many years ago.
>
> Given two equal capacitors (C1 and C2) arranged in parallel but separated by
> a normally open switch. With the switch open C1 is charged to voltage (V).
> C2 has no charge. Also given is that all circuitry is lossless. Then the
> switch is closed.
>
> Before the closure note that the energy in the circuit is
>
> Ebefore = C1 * (V^2) / 2 + 0
>
> After the switch is closed, the charge Q is equally shared by both
> capacitors. The voltage on each capacitor is now V/2.
>
> Now the total energy is
>
> Eafter = C1 * (V^2) / 4
>
> Where did the energy go?
>
> (BTW, I did get the job)
>
> regards,
>
> Bill Manley KB4XE

3845. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 00:17:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3A99A081.A0B842DA@eznec.com>
Source record: 169617

Correction -- I meant the time integral of I^2 * R, or the integral of
I(t)^2 * R dt.

Roy Lewallen, W7EL

Roy Lewallen wrote:
>
> We've done this one before on the newsgroup -- or maybe it was
> rec.radio.amateur.homebrew.
>
> Connect the capacitors with any finite resistance. It's easy to show
> that the "missing" energy is dissipated in the resistance. In the limit
> as the resistance goes to zero, the current increases to an infinite
> amount. However, you'll find that the integral of I^2 * R remains
> constant, and always equals the "missing" energy.
>
> Roy Lewallen, W7EL

3846. Re: bad tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 01:19:32 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <Eaim6.1$AN2.888@news7.onvoy.net>
Source record: 169469

One thing that wasn't mentiond from the first poster, look around your neighborhood and see where everyone else is pointing their antennas, and the size of the antennas. Does your antenna look like theirs? Has it worked in the past in that location or is it something you just put up? If it worked in the past, the feedline or antenna could have degraded and needs replacing. Try troubble shooting it and do the steps Bill mentioned. If it is a new installation, read the first 2 lines again.

Pedro Rodriguez Jr. <pedrordz@swbell.net> wrote in message news:3a85a886.20571659@news.swbell.net...
> Have a question about tv reception, I have an outside antenna
> any position I directed does not matter still have bad rececption can
> anybody have an idea getting better reception?
>
> Than ks

3847. Re: MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 01:59:38 UTC
From: NASCARFan <mdonoghue1@sympatico.ca>
Message-ID: <eMim6.230791$Pm2.3732272@news20.bellglobal.com>
Source record: 169470

"eborys" <eborys@home.com> wrote in message
news:v0Gl6.6824$t67.193040@news1.rdc1.il.home.com...
> Does anyone here own of the MFJ loops? How is it working out for you?
> Thanks,
> Emil
> ak9i
>
> If you can get your hands on a high voltage variable cap, you can build your own and save lots of $$$. My homemade 3 foot loop tunes 4.8 - 30 MHz and cost me about $100 US for the parts. I have pictures if you are interested.

73
Max VE3TMT

3848. Re: PROVEN Program-ENLARGE Your Penis (Guaranteed) 4565

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 02:26:54 UTC
From: Alfred Wallace <sysadmin@waika9.com>
Message-ID: <MPG.1503dd41c587b074989680@news.easynews.com>
Source record: 169471

In article <kW3m6.5361$kZ1.906978@news.uswest.net>,
bigbensblazer@NOSPAMyahoo.com says...

> Well i guess if it was long enuff it would make a good antenna. Could use
> some viagra for those long QSO's.

Caution : QRP or SWL only !

3849. Re: Finally put some of that old ethernet cable to work

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 02:34:32 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn99jg5m.23c.QSB@animas.frontier.net>
Source record: 169473

On Sun, 25 Feb 2001 16:03:04 -0600, Robert Casey scribbled:
>Had some ethernet cable from the old computer days.
>......
>Presense of vampire tap holes doesn't seem to matter much at HF.

As long as it's kept indoors and dry...

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

3850. Re: Finally put some of that old ethernet cable to work

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 02:37:20 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn99jgat.23c.QSB@animas.frontier.net>
Source record: 169472

```
On Sun, 25 Feb 2001 16:03:04 -0600, Robert Casey scribbled:
>Had some ethernet cable from the old computer days.
>......
>Presense of vampire tap holes doesn't seem to matter much at HF.

As long as it's kept indoors and dry...

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK
```

3851. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 02:50:44 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3A99C448.D74604BC@att.net>
Source record: 169474

Personally I always felt reassured by the thump of the power transformer
and filter chokes and the glow of the 866's against the back wall of the
shack each time I pressed the key . . .

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 55th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

"Peter O. Brackett" wrote:
>
> Reg:
>
> As you know, I heartily agree with your comments/sentiments below on SWR and
> SWR meters. Seldom are they used properly, and seldom do they indicate
> anything about the "reality" of the wave conditions of antennas and lines.

> I say, get rid of those "in line" SWR meters...
>
> -Peter K1PO

3852. Chevy Tahoe Mobile Installation Questions (2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 03:00:03 UTC
From: jeffreys@cyburban.com
Message-ID: <3a99c603$0$65504$45beb828@newscene.com>
Source record: 169475

Dear Group,

I am in need of some assistance. First, let me describe what I currently have, what I am planning to get and then the two questions.

Current installation 2m/440 radio wired to battery with magmaount dual-band antenna on roof fed with RG-8X/PL259 through rear barn door (double doors hinged on the side).

I am getting some water leaks (surprise, surprise) after several months of no problem.

Future radio I am planning on upgrading to HF with an FT-100.

Question #1: Is there anyone who makes a magmount that uses a few feet of the very thin RG-188 and will that prevent the water coming on or is any cable coming through a door going to distort the water seal enough that water wickes past it?

Question #2: If I have to drill holes into the car (which I don't mind), should I wait until I get the HF radio and drill one hole for a combo antenna or would it be better to have one antenna for 2m/70cm and another one for HF (I.e. drill now and add another hole later).

Question #2a: What's a recommended

--Jeffrey, KC2GUC, Scarsdale, NY

3853. Re: Finally put some of that old ethernet cable to work

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 03:39:26 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3A99CFEE.D0DF35C9@ix.netcom.com>
Source record: 169476

Allodoxaphobia wrote:

> On Sun, 25 Feb 2001 16:03:04 -0600, Robert Casey scribbled:
> >Had some ethernet cable from the old computer days.
> >......
> >Presense of vampire tap holes doesn't seem to matter much at HF.
>
> As long as it's kept indoors and dry...
>

It is indoors only......

3854. Re: Finally put some of that old ethernet cable to work

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 03:41:27 UTC
From: Jack Taylor <n7oo@theriver.com>
Message-ID: <fikm6.17347$Yx4.685224@news6.giganews.com>
Source record: 169477

It works well up in the 440 MHz range as well. I just taped up the holes.
Jacket fades a bit over time out in the Aridzona sun.

73 de Jack

"Robert Casey" <wa2ise@ix.netcom.com> wrote in message
news:3A998118.D3212BA0@ix.netcom.com...
> Had some ethernet cable from the old computer days. Stuff is equivalent
>
> to foam RG8U, with lots of shielding. Put it to work on my attic HF
> dipole
> antenna, replacing some RG58. Of course the SWR got worse, but that's
> the less lossyness of the ethernet doing that. I varied the feedline
> length to
> get my TS440S automatic tuner to tune everything except 10 meters.
>
> I don't think any MIS people use thick ethernet anymore for computer
> work. Presense of vampire tap holes doesn't seem to matter much at
> HF.
>

3855. Re: 70cm band antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 04:10:52 UTC
From: dave <vz327bfj@verizon.net>
Message-ID: <3A9A01B2.63D35B6D@verizon.net>
Source record: 169478

Try using yagimax you can get it at http://www.qrz.com under shareware its what I used to put together a 16element 432 yagi, I modeled it thru DL6WU which is in there...
try it you'll like it :-)

Old Biker wrote:

> AO KD5FXT wrote:
> >
> > Is a homebrew quad possible the 70 cm band? If so, what is a good website to
> > review for dimensions? Pls email
> >
> > bill
>
> Yes. I made a 4-element one and used it for a while. got the
> dimensions from a magazine article (approx 1/4 wave to a side).
> Used 1/4 inch OD plumbing copper tubing for elements and scraps
> of plastic water pipe for the boom and supports.
>
> KA3DWW

3856. Re: bad tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 04:42:02 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <u8lm6.340$9d.52647@newshog.newsread.com>
Source record: 169479

"Rosco" <rvaagen@nospam.hotmail.com> wrote in message
news:Eaim6.1$AN2.888@news7.onvoy.net...
> One thing that wasn't mentiond from the first poster, look around your
> neighborhood and see where everyone else is pointing their antennas, and
the
> size of the antennas. Does your antenna look like theirs? Has it worked in
> the past in that location or is it something you just put up? If it worked
> in the past, the feedline or antenna could have degraded and needs
> replacing. Try troubble shooting it and do the steps Bill mentioned. If it
> is a new installation, read the first 2 lines again.
>
Nuther question, if it's an older antenna. Is it near a chimney?
The fumes from nearly any furnace will corode the connections in a hurry.
However wood and coal bruners are many times worse than gas, or fuel oil.

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

> Pedro Rodriguez Jr. <pedrordz@swbell.net> wrote in message
> news:3a85a886.20571659@news.swbell.net...
> > Have a question about tv reception, I have an outside antenna
> > any position I directed does not matter still have bad rececption can
> > anybody have an idea getting better reception?
> >
> > Than ks
>
>

3857. Re: Chevy Tahoe Mobile Installation Questions (2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 06:05:02 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A99F20E.3B30590C@oio.net>
Source record: 169480

Jeffery,
In order;
1. No. Anything breaking the seal at the door is going to leak.
2. Why not wait till you know exactly what you want to do. Saves 'extra' holes. Personally, I'd use seperate antennas.
2A. That depends. How many bands? How many 'moves' on the same band? Will you change freq/bands very often? What kind of power levels are you anticipating using? How much are you planning/willing to spend?? The efficiency of mobile antennas is directly proportional to it's 'ugliness'... how much 'ugly' can you stand?

'Doc

3858. Titanex HP5

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 07:04:37 UTC
From: Peter Eisler <peter.eisler@lottery.co.at>
Message-ID: <8enm6.4$J33.517@nreader1.kpnqwest.net>
Source record: 169481

Does anybody have experience with the Titanex HP 5 multiband vertical
antenna ?
OE1PEW

3859. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 10:05:56 UTC
From: kh2d@my-deja.com
Message-ID: <3a9a29f2.10684298@news.guam.net>
Source record: 169482
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sat, 24 Feb 2001 14:24:31 -0500, Jerry Oxendine
<joxendi@bellsouth.net> wrote:

>I hung up the phone and I felt it start. A feeling that begins almost
>in my feet and, like Old Faithful, rises to the top of my head! I was
>shaking like a leaf! Not from fear, but from RAGE!

>Jerry
>K4KWH

You need to chill out Bubba. You are gonna bust a blood vessel in
your head. Or somebody else is gonna do if for you :-)

Anyway, thanks for that bit of fiction, I'm sure we'll all remember it
the next time we put a screwdriver antenna in our apartment.

73, Jim KH2D

3860. ISO Exide 1300EX Inverter Service Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 11:42:32 UTC
From: "Donald E. Smith" <desmith@innercite.com>
Message-ID: <3A9A4128.80FFB5B8@innercite.com>
Source record: 169497
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.shortwave

> I am in need of a service manual for my Exide Model 1300EX Inverter.
> It
> burned out a number of Transistors and parts. Trying to get the shack
> ready for California's outages. Will accept original or clear copy.
> Gladly pay any reasonable costs. Thanks Don Smith KB6GQA
>

Still trying to locate a service manual. Exide sold the Charger line
three years ago to Midtronics. Midtronics state they never got the
Inverter line. Referred to Prestolite Wireless without success also.
The company will not support their equipment so I must turn to
Newsgroups for help. Might anybody out there help me? Please reply to
my email address. Thanks Don smith

>
>

3861. Re: MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 13:16:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97dks7$250$1@uranium.btinternet.com>
Source record: 169483

Max said -
> > If you can get your hands on a high voltage variable cap, you
can build
> your own and save lots of $$$
==========
Never was a more true word spoken. Lots more job satisfaction too.

To find size of tuning capacitor needed to tune over a given
frequency range for a given size loop, download in a few seconds
program MAGLOOP4 from website below. Not zipped up. Run
immediately. Compare performance between one shape and size and
another.

Construct loop from standard sizes of copper water pipe and angles.
Can be any regular shape from square to octagonal. Use your
imagination for construction details and fitting the tuning
capacitor.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

3862. Want to Buy: Tubes

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 13:30:00 UTC
From: REDBONE <redbone1@swbell.net>
Message-ID: <3A9A5A58.43AA@swbell.net>
Source record: 169484

I want to buy some tubes NEW or PULLS (must not be "SOFT"!!!!). I need
to buy some of the following:

QUANITY Type

4 4CX250B tubes

2 3-500Z Graphite Tubes
(Must be Varian Industries
or Amprex)
No Russian or Chinese
made.

Please reply to with price including shipping to: Roy Thomas Sr..
Email Address:
kid1121@netzero.net

3863. WANTED LAPTOP BATTERY ZEOS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 13:30:35 UTC
From: Bill N0MNB <N0MNB@MINN.NET>
Message-ID: <97dlp3$mm9$1@newsfeed.minn.net>
Source record: 169485
Cross-posted to: alt.radio.amateur.club.clarc,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

NEED A LAPTOP BATTERY FOR ZEOS
MERIDIAN 800C.. ALLOT OF PLACE SAY THEY HAVE THEM BUT END UP CALLING BACK
AND TELLING ME THE OPPOSITE..

THANKS
BILL

3864. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 15:30:58 UTC
From: richardharrison@webtv.net
Message-ID: <24883-3A9A76B2-11@storefull-117.iap.bryant.webtv.net>
Source record: 169486

Bill, KB4XE wrote:
"Where did the energy go?"

Connecting an uncharged capacitor in parallel with an identical charged capacitor leaves each of the capacitors with half of the charge and half of the original voltage of the first charged capacitor.

Nothing has been lost. The same excess charges exist in the capacitors. The paralleled capacitors can be reconnected in series to restore the original voltage across the single capacitor.

Best regards, Richard Harrison, KB5WZI

3865. Re: Yaesu ATAS100 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 15:54:03 UTC
From: gpewitt@execpc.com
Message-ID: <3a9a7d33$0$46008$272ea4a1@news.execpc.com>
Source record: 169487

OK, here is my progress report.
I put the 80 and 40 meter Isotrons together last week and did the initial tuning with an MFJ-259B. Pretty easy to do with a short co-ax jumper I could make adjustments from my chair. I should mention that the antennas are mounted back to back on a 5 foot mast section held by a roof top tripod and standing in my dining room. I adjusted each antenna before connecting the co-ax tee and the cable to my transceiver (FT-847). I was able to adjust my MFJ antenna tuner on 40 without much trouble and made several contacts in Europe. According to the meters in the transceiver and the tuner I was getting full output. I could not seem to tune the 80 meter band though. This weekend I set up the 20/15/10 meter antennas on another mast and tripod. These have twinlead jumpers connecting all three and the co-ax feeds the 15 meter antenna. After tuning them seperatly with the 259 I finished hooking them up and tried to find the "sweet spots" on each band. Not much luck. I finally got smart and hooked the 259 up -through- the tuner. I set the center frequency of each band on the 259 and adjusted the tuner for the lowest swr. I got under 2:1 on each band and wrote the settings down for quick reference. No wonder I couldn't find the setting for 80 meters without the 259! It's -very- narrow. But I get 1.1:1 when properly tuned in. Since I found the settings I have been able to tune by ear on the receiver noise when changing frequencies. So, using the antenna switch on the tuner to select which antenna stack I'm using and tweeking the tuner for best swr I am able to work on 80, 40, 20, 15, and 10 meters. I have a 6 meter halo that will go up soon and a Cushcraft AR-270 for 2 meters and 440. I did have to buy a duplexer for that one. I was able to complete a schedule with my friend Ron WA9QNN in Grantsburg for the first time (on 40 meters) this weekend.
The Isotrons have tuning stubbs or counterpoises built in and require no ground to work. Good thing as I am living in a second floor condo with no outside antennas allowed.
Am I happy with the Isotrons? You bet. I might even get the 160 meter and the 30, 17, and 12. That might cause a problem though as the 30 meter is meant to go on with the 80 meter instead of the 40. The 17 and 12 are very similar to the 20 and 10. If the 80 is so narrow I'll bet the 160 is super narrow. You have to expect that trying to use such small antennas on the low bands but it does work.
Well that's all for now. 73 Gary N9ZSV

On Wed, 21 Feb 2001 22:21:11 -0500, ik7565@erols.com wrote:

>Post some reports on your Isotrons! I'm antenna-challenged also and
>looking for alternatives.
>

>73 de N8IK
>
>
>Gary Pewitt wrote:
>>
>> Well, I got the ATAS-100 and it worked for about two days then it
>> stopped tuning. I took it back and exchanged it for two Isotron
>> combinations. 80/40 meter and 20/15/10 meter. They are
>> mounted on two 5 foot masts supported by rooftop type tripods.
>> Currently standing in my living room. Works well with a tuner.
>> Sure glad I got that MFJ-259 analyzer to set them up with.
>> I hope to transfer them to my second floor balcony when the
>> weather warms up a bit. Live and learn. 73 Gary
>>
>> On Thu, 25 Jan 2001 17:16:50 GMT, gpewitt@execpc.com (Gary Pewitt)
>> wrote:
>>
>> >Does anyone have experiance with the Yaesu ATAS100 antenna. It looks
>> >to be a version of the screwdriver. I am planning to buy a Yaesu
>> >FT-847 soon and this antenna is listed as an accessory. It's supposed
>> >to cover 160 meters to 440 mhz. That's asking a -lot- from one
>> >antenna. It's supposed to auto tune too I believe. If it works like
>> >a screwdriver and becomes resonent on each band then it won't need an
>> >antenna tunner right? I live in a condo and am thinking of cutting a
>> >small hole in the ceiling of a closet and poking the antenna up into
>> >the attic. I am not allowed any outdoor antennas at all. I've heard
>> >nothing but good things about the screwdriver antennas but the ones
>> >I've seen info on only cover 80 to 10 meters.
>> >Any information greatly appreciated. Thanks Gary N9ZSV
>> >
>> >Gary Pewitt N9ZSV
>> >414 355 8147
>>
>> Gary Pewitt N9ZSV
>> 414 355 8147

Gary Pewitt N9ZSV
414 355 8147

3866. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 16:01:18 UTC
From: richardharrison@webtv.net
Message-ID: <24882-3A9A7DCE-29@storefull-117.iap.bryant.webtv.net>
Source record: 169488

I should have written:
The paralleled capacitors can be reconnected in series to restore the
original voltage AS across the single capacitor.
I omitted "as".

Best regards, Richard Harrison, KB5WZI

3867. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 17:02:59 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <7%vm6.4801$Ea1.382139@bgtnsc05-news.ops.worldnet.att.net>
Source record: 169489

"Bill Manley" <b_manley@bellsouth.net> wrote in message
news:BO8m6.9560$4f.19625920@news1.mia...
> Noting the interest in the "Warner was right .." and "question on theory"
> threads the group might enjoy entertaining the following question which
was
> offered to me in a job interview many years ago.
>
> Given two equal capacitors (C1 and C2) arranged in parallel but separated
by
> a normally open switch. With the switch open C1 is charged to voltage
(V).
> C2 has no charge. Also given is that all circuitry is lossless. Then the
> switch is closed.
>
> Before the closure note that the energy in the circuit is
>
> Ebefore = C1 * (V^2) / 2 + 0
>
> After the switch is closed, the charge Q is equally shared by both
> capacitors. The voltage on each capacitor is now V/2.
>
> Now the total energy is
>
> Eafter = C1 * (V^2) / 4
>
> Where did the energy go?
>
> (BTW, I did get the job)
>
> regards,
>
> Bill Manley KB4XE
>
>

Hi Bill:

The energy (time integral of power) did not "go" anywhere. Since there are no losses and there is no radiation, the total energy in the circuit "after" must equal the total energy in the circuit "before". Your equation for total energy after, Eafter, is simply incorrect.

Energy in a capacitor is the integral of power as a function of time. Power is a scalar quantity, a function of voltage and current, which are both vectors (complex). Power is equal to |V| |I| Cos (A), where A is the phase

angle delta between voltage and current. The direct addition of energy and power cannot be performed in the manner you describe because scalar additon does not contain the phase relationship information between E1 and E2 (they are in phase) which is needed to "add" them. As a result, energy and power do not "add" algebraically, ie, Etotal is not equal to E1 + E2 (this seems to be a hard concept for some to understand).

The total energy in the circuit before, Ebefore is equal to C1 * (V^2) / 2

The total energy in the circuit after, Eafter is not equal to C1 * (V^2) / 4.

If the energy in C1 is equal to E1 and the energy in C2 is equal to E2, the total energy in the circuit is given as follows:

Eafter = E1 + E2 + 2 Sqrt(E1) Sqrt (E2) = (Sqrt(E1) + Sqrt(E2))^2

Eafter = C1 * (V^2)/8 + C2 * (V^2)/8 + 2 * [Sqrt(C1) V / Sqrt(8)] [Sqrt(C2) V / Sqrt(8)]

Since C2 = C1

Eafter = C1 * (V^2) / 4 + C1 * (V^2) / 4

Eafter = C1 * (V^2) / 2

The law of conservation of energy holds.

Steve, VE9SRB

3868. microstrip patch antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 17:10:06 UTC
From: Fortissimo Electronics <sb127696@wolmail.nl>
Message-ID: <97e2k4$m50$1@nereid.worldonline.nl>
Source record: 169490

Hello,
I am not an expert on antenna design. I want to make a tiny transmitter for the European 868 MHz band (license free short range devices). The antenna must be on the PCB. I have a 433 MHz example from Linx Technologies. It is rectangular (28 x 13 mm) and has a 50 Ohm impedance. Are there any good references on this kind of antennas or is there a software program to calculate the required dimensions. The antenna must be small and may be inefficient; transmitting power is about 0 dBm, I need only 10 meters range.
Thanks,
Reinier

3869. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 17:16:45 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <1cwm6.4809$Ea1.383173@bgtnsc05-news.ops.worldnet.att.net>
Source record: 169491

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:972h9vsca2@lure.pipex.net...
>
> "VE9SRB" wrote ...
> > "Gary Peach" wrote ...
> > > Which raises the question;
> > > does a 40 Watt wave travel twice as far as a 10 Watt wave?
> >
> > I guess this really depends mostly on the your perspective, the
effective
> > aperture of your receive antenna, your system losses, noise and your
> > receiver sensitivity.
>
> Assume identical systems, in fact the same systems,
> but with the wick turned up a bit on the transmitter.
>
> > If you can't receive the 10 watt wave, is it really even there?
>
> That is threshold, the thing is, can you move your receiver twice the
> distance away if you use 4 times the power?
>
> Now prove it, assuming an Rx with a noise temperature of 12�K, no
> modulation?
>
> Remember that those deep deep space spacecraft only have 10 Watt
> transmitters on board.
> What is the limit of their useful range, (assume unmodulated)?
> note: space loss to 16,000 km at 2 Ghz = 183 dB
>
> What is the duration of a mission [time to reach threshold]?
> Assume a vector velocity away from the Earth of 29,250 MPH
> [13,000 m/s]
>
> Assume a useful 3 dB signal to noise ratio for data transmission at 8Hz,
> how much shorter in time and distance is the mission?
> Show calculations.
>
>
> > > >The distribution of energy in space as it travels
> > > > away from a source is not a heat dissipation issue as your statement
> > > > > might lead some to believe.
> > > Ah! the 'leading' is partly the Imp within me, but the root cause is
> > > wanting to stimulate people to think.

> >
> > You do a fine job.
>
> I hope that we can enjoy it together.
> You guys are fine examples of remaining cool and calm in debate and not
> resorting to personal insults, (the sure sign that the argument is lost).
> It is nice to keep the conversation as light though serious as possible in
a
> hobby group like this. Hopefully remembering the meaning of the word
hobby:
>

Hi Gary:

Given the number of posts in the last few days, it hard to jump back in
topic wise. We do try to be civil and maintain some level of composure.
Although, if you were to search the archives, you would find a few moments
where each of us were anything but civil and composed.

> hob�by (h�b��) noun
> plural hob�bies
> An activity or interest pursued outside one's regular occupation
> and engaged in primarily for pleasure.
>
> [Middle English hobi, hobyn, small horse,
> hobby horse, perhaps from Hobin, Hobby, nickname for Robert.]
> - hob�by�ist noun
>
> And ensuring that the primary purpose of 'pleasure' is served first and at
> all times.
> Of course my remarks are not aimed at you specifically,
> please forgive me for using your post as a billboard.
> --

I think we are all guilty of this, most of the time.

Steve

> Gary7SLL
> 51� 23' 50" N 1� 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
> -< trying out some superscript 13 x 10� ms�� >-
>
>
>
>
>
>

3870. Re: Commerical Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 18:06:08 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <3A9A9B10.57600095@alumni.caltech.edu>
Source record: 169492

'Doc wrote:
>
> Larry wrote:
> > Anyone using one of the Barker&Williamsom trappd dipoles such as the
> > as-80 (80-40-20). Can these be adjusted for the cw portion of the band
> > with ease?
> > K1zw
> > Larry
> > Qcwa
> Larry,
> Sure. And in exactly the same way you would adjust the resonance
> frequency of any other dipole.
> 'Doc

In other words, the B&W single band and trap dipoles do not come assembled. You assemble and tune it just as though you went out and bought the parts.

3871. Re: Visit today - www.SPAM.com -

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 18:13:34 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <i1xm6.477037$U46.14251745@news1.sttls1.wa.home.com>
Source record: 169493
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Peter,

Are you free to type? Are your kidnappers out of the room? How often do they have a gun to your head forcing you to read and reply to Charles Johnston's messages? It must be awful. It makes me cherish my freedom even more knowing I can killfile or just plain ignore a poster. I feel sorry for you comrade. I have watched you for a long time forced to read and comment on so many of Charles Johnston's messages. It must be hell for you. Be strong!

Glenn

USA

"Peter Lemken" <plemken@gmx.de> wrote in message
news:97e5g3$oi1i6$1@ID-31.news.dfncis.de...
> Charles Johnston wrote:
> >
>
> Don't you ever get tired of it? Usent is an information medium, not a TV
> station.
>
> Put the URL into a correctly separated .sig and be done with it.
>
> Peter Lemken
> Berlin
>
> --
> DeeeeeeeX'ing in the new Millenium. Scream for an hour and go
> check the online logs to see if you gotta scream for an hour again
> tomorrow nite. [KH2D in rec.radio.amateur.dx]

3872. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 18:29:19 UTC
From: JT <pescador@NOSPAMticnet.com>
Message-ID: <CDDE53649FFB5DA6.4EA785D481E474C5.ABC2E4DF51F38925@lp.airnews.net>
Source record: 169494

Hi, Greg! I thought about trying something like that, but my current marine VHF is a handheld, so I have no VHF antenna mounted yet. I'll certainly try the handheld on whatever 2M antenna I install. Thanks for the tip!

JT (KB6WIJ/5)

3873. Re: Commerical Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 18:51:16 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3A9AA5A4.56356A55@iquest.net>
Source record: 169495

Larry-

the B&W antennas, like most all the commercial wire antennas, do arrive assembled, at least to the point of just attaching feedline, tie-off rope, etc. I think what Doc was attempting to point out is that any dipole may be adjusted by simple length changes. Due to the surondings of most all antenna installations its normal to have to fine tune for best results.

Bests,

Patrick
W9GTA

Don Putnick wrote:
>
> 'Doc wrote:
> >
> > Larry wrote:
> > > Anyone using one of the Barker&Williamsom trappd dipoles such as the
> > > as-80 (80-40-20). Can these be adjusted for the cw portion of the band
> > > with ease?
> > > K1zw
> > > Larry
> > > Qcwa
> > Larry,
> > Sure. And in exactly the same way you would adjust the resonance
> > frequency of any other dipole.
> > 'Doc
>
> In other words, the B&W single band and trap dipoles do not come
> assembled. You assemble and tune it just as though you went out and
> bought the parts.

3874. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 18:53:14 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3A9AA645.BE047EE4@earthlink.net>
Source record: 169496

VE9SRB wrote:

> The energy (time integral of power) did not "go" anywhere. Since there are
> no losses and there is no radiation, the total energy in the circuit "after"
> must equal the total energy in the circuit "before". Your equation for
> total energy after, Eafter, is simply incorrect.

I have another one: a capacitor is charged with a certain charge/voltage, then
it is dissolved in a non-conductive acid solution (hey, we're talking theory).
Where did the energy go now?

Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

3875. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 19:30:46 UTC
From: richardharrison@webtv.net
Message-ID: <8633-3A9AAEE6-49@storefull-118.iap.bryant.webtv.net>
Source record: 169498

Reg wrote;
"Q meters are part of the environment."

My Heathkit HD-1250 dip meter will indicate the self-resonance of the 1.6 to 3.4 MHz coil by using the 3.2 to 6.6 MHz coil in the dip meter. The dip occurs at the 6.6 MHz end of the dial.

The inductance of the self-resonant coil is given by Heath as 171 microhenrys.

To resonate at 6.6 MHz requires 3.4 picofarads by my ARRL Lightning Coil Calculator. That is the apparent distributed capacitance of my 171 microhenry coil. Looks reasonable to me.

Heath recommends using the plug-in coils this way to determine unknown capacitor values. One can start with the coil`s parasitic capacitance value. It seems to work.

Best regards, Richard Harrison, KB5WZI

3876. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 19:56:21 UTC
From: richardharrison@webtv.net
Message-ID: <8633-3A9AB4E5-50@storefull-118.iap.bryant.webtv.net>
Source record: 169499

Zoran, WA7AA wrote:
"Where did the energy go now?"

You put the metal plates of the capacitor into a non-conducting solution and the charges stay on the atoms of the plates in that solution.

A useful formula is: Q=CE

If the distance between the atoms grows, the capacitance drops and the voltage rises. The converse could occur. If there is no movement it all stays the same.

Insulators can hold a charge without a metal structure. Remember the hard-rubber comb or the amber rod?

Best regards, Richard Harrison, KB5WZI

3877. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 20:15:18 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97eflgnjf1@lure.pipex.net>
Source record: 169501

"VE9SRB" wrote ...
> "Bill Manley" wrote ...
> > Noting the interest in the "Warner was right .." and "question on
theory"
> > threads the group might enjoy entertaining the following question which
> > was offered to me in a job interview many years ago.
> >
> > Given two equal capacitors (C1 and C2) arranged in parallel, but
separated
> by
> > a normally open switch. With the switch open C1 is charged to voltage
> (V).
> > C2 has no charge. Also given is that all circuitry is lossless. Then
the
> > switch is closed.
> >
> > Before the closure note that the energy in the circuit is
> >
> > Ebefore = C1 * (V^2) / 2 + 0
> >
> > After the switch is closed, the charge Q is equally shared by both
> > capacitors. The voltage on each capacitor is now V/2.
> >
> > Now the total energy is
> >
> > Eafter = C1 * (V^2) / 4
> >
> > Where did the energy go?
> >
> > (BTW, I did get the job)
>
> The energy (time integral of power) did not "go" anywhere. Since there
are
> no losses and there is no radiation, the total energy in the circuit
"after"
> must equal the total energy in the circuit "before". Your equation for
> total energy after, Eafter, is simply incorrect.

There was in the 19th century a machine invented to transfer charge from one capacitor to another, the Kelvin Water Dropper; this was later improved upon by Wimshurst. And finally the modern equivalent the Van de Graaff generator. Here transfering the charge augments it and it builds up.
WHY?

Consider what happens when a switch starts to open.
Initially the spacing is very small and a voltage exists across it. As the contacts open the capacitance decreases, but the charge remains constant, therefore the voltage across the opening contacts rises.
No wonder switches arc as the voltage rises above the breakdown voltage of air.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3878. Re: Walter was .. writing a new book ..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 20:15:52 UTC
From: Robert Spooner <rls19@psu.edu>
Message-ID: <29FF9DA850122249.F5623CFF229369D7.F764A4F0AC32C2A0@lp.airnews.net>
Source record: 169500

Walt,

Is ordering information available yet?

73,
Bob AD3K

Walter Maxwell wrote:
>
> My illness was some time ago. Part of the delay was due to problems in page
> setting, but the problems are gone and the manuscript is completely page
> set. The entire page setup is due to go to the printer late next week, and
> hopefully copies will be available at Dayton. That's what we're shooting
> for.
>
> Walt, W2DU

--
Robert L. Spooner
Registered Professional Engineer
Associate Research Engineer
Intelligent Control Systems Department

Applied Research Laboratory Phone: (814) 863-4120
The Pennsylvania State University FAX: (814) 863-7841
P. O. Box 30
State College, PA 16804-0030 rls19@psu.edu

3879. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 20:47:04 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97eflinjf2@lure.pipex.net>
Source record: 169502

"Zoran Brlecic" wrote ...
> VE9SRB wrote:
>
> > The energy (time integral of power) did not "go" anywhere. Since there
are
> > no losses and there is no radiation, the total energy in the circuit
"after"
> > must equal the total energy in the circuit "before". Your equation for
> > total energy after, Eafter, is simply incorrect.
>
> I have another one: a capacitor is charged with a certain charge/voltage,
then
> it is dissolved in a non-conductive acid solution (hey, we're talking
theory).
> Where did the energy go now?

Was this not one of the very earliest experiments using a capacitor (Leyden Jar)constructed from two silver tumblers separated by a glass tumbler.
The assembled capacitor was charged and the charge demonstrated by an electroscope, pith balls.
The capacitor was carefully dismantled and the silver tumblers demonstrated no charge.
The whole was reassembled and the charge was once again demonstrated to be present.
Thus it was inferred that the charge was held in the dielectric glass tumbler.
Using different materials it was possible to determine the Specific Inductive Capacity, (now known as the Dielectric Constant).

Faraday conducted this experiment using capacitors of spherical construction
C1V1 = C1V2 +C2V2
or
C2/C1 = (V1-V2) / V2

The charges were determined by weighing with a torsion balance.

Various dielectric were substituted in one of the condensers the other reference condenser having a dielectric of air.
The ratio C2/C1 is K the Specific Inductive Capacity

Glass
Double extra dense flint 9.90
Dense Flint 7.38
Plate 8.45
Ebonite 3.15 - 3.48
Gutta Percha 3.3 - 4.9 (untreated Rubber)

Mica 6.33 - 8
Paraffin 2.29 (Kerosene)
Shellac 2.95 - 3.73
Sulphur 2.24
Petroleum 2.02 - 2.10
Turpentine 2.15 - 2.28
Distilled water 76.0
Hydrogen at NTP 0.9997
Carbon Dioxide 1.0008

All of these things were common place in 19th century society.
A precision of two decimal places is remarkable considering the crudeness of
the apparatus and stands as testimony to the great care and discipline that
those 19th century experimenters maintained in the ardent search for truth.

Are we as careful, or does our splendid instrumentation make us sloppy not
only about measurement, but also about observation?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
http://www.gary.peach.dial.pipex.com/

3880. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 20:54:32 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <mfgl9tspb7etgdco9n1b2uo2phdtdpikhq@4ax.com>
Source record: 169503

On Mon, 26 Feb 2001 18:53:14 GMT, Zoran Brlecic
<zbrlecic@earthlink.net> wrote:

>VE9SRB wrote:
>
>> The energy (time integral of power) did not "go" anywhere. Since there are
>> no losses and there is no radiation, the total energy in the circuit "after"
>> must equal the total energy in the circuit "before". Your equation for
>> total energy after, Eafter, is simply incorrect.
>
>I have another one: a capacitor is charged with a certain charge/voltage, then
>it is dissolved in a non-conductive acid solution (hey, we're talking theory).
>Where did the energy go now?
>
>
>
>Zoran WA7AA

Hi Zoran,

Non-conductive acid, hmmm? However, it is still a solute and the
combination of this and the battery makes a solution. The charges are
as free as if they were in solid copper and will recombine.

I would suggest that you wear a face mask, because the energy may go
into a minor explosion.

73's
Richard Clark, KB7QHC

3881. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 21:20:56 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <dthl9t0urnr8qqv5gkeqkeit57k29oq4q1@4ax.com>
Source record: 169504

On Mon, 26 Feb 2001 20:15:18 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>There was in the 19th century a machine invented to transfer charge from one
>capacitor to another, the Kelvin Water Dropper; this was later improved upon
>by Wimshurst. And finally the modern equivalent the Van de Graaff generator.
>Here transfering the charge augments it and it builds up.
>WHY?

Hi Gary,

Because a Van de Graff generator accumulates the charge in a truncated
sphere. The charge is applied from within the sphere and naturally
escapes to the outside surface. The geometry of the sphere dominates
the mutual repulsion of like charges that the new charges encounter in
their escape.

73's
Richard Clark, KB7QHC

3882. 23 cm omnidirectional antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 21:25:22 UTC
From: "J.F. FOURCADIER" <jf.fourcadier@wanadoo.fr_NOSPAM>
Message-ID: <97ehit$o1s$1@wanadoo.fr>
Source record: 169531

Hello !

With some friends I build presently an ATV repeater. The transmitter is designed for the 23 cm band and the output power is about 15 W.
To cover the right area I need an horizontally polarized antenna with an omnidirectional diagram. A gain of about 8 to 10 dB will be highly welcome.
Any idea or tried design ? stacked halo or big wheel or something equivalent ?

Thank you for your help

--

73 de F4DAY

Jean-Fran&#65533;ois FOURCADIER

3883. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 21:30:22 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <OVzm6.4612$rL4.408042@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169506

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A97FCF5.59EE7296@IEEE.org...
>
>Are you telling me that waves that cancel at a point
> do NOT continue moving down the transmission line?
> (The devil made me do it)
> --

Hi Cecil:

The devil indeed. He must have poked me a bit to respond.

Considering the situation of multiple EM waves traveling in a guided medium (a transmission line): when multiple waves, all traveling in the same direction in the transmission line, combine to a total wave of zero voltage and current, there will be no net wave propagation in that direction, beyond the point at which the waves combine. A common example of this phenomena is seen in impedance matching with transformers, tuners, etc.

This is not the same situation as waves traveling in opposite directions which can combine at a single (multiple) point(s) to zero voltage or zero current. In this case, each wave will travel past the combination point.

Steve, VE9SRB

3884. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 21:45:12 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9ACE68.443CE1C3@IEEE.org>
Source record: 169507

VE9SRB wrote:
> ... when multiple waves, all traveling in the same
> direction in the transmission line, combine to a total wave of zero voltage
> and current, there will be no net wave propagation in that direction, beyond
> the point at which the waves combine.

I have been told that modern wave theory requires the continued
independent existence of canceled waves even if there is no net
wave propagation.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3885. Re: WANTED LAPTOP BATTERY ZEOS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 22:01:55 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <3A9AD253.6AC57C7A@qadas.com>
Source record: 169508
Cross-posted to: alt.radio.amateur.club.clarc,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

I have an old ZEOS Notebook 386 that developed dead batteries when I did not keep them on trickle charge. I carefully cut one of the 2 open and found that the batteries were standard 1700 mah cells that can be be obtained from various nicad sources and soldered together. I can sometimes restore the batteries if not hard shorted by zapping them, but zapped batteries never perform well after zapping, and must be kept on constant trickle charge as you can see from my webpage at http://www.ultimatecharger.com

Robert W0LMD

Bill N0MNB wrote:
>
> NEED A LAPTOP BATTERY FOR ZEOS
> MERIDIAN 800C.. ALLOT OF PLACE SAY THEY HAVE THEM BUT END UP CALLING BACK
> AND TELLING ME THE OPPOSITE..
>
> THANKS
> BILL

3886. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 22:04:29 UTC
From: glass2@glass2.lexington.ibm.com
Message-ID: <97ejtd$u36$1@ausnews.austin.ibm.com>
Source record: 169510

In <24883-3A9A76B2-11@storefull-117.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:
>Bill, KB4XE wrote:
>"Where did the energy go?"
>
>Connecting an uncharged capacitor in parallel with an identical charged
>capacitor leaves each of the capacitors with half of the charge and half
>of the original voltage of the first charged capacitor.
>
>Nothing has been lost. The same excess charges exist in the capacitors.
>The paralleled capacitors can be reconnected in series to restore the
>original voltage across the single capacitor.
>
>Best regards, Richard Harrison, KB5WZI
>

The trick is, though, that in the steady state condition, half the voltage on each capacitor corresponds to one quarter of the original energy on each capacitor. When the energy on the two capacitors are summed, the result is that the system only contains half the energy that the original capacitor did. Where did the other half of the energy go? Well, let's think about this.

If the energy on the first capacitor is V volts, then the energy on that capacitor may be found, assuming that the capacity is known, by the equation:

E=(1/2)*C*V**2

If the voltage is halved, then the energy is reduced to one quarter.

Ah, but, you say, if we connect the capacitors up in series, the original voltage is again present. Yes, it is, but the capacity is now one half the original since the capacity of capacitors in series is reduced, according to the equation:

```
1
C=------------------
1 1
---- + ---- + ...
C1 C2
```

Thus, even though the original voltage is present, the energy is still one half because the capacitance is one half the value of the original capacitor.

Ok, so where did the energy go, you might ask.

In an ideal system without resistance, when the switch is closed, capacitor C1 has a voltage on it, and C2 has zero voltage. Thus, current starts to flow from capacitor C1 to capacitor C2. The interconnecting wires have inductance, and this forms a resonant circuit. The current will build up until the voltages on the capacitors are equal. At this point, current continues to flow due to the energy stored in the inductance. The current continues to flow until all of the charge has been transferred to the second capacitor, at which point the first capacitor has zero voltage across it, and the second capacitor has the original voltage on it. At this point, the current starts to flow from the second capacitor back to the first capacitor. This oscillatory behavior continues infinitely, due to the lossless characteristic of the circuit.

Now, if we consider a real world case, resistance in the interconnecting wires, and losses in the capacitor dielectric will cause the oscillation to be damped. After the oscillations have died out, the voltages on the two capacitors will be equal, and will be equal to one half the original voltage, and no current will be flowing.

Of course, one half the voltage on each capacitor corrresponds to one quarter of the original energy on each capacitor, resulting in the complete system only containing one half the original energy that was stored on the original capacitor. Where did the rest of the energy go? It was dissipated as heat in the resistance and dielectric. Thus, energy is conserved, although not necessarily in the original form.

Dave
WA4QAL

3887. Re: Looking for antenna projects using Heliax

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 22:14:02 UTC
From: "Dr. Robert Suding" <robert@qadas.com>
Message-ID: <3A9AD52A.9ED004C1@qadas.com>
Source record: 169509

I just saw a quick article at http://lea.hamradio.si/~s51kq on using hardline for a 1250 Mhz dipole and reflector antenna for ATV. A PCB stock reflector is soldered to the outside of the heliax a few inches from the end, and a bow tie dipole is soldered to the inner and outer parts of the coax end.

A similar arrangement is possible for a quick & dirty AO27/UO14 handheld antenna.

Robert W0LMD

Paul wrote:
>
> Does anyone know of an antenna project book/site/source that utilizes Heliax
> as a construction material? I seem to remember Ken Sessions (73 Magazine)
> having a publication years ago with vertical collinear projects that
> replicated commercial antenna construction?
>
> Any help would be appreciated.
>
> Thanks and 73

3888. Learn and practice CW on the Web.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 22:41:17 UTC
From: Brad <bdstrau@attglobal.net>
Message-ID: <3a9ae03f_4@news1.prserv.net>
Source record: 169512

Learn and practice CW on the Web.

http://www.morse101.com

3889. Re: Commerical Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 22:45:56 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <hNuaOn3kXlFrbWCtXBmMidmVM8Mi@4ax.com>
Source record: 169511

ac5ez@webtv.net (Larry) wrote:

>Anyone using one of the Barker&Williamsom trappd dipoles such as the
>as-80 (80-40-20). Can these be adjusted for the cw portion of the band
>with ease?
>
>K1zw
>Larry
>Qcwa

Try the B&W site...

http://www.bwantennas.com

There, you'll see under Trapped Dipoles...

All of our trap antennas require measuring and cutting of the wire
segments, and attachment of the traps, center
connector, etc. You will be required to adjust antenna wire lengths
according to VSWR measurements, and solder
or crimp connections. The more bands the antenna covers, the more time
consuming this process may be. It must
be done with care, and strictly in accordance with the instructions.
Otherwise, you will not achieve satisfactory
performance from the antenna.

In other words, it's what you'd do with any antenna, commercial or
homemade.

Bob
k5qwg

3890. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 23:21:25 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <fuSaOoIcbIkmieBDYtc0rjx4jnKS@4ax.com>
Source record: 169513

Zoran Brlecic <zbrlecic@earthlink.net> wrote:

>Richard Clark wrote:
>
>> >What's a ball field backstop?
>> >
>> >73 .... Zoran WA7AA
>>
>> Hi Zoran,
>>
>> That big truncated cone of mesh wire behind the umpire, behind the
>> catcher, behind home plate, in front of the pitcher, in front of
>> second base, in front of center field, in one corner of the base ball
>> stadium (or a school ground play field).
>
>Ahhh, please excuse my ignorance when it comes to our national pastime. It's the
>euro-trash in me: the only sport I follow is basketball. Now, if you had said
>that his radials were "in the paint" or that his signal was like an "alley-oop
>after a three second violation", that would have been a different story.

Or if he'd said, the ground was like hooking into the plumbing for 300
urinals at Staples Center...

Bob
k5qwg

>
>Thanks and 73 .... Zoran WA7AA

3891. Bits for Cap.Co Mag loop wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 23:32:01 UTC
From: Peter Wilson <Pensal8039@btinternet.com>
Message-ID: <97ep32bim1@uranium.btinternet.com>
Source record: 169514

Have got hold of a Cap.Co Magnetic loop but need some parts and help. can
anyone point me in the right direction please
thanks in anticipation
Peter ....pensal8039@btinternet.com

3892. back to Feedline Theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-26 23:56:19 UTC
From: ogardner@uiuc.edu
Message-ID: <D2Cm6.5770$dL4.74018@vixen.cso.uiuc.edu>
Source record: 169515

In an attempt to shed light on my own question, I did some modeling on EZNEC/windows (a wonderfully user-friendly program).....I used a wider-spaced version of 450 ohm feedline by modelling #1 gauge wire spaced 0.583". Zo=276log(spacing/radius) . First I verified that EZNEC behaves well on a simple 1/4 WL of terminated transmission line. I used 20 MHz because EZNEC complains if the spacing is too small in terms of wavelength (I chose the larger #1 wire so the spacing would be wider. I included wires across the ends of the 1/4 WL section, but inserted the source in the center of one, and 450-j0 load in the center of the opposite end. I believe 1/4 WL gives the most severe test, and EZNEC (SrcData) displayed a near-perfect 453-j3, orsomething near that. Now having confidence in that portion, I modeled the off-center fed dipole that I had previously modeled without feedline....it measured 448-j4 ...fed 15.7% from one end of #12 wire dipole. One side of the 450 ohm feedline attached to 3.8' and the other side to 20' . The feed line is 12' long. I used a generous number of segments.... 50 on short part of dipole, 100 on the long part, and 100 each on the feedline, with 9 across the short bottom wire where the "source" is centered. The Current-Tables in EZNEC will now compare currents anywhere in system. As instructions will explain, to compare phases properly, you need to assign your wire coodinates in the appropriate directions, i.e. END#1 of the two sides of the transmission-line wires should start at the same end.
The results were as I expected....as they start up from the source, they are virtually equal amplitude and 180 deg out of phase, but they soon start to depart from that relationship and no longer cancel out their radiation. Of course, the SrcData was far from 450 ohms. Ironically, it "happened to show close to 50 ohms resistive, which pretty much verifies how the End-Fed Zepps operate (or "nearly" end fed.

3893. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 00:04:28 UTC
From: richardharrison@webtv.net
Message-ID: <8634-3A9AEF0C-24@storefull-118.iap.bryant.webtv.net>
Source record: 169516

Dave, WA4QAL wrote:
"Where did the rest of the energy go? It was dissipated as heat in the resistance and dielectric."

Bill Manley`s original problem states:
"Also given is that all circuitry is lossless."

That precludes radiation or resistance and insulated losses.

Best regards, Richard Harrison, KB5WZI

3894. Re: Chain Link Fence Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 00:45:35 UTC
From: donrm@soco.agilent.com
Message-ID: <983234735.821739@cswreg.cos.agilent.com>
Source record: 169517

Michael Connly <mconnly@mn.mediaone.net> wrote:
> I have a fairly large (about 150 linear feet) Chain Link Fence. How
> well will that work as a ground???

Probably pretty fair if you bury it under the soil. :^) I have a chain link fence surrounding my property that makes so many parasitic diodes that 80M becomes unusable at times due to generated intermod from several broadcast band transmitters in my vicinity. One "dit" at a couple of watts into the dipole burns out the diodes and everything gets quiet again.

73 Don K6LTS
donrm@soco.agilent.com

3895. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 00:58:31 UTC
From: richardharrison@webtv.net
Message-ID: <24195-3A9AFBB7-64@storefull-113.iap.bryant.webtv.net>
Source record: 169518

Dave, WA4QAL wrote:
"If the energy on the first capacitor is V volts, then the energy on
that capacitor may be found, assuming that the capacitance is known, by
the equation E=(1/2)*C*V**2
If the voltage is halved, then the energy is reduced to one quarter."

The charge in coulombs (a lot of electron`s charges) on a capacitor is
Q, and
Q=CE, where C is the capacitance in farads and E is the voltage in
volts.

At the original voltage the charge on the first capacitor was Q=CE.
On the two capacitors the charge on each is CE/2, but there are 2
capacitors and the sum of the charges on the pair is the same as that on
the original capacitor.

Best regards, Richard Harrison, KB5WZI

3896. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 01:14:28 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3A9AFF74.7F1@pacbell.net>
Source record: 169521

VE9SRB wrote:
>
> "Bill Manley" <b_manley@bellsouth.net> wrote in message
> news:BO8m6.9560$4f.19625920@news1.mia...
> > Noting the interest in the "Warner was right .." and "question on theory"
> > threads the group might enjoy entertaining the following question which
> was
> > offered to me in a job interview many years ago.
> >
> > Given two equal capacitors (C1 and C2) arranged in parallel but separated
> by
> > a normally open switch. With the switch open C1 is charged to voltage
> (V).
> > C2 has no charge. Also given is that all circuitry is lossless. Then the
> > switch is closed.
> >
> > Before the closure note that the energy in the circuit is
> >
> > Ebefore = C1 * (V^2) / 2 + 0
> >
> > After the switch is closed, the charge Q is equally shared by both
> > capacitors. The voltage on each capacitor is now V/2.
> >
> > Now the total energy is
> >
> > Eafter = C1 * (V^2) / 4
> >
> > Where did the energy go?
> >
> > (BTW, I did get the job)
> >
> > regards,
> >
> > Bill Manley KB4XE
> >
> >
>
> Hi Bill:
>
> The energy (time integral of power) did not "go" anywhere. Since there are
> no losses and there is no radiation, the total energy in the circuit "after"
> must equal the total energy in the circuit "before". Your equation for
> total energy after, Eafter, is simply incorrect.

I believe he's talking of static charges on two capacitors. In that
case, there
would be no current. No current, no power, and the time integral of
nothing
is nothing. Might he be talking about potential energy here?

>
> Energy in a capacitor is the integral of power as a function of time. Power
> is a scalar quantity, a function of voltage and current, which are both
> vectors (complex). Power is equal to |V| |I| Cos (A), where A is the phase
> angle delta between voltage and current.

I was under the impression that, in order to have a phase angle you had
to
have a couple of waves. All you have here is charge which causes a
potential difference between the plates of a pair of capacitors. This
should
store energy in a way analogous to a compressed spring.

> The direct addition of energy and
> power cannot be performed in the manner you describe because scalar additon
> does not contain the phase relationship information between E1 and E2 (they
> are in phase) which is needed to "add" them. As a result, energy and power
> do not "add" algebraically, ie, Etotal is not equal to E1 + E2 (this seems
> to be a hard concept for some to understand).
>
> The total energy in the circuit before, Ebefore is equal to C1 * (V^2) / 2
>
> The total energy in the circuit after, Eafter is not equal to C1 * (V^2) /
> 4.
>
> If the energy in C1 is equal to E1 and the energy in C2 is equal to E2, the
> total energy in the circuit is given as follows:
>
> Eafter = E1 + E2 + 2 Sqrt(E1) Sqrt (E2) = (Sqrt(E1) + Sqrt(E2))^2
>
> Eafter = C1 * (V^2)/8 + C2 * (V^2)/8 + 2 * [Sqrt(C1) V / Sqrt(8)]
> [Sqrt(C2) V / Sqrt(8)]
>
> Since C2 = C1
>
> Eafter = C1 * (V^2) / 4 + C1 * (V^2) / 4
>
> Eafter = C1 * (V^2) / 2
>
> The law of conservation of energy holds.
>
> Steve, VE9SRB

What you're saying is that given two capacitors, each with equal charge,
the total energy they store in their dielectrics is (Sqrt(E1) +
Sqrt(E2))^2

which, because E1 is equal to E2 comes out to 4 times E1. How did you derive this formula?

Tom Donaly KA6RUH

3897. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 01:51:46 UTC
From: richardharrison@webtv.net
Message-ID: <26746-3A9B0832-1@storefull-113.iap.bryant.webtv.net>
Source record: 169520

Dave, WA4QAL wrote:
"If the energy on the first capacitor is V volts, then the energy on
that capacitor can be found---."

I wrote:
"---the sum of the charges on the 2 capacitors is the same as that on
the original capacitor."

Yes, and reconecting them in series makes the sum of their voltages the
same as that on the original capacitor. Nothing has been lost.

Best regards, Richard Harrison, KB5WZI

3898. Re: Repeater antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 01:53:10 UTC
From: w5omr <no_mail@no_mail.org>
Message-ID: <aMDm6.68244$3B1.13098422@typhoon.austin.rr.com>
Source record: 169519

:-> 73 = Best Regards,
:-> -Jeff/W5OMR

: Hummm, w5 old man river. Haven't heard you in a while. We used to yak on
: 40m etc. I see you got your dad's old callsign. Good deal... MK
: --
: http://web.wt.net/~nm5k

Wow! Good to see ya Mark. You still hanging on 40m?

Yeah, I figured I'd get Dad's call while I could before someone who's got no interest in the family, nor someone who never knew who Dad was, or for what he believed in, got it. Got Extra in '92. Dad became sk in 1988, and his call had to lapse (along with the grace period) before I could apply for it, without a C.O.D. (Certificate of Death). Too much paperwork (and memories) to deal with. I just waited.

While I got you (and anyone else who's reading) I'm looking for replacement dipoles, and/or the little phoenolic/fiberglass rods that are used to support the Decibel Products line of antennas (or similar). Round, short - they keep the dipoles supported, while separated electrically from the standoff for the dipole support.

thanks!

--
73 = Best Regards,
-=Jeff/W5OMR=-

3899. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 02:45:18 UTC
From: richardharrison@webtv.net
Message-ID: <24181-3A9B14BE-18@storefull-117.iap.bryant.webtv.net>
Source record: 169522

Someone asked how long the sun interferred with earth station reception of the satellite when the satellite comes between the earth station and the sun on several days in the spring and fall.

As I recall, it is a period of several minutes for Houston cable TV earth stations. It depends on location of the earth station.

The earth turns through 360 degrees each 24 hours or 1440 minutes. That means it takes 4 minutes to turn one degree.

The cable company has large dishes with narrow beamwidths, so it doesn`t take much earth rotation to put the sun out of the dish`s boresight.

Best regards, Richard Harrison, KB5WZI

3900. Re: VHF antenna for boats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 03:15:17 UTC
From: richardharrison@webtv.net
Message-ID: <24181-3A9B1BC5-20@storefull-117.iap.bryant.webtv.net>
Source record: 169525

Gary Pewitt wrote:
"Cushcraft AR-270 has radials needs no other counterpoise."

I have installed several antennas on boats for HF and VHF. Never installed an antenna with radials which might be hazardous on a boat which pitches and rolls.

The Cushcraft may be completely benign. All the antennas I installed were verticals. They work far better over water. HF antennas need a ground plate or reasonable facsimile. For VHF, the coaxial antenna, a type of vertical dipole works very well.

Best regards, Richard Harrison, KB5WZI

3901. Re: Mobile Whips

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 03:38:12 UTC
From: Cliff Gieseke <cliffgie@swbell.net>
Message-ID: <3A9B2124.C37709C8@swbell.net>
Source record: 169524

A number of years ago I had pretty good luck with a couple of helically wound mobile whips (40 and 15 mtrs.) and mirrow mount clamped to a balcony of an apartment rented at Pensacola Beach and also clamping it to a raised trunk and other temporary locations, operating a Ten-Tec Argosy. At the beach apartment, I used two 1/4 wave lengths of bell wire as radials, cutting them until SWR was low. ... Also had the Ten-Tec Argosy, in the low power position, on a 10-speed bicycle one day with the helical whip mounted on a luggage rack and made a couple out of state ssb contacts.

Cliff, W4ZFL/5

Gene wrote:

> FAZAMY wrote:
>
> > I was thinking about using a mobile whip antenna for vacation use. It would be
> > used as a base station antenna. It wouldn't be mounted on a car or rv or suv.
> > Its important points would be that it gets out, and it is portable.
> >
> > 1. What is a source of instructions for contructing one homebrew?
> > 2. With the conditions I described above, what kind of ground system would I
> > need?
> >
> > Thanks and 73,
> > KB2AMY
> > Evan
>
> Use an SO-239 - 3/8x24 adapter with a mirror-mount bracket and put it on a short
> piece of mast. On the base of the bracket, put 4 pieces of speaker wire as long as
> you can get. When you get somewhere, attach the piece of mast to something and
> uncoil the wire as much as you can.
>
> Personally, I think you'd do better with a simple dipole.

3902. ANTENNA RESTRICTIONS HELP here

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 03:43:21 UTC
From: john williams <ac6ts@n2.net>
Message-ID: <3A9B2258.8145901@n2.net>
Source record: 169523

ANTENNA RESTRICTIONS? NO SPACE?
Lots of Ideas, examples, antenna designs to solve virtualy any antenna problem Caused by
space restrictions, cc&r's, RFI etc. Operate freely and keep your neighbors off your back!

CLICK ON THIS LINK
http://members.fortunecity.com/ac6ts/index-9.html
<A href=http://members.fortunecity.com/ac6ts/index-9.html>CLICK HERE</A>

THERE ARE SOLUTIONS!

--

PAGE AT-> http://www.angelfire.com/ca2/home4biz/index.html

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

3903. Re: Screwdriver antenna for apartment

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 04:43:53 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A9B3089.10C4@bellsouth.net>
Source record: 169526
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

Wasn't fiction.

Jim wrote:
>

>
> Anyway, thanks for that bit of fiction, I'm sure we'll all remember it
> the next time we put a screwdriver antenna in our apartment.
>
> 73, Jim KH2D

3904. Gap Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 06:11:00 UTC
From: dmccord@usol.com
Message-ID: <3a9b447d.17351462@news.usol.com>
Source record: 169527

I am thinking of purchasing a Gap Vertical Antenna For HF, does anyone have any experence with these verticals that they wish to share with me? The promotional material sure looks good.

73's Del
KA8OCN

3905. GARY SHANNON

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 09:54:31 UTC
From: antonettemarrapodi@hotmail.com
Message-ID: <97ftgn$3cu$2@ftp.curtin.edu.au>
Source record: 169528

gary shannon has now moved to 96FM!!!!!!

3906. WTB Comet Antenna Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 10:33:19 UTC
From: Dave C <davcross@yahoo.com>
Message-ID: <PnLm6.430$T7.10057@news2.voicenet.com>
Source record: 169529

I have been broken a few antenna's and am trying to fix them. I am looking for parts for the following antenna's

C-A2x4mb - Need the base of the antenna

FJ-15s - Need the first loading coil above the base.

If anyone has these please email Remove the NOT from the eamil address.

davcrossNOT@yahoo.com

3907. Antenna Switching Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 11:13:00 UTC
From: wd1v@amsat.org
Message-ID: <wd1v-2702010613010001@wdonev.ne.mediaone.net>
Source record: 169530

I've got 3 radios (HF) and 3 different antennas.

What is the best way to get maximum flexibility (any radio to
any antenna) and simulataneous safety (not blowing up the
radios that aren't in use from the 1 that is)?

JS
http://www.qsl.net/wd1v

3908. Re: back to Feedline Theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 12:32:26 UTC
From: Cecil <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9B9E5A.8B035840@IEEE.org>
Source record: 169532

gardner oral e wrote:
> Now having confidence in that portion, I modeled the off-center fed
> dipole that I had previously modeled without feedline....it measured
> 448-j4 ...fed 15.7% from one end of #12 wire dipole.

But EZNEC does not give you the separate impedances looking each
direction at the connection point. With an off center fed dipole,
there is more current flowing in one of the feedline wires than
in the other at the feedpoint and it's hard to choke ladder-line.
I would also avoid using the word "measured" when reporting the
results of a modeling program.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3909. Re: GARY SHANNON

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 12:51:22 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC8076880CB@www.premiersi.com>
Source record: 169534

Well, good riddance.

"antonette" <antonettemarrapodi@hotmail.com> wrote in message
news:97ftgn$3cu$2@ftp.curtin.edu.au...
> gary shannon has now moved to 96FM!!!!!!

3910. Q: BIP/BOP on VHF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 13:02:19 UTC
From: Juho Karvonen <oh8hfy@ikiPOIS.fi>
Message-ID: <Pine.LNX.4.21.0102271448120.1335-100000@phobos.kortex.jyu.fi>
Source record: 169533
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

hi,

I was surfing on the net and found G3WOS's article about stacking 50MHz yagis. He mentioned on the article BIP/BOP switching for elevating the radiation angle electrically by phasing yagis in or out-of-phase.

www.uksmg.org/stack.htm

I know that many HF DXers are doing this, but is there any benchmarks doing this on upper part of the VHF (e.g. 2 meters)?

On HF tilted elevation angle can be up to 90 degrees, but what happens with long and highgain VHF yagis? Will elevation change greatly compared with normal angle?

I've seen several commercial matching and stacking products for HF providing BIP/BOP, but is extra 1/2 lambda cable with coaxial relays in other arm of the phasing harness still suitable solution?

Juho OH8HFY

3911. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 19:37:03 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <$VMNPMAfHAn6EwOD@pickmere.demon.co.uk>
Source record: 169537

In article <7898-3A9BE68C-50@storefull-115.iap.bryant.webtv.net>,
Richard Harrison <richardharrison@webtv.net> writes
>Denver Braughter wrote:
>"How many degrees of arc does the sun fill?"
>
>I did not know so I looked in ARRL books for moonbounce because the sun
>and moon obviously fill the same angle as we know from eclipses. I found
>no answer.
>
>Then I looked in the RSGB VHF-UHF Manual and there it was on page 9.12.
>The answer is 1/2 degree.

Sun and moon move their own diameter in 2 minutes - useful.

Mike
--
M.J.Powell

3912. RE: R.S.Discone Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 21:01:14 UTC
From: <>
Message-ID: <97h4iq$lm9$1@news.netmar.com>
Source record: 169535

Hello All!

Since September 2000, I have lost 2 radials from the "cone" part of my antenna

to 50 mph+ wind storms, yet have suffered no loss in signal reception. The

radials are next to each other.

LAFD/PD and Palm Springs come in loud and clear, but I'm unsure just how much longer the present system will hold up.

What/where should I be looking for an upgraded and superior antenna.

Many Thanks!

Alain, just south of Palomar Mtn. (where the 200" Hale telescope is...)

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3913. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 21:09:42 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6C17FB5.3D0D%stewartx@sccoast.net>
Source record: 169536

David Snyder Hale wrote:

> I've found various sources for telescoping
> masts. One can of course buy these meant
> for antennas but they are usually too big
> for backpacking. There are telescoping
> fishing poles and telescoping wind-sock
> supports. Both are lightweight and tall,
> but don't collapse small enough for my
> taste (4ft). [snip]

The VERY best portable telescoping mast I've found are those aluminum telescoping masts used by professional window washers. These can be purchased from most hardware stores (or office supply stores) and can be found in lengths up to about 60 feet.

I have a 19 foot one that telescopes down to about 4.3 feet, and weighs almost nothing. With a rubber cap (for chair leg) over the large end, it also makes a nice walking stick.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3914. Re: Top of tree within the cone of a discone?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 21:48:00 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6C18AC0.3D15%stewartx@sccoast.net>
Source record: 169538

Gary Peach wrote:

> BTW it ain't how far you fall, but how hard
> you land that finishes you off. Some people
> have fallen thousands of feet and survived
> whilst others have merely tripped and kicked
> the bucket as a result.

Ah, thats nothing. I've know lots of people that have fallen thousands of feet and survived (hitting the ground after that killed them).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3915. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 21:58:30 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6C18D35.3D16%stewartx@sccoast.net>
Source record: 169539

Gray Frierson Haertig wrote:

>
> But why would a cop car need an
> Inmarsat terminal?
>
> There are also GPS antennas that
> look quite similar, which makes
> much more sense since automatic
> vehicle location systems are commonly
> included in cop cars.

I agree with all of the above. It sounds very much like an old GPS system.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

3916. What's a good mount for a Jeep Cherokee

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 21:59:50 UTC
From: Chris McGowan <c279m@yahoo.com>
Message-ID: <qrVm6.234$sp3.10215@news1.news.adelphia.net>
Source record: 169540

I'm looking to install my 2m/440 rig in my new 2001 Jeep Cherokee. On my previous car I had the MFJ ratchet/multi-angle hatchback mount on the trunk lid. Well after 1 year, it's rusted and corroded. I guess you get what you pay for, Mighty Fine Junk.

Anyways I'm now looking for a new mount. I'm think of buying another mount similar to the MFJ to attach the antenna to the side of the rear hatch instead on up top since the lip of the hatch dips in when you open it. The only other spot I can see is to go along the lip of the hood but I don't like they way that looks.

Any thoughts/ideas/suggestions on a good mount?

Thanks

Chris KC2GLX

3917. Re: What's a good mount for a Jeep Cherokee

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 22:13:11 UTC
From: Ralf Ballis <rabllis@consult.m.uunet.de>
Message-ID: <20010227.22131100@viviana.santiagosoft.de>
Source record: 169541

I think in the middle of the top is the best place.

Regards!

Ralf

3918. Re: Need opinions: ARRL Life Membership

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 22:26:42 UTC
From: dinod@deltanet.com
Message-ID: <CQVm6.314533$ge4.110209424@news2.rdc2.tx.home.com>
Source record: 169542

Hey Bill, sounds like you might not be around for very much longer....can I have you call? JUST KIDDING!!!! Live long and prosper!

Dino

>It was the single best investment I ever made. (And I made it as a
>"Charter" Life Member --- more than a few years ago.)
>
>Bill Ogden
>W2WO
>
>

3919. Re: What is the best AM radio antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 22:36:44 UTC
From: dinod@deltanet.com
Message-ID: <0_Vm6.314576$ge4.110224801@news2.rdc2.tx.home.com>
Source record: 169543

While traveling in Wyoming, I can listen to KFI at night! That system
works wonders!

Dino

>The one that KFI has down in Orange County, CA.
>
>W7TI

3920. Re: GARY SHANNON

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-27 23:29:25 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <pLWm6.6109$Ea1.478113@bgtnsc05-news.ops.worldnet.att.net>
Source record: 169544

Must not be important, I don't even know who Cary Hannon is!

--
Mike Knowlton
Panama City Fl.
antonette <antonettemarrapodi@hotmail.com> wrote in message
news:97ftgn$3cu$2@ftp.curtin.edu.au...
> gary shannon has now moved to 96FM!!!!!!
>

3921. Re: MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 00:07:45 UTC
From: "W. Hodgins" <whodgins@geocities.com>
Message-ID: <skXm6.4723$zi6.88752@newscontent-01.sprint.ca>
Source record: 169545

Hello

I've had an MFJ 1786 HI-Q loop (10 to 30mhz) for a couple of years.
Since this is the only HF antenna I ever had, I'm not sure
how it compares with others.
It's mounted on the roof of a 4 story apartment building (~35' ?)
and the rig is a 100 watt Yaesu Ft-757
I am not very active on HF but I can routinely reach Europe and
South America from Montreal Canada (is this good, bad, or normal?)
It is easy to use with the motor driven capacitor control right by the
radio.
The only gripe I have with it is because its very high Q, you have to
retune often when changing frequencies.

73, Wayne, VE2WRH

eborys <eborys@home.com> wrote in message
news:v0Gl6.6824$t67.193040@news1.rdc1.il.home.com...
> Does anyone here own of the MFJ loops? How is it working out for you?
> Thanks,
> Emil
> ak9i
>
>

3922. Re: What's a good mount for a Jeep Cherokee

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 00:32:14 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <SIXm6.940$m8.136338@news.direcpc.com>
Source record: 169546

>I think in the middle of the top is the best place.

Ditto! I use a Diamond magnet mount smack dab in the middle of the roof on my Jeep.

3923. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 01:36:14 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A9C560E.FDAB1585@bwcc.com>
Source record: 169547

Richard Harrison wrote:
> I did not know so I looked in ARRL books for moonbounce because the sun
> and moon obviously fill [about] the same angle as we know from eclipses.
That's why I mentioned the moon too.
But the sun actually fills a larger angle since solar prominences can extend for millions of miles above the surface and no doubt are hot emitters of RF.

It would be a simple matter to time the ending of a sunset.
For as many as I have watched, I have no specific sense of how long they take.
2 minutes seems reasonable.

3924. Re: Antenna Switching Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 01:43:18 UTC
From: "John D. Farr" <johnfarr@ro.com>
Message-ID: <DShn6.7742$m7.1458639@e3500-chi1.usenetserver.com>
Source record: 169421

JS:
In my car, I use a panel with UHF panel mount connectors for the radio and the two antennas. I switch with a short jumper that uses the push-on UHF connectors available at most hamfests. It works very well, is extremely versitile and very cheap.
John
KC4ZXX
wd1v@amsat.org wrote in message ...
>I've got 3 radios (HF) and 3 different antennas.
>
>What is the best way to get maximum flexibility (any radio to
>any antenna) and simulataneous safety (not blowing up the
>radios that aren't in use from the 1 that is)?
>
>JS
>http://www.qsl.net/wd1v
>
>

3925. Where to get Balun TP-104?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 04:24:37 UTC
From: u539123535@spawnkill.ip-mobilphone.net
Message-ID: <I.983334277.1974548339@[210.75.254.222]>
Source record: 169551

Hi,

Who can tell where to get Balun TP-104 or something about it?And the
relevant or possible manufacturer?

Thanks!

Angela

--
Sent by angela6911 from hotmail included in com
This is a spam protected message. Please answer with reference header.
Posted via http://www.usenet-replayer.com/cgi/content/new

3926. Where to get Balun TP-104?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 04:25:21 UTC
From: u539123535@spawnkill.ip-mobilphone.net
Message-ID: <I.983334322.1584564208@[210.75.254.222]>
Source record: 169552

Hi,

Who can tell where to get Balun TP-104 or something about it?And the
relevant or possible manufacturer?

Thanks!

Angela

--
Sent by angela6911 from hotmail within area com
This is a spam protected message. Please answer with reference header.
Posted via http://www.usenet-replayer.com/cgi/content/new

3927. Re: Learn and practice CW on the Web.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 04:33:16 UTC
From: pmunsel@aol.com
Message-ID: <20010227233316.13345.00000362@ng-bg1.aol.com>
Source record: 169548

Just visited the sight. It looks VERY good. I am doing too much right now (downloads etc), but will be back later to "Practice". Thanks and 73,
Paul Munsel N5XMV
Hearne, Tx.
EM10

3928. Re: Austin Amateur Radio Supply

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 04:40:49 UTC
From: pmunsel@aol.com
Message-ID: <20010227234049.13345.00000366@ng-bg1.aol.com>
Source record: 169549

>Hi OMs
>Doews anyone know if that store above also ships to overseas ? (especially
>D)
>

I use them a good bit, but only live 90 miles away. I am sure since they do a LOT of shipping, they will ship overseas. They have a website, so you might check that out as well. If any trouble finding the sight, or other info, let me know, and I'll do some checking for you.
73,
Paul Munsel N5XMV
Hearne, Tx. 77859
EM10

3929. Re: What was the antenna on this cop car for ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 04:48:18 UTC
From: pmunsel@aol.com
Message-ID: <20010227234818.13345.00000367@ng-bg1.aol.com>
Source record: 169550

It is in fact a satellite antenna. They are used for multi-purpose. If you were to be able to get close to it, you may be able to hear the little motor in there whirring as it keeps up with the signal. It will switch back and forth to get the best signal from a sat, due to obstructions etc. Stand near it, and move around, it'll start moving. These are used to show the position of the unit, as well as "radio and phone" traffic.
Sounds like to original poster was around Indy...
73,
Paul Munsel N5XMV
Hearne, Tx.
EM10
(formerly from the Indy area)

3930. Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 05:12:56 UTC
From: ardujenski@aol.com
Message-ID: <20010228001256.18237.00000247@ng-fd1.aol.com>
Source record: 169553

Cabelas is selling a backpackable fishpole that is 14ft and closes to just 15 inches. The St. Louis QUICKY will work nicely on this (about 11 ft) or setting up an inverted-L with lite wire. See www.cabelas.com and look up PANFISH ROD. I set up mine similar to the old St. louis vertical design with the 300 ohm tv wire wrapped on to the base handle. For 20m it is almost 50 percent efficient. Alan KB7MBI

3931. Re: What the heck is this about?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 05:18:40 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A9C8A30.637B9710@oio.net>
Source record: 169554

"kb7vkl"@no.spam.juno.com> wrote:
>
>
> In most sets of plans about building a 2M j pole they instruct the
> builder to use the coax as a "matching choke" by wrapping about
> 4 turns of coax into a 5" loop. I'm looking in the book "Practical
> Antenna Handbook" and see nothing like this.
> An example of the j-pole design I'm talking about can be seen
> here: http://www.sedan.org/ant.htm#2mjpole
>
> What's the deal? Is this "matching choke" supposed to replace the
> balun that Joe Carr goes into in depth?

In a word, Yes. Does it work? It does on common
mode (current on the outer shield). Is it 'better'?
Who knows. It can work, so just depends on 'how' you
wanna do it, I guess... Is it a balun? Not really in
this case, what's 'balanced'
'Doc

3932. Re: Antenna Switching Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 05:22:26 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A9C8B12.6AFA2C4A@oio.net>
Source record: 169555

wd1v@amsat.org wrote:
>
> I've got 3 radios (HF) and 3 different antennas.
>
> What is the best way to get maximum flexibility (any radio to
> any antenna) and simulataneous safety (not blowing up the
> radios that aren't in use from the 1 that is)?
>
> JS
> http://www.qsl.net/wd1v

Put the antennas on a switch. Un-screw the lead from the
switch from one radio and move it to the radio you want to
use. 'Switching' the radios works, but you want a very
good quality switch, and the unused outputs should be
grounded very well.
'Doc

3933. Re: What's a good mount for a Jeep Cherokee

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 05:52:53 UTC
From: Schneider <js@sprintmail.com>
Message-ID: <3A9C91F7.6FFB365D@sprintmail.com>
Source record: 169556

Center of the roof with a Comet- SBB-2NMO -146MHz 2.15 dBi 1/4wave
and 446MHz 3.8 dBi 5/8wavedb gain on VHF. At 18" you cant
beat the Gin and the antenna is VERY durable about 1/8 inch thick fairly
tough to bend or break http://www.cometantenna.com/mobile.html

I use a nmo roof mount on my explorer took so debating weather the
"hole" would drop the value....hell most car dealers now could care less
when it comes to trading in your car.

You can find other nmo mounts at the site below however mag. mounts are
more trouble than they are worth when it comes to putting it on top of
an SUV. If you do not want a hole get the window lip mount that will
take less time, and you can put up your antenna w/o getting out of or
climbing all over your truck.

http://www.radio-ware.com/rwantmnt.htm

73's
Jeff
--
http://www.homestead.com/KK5UFO/

In God we trust, all others we monitor.

3934. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 06:09:21 UTC
From: dmccord@usol.com
Message-ID: <3a9c9114.1070151@news.usol.com>
Source record: 169557
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I saw this still being quoted and I noticed that the follow up I had posted is not being included in these quotes.

After a few days of back and forth and after having Cushcraft send me back my original Matching network I did get a call from the Tech and he said I was shipped the wrong box. He then sent me a New Matching network and I installed it. It did the trick and the antenna is working fine (Over 3 months later).

1) I think the entire problem was caused by poor quality control, also the circuit board on the new matching network seems to be made out of a different material.
2) I understand that I could have made my own Vertical but I did not want to take the time and I wanted the best performance I could get. So I paid my 400$ to have a product that should have been trouble free.
3) I am in the market for a second Vertical (For our Cabin) I must say that even though the R8 Performs very well I am not going to purchased another one. I am looking at The Gap Verticals and the Butternet Verticals. I still have not figured out if the Betternet uses a Matching Network like the Cushcraft.

Delbert McCord
KA8OCN

>Delbert McCord wrote:
>>
>> I have a R8 that is less than 6 months old and I am having problems
>> witht he antenna also. It was working Great and then all of a sudden
>> its like having a dummy load on the end of the coax!
>>
>> I checked the coax (Which is also new) and Its not shorted and gives
>> me a perfect SWR when I connect a dummy load out there on the end of
>> the coax. Cushcraft (After a bunch of phone tag) had me send them the
>> matching box back to them, they tested it and returned it saying its
>> fine. I used to get better than a 2 on every band with out my tuner
>> now I get over a 8 swr and I can receive better if I connect the coax
>> to my dogs collar!
>>
>> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>> ever get from me!
>>
>> Worked great, Looks Great, Does not last
>> I can not afford almost 100$ a month for an antenna!

>>
>> Delbert McCord
>> KA8OCN
>>

3935. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 06:21:28 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <3A9C98E8.17A0180B@pacbell.net>
Source record: 169558

The VERY VERY best portable telescopic antenna mast I've found is the DK9SQ 33ft long fiberglass mast. This thing is designed as an antenna mast and nothing beats it for strength, length and weight. Do a search on DK9SQ and find the web site or find someone who has used one who will then convince you.

3936. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 06:37:24 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <E01n6.97$mI.12177@newshog.newsread.com>
Source record: 169559

"Denver Braughler" <Braughler@bwcc.com> wrote in message
news:3A9C560E.FDAB1585@bwcc.com...
> Richard Harrison wrote:
> > I did not know so I looked in ARRL books for moonbounce because the sun
> > and moon obviously fill [about] the same angle as we know from eclipses.
> That's why I mentioned the moon too.
> But the sun actually fills a larger angle since solar prominences can
extend for millions of miles above the surface and no doubt are hot emitters
of RF.
>
The sun and moon both have the same sustended angle of 1/2 degree.

However as the earth's orbit around the sun is not circular, nor is the
moons orbit around the earth, their sustended angles do vary. Hence the
reason for sometimes getting a total eclips (sun or moon) and other times an
eclipsed sun shows a full ring around the moon.

> It would be a simple matter to time the ending of a sunset.
> For as many as I have watched, I have no specific sense of how long they
take.
> 2 minutes seems reasonable.

Just remember that there is a good deal of diffraction taking place at
sunrise and sunset.
How much this would affect the time from limb to limb? I don't know.

Roger (K8RI)

3937. Heat shrink tube

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 06:45:26 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <a81n6.98$ml.12222@newshog.newsread.com>
Source record: 169560

I recently purchased some N connectors and discovered that they came with a 2" long piece of heat shrink tubing.

When the tubing is shrunk into place I noticed what looked like glue, epoxy, or some kind of resin around the end of the tube and the cable.

I just purchased a 4 foot length of 3M tubing to sealing connectors and discovered that it too has this coating on the inside.

This stuff bonds to just about everything so it looks like it may truly make a weather proof seal. I use a short piece at the back of the connector, make the connection and then shrink a piece that is a bit longer than the connectors and the original tubes. Makes one whale of a solid connection that looks as if, it'd survive under water. Probably not recommended, but it still has that appearance.

Any one know what this stuff is?
Also I don't know if the tubing is UV resistant. That being the case, I don't know if wrapping the tubing with electrical tape for UV protection is needed or not.

The stuff I have gotten from Radio shack always gets a couple layers of tape. Also the stuff from Radio shack does not have the resin coating.

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

3938. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 06:54:44 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A9CA0B4.ED34D619@bwcc.com>
Source record: 169561

Roger Halstead wrote:
> Braughler wrote:
> > Richard Harrison wrote:
> > > I did not know so I looked in ARRL books for moonbounce because the sun
> > > and moon obviously fill [about] the same angle as we know from eclipses.
> The sun and moon both have the same sustended angle of 1/2 degree.
To just one decimal place, I suppose that's the case.
But the sun as an emitter of radio interference is a tiny bit larger than
the visible circle we perceive as the sun.

> > 2 minutes seems reasonable.
> Just remember that there is a good deal of diffraction taking place at
> sunrise and sunset.
> How much this would affect the time from limb to limb? I don't know.
So at equinox to an observer on the equator in the middle of an ocean does the sun appear
to be up for measurably longer than 12 hours?

I have heard the seasonal sun interference with satellite dishes for network radio
broadcasts.
I think that at maximum they last a good bit longer than 4 minutes.

3939. Re: What the heck is this about?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 06:58:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A9CA19C.90A@wt.net>
Source record: 169562

kb7vkl@no.spam.juno.com> wrote:
>
>
> In most sets of plans about building a 2M j pole they instruct the
> builder to use the coax as a "matching choke" by wrapping about
> 4 turns of coax into a 5" loop. I'm looking in the book "Practical
> Antenna Handbook" and see nothing like this.
> An example of the j-pole design I'm talking about can be seen
> here: http://www.sedan.org/ant.htm#2mjpole
>
> What's the deal? Is this "matching choke" supposed to replace the
> balun that Joe Carr goes into in depth?

The choke is not the matching section. It's just to reduce common mode currents on the shield of the feedline.
I don't know about the Carr balun, but both do the same job. But, I question how well this works using the choke at the feedpoint. It really needs a second one a 1/4 below the feedpoint I think to fully decouple the line. On 1/2 wave verticals I found using a set of radials grounded to the mast a 1/4 wl below the feedpoint works pretty well. "You use a union for the radial connection the the coax shield". You could also use beads. There are many ways to do the same thing. In many cases, a 1/2 wave vertical will do fairly well without any choke or decoupling at all. But the choke etc, is insurance to make sure your feedline doesn't become part of the antenna. This skews the pattern upward off the horizon. MK
--
http://web.wt.net/~nm5k

3940. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 10:06:04 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97innf$t7l$2@lure.pipex.net>
Source record: 169565

"Richard Clarkwrote ...
> Gary Peach wrote:
> >There was in the 19th century a machine invented to transfer charge from
one
> >capacitor to another, the Kelvin Water Dropper; this was later improved
upon
> >by Wimshurst. And finally the modern equivalent the Van de Graaff
generator.
> >Here transfering the charge augments it and it builds up.
> >WHY?

> Because a Van de Graff generator accumulates the charge in a truncated
> sphere. The charge is applied from within the sphere and naturally
> escapes to the outside surface. The geometry of the sphere dominates
> the mutual repulsion of like charges that the new charges encounter in
> their escape.

The sphere is conductive and the electrons that make up the charge have
mobility, it is not the metal sphere that causes the charge to build up.
A bucket stood under a small leak in the roof does not fill of itself, the
drip drip drip integrates finally into and overflowing Bucket.
The Van de Graaff generator does not have charges of 4,000,000 Volts
imparted to it, but loads of tiny charges.
It is the energy expended in transferring the small charges that accounts
for the final high voltage.
Think of the electrophorus of the 19th century.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

3941. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 10:15:46 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97inng$t7l$3@lure.pipex.net>
Source record: 169563

"M.J.Powell" wrote ...
.iap.bryant.
> Richard Harrison <richardharrison@webtv.net> writes
> >Denver Braughter wrote:
> >"How many degrees of arc does the sun fill?"

It is interesting that both Sun and moon subtend the same Half degree angle when viewed fromn the Earth's surface, despite the fact that one is 96 million miles distant and the other a mere 250,000 miles. Looks like some Newtonian physics acting here.

> >I did not know so I looked in ARRL books for moonbounce because the sun
> >and moon obviously fill the same angle as we know from eclipses. I found
> >no answer.
> >
> >Then I looked in the RSGB VHF-UHF Manual and there it was on page 9.12.
> >The answer is 1/2 degree.
>
> Sun and moon move their own diameter in 2 minutes - useful.

Actuall they don't the Moon takes 27 days approximately so it move in it's orbit 360/27 = 13.3 degrees per day to orbit the Earth.

The Earth rotaes 360 degrees in 24 hours or 15 degrees per hour or 1 degree every 4 minutes. Hence the majority of the apperent movement of the Moon or Sun is due to the Rotation of the Earth.
Note what time the moon sets today and then again note when it sets tomorrow, This is a measure of how much the Moon has shifted in it's Orbit. The actual orbital position of the moon is quite difficult to calculate and it is affacted by external influences such as the gravitational effects of Jupiter. In fact the Bessel Function Tables that we use for some Radio Wave application were first calculated in order to predict the position of the Moon.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

3942. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 10:19:30 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97inni$t7l$4@lure.pipex.net>
Source record: 169564

"Denver Braughler" wrote ...
> Richard Harrison wrote:
> > I did not know so I looked in ARRL books for moonbounce because the sun
> > and moon obviously fill [about] the same angle as we know from eclipses.
> That's why I mentioned the moon too.
> But the sun actually fills a larger angle since solar prominences can
extend for millions of miles above the surface and no doubt are hot emitters
of RF.
>
> It would be a simple matter to time the ending of a sunset.
> For as many as I have watched, I have no specific sense of how long they
take.
> 2 minutes seems reasonable.

It would be even more interesting to time not only the optical setting, but
also the radio setting of the Sun.
A comparison of the times and the delay between them might indicate the
order of the apparent Radio Diameter of the Sun.
Of course edge diffraction and atmospheric and ionospheric corrections would
need to be applied.
Perhaps an Eclipse would provide much better data, especially if the eclipse
is near to Zenith.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

3943. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 10:27:32 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97innk$t7l$5@lure.pipex.net>
Source record: 169566

"Roger Halstead" wrote ...
> "Denver Braughler" wrote ...
> > Richard Harrison wrote:
> > > I did not know so I looked in ARRL books for moonbounce because the
sun
> > > and moon obviously fill [about] the same angle as we know from
eclipses.
> > That's why I mentioned the moon too.
> > But the sun actually fills a larger angle since solar prominences can
> extend for millions of miles above the surface and no doubt are hot
emitters
> of RF.
> >
> The sun and moon both have the same sustended angle of 1/2 degree.
>
> However as the earth's orbit around the sun is not circular, nor is the
> moons orbit around the earth, their sustended angles do vary. Hence the
> reason for sometimes getting a total eclips (sun or moon) and other times
an
> eclipsed sun shows a full ring around the moon.
>
> > It would be a simple matter to time the ending of a sunset.
> > For as many as I have watched, I have no specific sense of how long they
> take.
> > 2 minutes seems reasonable.
>
> Just remember that there is a good deal of diffraction taking place at
> sunrise and sunset.
> How much this would affect the time from limb to limb? I don't know.

Very true, what you can do is provide your own false Horizon when the Sun is
Near to Zenith and time the passage of the leading and trailing edges, at 15
degrees per hour the time will give the angle.
A simple Pin hole projection of the sun should be quite adequate and this
method will permit you to have several goes at it so that you may calculate
an average value and a standard deviation for the sample.
The simplest methods are the best and modern electronic stop watches are
more than adequate to the task.
A similar experiment for the Moon the times can be compared directly to
those found for the Sun.
Determining the Radio Diameter at HF may be too difficult for Hams to
achieve a result with sufficient precision, unless of course you know
better, or can devise a better method, perhaps with AE arranged to produce
an interferometer. Or work in conjunction with another Ham or Hams for

simultaneous observations for widely separated geographical locations. It'd make a nice change from collecting bus numbers. :)
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

3944. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 10:40:15 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97innm$t7l$6@lure.pipex.net>
Source record: 169567

"Denver Braughler" wrote ...
> Roger Halstead wrote:
> > Braughler wrote:
> > > Richard Harrison wrote:
> > > > I did not know so I looked in ARRL books for moonbounce because the
sun
> > > > and moon obviously fill [about] the same angle as we know from
eclipses.
> > The sun and moon both have the same sustended angle of 1/2 degree.
> To just one decimal place, I suppose that's the case.
> But the sun as an emitter of radio interference is a tiny bit larger than
> the visible circle we perceive as the sun.
>
> > > 2 minutes seems reasonable.
> > Just remember that there is a good deal of diffraction taking place at
> > sunrise and sunset.
> > How much this would affect the time from limb to limb? I don't know.

As wrist watches with hundredths of a second are common then local horizon measurements, defined in another post by me in this topic, can be made to 1 part in 12,000, which is pretty good going for Ham work. By taking a large number of measurements a reliable Standard Deviation for the measurements will be available and that should be a good indicator to the Effect.
Doing this Measurement in the Radio Spectrum might prove more difficult, but well within the capabilities of a Ham station and the enginuity of the operator.

> So at equinox to an observer on the equator in the middle of an ocean does
the sun appear to be up for measurably longer than 12 hours?

Look at The Nautical Almanac, full details are given for all seasons.
Look at the figures for civil sunrise and sunset even these will be a good indicator of your local conditions.
Why not go to one of the poles in its Summer time and the Sun will never Set :)

> I have heard the seasonal sun interference with satellite dishes for
network radio broadcasts.
> I think that at maximum they last a good bit longer than 4 minutes.
That is only two optical diameters. the Radio diameter of the Sun is more than the Optical and the Sun Noise does not cut off suddenly, but tails off on a gradient.
Add to that the beamwidth of your receiving antenna and you will be up for a time equal to

Apparent angular radio diameter of the sun time 2 plus the beamwidth of your
receiving dish divided 15 seconds per minute.
Say 1 degree + 15 degrees / .25 = 48 Minutes minimum
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

3945. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 12:07:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97ipi8$ii9$1@plutonium.btinternet.com>
Source record: 169568

The time taken for the sun to set greatly depends in the lattitude
of the observer. On the equator the sun takes the shortest possible
time to set. On the arctic circle at some times of the year the sun
does not set at all - it just runs all the way round the horizon.

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Roger Halstead <rdhalste@tm.net> wrote in message
news:E01n6.97$mI.12177@newshog.newsread.com...
>
> "Denver Braughler" <Braughler@bwcc.com> wrote in message
> news:3A9C560E.FDAB1585@bwcc.com...
> > Richard Harrison wrote:
> > > I did not know so I looked in ARRL books for moonbounce
because the sun
> > > and moon obviously fill [about] the same angle as we know
from eclipses.
> > That's why I mentioned the moon too.
> > But the sun actually fills a larger angle since solar
prominences can
> extend for millions of miles above the surface and no doubt are
hot emitters
> of RF.
> >
> The sun and moon both have the same sustended angle of 1/2
degree.
>
> However as the earth's orbit around the sun is not circular, nor
is the
> moons orbit around the earth, their sustended angles do vary.
Hence the
> reason for sometimes getting a total eclips (sun or moon) and
other times an
> eclipsed sun shows a full ring around the moon.
>
> > It would be a simple matter to time the ending of a sunset.
> > For as many as I have watched, I have no specific sense of how
long they
> take.

> > 2 minutes seems reasonable.
>
> Just remember that there is a good deal of diffraction taking
place at
> sunrise and sunset.
> How much this would affect the time from limb to limb? I don't
know.
>
> Roger (K8RI)
>
>
>

3946. apartment dwellers indoor antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 12:17:18 UTC
From: jack beltz <blues38@inwave.com>
Message-ID: <Zrgn6.3581$7e6.1426515@homer.alpha.net>
Source record: 169414

live on the first floor of an apartment.no outside antennas.
what to do for hf.80-10 meters?
thanks jack

3947. Re: ISO Exide 1300EX Inverter Service Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 13:04:35 UTC
From: "Spotillius Maximus aka \"Spot\"" <*****@ix.netcom.com>
Message-ID: <97isrv$6jj$1@slb3.atl.mindspring.net>
Source record: 169369
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.shortwave

In all honesty, you will probably never find a service manual for that piece
of equipment. The manufacturer doesn't want the public to have them. I'm
going through the crap with APC. Good luck.

Spot

"Donald E. Smith" <desmith@innercite.com> wrote in message
news:3A9A4128.80FFB5B8@innercite.com...
> > I am in need of a service manual for my Exide Model 1300EX Inverter.
> > It
> > burned out a number of Transistors and parts. Trying to get the shack
> > ready for California's outages. Will accept original or clear copy.
> > Gladly pay any reasonable costs. Thanks Don Smith KB6GQA
> >
>
> Still trying to locate a service manual. Exide sold the Charger line
> three years ago to Midtronics. Midtronics state they never got the
> Inverter line. Referred to Prestolite Wireless without success also.
> The company will not support their equipment so I must turn to
> Newsgroups for help. Might anybody out there help me? Please reply to
> my email address. Thanks Don smith
>
> >
> >
>
>
>
>

3948. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 13:47:47 UTC
From: k4ia@aol.com
Message-ID: <20010228084747.12865.00000395@ng-co1.aol.com>
Source record: 169370

I had a Cushcrap R7000 that blew up and I now have a GAP Titan. It is pretty decent but is long and top heavy so plan on guying it. There is no matching network, no traps, no radials. It peforms at least as well as the R7000 and a lot more reliably. However, I have become a convert to ladder line fed dipoles. My 82 foot long 160 mtrs dipole (shortened with coils) is fed through a tuner on 160-10 meters. It works great. Far less noise than the vertical - a lot cheaper - a lot easier.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3949. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 14:02:16 UTC
From: Peter Eisler <peter.eisler@lottery.co.at>
Message-ID: <lx7n6.52$Gs3.2848@nreader1.kpnqwest.net>
Source record: 169371
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hi!

My R5 came down last week because of high winds, broken at the antenna-foot.
I will never by an antenna again with the centrte of gravity at the top.
I want to by a titanex HP5. There are no traps and it has an element for
each of the five bands.
Maybe this is a good solution for cushcraft victims.
Has anybody experience with this type of antenna ?

73 OE1PEW

Delbert McCord <dmccord@usol.com> schrieb in im Newsbeitrag:
3a9c9114.1070151@news.usol.com...
> I saw this still being quoted and I noticed that the follow up I had
> posted is not being included in these quotes.
>
> After a few days of back and forth and after having Cushcraft send me
> back my original Matching network I did get a call from the Tech and
> he said I was shipped the wrong box. He then sent me a New Matching
> network and I installed it. It did the trick and the antenna is
> working fine (Over 3 months later).
>
> 1) I think the entire problem was caused by poor quality control, also
> the circuit board on the new matching network seems to be made out of
> a different material.
> 2) I understand that I could have made my own Vertical but I did not
> want to take the time and I wanted the best performance I could get.
> So I paid my 400$ to have a product that should have been trouble
> free.
> 3) I am in the market for a second Vertical (For our Cabin) I must say
> that even though the R8 Performs very well I am not going to purchased
> another one. I am looking at The Gap Verticals and the Butternet
> Verticals. I still have not figured out if the Betternet uses a
> Matching Network like the Cushcraft.
>
> Delbert McCord
> KA8OCN
>
>
>
> >Delbert McCord wrote:
> >>
> >> I have a R8 that is less than 6 months old and I am having problems
> >> witht he antenna also. It was working Great and then all of a sudden

> >> its like having a dummy load on the end of the coax!
> >>
> >> I checked the coax (Which is also new) and Its not shorted and gives
> >> me a perfect SWR when I connect a dummy load out there on the end of
> >> the coax. Cushcraft (After a bunch of phone tag) had me send them the
> >> matching box back to them, they tested it and returned it saying its
> >> fine. I used to get better than a 2 on every band with out my tuner
> >> now I get over a 8 swr and I can receive better if I connect the coax
> >> to my dogs collar!
> >>
> >> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
> >> ever get from me!
> >>
> >> Worked great, Looks Great, Does not last
> >> I can not afford almost 100$ a month for an antenna!
> >>
> >> Delbert McCord
> >> KA8OCN
> >>
>

3950. Followup on ATAS antenna for apartment use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 14:20:38 UTC
From: gpewitt@execpc.com
Message-ID: <3a9d0a54$0$46010$272ea4a1@news.execpc.com>
Source record: 169372

OK, here is my progress report.
I put the 80 and 40 meter Isotrons together last week and did the initial tuning with an MFJ-259B. Pretty easy to do with a short co-ax jumper I could make adjustments from my chair. I should mention that the antennas are mounted back to back on a 5 foot mast section held by a roof top tripod and standing in my dining room. I adjusted each antenna before connecting the co-ax tee and the cable to my transceiver (FT-847). I was able to adjust my MFJ antenna tuner on 40 without much trouble and made several contacts in Europe. According to the meters in the transceiver and the tuner I was getting full output. I could not seem to tune the 80 meter band though. This weekend I set up the 20/15/10 meter antennas on another mast and tripod. These have twinlead jumpers connecting all three and the co-ax feeds the 15 meter antenna. After tuning them seperatly with the 259 I finished hooking them up and tried to find the "sweet spots" on each band. Not much luck. I finally got smart and hooked the 259 up -through- the tuner. I set the center frequency of each band on the 259 and adjusted the tuner for the lowest swr. I got under 2:1 on each band and wrote the settings down for quick reference. No wonder I couldn't find the setting for 80 meters without the 259! It's -very- narrow. But I get 1.1:1 when properly tuned in. Since I found the settings I have been able to tune by ear on the receiver noise when changing frequencies. So, using the antenna switch on the tuner to select which antenna stack I'm using and tweeking the tuner for best swr I am able to work on 80, 40, 20, 15, and 10 meters. I have a 6 meter halo that will go up soon and a Cushcraft AR-270 for 2 meters and 440. I did have to buy a duplexer for that one. I was able to complete a schedule with my friend Ron WA9QNN in Grantsburg for the first time (on 40 meters) this weekend.
The Isotrons have tuning stubbs or counterpoises built in and require no ground to work. Good thing as I am living in a second floor condo with no outside antennas allowed.
Am I happy with the Isotrons? You bet. I might even get the 160 meter and the 30, 17, and 12. That might cause a problem though as the 30 meter is meant to go on with the 80 meter instead of the 40. The 17 and 12 are very similar to the 20 and 10. If the 80 is so narrow I'll bet the 160 is super narrow. You have to expect that trying to use such small antennas on the low bands but it does work.
Well that's all for now. 73 Gary N9ZSV

On Wed, 21 Feb 2001 22:21:11 -0500, ik7565@erols.com wrote:

>Post some reports on your Isotrons! I'm antenna-challenged also and
>looking for alternatives.
>

>73 de N8IK
>
>
>Gary Pewitt wrote:
>>
>> Well, I got the ATAS-100 and it worked for about two days then it
>> stopped tuning. I took it back and exchanged it for two Isotron
>> combinations. 80/40 meter and 20/15/10 meter. They are
>> mounted on two 5 foot masts supported by rooftop type tripods.
>> Currently standing in my living room. Works well with a tuner.
>> Sure glad I got that MFJ-259 analyzer to set them up with.
>> I hope to transfer them to my second floor balcony when the
>> weather warms up a bit. Live and learn. 73 Gary
>>
>> On Thu, 25 Jan 2001 17:16:50 GMT, gpewitt@execpc.com (Gary Pewitt)
>> wrote:
>>
>> >Does anyone have experiance with the Yaesu ATAS100 antenna. It looks
>> >to be a version of the screwdriver. I am planning to buy a Yaesu
>> >FT-847 soon and this antenna is listed as an accessory. It's supposed
>> >to cover 160 meters to 440 mhz. That's asking a -lot- from one
>> >antenna. It's supposed to auto tune too I believe. If it works like
>> >a screwdriver and becomes resonent on each band then it won't need an
>> >antenna tunner right? I live in a condo and am thinking of cutting a
>> >small hole in the ceiling of a closet and poking the antenna up into
>> >the attic. I am not allowed any outdoor antennas at all. I've heard
>> >nothing but good things about the screwdriver antennas but the ones
>> >I've seen info on only cover 80 to 10 meters.
>> >Any information greatly appreciated. Thanks Gary N9ZSV
>> >
>> >Gary Pewitt N9ZSV
>> >414 355 8147
>>
>> Gary Pewitt N9ZSV
>> 414 355 8147

Gary Pewitt N9ZSV
414 355 8147

3951. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 14:43:07 UTC
From: jflanders2@home.com
Message-ID: <3a9d0b02.73092885@news>
Source record: 169373
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Info on the Butternut antennas is at:

http://www.bencher.com/ant_select.html

Very good writeups, including their manuals in PDF format.

I use a HF6V Butternut as backup for my tree-mounted dipoles. This ground-mounted HF6V is now 20 years old, never been guyed. It needed minor maintenance on some plastic insulators last year.

There is no "matching network", but there is a short section of 75 ohm coax used to transform 20 meter feed impedance down to 50 ohms. The various components of the HF6V look pretty rugged, and Butternut even rates it for the full 2KW. I have fed mine with 500 - 600 watts RTTY years ago with no problems.

Jerry W4UK

On Wed, 28 Feb 2001 06:09:21 GMT, dmccord@usol.com (Delbert McCord) wrote:

>SNIP
>3) I am in the market for a second Vertical (For our Cabin) I must say
>that even though the R8 Performs very well I am not going to purchased
>another one. I am looking at The Gap Verticals and the Butternet
>Verticals. I still have not figured out if the Betternet uses a
>Matching Network like the Cushcraft.
>
>Delbert McCord
>KA8OCN
>
>
>SNIP

3952. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 15:22:06 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3A9D179E.2F0ECE20@iquest.net>
Source record: 169374

I've got some of the DK9SQ masts as well and MANY other items I've made use of over tehe decades. The 10 mtr DK9SQ is a reasonably good choice in the $100 class. One word of caution - it can break. The units are noted as being nearly unbreakable, but I've suffered losses repeatedly of the two smallest sections. A cure for one of the causes is rather simple and only requires installing a plug in the third section which prevents the upper two from falling into the base section. This will prevent the possiblity of snapping these two upper sections while retracting the remaining sections. Most simple fishing poles have a plug installed as mentioned. Too bad a hundred dollar pole doesn't include this ten cent item.

If bent sharply with a light 22 gauge wire these top sections can snap also. Use care when stringing a dipole or other wire with this pole being your sole center support.

If you can live with less than the 10 meter (33') height try a South Bend or Black Widow fishing poles which may be purchased from 6 feet to 20 feet in length for $7 - $20. You will also find extention paint/window cleaning poles at most major hardware stores. These can be fiberglas, aluminum, or a combination. Design accordingly.

Bests,

Patrick
W9GTA

Dwight Stewart wrote:
>
> David Snyder Hale wrote:
>
> > I've found various sources for telescoping
> > masts. One can of course buy these meant
> > for antennas but they are usually too big
> > for backpacking. There are telescoping
> > fishing poles and telescoping wind-sock
> > supports. Both are lightweight and tall,
> > but don't collapse small enough for my
> > taste (4ft). [snip]
>
> The VERY best portable telescoping mast I've found are those aluminum
> telescoping masts used by professional window washers. These can be
> purchased from most hardware stores (or office supply stores) and can be
> found in lengths up to about 60 feet.
>
> I have a 19 foot one that telescopes down to about 4.3 feet, and weighs

> almost nothing. With a rubber cap (for chair leg) over the large end, it
> also makes a nice walking stick.
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net

3953. One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 15:47:03 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3A9D1D77.7649BBC6@iquest.net>
Source record: 169375

I failed to mention that if your goal is to pack away the mast instead
of using as a 'walking stick' yoou may want to consider one of the many
fishing poles the retract to a foot or so in length. Check here for
such: http://www.cabelas.com

Other outlets offer like items. The smaller and stronger the pole the
higher the cost. Cabela's house brands go for around $20 at the 12'
length.

Bests,

Patrick Croft
W9GTA

Dwight Stewart wrote:
>
> David Snyder Hale wrote:
>
> > I've found various sources for telescoping
> > masts. One can of course buy these meant
> > for antennas but they are usually too big
> > for backpacking. There are telescoping
> > fishing poles and telescoping wind-sock
> > supports. Both are lightweight and tall,
> > but don't collapse small enough for my
> > taste (4ft). [snip]
>
> The VERY best portable telescoping mast I've found are those aluminum
> telescoping masts used by professional window washers. These can be
> purchased from most hardware stores (or office supply stores) and can be
> found in lengths up to about 60 feet.
>
> I have a 19 foot one that telescopes down to about 4.3 feet, and weighs
> almost nothing. With a rubber cap (for chair leg) over the large end, it
> also makes a nice walking stick.
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net

3954. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 15:53:05 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <AkzSzDAh7Rn6Ewbr@pickmere.demon.co.uk>
Source record: 169387

In article <97inng$t7l$3@lure.pipex.net>, Gary Peach
<xcg34@dial.pipex.com> writes
>
>"M.J.Powell" wrote ...
>.iap.bryant.
>> Richard Harrison <richardharrison@webtv.net> writes
>> >Denver Braughter wrote:
>> >"How many degrees of arc does the sun fill?"
>
>It is interesting that both Sun and moon subtend the same Half degree angle
>when viewed fromn the Earth's surface, despite the fact that one is 96
>million miles distant and the other a mere 250,000 miles. Looks like some
>Newtonian physics acting here.
>
>> >I did not know so I looked in ARRL books for moonbounce because the sun
>> >and moon obviously fill the same angle as we know from eclipses. I found
>> >no answer.
>> >
>> >Then I looked in the RSGB VHF-UHF Manual and there it was on page 9.12.
>> >The answer is 1/2 degree.
>>
>> Sun and moon move their own diameter in 2 minutes - useful.
>
>Actuall they don't the Moon takes 27 days approximately so it move in it's
>orbit 360/27 = 13.3 degrees per day to orbit the Earth.
>
>The Earth rotaes 360 degrees in 24 hours or 15 degrees per hour or 1 degree
>every 4 minutes. Hence the majority of the apperent movement of the Moon or
>Sun is due to the Rotation of the Earth.
>Note what time the moon sets today and then again note when it sets
>tomorrow, This is a measure of how much the Moon has shifted in it's Orbit.
>The actual orbital position of the moon is quite difficult to calculate and
>it is affacted by external influences such as the gravitational effects of
>Jupiter. In fact the Bessel Function Tables that we use for some Radio Wave
>application were first calculated in order to predict the position of the
>Moon.

Dear oh dear, Gary. It was only a rule-of-thumb.

Mike
--
M.J.Powell

3955. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 15:53:07 UTC
From: richardharrison@webtv.net
Message-ID: <25857-3A9D1EE3-6@storefull-114.iap.bryant.webtv.net>
Source record: 169379

Pete, KA0TZK wrote:
"I am often hiking in the country where there are few if any trees so I`ll have to carry all the supporting stuff myself."

The military are expert in improvised antennas. Their choice for ease and performance is the end-fed half-wave.

The length in feet is 468 divided by the frequency in MHz. The ground counterpoise or connection is a "crow-foot" of (8) 25-foot radials.

The military anticipate a sloping wire of 30-ft. elevation down to about 4 feet at the radio set. Their antenna tuners are designed for such an antenna. Trees are possible supports for such an antenna. Insulated extensions of the wire are used for contact with the supports. If both ends of the wire can be elevated to 30 feet or more, so much the better. If trees are not available, a pole or poles are recommended.

For multiband operation, the antenna is broken with insulators. These can all be jumpered for operation at the lowest frequency. Jumpers are removed to permit resonance at higher frequencies.

The military also have a support kit for half-rhombic antennas. The kit includes the wire, insulators, a balloon, hydrogen cylinders, a kite, and other apparatus. It`s too much to back pack unless you are a soldier.

The military have a less onerous suggestion:
"An unterminated end-fed horizontal wire one wavelength long and a few feet off the ground will produce a vertically polarized ground wave in line with the wire, which has materially higher intensity than that from a short whip. This assumes that the wire is fed as described for end-fed half-wave antennas (par.663). The horizontal radiation pattern for ground waves is like a figure 8, the two maxima being in the forward and backward directions of the wire, with the field at 30 degrees from these directions only slightly reduced. This antenna can be used over ground of high or average resistivity, but not over sea water or salt marsh."

This is a type of Beverage antenna which The war Department recommends as a transmitting antenna in several places in their Engineering Handbook. They recommend higher elevations than are often used with Beverage antennas, such as 15 or more feet. But they also say the wire can be placed directly on the ground if necessary, but the efficiency suffers. Thery say that the antenna is as good as a 1/4-wave vertical if their high elevation is used and given the best conditions for the Beverage.

Best regards, Richard Harrison, KB5WZI

3956. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 16:44:03 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <OV9n6.526$Gd5.298020@news3.mia>
Source record: 169377

Well, note that I specified that the question was proposed as part of a job interview. It was less a challenge to design (engineer) the circuit than to understand the underlying physical principles involved. To understand where the energy went requires that you can suggest the various forms energy may take as it goes anywhere.

As I interpreted the question the stipulation that the circuitry was lossless suggested, to me, that there was no loss due to heat. Ruling out that obvious answer led to a discussion, with the interviewer, of other candidate forms of energy. I'll add a few additional facts.

My degree is in physics. My education is not in engineering. The interviewer knew that.

The company was a moderately high tech engineering organization.

The circuit describes the underlying principle for one of the companies' products.

The discussion accompanying the challenge was focused on the statics of the circuitry. Transient or dynamic behavior was not an issue.

Now you know as much as the interviewer and I did at the time of the interview. The answer should be nearly obvious. So, where did the energy go?

regards,

Bill Manley

"Bill Manley" <b_manley@bellsouth.net> wrote in message
news:BO8m6.9560$4f.19625920@news1.mia...
> Noting the interest in the "Warner was right .." and "question on theory"
> threads the group might enjoy entertaining the following question which
was
> offered to me in a job interview many years ago.
>
> Given two equal capacitors (C1 and C2) arranged in parallel but separated
by
> a normally open switch. With the switch open C1 is charged to voltage
(V).
> C2 has no charge. Also given is that all circuitry is lossless. Then the
> switch is closed.
>
> Before the closure note that the energy in the circuit is
>
> Ebefore = C1 * (V^2) / 2 + 0

>
> After the switch is closed, the charge Q is equally shared by both
> capacitors. The voltage on each capacitor is now V/2.
>
> Now the total energy is
>
> Eafter = C1 * (V^2) / 4
>
> Where did the energy go?
>
> (BTW, I did get the job)
>
> regards,
>
> Bill Manley KB4XE
>
>

3957. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 16:45:11 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A9D2B17.CF1714F0@zylay.com>
Source record: 169376

I wouldn't worry about carrying a mast. A wrist rocket and some 50-lb monofilament line is a lot easier to carry, and unless you're in Antarctica (or some other desert), there's usualy something to shoot a line into. WIth the 50-lb line, you can use the same line to pull your antenna up as you shot into the tree.

Patrick Croft wrote:
>
> I failed to mention that if your goal is to pack away the mast instead
> of using as a 'walking stick' yoou may want to consider one of the many
> fishing poles the retract to a foot or so in length. Check here for
> such: http://www.cabelas.com
>
> Other outlets offer like items. The smaller and stronger the pole the
> higher the cost. Cabela's house brands go for around $20 at the 12'
> length.
>
> Bests,
>
> Patrick Croft
> W9GTA
>
> Dwight Stewart wrote:
> >
> > David Snyder Hale wrote:
> >
> > > I've found various sources for telescoping
> > > masts. One can of course buy these meant
> > > for antennas but they are usually too big
> > > for backpacking. There are telescoping
> > > fishing poles and telescoping wind-sock
> > > supports. Both are lightweight and tall,
> > > but don't collapse small enough for my
> > > taste (4ft). [snip]
> >
> > The VERY best portable telescoping mast I've found are those aluminum
> > telescoping masts used by professional window washers. These can be
> > purchased from most hardware stores (or office supply stores) and can be
> > found in lengths up to about 60 feet.
> >
> > I have a 19 foot one that telescopes down to about 4.3 feet, and weighs
> > almost nothing. With a rubber cap (for chair leg) over the large end, it
> > also makes a nice walking stick.
> >

> > Dwight Stewart (W5NET)
> >
> > http://www.qsl.net/w5net

3958. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 17:08:59 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3A9D30AB.D41D5089@zylay.com>
Source record: 169378

Gene wrote:
>
> I wouldn't worry about carrying a mast. A wrist rocket and some 50-lb
> monofilament line is a lot easier to carry, and unless you're in
> Antarctica (or some other desert), there's usualy something to shoot a
> line into. WIth the 50-lb line, you can use the same line to pull your
> antenna up as you shot into the tree.

Just found the original message and saw that you say that you're
sometimes away from trees. Something like that would make me carefully
chose where I set up rather than carry a mast.

> Patrick Croft wrote:
> >
> > I failed to mention that if your goal is to pack away the mast instead
> > of using as a 'walking stick' yoou may want to consider one of the many
> > fishing poles the retract to a foot or so in length. Check here for
> > such: http://www.cabelas.com
> >
> > Other outlets offer like items. The smaller and stronger the pole the
> > higher the cost. Cabela's house brands go for around $20 at the 12'
> > length.
> >
> > Bests,
> >
> > Patrick Croft
> > W9GTA
> >
> > Dwight Stewart wrote:
> > >
> > > David Snyder Hale wrote:
> > >
> > > > I've found various sources for telescoping
> > > > masts. One can of course buy these meant
> > > > for antennas but they are usually too big
> > > > for backpacking. There are telescoping
> > > > fishing poles and telescoping wind-sock
> > > > supports. Both are lightweight and tall,
> > > > but don't collapse small enough for my
> > > > taste (4ft). [snip]
> > >
> > > The VERY best portable telescoping mast I've found are those aluminum
> > > telescoping masts used by professional window washers. These can be
> > > purchased from most hardware stores (or office supply stores) and can be
> > > found in lengths up to about 60 feet.

> > >
> > > I have a 19 foot one that telescopes down to about 4.3 feet, and weighs
> > > almost nothing. With a rubber cap (for chair leg) over the large end, it
> > > also makes a nice walking stick.
> > >
> > > Dwight Stewart (W5NET)
> > >
> > > http://www.qsl.net/w5net

3959. Re: Cushcraft warming

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 17:30:44 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <97jck4$s0m$1@news.hawaii.edu>
Source record: 169381
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Delbert McCord <dmccord@usol.com> wrote:
>It did the trick and the antenna is working fine (Over 3 months later).

but

>2) I understand that I could have made my own Vertical but I did not
>want to take the time and I wanted the best performance I could get.

It's ironic that we can make the time to wait but not to build. We're
quickly abandoning that most-important, self-learning principle of
our hobby. 73, Jeff KH6O

3960. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 17:44:57 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <tOan6.6799$rL4.547115@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169380

"Bill Manley" <b_manley@bellsouth.net> wrote in message
news:OV9n6.526$Gd5.298020@news3.mia...
> Well, note that I specified that the question was proposed as part of a
job
> interview. It was less a challenge to design (engineer) the circuit than
to
> understand the underlying physical principles involved. To understand
where
> the energy went requires that you can suggest the various forms energy may
> take as it goes anywhere.
>
> As I interpreted the question the stipulation that the circuitry was
> lossless suggested, to me, that there was no loss due to heat. Ruling out
> that obvious answer led to a discussion, with the interviewer, of other
> candidate forms of energy. I'll add a few additional facts.
>
> My degree is in physics. My education is not in engineering. The
> interviewer knew that.
>
> The company was a moderately high tech engineering organization.
>
> The circuit describes the underlying principle for one of the companies'
> products.
>
> The discussion accompanying the challenge was focused on the statics of
the
> circuitry. Transient or dynamic behavior was not an issue.
>
> Now you know as much as the interviewer and I did at the time of the
> interview. The answer should be nearly obvious. So, where did the
energy
> go?
>
> regards,
>
> Bill Manley

Hi Bill:

Given two equal value capacitors in series, both having a voltage V/2, I
would suggest you look at re-calcualting the total energy in the circuit
again. It is not: Eafter = C1 * (V^2) / 4. Eafter is not equal to
E1 + E2.

Steve

3961. Re: HF Antenna Survey

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 18:33:35 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <97jg8v$3oa$1@news.tribune.com>
Source record: 169383

I faced the same dilema a year ago.

Ended up with: 5 sets of 2 element monobanders, stacked 2 high.
Most people just call it a 2 element 5 band Quad. Having had it for a year,
I would not go back to a (compromise) multiband Yagi.

KA9CAR

Mark Roberts <marob@bellsouth.net> wrote in message
news:gveg9tk8qitpcetb6un20krer3hnrcvfc4@4ax.com...
> 4 years ago, I dropped my tower at the old QTH, and packed everything
> up to begin the transition to our new home. The new residence is
> complete, and I have finally gotten everything ready to raise the
> tower again. The old Mosley Pro-57 is still in the storage shed, but,
> since I always considered it the world's best vertical, I am looking
> for some opinions on multi-band beams. I am looking for the best 10-40
> beam, so all opinions will be appreciated.
> N4ROL

3962. 160 Meter Inverted "L" Advice Requested:

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 18:39:19 UTC
From: yardleyite@aol.com
Message-ID: <20010228133919.08604.00000226@ng-da1.aol.com>
Source record: 169382

I'd like to ask the antenna newsgroup a question about inverted L's. I would like to build one for 160 meters and have a few questions: Here is my situation:

I can go about 90-100 feet vertical, and just about an unlimited length horizontally. My property is surrounded by talls trees which I plan to hang the antenna from. I already have a 260' flat-top up at about 85' which is a good performer and I'm looking for something that will have a lower takeoff angle to work DX with. I run close to legal limit with my amplifiers. At best my flat-top in reality is a "cloudwarmer" with a takeoff angle of 90 degrees or so. I can't get the 125' height required for a full size 1/4 wave ground plane so I want to do the next best thing.
Here is my idea:

I would like to build an inverted - L and current feed it at the ground via a variable cap. The antenna would be about 90' vertical and either 96' horizontally (for a 3/8 wave antenna) or 170' horizontally (for a 1/2 wave). Since I'm feeding it essentially like a "Marconi" - except with variable reactance at the base, would it outperform my flat -top? Does anyone on the list have a simular configuration?
If so, how does it perform? How does it measure up to a flat - top if you have one as a reference antenna?

I could also elevate the feedpoint to the apex of the vertical and run it against a ground but I don't see any advantage to doing it that way. In either situation I have a large body of salt water that runs directly through my property and I already have four ground rods buried directly in there. I have a 1/4 wave vertical for 75M (61.5') with elevated radials that is a descent performer. I plan to tie the 160M "L" radial system into that.

Any advice will be greatly appreciated. Thanks for reading this post and 73.

Joe Cro N3IBX

3963. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 18:58:29 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <97ji21$i4a$1@newpoisson.nosc.mil>
Source record: 169384

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A9515F7.D175E3AD@IEEE.org...
Lots of hams buy something expensive and it turns out bad. The necessary
ground plane for a vertical is more effort and expense than a $20 dipole
which may outperform it. Why not try the $20 dipole first?
> SNIP <

Ah, Cecil, once again we find ourselves reading the "dipole may be better
than the vertical" trilogy - or is it octallogy by now? Perhaps the fella
is limited in horizontal-hanging space and sees a vertical as the only way
to go - let's get the requirements nailed down before we start pushing that
tired "vertical, yuk, dipole, YES!" axiom, please. AND, most importantly,
how do you justify the "ground plane for a vertical is more expense and
effort than a dipole" statement? Even you commented favorably on my
multi-band "roll your own" ground plane with low swr and a mere 20 radials.
I'll admit it cost more than $25 (I believe I ended up with $65 in total
cost but I believe that could be reduced significantly with some astute
capacitor shopping) but then it met my horizontally-challenged situation and
got me 212 DXCC confirmed in about 18 months - which was one of the
requirements as well.

P.S. I love cracking on folks that dis the vertical by promoting the
dipole - apples and oranges, in many cases, once the requirements and
expectations are sorted out.

Regards, Jim R.

3964. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:15:03 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <97jj12icu1@newpoisson.nosc.mil>
Source record: 169388

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A588B3F.8D748EFB@IEEE.org...
Hmm... doesn't look like an F-150, maybe a Ram? What?

> GMC, the most electrically noiseless vehicle I have ever owned.>

Cecil: friends don't let friends drive GMC products! It's a Ford F-250
with the Power Stroke Diesel or nothing!

Regards, Jim R.

3965. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:15:57 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9D4E6D.A956CD46@IEEE.org>
Source record: 169386

Jim Rodenkirch wrote:
> Ah, Cecil, once again we find ourselves reading the "dipole may be better
> than the vertical" trilogy - or is it octallogy by now? Perhaps the fella
> is limited in horizontal-hanging space and sees a vertical as the only way
> to go - let's get the requirements nailed down before we start pushing that
> tired "vertical, yuk, dipole, YES!" axiom, please.

I was pushing economy, not performance. If the performance of a $20 dipole
is satisfactory, stick with it. If its performance is not satisfactory,
then spend some more money for something else. "Why not try the $20
dipole first?" didn't seem very pushy to me.

> AND, most importantly,
> how do you justify the "ground plane for a vertical is more expense and
> effort than a dipole" statement?

Last time I calculated the parameters, 1/2WL of wire cost less than 20
1/4WLs of wire. :-) Besides the cost of the vertical, one doesn't get
very good performance out of 1/2WL of ground plane wire. But one gets
pretty good performance out of 1/2WL of dipole. :-)
--
http://www.mindspring.com/~w6rca

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-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3966. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:24:11 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3A9D505B.E04E2E79@mwci.net>
Source record: 169385

Bill Manley wrote:

> Now you know as much as the interviewer and I did at the time of the
> interview. The answer should be nearly obvious. So, where did the energy
> go?
>

The basic problem is that a capacitor cannot change its voltage instantaneously. This difficulty is handled in this problem by the introduction of the Dirac function at the moment of switch closure. This function has a very small time duration and a very large amplitude, a "spike" in time. The missing energy is contained within that spike. If we take the Fourier transform of this spike we get a very wideband RF spectrum of coherent radiation for a very brief time. This solution assumes zero inductance and zero resistance in the loop, which is how the problem was stated.

This solution is affirmed by solving the differential equation, using the LaPlace transform method.

Bill W0IYH

3967. Watkins Johnson HF 1000 for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:43:06 UTC
From: raider@tiscalinet.it
Message-ID: <011b01c0a1be$8e41f7c0$4d0314ac@ansa.priv>
Source record: 169389
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.digital.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.audio.tubes,es.rec.radio.ondacorta,es.rec.radio.misc,es.rec.radio.amateur

I am selling a WJ HF 1000 HF receiver.

The receiver is in good condition and complete of suboctave preselector and operating manual.

Since i live in Rome (Italy) interested buyers are requested to pay this item upon delivery directly to a major express mail service (DHL,TNT FedEx or other) together with shipping charges.

Price is about 2500 US $

If interested contact me via email for further details.

Stefano

raider@tiscalinet.it

3968. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:43:51 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <97jkncipq1@newpoisson.nosc.mil>
Source record: 169392

Steve: having served on 4 Navy destroyers during my 21 years in the "Bloody Navy" as an Electronics Technician, I found your post informative. However, your statement, "The choice of upper operating frequency (6 or 8 MHz) is based on the configuration of the HF transceivers used to cover the 2.0 - 30.0 MHz frequency band" may not be entirely accurate. The HF transmitters I remember being connected to the HF fan antennas (principally SRC-16 variations) were operable in the 2 - 30 MHZ range. It was the antenna couplers for the transmitters that dictated which fan they were connected to. The three coupler ranges were, to the best of my recollection, always 2 - 6, 4- 12, and 10 to 30 MHZ. Modern day Spruance/Aegis destroyers and force level ships (e.g., CV/CVN/LHA/LHD) employ a HF system similar to the SRC-16 (I can't remember the Spruance model number) but some Aegis and force level utilize a URC-109 (Canadian model) or a Harris version.

An aside note: The HF transmitters or transceivers that I've worked with, from WRT-2s through URC-32s in the early years (1960 through 1970s) through the modern day URT-23 had an antenna (often 30 foot verticals) specifically "designated"; meaning that xmtr's antenna coupler was located at the base of a specific antenna. However, patch panels were employed where one could switch a transmitter's output around; so that, if a coupler or transmitter went wheels up, you could patch around that defective unit although operating the tuner of one with the transmitter of another could be a challenge.

How'd I do? It's been a while since I've been back aboard a ship to mess with the HF systems - sure brings back fond memories, believe me.

Regards, Jim R.

"VE9SRB" <srbest@att.net> wrote in message
news:zzcj6.9813$X61.710915@bgtnsc04-news.ops.worldnet.att.net...
As a general overview, HF fan antennas installed on Naval ships are generally designed to operate untuned from 2.0 - 6.0 MHz or 2.0 - 8.0 MHz (maybe 10 MHz in some cases) with a maximum SWR of 3.0:1 over the band. Many of the installed fans will have a maximum SWR up to 4.0:1. The choice of upper operating frequency (6 or 8 MHz) is based on the configuration of the HF transceivers used to cover the 2.0 - 30.0 MHz frequency band. Older US Navy transceiver configurations had the HF band segmented into three smaller bands: 2 - 6 MHz, 4 - 12 MHz and 10 - 30 MHz. You will note some frequency overlap. Recent installations segment the bands differently as the transceiver systems are designed to be more broadband.

The HF fan antenna is typically constructed using two fan sections each made with three or four phosphor bronze insulated wires. Each end of the fan is insulated from the ship using delrin insulators. The fans are typically suspended from a main-mast yardarm to a deck level. The fan feedpoint will

be located somewhere on the mast near the upper end of the fan. The fan wires will be connected to a single or dual feedpoint. A broadband matching network comprised of high-voltage vacuum capacitors and lowloss inductors
(sometimes wound using CU refrigerator tubing) will be used to provide the impedance match.

The fan antenna itself is really designed to couple energy to and from the metal structure of the ship and its yardarms. At lower HF frequencies the fan essentially induces currents in the ship's superstructure so the entire ship functions as the "antenna". Integration of the fan into the ship's superstructure is important and that's why many of these antennas are (were) designed using 1/48th scale brass ship models (1/50th scale for metric).

> If you have any specific questions, I would be happy to help.
>
> Steve - VE9SRB
>
>
>

3969. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:52:54 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <qGcn6.6258$mX4.523877@bgtnsc06-news.ops.worldnet.att.net>
Source record: 169390

"VE9SRB" <srbest@att.net> wrote in message
news:tOan6.6799$rL4.547115@bgtnsc04-news.ops.worldnet.att.net...
>
>
> Hi Bill:
>
> Given two equal value capacitors in series, both having a voltage V/2, I
> would suggest you look at re-calcualting the total energy in the circuit
> again. It is not: Eafter = C1 * (V^2) / 4. Eafter is not equal
to
> E1 + E2.
>
> Steve
>

No, I am not replying to myself -

Looking at the problem outside my previous perspective, the statements above are incorrect. If two circuit elements have individual energies E1 and E2, the total energy in the circuit will be E1 + E2. Same as power dissipation - if the power dissipation in one element is P1 and the power dissipation in the other is P2, the total power dissipation must be P1 + P2. Not sure what I was thinking there.

Steve

3970. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 19:56:34 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <97jletiuf1@newpoisson.nosc.mil>
Source record: 169391

I opted to reply/climb in here, Cecil, simply because I continue to see the "dipole better than a vertical" argument or position when that may be or remain a moot point IF his requirements or limitations dictate a vertical vs a dipole (the ol' horizontally-challenged symdrome again).

Also, what performance are we talking about here? Working "good" DX (e.g., FR, VK0, or DS/HS from South Carolina) on 40 meters? I'll take the vertical any time over a dipole. Again, my friend, what are the requirements?

Regards, Jim R. Oh, go Ford trucks and Power Stroke engines!

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3A9D4E6D.A956CD46@IEEE.org...
> Jim Rodenkirch wrote:
> > Ah, Cecil, once again we find ourselves reading the "dipole may be better
> > than the vertical" trilogy - or is it octallogy by now? Perhaps the fella
> > is limited in horizontal-hanging space and sees a vertical as the only way
> > to go - let's get the requirements nailed down before we start pushing that
> > tired "vertical, yuk, dipole, YES!" axiom, please.
>
> I was pushing economy, not performance. If the performance of a $20 dipole
> is satisfactory, stick with it. If its performance is not satisfactory,
> *then* spend some more money for something else. "Why not try the $20
> dipole first?" didn't seem very pushy to me.
>
> > AND, most importantly,
> > how do you justify the "ground plane for a vertical is more expense and
> > effort than a dipole" statement?
>
> Last time I calculated the parameters, 1/2WL of wire cost less than 20
> 1/4WLs of wire. :-) Besides the cost of the vertical, one doesn't get
> very good performance out of 1/2WL of ground plane wire. But one gets
> pretty good performance out of 1/2WL of dipole. :-)
> --
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>
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3971. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:04:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9D59DB.6A84306A@IEEE.org>
Source record: 169393

Jim Rodenkirch wrote:
> Also, what performance are we talking about here? Working "good" DX (e.g.,
> FR, VK0, or DS/HS from South Carolina) on 40 meters? I'll take the vertical
> any time over a dipole. Again, my friend, what are the requirements?

The requirements are that it costs $20. :-)
--
http://www.mindspring.com/~w6rca

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3972. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:13:01 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9d5e7a$0$30003$44a10c7e@news.net-link.net>
Source record: 169396

Don't you need to guy this mast? Isn't it pretty flimsy without guys? Will it support 14ga wire inverted L without guys? what about using 2 guys and the L leg as the 3rd guy? Will it then bow in the middle thus needing additional guys?

Something tells me to forgo the extra weight of a big mast and just take along a light fishing pole for fishing and use wire antennas. Perhaps a small auto coupler for end fed wire over radials and just toss wire up a tree.
Mike wrote in message <3A9C98E8.17A0180B@pacbell.net>...
>The VERY VERY best portable telescopic antenna mast I've found is the
>DK9SQ 33ft long fiberglass mast. This thing is designed as an antenna
>mast and nothing beats it for strength, length and weight. Do a search
>on DK9SQ and find the web site or find someone who has used one who will
>then convince you.
>

3973. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:14:12 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97jm6k$s0i$1@agate.berkeley.edu>
Source record: 169394

Patrick Croft <mai@iquest.net> wrote:
> fishing poles the retract to a foot or so in length. Check here for
> such: http://www.cabelas.com

This is sorta interesting looking... I just went to cabelas.com and
found a telescoping push pole (not a fishing rod) ITEM: XA-22-0080
which is made from aluminum and telescopes from 6.5 inches to 12 feet!

Now, that might make a nice 40m loaded vertical right there, don'cha
think? (I'm also looking for very compact antenna ideas, both for
backpacking and for taking to the beach, where there clearly are no trees.)

Could one just add some sort of end loading coil, radials, and then feed
this Al mast itself as the radiator?

73,
--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3974. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:21:23 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97jmk3$s0i$2@agate.berkeley.edu>
Source record: 169395

ARDUJENSKI <ardujenski@aol.com> wrote:
> Cabelas is selling a backpackable fishpole that is 14ft and closes to just 15
> inches. The St. Louis QUICKY will work nicely on this (about 11 ft) or setting

What is the "St. Louis QUICKY"?

Have you seen this one at cabelas.com?.... ITEM: XA-22-0080
It is an aluminum telescoping push pole,
which telescopes from 6.5 inches to 12 feet!

I was thinking that one could make a loading coil on PVC form
or something, then slip it around the base of this push pole
where the pole itself becomes the radiating element.

I don't know how to design stuff like this though.
What do you think?

How would you determine efficiency? (You mentioned yours was 50% eff on 20m)
I'd like to build something like this for 40m, perhaps tunable on 20m too.

73,
--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

3975. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:24:45 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9d5e7b$0$30003$44a10c7e@news.net-link.net>
Source record: 169397

I would not use 50lb mono line to shoot into the trees because you can't break it or pull the knot out when you get hung up (you will get hung up). I like about 12 to 20 lb mono--the high vis yellow works good--then I tie on my support line--high vis orange or green/yellow 150lb test nylon planer board line. I use a small 1 to 2 oz tear drop sinker and a wrist rocket sling shot, depending on how far you need to shoot it. Keep the lines on factory spool and lay on ground. Shot from opposite of where you want to hall your antenna up. This way you don't have to cut any line and have plenty of mono for when you tangle it (you will tangle it and they don't sell it in the bush).
Gene wrote in message <3A9D2B17.CF1714F0@zylay.com>...
>I wouldn't worry about carrying a mast. A wrist rocket and some 50-lb
>monofilament line is a lot easier to carry, and unless you're in
>Antarctica (or some other desert), there's usualy something to shoot a
>line into. WIth the 50-lb line, you can use the same line to pull your
>antenna up as you shot into the tree.
>
>Patrick Croft wrote:
>>
>> I failed to mention that if your goal is to pack away the mast instead
>> of using as a 'walking stick' yoou may want to consider one of the many
>> fishing poles the retract to a foot or so in length. Check here for
>> such: http://www.cabelas.com
>>
>> Other outlets offer like items. The smaller and stronger the pole the
>> higher the cost. Cabela's house brands go for around $20 at the 12'
>> length.
>>
>> Bests,
>>
>> Patrick Croft
>> W9GTA
>>
>> Dwight Stewart wrote:
>> >
>> > David Snyder Hale wrote:
>> >
>> > > I've found various sources for telescoping
>> > > masts. One can of course buy these meant
>> > > for antennas but they are usually too big
>> > > for backpacking. There are telescoping
>> > > fishing poles and telescoping wind-sock
>> > > supports. Both are lightweight and tall,
>> > > but don't collapse small enough for my

>> > > taste (4ft). [snip]
>> >
>> > The VERY best portable telescoping mast I've found are those aluminum
>> > telescoping masts used by professional window washers. These can be
>> > purchased from most hardware stores (or office supply stores) and can
be
>> > found in lengths up to about 60 feet.
>> >
>> > I have a 19 foot one that telescopes down to about 4.3 feet, and
weighs
>> > almost nothing. With a rubber cap (for chair leg) over the large end,
it
>> > also makes a nice walking stick.
>> >
>> > Dwight Stewart (W5NET)
>> >
>> > http://www.qsl.net/w5net

3976. Re: back to Feedline Theory

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:28:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97jmrg$jo7$1@slb6.atl.mindspring.net>
Source record: 169399

Cecil:

Measurements... Heh, heh... hey man, this is the age of the computer.

Build, experiment and measure all done with a Mouse and without leaving your Window!

I just finished a few measurements myself on Electronic Workbench, think I'll go do a few "touch and go's" up there in New York, I'll try JFK and LaGuardia this afternoon, haven't landed there in a while. Getting tired of Hong Kong.

Gotta go now... Come on Flight Simulator... damm it, this thing boots too slow, just finished a bunch of measurements on a MatLab model and now I wanna fly...

-Peter K1PO

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A9B9E5A.8B035840@IEEE.org...
> gardner oral e wrote:
> > Now having confidence in that portion, I modeled the off-center fed
> > dipole that I had previously modeled without feedline....it measured
> > 448-j4 ...fed 15.7% from one end of #12 wire dipole.
>
> But EZNEC does not give you the separate impedances looking each
> direction at the connection point. With an off center fed dipole,
> there is more current flowing in one of the feedline wires than
> in the other at the feedpoint and it's hard to choke ladder-line.
> I would also avoid using the word "measured" when reporting the
> results of a modeling program.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3977. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:28:22 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Gbdn6.7576$rL4.552447@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169398

"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
news:97jkncipq1@newpoisson.nosc.mil...
> Steve: having served on 4 Navy destroyers during my 21 years in the
"Bloody
> Navy" as an Electronics Technician, I found your post informative.
However,
> your statement, "The choice of upper operating frequency (6 or 8 MHz) is
> based on the configuration of the HF transceivers used to cover the 2.0 -
> 30.0 MHz frequency band" may not be entirely accurate. The HF
transmitters
> I remember being connected to the HF fan antennas (principally SRC-16
> variations) were operable in the 2 - 30 MHZ range. It was the antenna
> couplers for the transmitters that dictated which fan they were connected
> to. The three coupler ranges were, to the best of my recollection, always
> 2 - 6, 4- 12, and 10 to 30 MHZ. Modern day Spruance/Aegis destroyers and
> force level ships (e.g., CV/CVN/LHA/LHD) employ a HF system similar to the
> SRC-16 (I can't remember the Spruance model number) but some Aegis and
force
> level utilize a URC-109 (Canadian model) or a Harris version.
>
> An aside note: The HF transmitters or transceivers that I've worked with,
> from WRT-2s through URC-32s in the early years (1960 through 1970s)
through
> the modern day URT-23 had an antenna (often 30 foot verticals)
specifically
> "designated"; meaning that xmtr's antenna coupler was located at the base
of
> a specific antenna. However, patch panels were employed where one could
> switch a transmitter's output around; so that, if a coupler or transmitter
> went wheels up, you could patch around that defective unit although
> operating the tuner of one with the transmitter of another could be a
> challenge.
>
> How'd I do? It's been a while since I've been back aboard a ship to mess
> with the HF systems - sure brings back fond memories, believe me.
>
> Regards, Jim R.
>

Good job Jim, you are quite correct. The URT-23 transmitter does operate
over the full 2 - 30 MHz band. The equipment dictating the HF frequency
band separations is in fact the HF multicouplers. The AN/SRA-56 operates
2 - 6 MHz; the AN/SRA-57 operates 4 - 12 MHz and the AN/SRA-58 operates 10 -
30 MHz. Alternately, the URT-23 could be directly connected to a dedicated

whip with a remotely located AN/URA-38 tuner/coupler.

I would have to check in detail to identify the configurations on the DDG-47 (Aegis) and the DD-963 (Spruance) class. I think the newer installations are the broadband Harris equipments that interface with a narrowband or a broadband RF distribution system.

Steve

3978. Re: Backpack antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:29:11 UTC
From: richardharrison@webtv.net
Message-ID: <19079-3A9D5F97-22@storefull-116.iap.bryant.webtv.net>
Source record: 169400

I wrote:
"They say that the antenna is as good as a 1/4-wave vertical."

But, that is for a 2-wavelength Beverage, not just one wavelength.

Here ts what the War Department said:
A single wire two or more wavelengths long supported on poles at a height of 12 to 20 feet above ground is a wave antenna. At the far end the wire is connected to ground through a resistor of about 500 ohms, Crowfoot grounds can be used at each end. I`ve made some omissions only for brevity.

This antenna is directional towards the termination resistor "and is used primarily for either transmitting or receiving vertically polarixed ground waves."

"With two wavelengths of wire, an efficiency equalling that of a guarter-wave vertical can be expected in the h-f band over poor or medium soil."

"The terminating resistor of about 500 ohms must be able to dissipate about 1/3 of the power fed into the antenna when transmitting."

Some of the worlds best scientists were authors of the book when it was written in 1940 to 1944, and this information is excerpted from the book.

Nay-sayers always appear saying a Beverage is hoplessly inefficient for transmitting. I haven`t tried it for transmitting but have used one for reception and it was formidable!

Best regards, Richard Harrison, KB5WZI

3979. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:47:50 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A9D63F6.167EB0E7@rupert.tds-az.lmco.com>
Source record: 169405

David Snyder Hale wrote:
>
> Patrick Croft <mai@iquest.net> wrote:
> > fishing poles the retract to a foot or so in length. Check here for
> > such: http://www.cabelas.com
>
> This is sorta interesting looking... I just went to cabelas.com and
> found a telescoping push pole (not a fishing rod) ITEM: XA-22-0080
> which is made from aluminum and telescopes from 6.5 inches to 12 feet!

You need to go read that again. I missed it too the first time I read
it. The web site says "Telescopes from 6-1/2' to 12'". Unless they
made a typo and really mean do mean 6-1/2". But I don't think so.

If you do a search on "TELESCOPING" there is a "Telescopic Panfish
Pole" that does go from 15-1/2" to 14'. But it's not aluminum and
wouldn't work as a radiator, without adding wire. It would probably
be able to hold up a light weight inverted-v.

> Now, that might make a nice 40m loaded vertical right there, don'cha
> think? (I'm also looking for very compact antenna ideas, both for
> backpacking and for taking to the beach, where there clearly are no trees.)
>
> Could one just add some sort of end loading coil, radials, and then feed
> this Al mast itself as the radiator?
>
> 73,
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

In the past I have used the extendable aluminum poles that are
intended as swimming pool accessories. They are not expensive,
very light, and are available in any pool supply store. I have
used them as masts and as loaded verticles.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

3980. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:51:25 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97jo77qfv1@slb6.atl.mindspring.net>
Source record: 169401

George:

Power transformer thump... hmmm musta been running a kW. My puny little power transformer just "clicked".

Ahhhh those 866's. Standing tall and proud, those big ceramic plate caps squating there on top of the bottles, with the HT wire hanging down...

The "glow" actually changed color, shape, and intensity as the current surged through those beautiful bottles with each press of the key. More than a glow... sort of like a captured miniature version of the aurora boreolis inside the 866's glass. Wonderful. You could almost see those individual electrons streaming across.

My 866s were standing tall in the open for all to see from the front. Didn't have to watch the flickering on the back wall of the shack. Of course I had a big sign posted nearby that power supply saying, "Hands Off" and "Danger - High Voltage"! And with that cathode keying circuit you hadda keep your fingers on the key's insulated knob, or Wow!

Of course with the neon bulbs, taped to the open wire feeders with masking tape, flashing in synbchronism with the key strokes, it all kept onlookers at bay. Heh, heh.

Fun! Radio Shacks are just "too clean" today.

-Peter K1PO

I ask you... Where's the "romance" and "glow" in solid state?

"George, W5YR" <w5yr@att.net> wrote in message
news:3A99C448.D74604BC@att.net...
> Personally I always felt reassured by the thump of the power transformer
> and filter chokes and the glow of the 866's against the back wall of the
> shack each time I pressed the key . . .
>
> 72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
> Amateur Radio W5YR, in the 55th year and it just keeps getting better!
> Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437
>
>
> "Peter O. Brackett" wrote:
> >
> > Reg:
> >
> > As you know, I heartily agree with your comments/sentiments below on SWR

and
> > SWR meters. Seldom are they used properly, and seldom do they indicate
> > anything about the "reality" of the wave conditions of antennas and
lines.
>
> > I say, get rid of those "in line" SWR meters...
> >
> > -Peter K1PO

3981. Re: Commerical Dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:52:47 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9d6516$0$30013$44a10c7e@news.net-link.net>
Source record: 169402

I have the AS-160. It covers 160/80/40/20 and held up quite well over the years and 2 moves. Center insulator fell apart. I purchased another aftermarket insulator (not B&W) and also new wire. I thought I would put this antenna together "correctly" using the B&W specs and hung it on a 35' tall fiberglass mast. Boy did it bow over. Even with guys. I adjusted the antenna close to where I wanted it using an MFJ259. Then put the antenna away for when I could hoist it up the tower once I rigged the yard arm and pulley. All set up now and the resonant points are all screwed up. This antenna is location particular. I did not know that and the info did not say--but I should have know better. All the resonant points changed, some to a band edge or beyond. I am going to take it down, but not change it, and just use it for field day because I will just hang it from a tree and it should be the same. Start with 20 meters, then ad a trap and recheck, then 40 wire, check 20 and make adjustments on 20 and 40, then add 40 trap, etc. Antenna works good for local stuff. I like my full size 160 fed with 450 line a LOT better. Much cheaper too!!!!
Larry wrote in message
<14804-3A97C02F-3@storefull-114.iap.bryant.webtv.net>...
Anyone using one of the Barker&Williamsom trappd dipoles such as the as-80 (80-40-20). Can these be adjusted for the cw portion of the band with ease?

K1zw
Larry
Qcwa

3982. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:59:01 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9d670b$0$30005$44a10c7e@news.net-link.net>
Source record: 169407
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Cushcraft says to guy the antenna if you use it in windy environments.
Hustler and Butternut advise to guy also. I have had a Hustler 5BTV survive
60mph wind with no guys. I guyed a Cushcraft R7 about 10 or 12 feet from
the top it was invisible to 50mph wind. Especially guy if your area is
prone to high winds and ice or snow loading.
Peter Eisler wrote in message ...
>Hi!
>
>My R5 came down last week because of high winds, broken at the
antenna-foot.
>I will never by an antenna again with the centrte of gravity at the top.
>I want to by a titanex HP5. There are no traps and it has an element for
>each of the five bands.
>Maybe this is a good solution for cushcraft victims.
>Has anybody experience with this type of antenna ?
>
>73 OE1PEW
>
>Delbert McCord <dmccord@usol.com> schrieb in im Newsbeitrag:
>3a9c9114.1070151@news.usol.com...
>> I saw this still being quoted and I noticed that the follow up I had
>> posted is not being included in these quotes.
>>
>> After a few days of back and forth and after having Cushcraft send me
>> back my original Matching network I did get a call from the Tech and
>> he said I was shipped the wrong box. He then sent me a New Matching
>> network and I installed it. It did the trick and the antenna is
>> working fine (Over 3 months later).
>>
>> 1) I think the entire problem was caused by poor quality control, also
>> the circuit board on the new matching network seems to be made out of
>> a different material.
>> 2) I understand that I could have made my own Vertical but I did not
>> want to take the time and I wanted the best performance I could get.
>> So I paid my 400$ to have a product that should have been trouble
>> free.
>> 3) I am in the market for a second Vertical (For our Cabin) I must say
>> that even though the R8 Performs very well I am not going to purchased
>> another one. I am looking at The Gap Verticals and the Butternet
>> Verticals. I still have not figured out if the Betternet uses a
>> Matching Network like the Cushcraft.
>>
>> Delbert McCord

>> KA8OCN
>>
>>
>>
>> >Delbert McCord wrote:
>> >>
>> >> I have a R8 that is less than 6 months old and I am having problems
>> >> witht he antenna also. It was working Great and then all of a sudden
>> >> its like having a dummy load on the end of the coax!
>> >>
>> >> I checked the coax (Which is also new) and Its not shorted and gives
>> >> me a perfect SWR when I connect a dummy load out there on the end of
>> >> the coax. Cushcraft (After a bunch of phone tag) had me send them the
>> >> matching box back to them, they tested it and returned it saying its
>> >> fine. I used to get better than a 2 on every band with out my tuner
>> >> now I get over a 8 swr and I can receive better if I connect the coax
>> >> to my dogs collar!
>> >>
>> >> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>> >> ever get from me!
>> >>
>> >> Worked great, Looks Great, Does not last
>> >> I can not afford almost 100$ a month for an antenna!
>> >>
>> >> Delbert McCord
>> >> KA8OCN
>> >>
>>
>
>

3983. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 20:59:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97joqp$2ca$1@nntp9.atl.mindspring.net>
Source record: 169404

Gary:

We colonialists were once British Subjects, but our ancestors decided the King didn't really know what was best for us, and so we embarked upon an effort to increase our own Q.

Unibond...heh, heh... we don't have that trade name here in the colonies, but since you have "splained" it for us, now we "get it".

Kew? Is that where Kew Gardens is located? Is this the Q that Reg disparages?

Best,

-Peter K1PO, a former Subject.

"Gary Peach" <xcg34@dial.pipex.com> wrote in message news:97akm0$ju3$3@lure.pipex.net...
>
> "Peter O. Brackett" wrote ...
>
> > > > What about the rest of us mere mortals. How shall we measure Q?
> > > By whether you get into the cinema or not before the big picture starts.
>
> > What is the Q of a queue? Or indeed of a cue?
>
> Oh! balls can't get out from the 8
>
> > MI5 had a "Q", but got no respect from Bond.
> > Does that make him a low Q?
>
> No, a fur cue.
>
> For the answer go down to Kew at Lilac Time, it isn't far from London.
> While you're there pop into the PRO and look up Bond.
> Is an educated agent a Unibond?
>
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> http://www.gary.peach.dial.pipex.com/
>
> For our American Cousins Unibond is a product line of building materials
> mostly paints and plasters and fillers and things; hope this helps you get

a
> grip on this subject.
> Oops! America doesn't have Subjects. :)
>
>
>

3984. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 21:01:19 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9d670c$0$30005$44a10c7e@news.net-link.net>
Source record: 169408
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Since cabins tend to get vandalized and a big commercial antenna is a sign
of possible goodies hooked to it inside, you should consider an ladder line
fed dipole antenna. Take your rig and tuner home with you. On the other
hand, look for a good used Cushcraft R7.
Delbert McCord wrote in message <3a9c9114.1070151@news.usol.com>...
>I saw this still being quoted and I noticed that the follow up I had
>posted is not being included in these quotes.
>
>After a few days of back and forth and after having Cushcraft send me
>back my original Matching network I did get a call from the Tech and
>he said I was shipped the wrong box. He then sent me a New Matching
>network and I installed it. It did the trick and the antenna is
>working fine (Over 3 months later).
>
>1) I think the entire problem was caused by poor quality control, also
>the circuit board on the new matching network seems to be made out of
>a different material.
>2) I understand that I could have made my own Vertical but I did not
>want to take the time and I wanted the best performance I could get.
>So I paid my 400$ to have a product that should have been trouble
>free.
>3) I am in the market for a second Vertical (For our Cabin) I must say
>that even though the R8 Performs very well I am not going to purchased
>another one. I am looking at The Gap Verticals and the Butternet
>Verticals. I still have not figured out if the Betternet uses a
>Matching Network like the Cushcraft.
>
>Delbert McCord
>KA8OCN
>
>
>
>>Delbert McCord wrote:
>>>
>>> I have a R8 that is less than 6 months old and I am having problems
>>> witht he antenna also. It was working Great and then all of a sudden
>>> its like having a dummy load on the end of the coax!
>>>
>>> I checked the coax (Which is also new) and Its not shorted and gives
>>> me a perfect SWR when I connect a dummy load out there on the end of
>>> the coax. Cushcraft (After a bunch of phone tag) had me send them the
>>> matching box back to them, they tested it and returned it saying its
>>> fine. I used to get better than a 2 on every band with out my tuner

>>> now I get over a 8 swr and I can receive better if I connect the coax
>>> to my dogs collar!
>>>
>>> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>>> ever get from me!
>>>
>>> Worked great, Looks Great, Does not last
>>> I can not afford almost 100$ a month for an antenna!
>>>
>>> Delbert McCord
>>> KA8OCN
>>>
>

3985. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 21:01:23 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <DGdn6.7721$rL4.554624@bgtnsc04-news.ops.worldnet.att.net>
Source record: 169403

The contents of this and my subsequent posts should be ignored.

The discussion below does not apply to the situation of determining the total energy (or power dissipation) in two circuit elements, knowing the individual energy (or power dissipation) in each.

My sons would look at me and say Doooo...

Steve,
VE9SRB

"VE9SRB" <srbest@att.net> wrote in message
news:7%vm6.4801$Ea1.382139@bgtnsc05-news.ops.worldnet.att.net...
>
> "Bill Manley" <b_manley@bellsouth.net> wrote in message
> news:BO8m6.9560$4f.19625920@news1.mia...
> > Noting the interest in the "Warner was right .." and "question on
theory"
> > threads the group might enjoy entertaining the following question which
> was
> > offered to me in a job interview many years ago.
> >
> > Given two equal capacitors (C1 and C2) arranged in parallel but
separated
> by
> > a normally open switch. With the switch open C1 is charged to voltage
> (V).
> > C2 has no charge. Also given is that all circuitry is lossless. Then
the
> > switch is closed.
> >
> > Before the closure note that the energy in the circuit is
> >
> > Ebefore = C1 * (V^2) / 2 + 0
> >
> > After the switch is closed, the charge Q is equally shared by both
> > capacitors. The voltage on each capacitor is now V/2.
> >
> > Now the total energy is
> >
> > Eafter = C1 * (V^2) / 4
> >
> > Where did the energy go?
> >
> > (BTW, I did get the job)

> >
> > regards,
> >
> > Bill Manley KB4XE
> >
> >
>
> Hi Bill:
>
> The energy (time integral of power) did not "go" anywhere. Since there
are
> no losses and there is no radiation, the total energy in the circuit
"after"
> must equal the total energy in the circuit "before". Your equation for
> total energy after, Eafter, is simply incorrect.
>
> Energy in a capacitor is the integral of power as a function of time.
Power
> is a scalar quantity, a function of voltage and current, which are both
> vectors (complex). Power is equal to |V| |I| Cos (A), where A is the
phase
> angle delta between voltage and current. The direct addition of energy
and
> power cannot be performed in the manner you describe because scalar
additon
> does not contain the phase relationship information between E1 and E2
(they
> are in phase) which is needed to "add" them. As a result, energy and
power
> do not "add" algebraically, ie, Etotal is not equal to E1 + E2 (this seems
> to be a hard concept for some to understand).
>
> The total energy in the circuit before, Ebefore is equal to C1 * (V^2) / 2
>
> The total energy in the circuit after, Eafter is not equal to C1 * (V^2) /
> 4.
>
> If the energy in C1 is equal to E1 and the energy in C2 is equal to E2,
the
> total energy in the circuit is given as follows:
>
> Eafter = E1 + E2 + 2 Sqrt(E1) Sqrt (E2) = (Sqrt(E1) + Sqrt(E2))^2
>
> Eafter = C1 * (V^2)/8 + C2 * (V^2)/8 + 2 * [Sqrt(C1) V / Sqrt(8)]
> [Sqrt(C2) V / Sqrt(8)]
>
> Since C2 = C1
>
> Eafter = C1 * (V^2) / 4 + C1 * (V^2) / 4
>

> Eafter = C1 * (V^2) / 2
>
> The law of conservation of energy holds.
>
> Steve, VE9SRB
>
>
>
>

3986. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 21:03:37 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <6roq9t80f933d41gb60hn00dn0suob7uc3@4ax.com>
Source record: 169406

On Wed, 28 Feb 2001 10:06:04 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Richard Clarkwrote ...
>> Gary Peach wrote:
>> >There was in the 19th century a machine invented to transfer charge from
>one
>> >capacitor to another, the Kelvin Water Dropper; this was later improved
>upon
>> >by Wimshurst. And finally the modern equivalent the Van de Graaff
>generator.
>> >Here transfering the charge augments it and it builds up.
>> >WHY?
>
>> Because a Van de Graff generator accumulates the charge in a truncated
>> sphere. The charge is applied from within the sphere and naturally
>> escapes to the outside surface. The geometry of the sphere dominates
>> the mutual repulsion of like charges that the new charges encounter in
>> their escape.
>
>The sphere is conductive and the electrons that make up the charge have
>mobility, it is not the metal sphere that causes the charge to build up.
>A bucket stood under a small leak in the roof does not fill of itself, the
>drip drip drip integrates finally into and overflowing Bucket.
>The Van de Graaff generator does not have charges of 4,000,000 Volts
>imparted to it, but loads of tiny charges.
>It is the energy expended in transferring the small charges that accounts
>for the final high voltage.
>Think of the electrophorus of the 19th century.

Hi Gary,

You missed this one, and it was your own question!

Charge accumulates on the basis of geometry and the Van de Graff
generator employs a sphere for this purpose alone. Charge always
seeks the curvature of least radius and inside the sphere does not
qualify in the least, but rather the outside is the perfect reservoir.

Think about it, the same belt that moves charge up and into the hollow
sphere could as easily drain the charge (carry it back down due to
mutual repulsion) IF it were collected at the same point it was
applied. This does not happen because the charge "applied" always
seeks to flow to the outer radius and is replaced by newly "applied"
charge from the belt. This charge flow is enforced by geometry (there

is absolutely no way to move a static charge into the sphere from its outer surface).

In a sense, the hollow sphere and belt feed system acts as a mechanical diode permitting charge to move in one direction only. You might want to think of your analogy above with buckets being emptied under water (no net change occurs and the buckets always return to the source full). You will note your explanation offers nothing in the way of preventing this backwash.

Geometry is a first principle.

73's
Richard Clark, KB7QHC

3987. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 21:03:53 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9d67a6$0$30013$44a10c7e@news.net-link.net>
Source record: 169409
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Walt can send me $95.00 (my standard fee for a letter) and I will take care
of it.
Walton Hackman wrote in message <976n41$a1d$1@mozo.cc.purdue.edu>...
>Write to the ARRL and tell them you are willing to make a deal. Offer them
>$100 if they will remove your name from the membership rolls.
>Walton, W3NYT
>==============
>"smiley o'riley" <bummer-radio@licensing.org> wrote in message
>news:goodbye@goodbye...
>>
>> I find I can no longer support the ARRL by being a member. What's the
>best
>> way to cancel a membership?
>>
>> TNX 73 de Smiley
>
>
>

3988. Re: 160 Meter Inverted "L" Advice Requested:

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 21:24:26 UTC
From: Ted Gervais <ve1drg@fox.nstn.ca>
Message-ID: <e0en6.132$bv5.42316@sapphire.mtt.net>
Source record: 169410

Yardleyite wrote:

> I'd like to ask the antenna newsgroup a question about inverted L's. I
> would like to build one for 160 meters and have a few questions: Here is
> my situation:
>
> I can go about 90-100 feet vertical, and just about an unlimited length
> horizontally. My property is surrounded by talls trees which I plan to
> hang the antenna from. I already have a 260' flat-top up at about 85'
> which is a good performer and I'm looking for something that will have a
> lower takeoff angle to work DX with. I run close to legal limit with my
> amplifiers. At best my flat-top in reality is a "cloudwarmer" with a
> takeoff angle of 90 degrees or so. I can't get the 125' height required
> for a full size 1/4 wave ground plane so I want to do the next best thing.
> Here is my idea:
>
> I would like to build an inverted - L and current feed it at the ground
> via a variable cap. The antenna would be about 90' vertical and either 96'
> horizontally (for a 3/8 wave antenna) or 170' horizontally (for a 1/2
> wave). Since I'm feeding it essentially like a "Marconi" - except with
> variable reactance at the base, would it outperform my flat -top? Does
> anyone on the list have a simular configuration?
> If so, how does it perform? How does it measure up to a flat - top if you
> have one as a reference antenna?
>
> I could also elevate the feedpoint to the apex of the vertical and run it
> against a ground but I don't see any advantage to doing it that way. In
> either situation I have a large body of salt water that runs directly
> through my property and I already have four ground rods buried directly in
> there. I have a 1/4 wave vertical for 75M (61.5') with elevated radials
> that is a descent performer. I plan to tie the 160M "L" radial system into
> that.
>
> Any advice will be greatly appreciated. Thanks for reading this post and
> 73.
>
> Joe Cro N3IBX

I can't offer any advice to your question Joe, but I am trying to do the
exact same thing. I have a 100 foot tower and and lots of room out one way
(hoizontally) but limited room the other (opposite) way. I currently have
full size 40 and 80 meter inverted 'V's but 160 band takes a bit more room.

So something like an inverted 'L' sounds interesting but I don't want to
use ground radials. Maybe I am too fussy but there must be a way ..

>

--
Ted Gervais
Coldbrook, Nova Scotia Canada.

3989. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 21:48:27 UTC
From: richardharrison@webtv.net
Message-ID: <11621-3A9D722B-23@storefull-117.iap.bryant.webtv.net>
Source record: 169411

Richard wrote:
"I am looking at purchasing a multiband vertical antenna."

The War Department`s "Electrical Communication Systems Engineering" has a relative gain table for common antennas in near vertical incidence with the ionosphere for propagation:

Horizontal half-wave, 7 feet high = 0 db

Horizontal half-wave, 30 feet high = +21 db

Sloping 1/2-wave, 5 to 30 ft (broadside)= +12db

Sloping 1/4-wave, 5 to 20 ft (broadside)= +1 db

45-ft top, 35-ft downlead (SCR-188-A)= -2 db

15-ft tuned whip with counterpoise = -38 db

Sky-wave transmission between like antennas.
75 miles, 3 MHz, F2-layer, South Florida.

Of course, for very low-angles the radiation from the vertical tuned whip would look a lot better. But for h-f, horizontal polarization does have advantages.

Best regards, Richard Harrison, KB5WZI

3990. Re: Heat shrink tube

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 22:55:42 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20010228175542.09268.00000052@ng-fm1.aol.com>
Source record: 169412

It will only be UV resistant, if it's labeled that way...
THe stuff in the Heat Shrink is Hot Melt Glue.
DEFINITELY wrap it w/ tape.
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

3991. Should multi band zepps be oddball lengths?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-02-28 23:54:23 UTC
From: k4ia@aol.com
Message-ID: <20010228185423.26716.00000075@ng-cp1.aol.com>
Source record: 169413

I use a ladder line fed 160 mtr dipole and tuner on all bands. It's a bit touchy on 80 mtrs. The problems associated with antennas exhibiting a high impeadence at even multiples of their design frequency intrigues me.

I have had a theory that because of this phenomena, it would make sense to use a non-resonant length for the dipole (and by that I mean, not cut for the frequency). This is the classsic 100 foot long center fed antenna in the handbook. It would be "off" on all frequencies but since it is not resonant at any multiple, the mismatch would not throw you off the charts. That is why you shouldn't use certain lengths of feedline. Wouldn't the same theory apply to antennas?
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3992. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 00:13:34 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <Mtgn6.2036$qh5.5484030@nntp3.onemain.com>
Source record: 169416
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

What meathead posted this to 5
groups??
???????????

"Rudy Marcelletti" <rudym@net-link.net> wrote in message
news:3a9d67a6$0$30013$44a10c7e@news.net-link.net...
> Walt can send me $95.00 (my standard fee for a letter) and I will take
care
> of it.
> Walton Hackman wrote in message <976n41$a1d$1@mozo.cc.purdue.edu>...
> >Write to the ARRL and tell them you are willing to make a deal. Offer
them
> >$100 if they will remove your name from the membership rolls.
> >Walton, W3NYT
> >==============
> >"smiley o'riley" <bummer-radio@licensing.org> wrote in message
> >news:goodbye@goodbye...
> >>
> >> I find I can no longer support the ARRL by being a member. What's
the
> >best
> >> way to cancel a membership?
> >>
> >> TNX 73 de Smiley
> >>
> >>
> >>
>
>

3993. Re: Surplus Transco antenna switch query

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 00:22:31 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <bDgn6.3650$Ok4.541347@news1.rdc1.ct.home.com>
Source record: 169415

Try eBay... They appear there regularly. Do a search for transco switch and
if any are listed you should find them. Give it a few months of trying,
they aren't always there, but that is where I got mine.

Pete

"Ai de hua" <aidehua@aol.com> wrote in message
news:20010226165839.06300.00000083@ng-fs1.aol.com...
> Want to sell them? I need a couple of these. If not, where can I get
some???
>

3994. Re: apartment dwellers indoor antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 00:51:27 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <mZudOlGNGW4oqkbuIVimgu939UZC@4ax.com>
Source record: 169417

"jack beltz" <blues38@inwave.com> wrote:

>live on the first floor of an apartment.no outside antennas.
>what to do for hf.80-10 meters?
>thanks jack
>

You might string up an indoor 10 meter dipole.

You might put an hf antenna on your car, and run coax out to the car
from your apartment.

If you can mount an antenna in your window, look at the Barker &
Williamson AP-10 (I ran one from a 3rd story apartment with success).
See http://www.bwantennas.com/

Check with the arrl web site -- they have a book on stealth antennas.

Otherwise, move :-(

Get more space. Or get higher. Or both.

Bob
k5qwg

3995. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 00:58:34 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <97k6rq$p3c$1@news.hawaii.edu>
Source record: 169418
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

>I find I can no longer support the ARRL by being a member. What's the
>best way to cancel a membership?

It's impossible now. We just sent in a lifetime membership in your name.

3996. Spud gun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 01:26:59 UTC
From: Wayne and Louise Irwin <the-irwins@home.com>
Message-ID: <Dzhn6.3666$Ok4.558129@news1.rdc1.ct.home.com>
Source record: 169420

Hello everyone,

Has anyone on this reflector used a "spud gun" to launch antenna supports?
If so, any pointers. Either post here or e-mail to:

the-irwins@home.com or w1ki@arrl.org

Thanks in advance,

Wayne, W1KI

3997. HT ANTENNAS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 01:27:45 UTC
From: Dustin Knau <knau@swbell.net>
Message-ID: <wAhn6.352$4C2.6238@nnrp1.sbc.net>
Source record: 169419

I am looking for some good sources on homemade HT Antennas.. If anyone can help you can email me at knau@swbell.net or post to the news group.

3998. 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 01:54:49 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <TVhn6.247$bG5.127717@news.pacbell.net>
Source record: 169422
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

I've got a Diamond D130J discone antenna mounted 10 feet above my second floor roof. I did a test, and found out that that I'm only get reception up to 1.5 mile away using my icom W32A with 5w output. The antenna I used for transmission is a magnetic mount on my car top. The area is you typical residential area with no tall buildings in sight. Now I'm kind of dispointed.What are your experiences, suggestions? Thx.

3999. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 02:20:56 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <97kbunhdn1@slb0.atl.mindspring.net>
Source record: 169423
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Michael" <hkc2001@pacbell.net> wrote in message
news:TVhn6.247$bG5.127717@news.pacbell.net...
> I've got a Diamond D130J discone antenna mounted 10 feet above my second
> floor roof. I did a test, and found out that that I'm only get reception
up
> to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
> transmission is a magnetic mount on my car top. The area is you typical
> residential area with no tall buildings in sight. Now I'm kind of
> dispointed.What are your experiences, suggestions? Thx.
>
>
It is very possible that I am misreading this or am missing something
obvious..but....How did you get your car 10' above your second floor roof?
The mental picture is somewhat funny.. :-)

4000. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 02:47:09 UTC
From: dmccord@usol.com
Message-ID: <3a9daf85.3824707@news.usol.com>
Source record: 169424

I do not pretend to know everything about antennas, I am learning.

I have a dipole antenna up only 25 feet, at one time I had a 80 meter, a 40 meter, and a 20 meter diapole. They worked ok but without the abilaty to get them up in the air I beleive I had a high angle of radiation. (ARRL handbook says that if the dipole is not at least 1.2 wave above the ground it causes the higher angle of radiaton).
With the dipoles I was not getting many contacts outside the USA (My QTH is Michigan)

I now have a vertical and I get much more DX than I did before.
I think the reason for the added DX is the Lower Angle of radiation of the verical (Again the ARRL Handbook says the vertical have lower angles of radiation around 14 degrees)

I have all the room I need for antennas, (5 ach) but I have no trees within 400 feet of the house and only one old tower that was here when I purchased the house (Tower does not tilt). I already have 5 antennas on the tower already.

When I got the vertical I took all the dipoles down except for the 80 meter dipole, (That made the Family a lot happier, my Daughter was calling our house the Beverly Hillbillys Antenna Farm).

All I can say is what my experence is, my Vertical seems to out perform my dipole at my location. I hope to play with making some home grown verticals this comming summer.

I have some feet problems and I cannot climb a tower, so Verticals for me seem to be a good choice.

Does anyone know anything about using multiple verticals at one time?
Is there any advantage?

Delbert McCord
KA8OCN

On Wed, 28 Feb 2001 14:04:43 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Jim Rodenkirch wrote:
>> Also, what performance are we talking about here? Working "good" DX (e.g.,
>> FR, VK0, or DS/HS from South Carolina) on 40 meters? I'll take the vertical
>> any time over a dipole. Again, my friend, what are the requirements?
>
>The requirements are that it costs $20. :-)
>--

>http://www.mindspring.com/~w6rca
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4001. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:19:37 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3A9DBFC9.71670CEC@bwcc.com>
Source record: 169425

KB9WFK wrote:
> hkc2001@pacbell.net wrote:
> > I've got a Diamond D130J discone antenna mounted 10 feet above my second
> > floor roof. I did a test, and found out that that I'm only get reception
> > up to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
> > transmission is a magnetic mount on my car top. The area is your typical
> > residential area with no tall buildings in sight. Now I'm kind of
> > disappointed. What are your experiences, suggestions? Thx.
> It is very possible that I am misreading this or am missing something
> obvious..but....How did you get your car 10' above your second floor roof?
Yes.

But we are definitely missing something.
Does his base station allow him to hear hams at similar power from much farther distances?
If so, the problem is probably his car transmitter/antenna.

There are too many variables in his problem.

4002. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:20:25 UTC
From: BD <bodu@pobox.com>
Message-ID: <mejn6.123$Lg5.154797@nnrp3.sbc.net>
Source record: 169426
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

Sounds like something's broken... I can do almost as good with two FRS radios....
Have you tried re-testing it with the original antenna?
Do you have an SWR meter?... Because the Icom 'expects' a little 7" (or whatever) rubber-ducky, well.. ;) I'd be willing to bet that it might do as well or better than the 'stock' magmount...

"Michael" <hkc2001@pacbell.net> wrote in message news:TVhn6.247$bG5.127717@news.pacbell.net...
> I've got a Diamond D130J discone antenna mounted 10 feet above my second
> floor roof. I did a test, and found out that that I'm only get reception up
> to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
> transmission is a magnetic mount on my car top. The area is you typical
> residential area with no tall buildings in sight. Now I'm kind of
> dispointed.What are your experiences, suggestions? Thx.

4003. Re: Newby help needed on selection of Receiving antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:30:17 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9DC249.5179AB93@IEEE.org>
Source record: 169427

mwalkord@att.net wrote:
> ... there is not a good
> location for this wire without my wife making an issue of it.

Why does your wife want you to be unhappy?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4004. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:44:44 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <Xwjn6.2250$wt3.157773@news.pacbell.net>
Source record: 169428
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

Let me clarify a little bit. I have a receiver connected to the discone at
home and I drove away in my car to different distances and transmitted using
the icom.
"Michael" <hkc2001@pacbell.net> wrote in message
news:TVhn6.247$bG5.127717@news.pacbell.net...
> I've got a Diamond D130J discone antenna mounted 10 feet above my second
> floor roof. I did a test, and found out that that I'm only get reception
up
> to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
> transmission is a magnetic mount on my car top. The area is you typical
> residential area with no tall buildings in sight. Now I'm kind of
> dispointed.What are your experiences, suggestions? Thx.
>
>
>

4005. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:47:28 UTC
From: richardharrison@webtv.net
Message-ID: <25858-3A9DC650-30@storefull-114.iap.bryant.webtv.net>
Source record: 169431

Michael, KB9WFK wrote:
"I did a test and found out that I only get reception up to 1.5 miles away using my Icom W32A with 5w output."

You can compare performance between your fixed station and other stations, and also compare performance between your mobile station and other stations. Then compare them with each other to see what is deficient.

If residential area propagation is deficient, you could try to find a local repeater to extend your range.

Best regards, Richard Harrison, KB5WZI

4006. Re: Should multi band zepps be oddball lengths?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:47:59 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9DC66F.E31BCCFD@IEEE.org>
Source record: 169430

K4IA wrote:
> I have had a theory that because of this phenomena, it would make sense to use
> a non-resonant length for the dipole (and by that I mean, not cut for the
> frequency). This is the classsic 100 foot long center fed antenna in the
> handbook. It would be "off" on all frequencies but since it is not resonant at
> any multiple, the mismatch would not throw you off the charts. That is why you
> shouldn't use certain lengths of feedline. Wouldn't the same theory apply to
> antennas?

Make the dipole 1/2WL long at the lowest frequency of operation, feed it
with 450 ohm ladder-line and don't worry about antenna length. Here's why:

Dipole feedpoint impedances range from about 25 ohms to a few thousand ohms.
What is the SWR on 450 ohm ladder-line for a 25 ohm antenna? 450/25=18:1
Given ladder-line losses on HF, 18:1 is a reasonable upper limit for SWR.
What anti-resonant feedpoint impedance will give an 18:1 SWR?
18*450= 8100 ohms. One is not likely to encounter a full wavelength dipole
with a feedpoint impedance higher than 8100 ohms. If we cut our dipole much
shorter than 1/2WL at the lowest frequency of operation, the SWR can go
much above 18:1. So we have a set of parameters for dipole design.

Note that since the 450 ohm SWR is the same for a 25 ohm antenna and an
8100 ohm antenna, the impedance at the current maximum point on the
ladder-line will be the same for both antennas. In fact, from inside
the shack making only impedance measurements and not knowing the antenna
length or the feedline length, one cannot tell these two antennas apart.

So don't worry about the length of the dipole. Make the dipole 1/2WL
on the lowest frequency of operation and enjoy. Note that I have said
nothing about the radiation patterns which may or may not be a consideration.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4007. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 03:55:48 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3A9DC844.DDC5C4A7@dialpoint.net>
Source record: 169429
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

You have a serious problem somewhere. Either the antennas/feed line
have a problem or the radio has. I am not sure what kind of setup you
are using as one antenna is on the house and one is on the car. Unless
there is a srious location problem you should be able to use 2 radios
with 5 watts output for several miles. Assuming the antenna is up 25
feet at the house you should be able to work another station in a car at
over 5 miles.

Michael wrote:
>
> I've got a Diamond D130J discone antenna mounted 10 feet above my second
> floor roof. I did a test, and found out that that I'm only get reception up
> to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
> transmission is a magnetic mount on my car top. The area is you typical
> residential area with no tall buildings in sight. Now I'm kind of
> dispointed.What are your experiences, suggestions? Thx.

4008. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 05:15:10 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3A9DDADE.E281B334@hiwaay.net>
Source record: 169432
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

Michael- There must be something wrong- I regularly hit a repeater over
20 miles away with my FT530 with its rubber duck, and hit a repeater
about 75 miles away when I am on a roof-top Cushcraft dual band. I can
count on 20-25 miles when I use a car top magmount (Larsen),except when
I am down in the valley.

Bill-W4BSG

Michael wrote:
>
> I've got a Diamond D130J discone antenna mounted 10 feet above my second
> floor roof. I did a test, and found out that that I'm only get reception up
> to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
> transmission is a magnetic mount on my car top. The area is you typical
> residential area with no tall buildings in sight. Now I'm kind of
> dispointed.What are your experiences, suggestions? Thx.

4009. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 05:42:22 UTC
From: Bruce Tyler <top@bottom.au>
Message-ID: <3sjr9t00445uvs8aokufauqt5cl98jur7t@4ax.com>
Source record: 169433
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

On Wed, 28 Feb 2001 17:54:49 -0800, "Michael" <hkc2001@pacbell.net> wrote:

>I've got a Diamond D130J discone antenna mounted 10 feet above my second
>floor roof. I did a test, and found out that that I'm only get reception up
>to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
>transmission is a magnetic mount on my car top. The area is you typical
>residential area with no tall buildings in sight. Now I'm kind of
>dispointed.What are your experiences, suggestions? Thx.
>

Like the other guy, I too was confused with your problem....
Let me see if I have it correct....
1.. You mounted a Diamond D130-J Discone on your house roof (10ft above)
2.. You connected a receiver to it, inside the house.
3.. You drove down the road in your car with your W32A (I had one of these H/H's a while ago too) and transmitted back to the house, using a magnetic mount antenna on the car and connected to the W32A..... Right???

And you are saying your maximum receive range for the D130-J is what...1.5 miles??? That if the car went further than 1.5 miles you either lost it or your reception went downhill (so to speak).....??? And you aren't living in an area without any larger structures (tall buildings or hills) that could block out radio transmissions...?

I hope I got it right.... Well I will at least try to base my reply on the above, hopeful, facts.....

I just recently put up a Diamond D130-J Discone, like about 2 weeks ago and I am very happy with its performance. VERY.
I live in a single level house and my discone is barely above the apex of the roof, well to be honest, it is slightly below it - I just ran out and looked. The tip of the stainless whip only just cuts the apex in height, yet I receive everything... and how!!!! I love it.
I wont bore you with my recent problem but I had a receiver that never really performed that well on V/UHF and I tried many homebrew antennas to improve its reception. I mean to say,, it shouldn't be that hard to receive on a scanner/receiver,, right!!!
My final desperate attempt was to buy this discone as they get good reviews and nobody really has a bad thing to say about them. It still didn't work... To cut things short... It was the receiver that was a tad deaf at V/UHF.
I bought another receiver the other day and all is well. Believe me the discone really does the job and well too. It receives repeaters up to 70 miles away in this hilly country that I live in. Anything within 20 miles is literally "in my face" => full strength.

If you aren't getting similar results with yours mounted, probably twice the height, then you have to have a fault somewhere....
Check...
1. That the Discone is assembled correctly - It was like putting a metallic spider together for me...
2. That it is mounted correctly - Make sure it is not touching anything else and is away from any solid objects.
3. That the coax line/connector is correctly soldered and correctly plugged into the discone, with NO shorts (short to earth etc) or breaks in it.
4. That the other end (at the receiver) is same as No.3
5. That the receiver is on the "correct" frequency and correct mode of reception => AM or FM etc.
6. That you have the correct power supply to the receiver.
7. That the receiver does NOT have a fault in it.
8. That if all above is" A1" then are you suffering the same on all frequencies, not just from your W32A in the car..

Yeah... I know it is a "basic" list of checks but the first thing you should check is always "the most obvious". It's amazing how many people bypass this simple checklist only to curse themselves later when they find one of the above to be the fault...

Michael - I too have had some points in my life when an antenna just gives up on me and it's VERY frustrating to find where, how and why.
Twice now in the past 2 years has my 16 ft Dualband Brainer antenna, all of a sudden, just died down to about half receive strength overnight and transmitting would reveal that I couldn't hit repeaters even 20 miles away. That's when I start at the most simple checks. The first being an S.W.R meter which gave some real wild readings. Both times it was corrosion between the centre lead and the outside braiding at the antenna end, even though the connector was up inside the metal tubing attatched to the antenna base. It was water doing it.... After cleaning and resoldering it, I then wrapped an insulation tape around the connector and first few inches of coax and its been over 12 months now and no problems... yet.

It sounds like you definitely have a "fault" somewhere..... I suggest that it is somewhere in the above checklist....

Good luck.....

4010. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 06:39:43 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <97kqrf$qb1$0@208.206.142.107>
Source record: 169434

Back in the early 80's I installed an 8 ft white fiberglass C band
SatTV dish for a friend. A few months later I checked it and found that
the polystyrene feedhorn cover had been completely melted by the passage
of the sun through the spring equinox. A very efficient solar furnace.

Dick

Richard Harrison wrote:
>
> Someone asked how long the sun interferred with earth station reception
> of the satellite when the satellite comes between the earth station and
> the sun on several days in the spring and fall.
>
> As I recall, it is a period of several minutes for Houston cable TV
> earth stations. It depends on location of the earth station.
>
> The earth turns through 360 degrees each 24 hours or 1440 minutes. That
> means it takes 4 minutes to turn one degree.
>
> The cable company has large dishes with narrow beamwidths, so it doesn`t
> take much earth rotation to put the sun out of the dish`s boresight.
>
> Best regards, Richard Harrison, KB5WZI

4011. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 06:42:05 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <97kr8d$m8b$1@nntp9.atl.mindspring.net>
Source record: 169435
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Michael" <hkc2001@pacbell.net> wrote in message
news:Xwjn6.2250$wt3.157773@news.pacbell.net...
> Let me clarify a little bit. I have a receiver connected to the discone at
> home and I drove away in my car to different distances and transmitted
using
> the icom.

Thanks. That was what I was missing. I was sure what you did was possible,
but once I pictured the car on the roof I stopped thinking...
Can you talk to others farther away than that on your mobile? Just asking
to be sure your mobile is really getting out and not the problem in the
test.
Did you terminate the coax yourself? Might try testing it shield to center
conductor for a short. Also try shield to shield on the ends to make sure
there is a good connection to the PL connector.

Is the receiver "dead" on all freqs or just 2M? Did it work before
installing this antenna or is the whole set up new?
As you already know, something is very wrong. With 5W on a HT I regularly
hit a repeater 15 miles away with decent reports. A little noise in the
background but still readable. Good luck and let us know what it was when
you find it.
KB9WFK

4012. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 07:47:07 UTC
From: BD <bodu@pobox.com>
Message-ID: <q8nn6.386$es4.204299@nnrp2.sbc.net>
Source record: 169436
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

You can't really compare his setup to a good repeater, tho.... ;)

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:3A9DDADE.E281B334@hiwaay.net...
> Michael- There must be something wrong- I regularly hit a repeater over
> 20 miles away with my FT530 with its rubber duck, and hit a repeater
> about 75 miles away when I am on a roof-top Cushcraft dual band. I can
> count on 20-25 miles when I use a car top magmount (Larsen),except when
> I am down in the valley.

4013. Re: 160 Meter Inverted "L" Advice Requested:

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 08:17:08 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3A9E0584.3C00@wt.net>
Source record: 169443

Yardleyite wrote:
>
> I'd like to ask the antenna newsgroup a question about inverted L's. I would
> like to build one for 160 meters and have a few questions: Here is my
> situation:
>
> I can go about 90-100 feet vertical, and just about an unlimited length
> horizontally. My property is surrounded by talls trees which I plan to hang the
> antenna from. I already have a 260' flat-top up at about 85' which is a good
> performer and I'm looking for something that will have a lower takeoff angle to
> work DX with. I run close to legal limit with my amplifiers. At best my
> flat-top in reality is a "cloudwarmer" with a takeoff angle of 90 degrees or
> so. I can't get the 125' height required for a full size 1/4 wave ground plane
> so I want to do the next best thing.
> Here is my idea:
>
> I would like to build an inverted - L and current feed it at the ground via a
> variable cap. The antenna would be about 90' vertical and either 96'
> horizontally (for a 3/8 wave antenna) or 170' horizontally (for a 1/2 wave).
> Since I'm feeding it essentially like a "Marconi" - except with variable
> reactance at the base, would it outperform my flat -top? Does anyone on the
> list have a simular configuration?
> If so, how does it perform? How does it measure up to a flat - top if you have
> one as a reference antenna?
>
> I could also elevate the feedpoint to the apex of the vertical and run it
> against a ground but I don't see any advantage to doing it that way. In either
> situation I have a large body of salt water that runs directly through my
> property and I already have four ground rods buried directly in there. I have a
> 1/4 wave vertical for 75M (61.5') with elevated radials that is a descent
> performer. I plan to tie the 160M "L" radial system into that.
>
> Any advice will be greatly appreciated. Thanks for reading this post and 73.
>
> Joe Cro N3IBX

I guess would depend on what you are trying to work. If far off dx, you
will want to consider the horizontal radiation from the extended wire on
the "L". I assume you want to raise the point of maximum current to
reduce ground losses. Nothing wrong with this, but if you run the
"normal" extended L that is 3/8 wave, you will have a good bit of higher
angle radiation. For medium distances this would be ok, but for far off
DX , not so good. But would still likely beat the pants off the dipole
for long haul. One thing you could do is add a second horizontal wire

and make a "T" vertical instead of an L. This will greatly reduce the horozontal componant, and will act much as a normal monopole. I ran a quick test comparing the two antennas using the elnec demo to see the patterns. The feed impedance doesn't change too much due to adding the extra top wire. I made snapshots of each antenna, and also pasted a clip of the current distribution in the lower right hand corners of each. Both antennas use a 90 ft vertical section , and the first "L" uses a 96 ft horizontal wire at 90 ft high the whole length. The 2nd "T" antenna the same except another 96 ft wire on the other side for a "T". I think I would prefer the "T" antenna for hard core dx. MK

You can see the " L" at http://web.wt.net/~nm5k/invl-1.jpg
You can see the " T" at http://web.wt.net/~nm5k/invl-2.jpg

Both pix compressed to a small jpeg about 35k apiece. Fast d/l..
--
http://web.wt.net/~nm5k

4014. Re: Spud gun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 08:32:41 UTC
From: les <lesbod@lesbod.fsnet.co.uk>
Message-ID: <97l1fg$rs8$1@newsg3.svr.pol.co.uk>
Source record: 169442

Hello Wayne, you will find a lot of bandwidth on "spug guns"
on the Elecraft reflector. over the last week.
Les, G4JDC
"Wayne and Louise Irwin" <the-irwins@home.com> wrote in message
news:Dzhn6.3666$Ok4.558129@news1.rdc1.ct.home.com...
> Hello everyone,
>
> Has anyone on this reflector used a "spud gun" to launch antenna supports?
> If so, any pointers. Either post here or e-mail to:
>
> the-irwins@home.com or w1ki@arrl.org
>
> Thanks in advance,
>
> Wayne, W1KI
>
>

4015. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 10:04:20 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97l9gg$3u9$1@lure.pipex.net>
Source record: 169438

"Richard Clark" wrote ...
> Gary Peach wrote:
> >"Richard Clarkwrote ...
> >> Gary Peach wrote:
> >> >There was in the 19th century a machine invented to transfer charge
from
> >one
> >> >capacitor to another, the Kelvin Water Dropper; this was later
improved
> >upon
> >> >by Wimshurst. And finally the modern equivalent the Van de Graaff
> >generator.
> >> >Here transfering the charge augments it and it builds up.
> >> >WHY?
> >
> >> Because a Van de Graff generator accumulates the charge in a truncated
> >> sphere. The charge is applied from within the sphere and naturally
> >> escapes to the outside surface. The geometry of the sphere dominates
> >> the mutual repulsion of like charges that the new charges encounter in
> >> their escape.
> >
> >The sphere is conductive and the electrons that make up the charge have
> >mobility, it is not the metal sphere that causes the charge to build up.
> >A bucket stood under a small leak in the roof does not fill of itself,
the
> >drip drip drip integrates finally into and overflowing Bucket.
> >The Van de Graaff generator does not have charges of 4,000,000 Volts
> >imparted to it, but loads of tiny charges.
> >It is the energy expended in transferring the small charges that accounts
> >for the final high voltage.
> >Think of the electrophorus of the 19th century.
>
> Hi Gary,
>
> You missed this one, and it was your own question!
>
> Charge accumulates on the basis of geometry and the Van de Graff
> generator employs a sphere for this purpose alone. Charge always
> seeks the curvature of least radius and inside the sphere does not
> qualify in the least, but rather the outside is the perfect reservoir.
>
> Think about it, the same belt that moves charge up and into the hollow
> sphere could as easily drain the charge (carry it back down due to
> mutual repulsion)

Yes indeed, it will be charge of an opposite polarity and a machine can be constructed where double the PD between the two spheres may be realised. The practical considerations not with standing.

> IF it were collected at the same point it was
> applied. This does not happen because the charge "applied" always
> seeks to flow to the outer radius and is replaced by newly "applied"
> charge from the belt. This charge flow is enforced by geometry (there
> is absolutely no way to move a static charge into the sphere from its
> outer surface).
>
> In a sense, the hollow sphere and belt feed system acts as a
> mechanical diode permitting charge to move in one direction only. You
> might want to think of your analogy above with buckets being emptied
> under water (no net change occurs and the buckets always return to the
> source full). You will note your explanation offers nothing in the
> way of preventing this backwash.
>
> Geometry is a first principle.

Is not simply that the charge density is less on the outer surface merely because it is at a greater radius and therefore a larger area, and therefore current does not flow into a higher charge density region on the inner surface, like charges of the electrons repelling.

Should the sphere we connected to a point how much will the voltage increase at the point?

Will charge from the surface of the sphere actually move to the point?

I don't expect a lightening answer BTW.

Next coming to this space the Homopolar generator.:)

--

Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4016. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 10:13:06 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97l9gi$3u9$2@lure.pipex.net>
Source record: 169439

"M.J.Powell" wrote >
> Dear oh dear, Gary. It was only a rule-of-thumb.

Do you wish to hammer your point home?

anorak of long standing
:)--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4017. Re: Should multi band zepps be oddball lengths?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 10:47:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97l991rud1@uranium.btinternet.com>
Source record: 169437

Buck, download program VARNEY to accurately analyse performance of dipoles + ladderline + balun + coax + tuner. Instantaneously compare input impedance of feedline on different bands. Compare efficiencies. Check SWR. See where in system the losses occur. Vary feedline and antenna lengths for minimum loss. L-match L and C component values calculated. Observe what happens as frequency is swept over the bands.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

K4IA wrote
> I use a ladder line fed 160 mtr dipole and tuner on all bands. It's a bit
> touchy on 80 mtrs. The problems associated with antennas exhibiting a high
> impeadence at even multiples of their design frequency intrigues me.
>
> I have had a theory that because of this phenomena, it would make sense to use
> a non-resonant length for the dipole (and by that I mean, not cut for the
> frequency). This is the classsic 100 foot long center fed antenna in the
> handbook. It would be "off" on all frequencies but since it is not resonant at
> any multiple, the mismatch would not throw you off the charts. That is why you
> shouldn't use certain lengths of feedline. Wouldn't the same theory apply to
> antennas?
> Radio K4IA
> Buck
> Fredericksburg, Virginia USA
> ----------
> REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate,
> International, Toll Free, Callback, Calling Cards, Pagers and more Tune to
> http://www.ld.net/?bucksavers

>

4018. Re: How do I cancel my League membership?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 11:11:36 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6C39898.3F35%stewartx@sccoast.net>
Source record: 169440
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

Richard McCollum wrote:

> What meathead posted this to 5 groups????????

I absolutely agree. I subscribe to all of these newsgroups, and my
current newsgroup reader does not automatically delete crossposted messages
once they've been deleted elsewhere, so I have to delete the same messages
over and over in each newsgroup.

Lets break this thread up guys. Before replying, please delete all
newsgroups other than the one you're in. Either that or simply stop
responding to this thing (its a darn silly subject line anyway).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4019. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 11:24:08 UTC
From: BuzzKenwood <dontask@wonttell.com>
Message-ID: <fccs9tc1ee3rgitgnpokj37qgil4grhqr6@4ax.com>
Source record: 169441

On 28 Feb 2001 20:14:12 GMT, David Snyder Hale
<david@isi9.mtwilson.edu> wrote:

>Patrick Croft <mai@iquest.net> wrote:
> > fishing poles the retract to a foot or so in length. Check here for
> > such: http://www.cabelas.com
>
>This is sorta interesting looking... I just went to cabelas.com and
>found a telescoping push pole (not a fishing rod) ITEM: XA-22-0080
>which is made from aluminum and telescopes from 6.5 inches to 12 feet!
>http://www.cabelas.com/texis/scripts/store/+/CatalogDisplay/displayPOD/CabFALL1998/CabFAL
L1998/XA748F?format=search
(B) Telescoping Push Pole ï¿½ Telescopes from 6-ï¿½' to 12'. Made of
heavy-duty aluminum.
Available: Marsh grass color.

>Now, that might make a nice 40m loaded vertical right there, don'cha
>think? (I'm also looking for very compact antenna ideas, both for
>backpacking and for taking to the beach, where there clearly are no trees.)
>
>Could one just add some sort of end loading coil, radials, and then feed
>this Al mast itself as the radiator?
>
>73,

4020. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 12:45:03 UTC
From: David Richardson <firsty@alphalink.com.au>
Message-ID: <3a9edfb5@news.alphalink.com.au>
Source record: 169444

Try adding a resistor in series with the switch. When the switch is closed, the resistor heats up and guess what? The final value of voltage on the equal value capacitors (V/2) is the same as without the resistor!

VE9SRB wrote in message ...
>
>"VE9SRB" <srbest@att.net> wrote in message
>news:tOan6.6799$rL4.547115@bgtnsc04-news.ops.worldnet.att.net...
>>
>>
>> Hi Bill:
>>
>> Given two equal value capacitors in series, both having a voltage V/2, I
>> would suggest you look at re-calcualting the total energy in the circuit
>> again. It is not: Eafter = C1 * (V^2) / 4. Eafter is not equal
>to
>> E1 + E2.
>>
>> Steve
>>
>
>No, I am not replying to myself -
>
>Looking at the problem outside my previous perspective, the statements
above
>are incorrect. If two circuit elements have individual energies E1 and E2,
>the total energy in the circuit will be E1 + E2. Same as power
>dissipation - if the power dissipation in one element is P1 and the power
>dissipation in the other is P2, the total power dissipation must be P1 +
P2.
>Not sure what I was thinking there.
>
>Steve
>
>
>
>

4021. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 12:46:59 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <uxbJ2ZADTkn6EwOg@pickmere.demon.co.uk>
Source record: 169455

In article <97l9gi$3u9$2@lure.pipex.net>, Gary Peach
<xcg34@dial.pipex.com> writes
>
>"M.J.Powell" wrote >
>> Dear oh dear, Gary. It was only a rule-of-thumb.
>
>Do you wish to hammer your point home?

Hehe!

>
>anorak of long standing

I left my anorak on Pontypool Road station when I gave up collecting
engine numbers.

Mike
--
M.J.Powell

4022. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 13:35:12 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <qE6eOucAhXHdMEPZ8NwzYk2u3sAA@4ax.com>
Source record: 169445

Bill Aycock <baycock@hiwaay.net> wrote:

>Michael- There must be something wrong- I regularly hit a repeater over
>20 miles away with my FT530 with its rubber duck, and hit a repeater
>about 75 miles away when I am on a roof-top Cushcraft dual band. I can
>count on 20-25 miles when I use a car top magmount (Larsen),except when
>I am down in the valley.

I suspect the repeaters you're hitting so far away have antennas that
are considerably higher than the 2-story antenna the original poster
is using. And the repeaters might also have much better receivers. The
original poster has not mentioned what he's using for a receiver, or
how efficient his sending/receiving setups really are. He's operating
simplex, with one ground level antenna, and one 2-story antenna, and
only about 5 watts output. I don't know that he's all that off.

Bob
k5qwg

>
>Bill-W4BSG
>
>Michael wrote:
>>
>> I've got a Diamond D130J discone antenna mounted 10 feet above my second
>> floor roof. I did a test, and found out that that I'm only get reception up
>> to 1.5 mile away using my icom W32A with 5w output. The antenna I used for
>> transmission is a magnetic mount on my car top. The area is you typical
>> residential area with no tall buildings in sight. Now I'm kind of
>> dispointed.What are your experiences, suggestions? Thx.

4023. WTB:Basketcase/Project Heath gear

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 13:58:42 UTC
From: Heath <radiovintage@hotmail.com>
Message-ID: <kwsn6.307$OS1.313908@nntp2.onemain.com>
Source record: 169446
Cross-posted to: rec.antiques.radio+phono,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Disabled ham homebound looking for Heath basketcase or project equipment.Condition/looks not important tube or transistor.Radio or test equipment.Heath preferred but anything considered if the price is right.

4024. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 14:11:57 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <eNsn6.10077$4f.22755496@news1.mia>
Source record: 169447

Yes Steve, this is a static problem. How the energy transformed from one
state to another is not an issue.

regards,

Bill
"VE9SRB" <srbest@att.net> wrote in message
news:qGcn6.6258$mX4.523877@bgtnsc06-news.ops.worldnet.att.net...
>
> "VE9SRB" <srbest@att.net> wrote in message
> news:tOan6.6799$rL4.547115@bgtnsc04-news.ops.worldnet.att.net...
> >
> >
> > Hi Bill:
> >
> > Given two equal value capacitors in series, both having a voltage V/2, I
> > would suggest you look at re-calcualting the total energy in the circuit
> > again. It is not: Eafter = C1 * (V^2) / 4. Eafter is not equal
> to
> > E1 + E2.
> >
> > Steve
> >
>
> No, I am not replying to myself -
>
> Looking at the problem outside my previous perspective, the statements
above
> are incorrect. If two circuit elements have individual energies E1 and
E2,
> the total energy in the circuit will be E1 + E2. Same as power
> dissipation - if the power dissipation in one element is P1 and the power
> dissipation in the other is P2, the total power dissipation must be P1 +
P2.
> Not sure what I was thinking there.
>
> Steve
>
>
>
>

4025. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 14:14:09 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <kPsn6.10079$4f.22757012@news1.mia>
Source record: 169448

Excellent thought. Now set the resistor value = 0. It no longer heats up.
So where did the energy go?

Bill.
"David Richardson" <firsty@alphalink.com.au> wrote in message
news:3a9edfb5@news.alphalink.com.au...
> Try adding a resistor in series with the switch. When the switch is
closed,
> the resistor heats up and guess what? The final value of voltage on the
> equal value capacitors (V/2) is the same as without the resistor!
>
> VE9SRB wrote in message ...
> >
> >"VE9SRB" <srbest@att.net> wrote in message
> >news:tOan6.6799$rL4.547115@bgtnsc04-news.ops.worldnet.att.net...
> >>
> >>
> >> Hi Bill:
> >>
> >> Given two equal value capacitors in series, both having a voltage V/2,
I
> >> would suggest you look at re-calcualting the total energy in the
circuit
> >> again. It is not: Eafter = C1 * (V^2) / 4. Eafter is not
equal
> >to
> >> E1 + E2.
> >>
> >> Steve
> >>
> >>
> >No, I am not replying to myself -
> >
> >Looking at the problem outside my previous perspective, the statements
> above
> >are incorrect. If two circuit elements have individual energies E1 and
E2,
> >the total energy in the circuit will be E1 + E2. Same as power
> >dissipation - if the power dissipation in one element is P1 and the power
> >dissipation in the other is P2, the total power dissipation must be P1 +
> P2.
> >Not sure what I was thinking there.
> >
> >Steve

> >
> >
> >
> >
>
>

4026. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 14:30:46 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <X2tn6.10096$4f.22767300@news1.mia>
Source record: 169449

********** RIGHT ON!
****
GIVE THIS MAN A CIGAR

Bill Sabin would have certainly gotten the job.

The energy was dissipated in radiation. With no resonant circuits identified, it would likely have been white noise whose total integrated power (Steve!!!) equal to the difference in the energy before and after.

Now for the end of the story. The circuit was one of the underlying design features of a radar gun which was manufactured by the company.

The interviewer was the Vice President of Engineering. This man was one of the several who shaped my career. (I'm now retired). Not to bore you with details other than to mention that he flew a messerschmit during WWII. A great physicist, engineer and manager.

regards,

Bill Manley KB4XE

"William E. Sabin" <sabinw@mwci.net> wrote in message news:3A9D505B.E04E2E79@mwci.net...
>
>
> Bill Manley wrote:
>
> > Now you know as much as the interviewer and I did at the time of the
> > interview. The answer should be nearly obvious. So, where did the energy
> > go?
> >
>
> The basic problem is that a capacitor cannot change its voltage
> instantaneously. This difficulty is handled in this problem by the introduction
> of the Dirac function at the moment of switch closure. This function has a very
> small time duration and a very large amplitude, a "spike" in time. The missing
> energy is contained within that spike. If we take the Fourier transform of this
> spike we get a very wideband RF spectrum of coherent radiation for a very brief
> time. This solution assumes zero inductance and zero resistance in the

loop,
> which is how the problem was stated.
>
> This solution is affirmed by solving the differential equation, using the
> LaPlace transform method.
>
> Bill W0IYH
>

4027. Re: 160 Meter Inverted "L" Advice Requested:

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 14:34:51 UTC
From: w5omr <no_mail@no_mail.org>
Message-ID: <f6tn6.1910$Fz.677047@typhoon.austin.rr.com>
Source record: 169451

: I'd like to ask the antenna newsgroup a question about inverted L's. I would
: like to build one for 160 meters and have a few questions: Here is my
: situation:
:
: I can go about 90-100 feet vertical, and just about an unlimited length
: horizontally. My property is surrounded by talls trees which I plan to hang
the
: antenna from. I already have a 260' flat-top up at about 85' which is a good
: performer and I'm looking for something that will have a lower takeoff angle
to
: work DX with.

A long time ago, Benjamin Van Wye/W5ZED "Van", took a simple 40m inverted V,
and turned it 90°. The now verticaly polarized antenna is one he called the
"signal Jet".
Presumbably, the direction of the antenna's feedpoint, aimed the direction of
the
signal. Others have tried this, and from what I am told, they have fairly
promising
reports.

What I'm thinking of, is a variation on that theme. You'd like to change the
angle
of attack/approach of the signal from the antenna. How about taking your 260'
Flat top,
lowering the legs (which would reduce your feedpoint Z to something closer to
50ohms) and perhaps fanning them back at an angle, to 'direct' the signal?
For that matter, how about a second antenna, some phasing line, and different
degrees of phasing to electrically change the angle of attack/approach of the
signal?

It's been done. Years ago, it was called a 2-element phased array.

With latching relays to hold the phasing line from one direction to the other,
front
to back reports were seen in the order of 30 to 50db, depending on band condx.

:I run close to legal limit with my amplifiers.

I think most folks in here would agree that the best amplifier is a GOOD working
antenna.

--
73 = Best Regards,
-=Jeff/W5OMR=-

4028. Re: Gap Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 14:42:22 UTC
From: 2w8ji@akorn.net
Message-ID: <3a9e5ef0.604405556@news.accessunited.com>
Source record: 169450

On Tue, 27 Feb 2001 06:11:00 GMT, dmccord@usol.com (Delbert McCord)
wrote:

>I am thinking of purchasing a Gap Vertical Antenna For HF, does anyone
>have any experence with these verticals that they wish to share with
>me? The promotional material sure looks good.
>
>73's Del
>KA8OCN

Advertising always looks good.

The antenna is one step removed from a dummy load on the lower bands,
but generally works better as frequency is raised. Don't expect to do
well at all on the lowest bands.

QST review a Gap a while ago, I forgot when, and their conclusions
were about like mine. A ground mounted trap vertical with a good
radial system is much better on most bands.

73 Tom

4029. Re: Antenna Switch.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 14:59:44 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3A9E63E0.2781E494@rupert.tds-az.lmco.com>
Source record: 169452

Jim Henson wrote:
>
> I want to build an antenna switch to switch between 2 or 3 different
> sources (one antenna, 3 different radios). Two of those radios would be ham
> radios, one would be a scanner. The maximum power transmitted would be 50
> watts. I need to know what kind of switch I need to use that won't mess up
> my SWRs and end up burning the switch or a radio.
>
> Respond in email if possible, I rarely get to check the newsgroups.

The key ingrediant to any of the good antenna switche is a low loss ceramic rotary switch. These are usually more expensive than the garden variety rotary switches, but they offer a higher voltage and current capability, and provide better isolation between switch positions.

If you don't want to build, you could just wander around a local ham fest. I always see them for sale at reasonable prices.

You can also go with relays. Relays allow you to separate the control section from the switching section. You can then put the control portion in a convienent place and have the switching section tucked behind your operating desk. It should be easy to find relays that will handle the voltage and current. Good isolation is usually easier to come by with a relay setup. As long as you don't try hot-switching the relays, contact arcing shouldn't be a problem.

In to any of these setups it would probably be a good idea to include an extra position for grounding the antenna. A good idea to prevent static buildup when your radios are not in use.

Take a look at the ARRL Handbood for some good ideas on antenna and rig switching.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

4030. Re: 160 Meter Inverted "L" Advice Requested:

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 15:03:53 UTC
From: 2w8ji@akorn.net
Message-ID: <3a9e6057.604764255@news.accessunited.com>
Source record: 169453

On 28 Feb 2001 18:39:19 GMT, yardleyite@aol.com (Yardleyite) wrote:

>I would like to build an inverted - L and current feed it at the ground via a
>variable cap. The antenna would be about 90' vertical and either 96'
>horizontally (for a 3/8 wave antenna) or 170' horizontally (for a 1/2 wave).
>Since I'm feeding it essentially like a "Marconi" - except with variable
>reactance at the base, would it outperform my flat -top? Does anyone on the
>list have a simular configuration?
>If so, how does it perform? How does it measure up to a flat - top if you have
>one as a reference antenna?

I've used antennas like that, as have many 160 ops. You really do NOT
want a 3/8th wl inverted L or longer unless you absolutely can not put
in a reasonable ground.

Four ground rods will not be enough, and neither will a few elevated
radials, unless you are happy losing several dB of signal. Even the
loss of two dB can be a big difference if you are trying to work DX.

A vertically polarized radiator will, as a general rule, blow away a
horizontal antenna for any distance more than a few hundred miles. I
have a dipole at 300 feet, and even with that extreme height virtually
all of the time a vertical (with 100 radials) is equal or better.
Sometimes the vertical substantially better!

A lower heghts, a dipole is a dog for anything over a few hundred
miles unless you compare it to a poor vertical. You'll find as a
general rules the only people who swear by low dipoles are those with
poor ground systems, like four elevated radials close to the earth.

Assuming you have a reasonable ground system you want maximum current
over the length of the vertical section, NOT at the top. So you should
plan the length of any flat-top accordingly. Making the antenna about
1/4 wl long from the MIDDLE of the vertical section to the open end
works pretty well.

>I could also elevate the feedpoint to the apex of the vertical and run it
>against a ground but I don't see any advantage to doing it that way. In either
>situation I have a large body of salt water that runs directly through my
>property and I already have four ground rods buried directly in there. I have a
>1/4 wave vertical for 75M (61.5') with elevated radials that is a descent
>performer. I plan to tie the 160M "L" radial system into that.

If you are "tying stuff in" to the elevated ground, and don't actually
have the feedlines and stuff ground isolated, you are not getting
maximum efficiency from the elevated ground system. Elevated radials
systems close to earth aren't all that good anyway even when properly

installed, so you might consider a conventional ground system.

If you use a conventional system with only 30 radials that are 1/8 to 1/4 wl long on 160 meters, you'll be withing a dB or two of anything you can do and far better off than having the elevated system. You'll have less RF floating around, and you will have a feed system that can be (and actually is) directly connected to earth for lightning protection. It will also work very well on multiple bands, something the elevated system won't even likely do on one band.

Of course you'll make lots of contacts even with a less than optimised system, you'll just never be at or near the top of the heap.

73 Tom

4031. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 15:07:51 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9e65b7$0$35013$44a10c7e@news.net-link.net>
Source record: 169454

Cabela's has "bream" poles to 20 feet. I just saw them at the new store in Dundee, MI on sale for $18.00. The collapse down to about 4 feet. They have rubber caps at each end. All sections are hollow except the tip section, which is a bright yellow/green color with one eye on the end. Overall, the pole is fairly stiff. I put a 60 foot spool of 18 gauge stranded wire at the end of the smallest hollow section and had about 6 inches of sag when holding it at the butt end. The solid tip is pretty whippy, however, your can easily helically wind some wire onto this pole, then take the wire through the eye, then over to a tree, or back down to the ground for an inverted L or V type antenna over radials. I am working on using 2 of these for a portable loaded rotatable dipole.
BuzzKenwood wrote in message ...
>On 28 Feb 2001 20:14:12 GMT, David Snyder Hale
><david@isi9.mtwilson.edu> wrote:
>
>>Patrick Croft <mai@iquest.net> wrote:
>> > fishing poles the retract to a foot or so in length. Check here for
>> > such: http://www.cabelas.com
>>
>>This is sorta interesting looking... I just went to cabelas.com and
>>found a telescoping push pole (not a fishing rod) ITEM: XA-22-0080
>>which is made from aluminum and telescopes from 6.5 inches to 12 feet!
>>http://www.cabelas.com/texis/scripts/store/+/CatalogDisplay/displayPOD/Cab
FALL1998/CabFALL1998/XA748F?format=search
>(B) Telescoping Push Pole Telescopes from 6-' to 12'. Made of
> heavy-duty aluminum.
> Available: Marsh grass color.
>
>>Now, that might make a nice 40m loaded vertical right there, don'cha
>>think? (I'm also looking for very compact antenna ideas, both for
>>backpacking and for taking to the beach, where there clearly are no
trees.)
>>
>>Could one just add some sort of end loading coil, radials, and then feed
>>this Al mast itself as the radiator?
>>
>>73,
>

4032. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 15:16:57 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3A9E67E9.6F0F8C8@iquest.net>
Source record: 169456

In reviewing the Cabela page for this item I find you made a slight error in your report -

The unit telescopes from 6.5 FEET to 12 FEET, not 6.5 INCHES to 12 feet. Too long for most traveling ham types. No real advantage to this over a paint or window pole that will cost you half as much. The paint/window poles have the avantage of an adaptable end for mating to PVC and such.

There are telescoping units at achieve the range of 6.5" to 12+ feet. They are typically used in robotic applications by NASA and cost a far more than your super delux rig.

Bests,

Patrick
W9GTA

David Snyder Hale wrote:
>
> ARDUJENSKI <ardujenski@aol.com> wrote:
> > Cabelas is selling a backpackable fishpole that is 14ft and closes to just 15
> > inches. The St. Louis QUICKY will work nicely on this (about 11 ft) or setting
>
> What is the "St. Louis QUICKY"?
>
> Have you seen this one at cabelas.com?.... ITEM: XA-22-0080
> It is an aluminum telescoping push pole,
> which telescopes from 6.5 inches to 12 feet!
>
> I was thinking that one could make a loading coil on PVC form
> or something, then slip it around the base of this push pole
> where the pole itself becomes the radiating element.
>
> I don't know how to design stuff like this though.
> What do you think?
>
> How would you determine efficiency? (You mentioned yours was 50% eff on 20m)
> I'd like to build something like this for 40m, perhaps tunable on 20m too.
>
> 73,
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4033. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 15:57:02 UTC
From: richardharrison@webtv.net
Message-ID: <19079-3A9E714E-144@storefull-116.iap.bryant.webtv.net>
Source record: 169457

Cecil wrote:
"But one gets pretty good performance out of 1/2WL of dipole."

Page 3-9 of the ARRL Antenna Book puts it very succinctly, "A horizontal antenna will often outperform a vertical for low angle DX work, particularly over lossy types of earth at the higher frequencies.

For honesty in advertising they could have added that you need at least 1/2-wave elevation to get that low-angle radiation. Instead, they left it up to the reader to examine all the charts and graphs that they included.

Best regards, Richard Harrison, KB5WZI

4034. ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 17:33:26 UTC
From: gene@ews.uiuc.edu
Message-ID: <GJvn6.6920$dL4.90477@vixen.cso.uiuc.edu>
Source record: 169458

The 19th Ed. ARRL Antenna Handbook has some interesting comments concerning feedlines: Quote:
......p. 26-25.."ONE FINAL WORD: This is a good point to debunk a persistent myth among amateurs that a mismatched transmission line somehow radiates. This is absolutely not true! The loss is miniscule. Whenever a line radiates it is because of an unbalanced condition somewhere in the system (on the antenna or its environment or on the line itself) or because of common-mode currents radiated by the antenna back on to the line because of asymmetry in the system. The SWR on the line has nothing to do with the unwanted radiation from a transmission line."...unquote.

..to me, this seems to say that you could probably never get inconsequential radiation from the feedline except in center-fed systems.

......another quote: p. 26-19 "All around the world there are many thousands of coax-fed dipoles in use, where no special effort has been made to smooth the transition from unbalanced coax to balanced dipole." ...."Any minor change in SWR due to common-mode current would be shrugged off as inconsequential." unquote.

Note that they said 'dipoles'...and they discuss that this method would present problems for direction-finding or front-to-back beams requiring deeper nulls.

An unrelated Note: There is an "obvious" error in a figure on p. 5-4 describing the Army Loop: the variable-capacitor shown in the horizontal line to ground, should be inserted in the horizontal line directly above it.
--

Internet, BITNET: gene@csl.uiuc.edu

4035. Re: Antenna opinions needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 18:35:20 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <5u4t9t4dl7kcai5mbvh2mdf19lqg96qd9p@4ax.com>
Source record: 169459

On Tue, 30 Jan 2001 19:09:18 -0600, "rdalton1" <rdalton1@postoffice.swbell.net> wrote:
>Trying to figure out a way to use a swan 250 in an apartment I will have to
>use a counterpoise,any antenna ideas are appreciated .Thanks

You'll need to counterpoise the counterpoise. Any old hunk of wire
will do, but it will work best if the counterpoise for your counterpoise
is a mirror image of the original counterpoise. In other words, use a
center fed dipole as antenna and counterpoise all in one. No other
counterpoise or ground connection is needed.

It isn't necessary for it to be cut to be resonant at any particular
frequency. It doesn't have to be perfectly straight. But do try to
maintain symmetry about the feedpoint. If the antenna winds up
much shorter than a halfwave, it'll probably be advantageous to
add capacity hats to each end (hardware cloth nailed up to attic
structures is convenient). A tuner may be required, though the
old Swan's Pi net has a fairly broad matching range.

If you use a tuner, a balanced design, and ladder line feed, would
be preferred. (Symmetry is the important thing here to maintain
ground independence and to avoid stray RF in the shack.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4036. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 19:07:43 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97m9gkiov1@lure.pipex.net>
Source record: 169462

```
"Richard Clark" wrote
> 10 - 20%
```

Better than the 2% of an X-Ray tube then.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4037. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 19:17:45 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97m9gliov2@lure.pipex.net>
Source record: 169463

"Peter O. Brackett" wrote ...
> Gary:
> We colonialists were once British Subjects, but our ancestors decided the
> King didn't really know what was best for us, and so we embarked upon an
> effort to increase our own Q.

O. "Stanley that's another fine mess you got me into."
fx(screws up face pretending to cry and scratches top of head)

Yeah! your best home grown was the Marx Brothers:)
And of course Doris Day

> Unibond...heh, heh... we don't have that trade name here in the colonies,
> but since you have "splained" it for us, now we "get it".

It'll cover up the cracks very nicely.
Wouldn't want you to think that it was come sort of college fraternity,
phi, beta, kappa.
On the square, more likely Toc H.

I hope that your builders are better than the Cowboys that we get here.
Just how much DIY do you guys do on your own houses?

> Kew? Is that where Kew Gardens is located?

Yes, certainly is:
Go down to Kew at lilac time,
It isn't far from London.

> Is this the Q that Reg disparages?

We take what Reg disparages with a pinch of salt.
--
Gary7SLL
51 23' 50" N 1 19' 58"W
www.gary.peach.dial.pipex.com/

4038. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 19:43:04 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97m8o8dev1@agate.berkeley.edu>
Source record: 169460

Patrick-

yes, I later saw that. I should have realized that I misread it,
since I am a firm believer in what seems to be too good to be true
always is.

However, KB7MBI pointed out that cabelas.com sells a telescoping panfish
rod (ITEM: IB-11-5800), 15 inches to 15 feet, which is still pretty good,
provided it is rigid enough to support a 6 inch coil at about the 11 ft
mark.

Patrick Croft <mai@iquest.net> wrote:
> In reviewing the Cabela page for this item I find you made a slight
> error in your report -
>
> David Snyder Hale wrote:
>>
>> Have you seen this one at cabelas.com?.... ITEM: XA-22-0080
>> It is an aluminum telescoping push pole,
>> which telescopes from 6.5 inches to 12 feet!

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4039. Vac Variable To Tune Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 19:45:40 UTC
From: n4jzh@knology.net
Message-ID: <3a9ea659.437198144@news.knology.net>
Source record: 169461

Thinking of using a Vacuum Variable at the feed point to
help tune a Inverted L. any comments?
Donnie

4040. Re: Learn and practice CW on the Web.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 19:55:01 UTC
From: "D.J. Beard" <dbeard@aoc.nrao.edu>
Message-ID: <97m9fh$5bj$1@chaos.aoc.nrao.edu>
Source record: 169464

I'd love to use this site BUT the code sounds terrible. Maybe it's my computer. Hmmmm.

DJ

4041. Re: sun and moon size

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:04:36 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97madp$jq9$1@lure.pipex.net>
Source record: 169465

```
"M.J.Powell" wrote ...
> Gary Peach writes
> >"M.J.Powell" wrote >
> >> Dear oh dear, Gary. It was only a rule-of-thumb.
> >Do you wish to hammer your point home?
> Hehe!
> >anorak of long standing
>
> I left my anorak on Pontypool Road station when I gave up collecting
> engine numbers.
```

And took up DXCC instead:)
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4042. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:19:06 UTC
From: richardharrison@webtv.net
Message-ID: <13339-3A9EAEBA-68@storefull-115.iap.bryant.webtv.net>
Source record: 169321

Gene Gardner wrote:
"There is an obvious mistake in a figure on p.5-4 describing the Army Loop."

In my copy of the 19th edition, the army loop is Fig 15(A) on page 5-11 of the ARRL Antenna Book.

Agreed, there is a mistake. The loop is shorted in the figure. Won`t work!

The book, however, is correct that imbalance is the principal cause of parallel line radiation. Amplitude of the unbalanced current directly relates to the amplitude of radiation from the line, but is not the cause. The cause is the imbalance.

The book is also correct when it says that dipoles fed directly with coax can in many cases work beautifully with no baluns. I`ve erected many that way myself without a trace of troubles.

Best regards, Richard Harrison, KB5WZI

4043. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:25:56 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3A9EB054.63D664D8@iquest.net>
Source record: 169466

Dave-

the Pan fish Poles are nice units for backpackers as well as suitcase travelers. The longest is actually 14 feet and costs $24.99 plus all the usual shipping fees. Not a super strong rod, but quite an asset at $25 just the same. They are well suited for verticals, inverted L's, NVIS dipoles, and other applications in portable situations.

The last robotic satellite pole (9" collapsed to 30' extended seen surplus went on eBay for around a hundred bucks...a fraction of the gov'ts cost (typically $2K).

For supporting coils I suggest some foam pipe insulation of varying diameters. This material is easily layered to host a coil upon a rod and weighs near zero. Its good packing material for the coil as well. I tend to use 2" to 3" diameter coils of 14 gauge or larger wire. Smaller coils tend to get distorted in transit.

You may find it more convenient to place loading coils in the six foot range. While theory demands coils high as possible for greatest efficiency, the practical needs would suggest within reach to allow adjustments.

Bests,

Patrick
W9GTA

4044. Re: Chevy Tahoe Mobile Installation Questions (2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:33:48 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3A9EB22C.4C37063B@grove.iup.edu>
Source record: 169467

You definately want to check out the Diamond K400-3/8C mount. Very very thin teflon coax (RG-316???) and very modern looking. I use it on the top of my door on my Silverado (I also use a FT-100). I swap in mono band antennas.

Scott.

Jeffrey Steinberg wrote:

> Dear Group,
>
> I am in need of some assistance. First, let me describe what I currently have, what I am planning to get and then the two questions.
>
> **Current installation** 2m/440 radio wired to battery with magmaount dual-band antenna on roof fed with RG-8X/PL259 through rear barn door (double doors hinged on the side).
>
> I am getting some water leaks (surprise, surprise) after several months of no problem.
>
> **Future radio** I am planning on upgrading to HF with an FT-100.
>
> Question #1: Is there anyone who makes a magmount that uses a few feet of the very thin RG-188 and will that prevent the water coming on or is any cable coming through a door going to distort the water seal enough that water wickes past it?
>
> Question #2: If I have to drill holes into the car (which I don't mind), should I wait until I get the HF radio and drill one hole for a combo antenna or would it be better to have one antenna for 2m/70cm and another one for HF (I.e. drill now and add another hole later).
>
> Question #2a: What's a recommended
>
> --Jeffrey, KC2GUC, Scarsdale, NY

4045. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:37:58 UTC
From: richardharrison@webtv.net
Message-ID: <13339-3A9EB326-72@storefull-115.iap.bryant.webtv.net>
Source record: 169320

Richard Clark, KB7QHC wrote:
"10 - 20%" (Efficiency of the incandescent lamp).

I thought, can`t be. I`d remembered 5% all these years. Looked-up these efficiencies in a source quoting lumens per watt for everything from Edison`s original issue carbonized string lamp to the most modern, and Richard Clark is right!

Best regards, Richard Harrison, KB5WZI

4046. Re: Learn and practice CW on the Web.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:42:54 UTC
From: les <lesbod@lesbod.fsnet.co.uk>
Message-ID: <97mc8lhob1@news6.svr.pol.co.uk>
Source record: 169468

No I don't think its your computer, take a look at Morse Academy at
www.speroni.com its a dos program but you can get into it from
windows, you will have to set it up to your sound card.
if I can help email me
Les G4JDC

"D.J. Beard" <dbeard@aoc.nrao.edu> wrote in message
news:97m9fh$5bj$1@chaos.aoc.nrao.edu...
>
> I'd love to use this site BUT the code sounds terrible. Maybe it's my
> computer. Hmmmm.
>
> DJ
>
>

4047. Re: Learn and practice CW on the Web.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 20:44:43 UTC
From: les <lesbod@lesbod.fsnet.co.uk>
Message-ID: <97mcc1$r11$1@news8.svr.pol.co.uk>
Source record: 169319

BTW Its Free
"les" <lesbod@lesbod.fsnet.co.uk> wrote in message
news:97mc8lhob1@news6.svr.pol.co.uk...
> No I don't think its your computer, take a look at Morse Academy at
> www.speroni.com its a dos program but you can get into it from
> windows, you will have to set it up to your sound card.
> if I can help email me
> Les G4JDC
>
> "D.J. Beard" <dbeard@aoc.nrao.edu> wrote in message
> news:97m9fh$5bj$1@chaos.aoc.nrao.edu...
> >
> > I'd love to use this site BUT the code sounds terrible. Maybe it's my
> > computer. Hmmmm.
> >
> > DJ
> >
> >
>
>

4048. Re: 2m transmission range

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 22:10:13 UTC
From: conal@drunkenbard.com
Message-ID: <3a9ec7be.57877072@news.newsreader.com>
Source record: 169322
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

On Wed, 28 Feb 2001 21:20:25 -0600, "BD" <bodu@pobox.com> wrote:

>Sounds like something's broken... I can do almost as good with two FRS
>radios....

In the right neighborhood, I can get a message 1.5mi by yelling really
hard.

>Do you have an SWR meter?...

That would be my first suggestion. I found that most of the CB HT's I
used back in my CB days didn't care much for my big antennas. They
were getting nearly full-scale readings on the SWR meter. It worked
much better to roll down the window and lean out with the original
antenna.

Of course, just using the right radio for the job let me get ome use
out of those antennas, and keep the air conditioning working. :)

Conal Fitzgerald
conal@drunkenbard.com
http://www.drunkenbard.com

4049. Re: apartment dwellers indoor antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-01 23:00:50 UTC
From: Steve Woodruff <sjwoodr.nospam@nospam.email.com>
Message-ID: <97mkebfue1@flood.xnet.com>
Source record: 169323

"jack beltz" <blues38@inwave.com> wrote in message
news:Zrgn6.3581$7e6.1426515@homer.alpha.net...
> live on the first floor of an apartment.no outside antennas.
> what to do for hf.80-10 meters?
> thanks jack

I don't live in an apartment, but my subdivision does not allow outside
antennas.
I have a 20/40/80 meter multi-leg, parallel dipole in the attic of my garage
up
about 10 feet. Its not the best antenna, but i've worked 44 states and 3
countries
since i put it up about 8 weeks ago. Since the garage is only 20'x20', the
antenna
zig-zags all over up there, but it works, and with a tuner you can get 1:1
swr.
If your living room in your apt is large enough, i imagine you could tape
something
similiar to the ceiling.

Good Luck!

Steve, N9XBJ

4050. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 00:25:52 UTC
From: kb7qhc@home.com
Message-ID: <3a9ee743.27157169@news.seanet.com>
Source record: 169324

On Thu, 1 Mar 2001 14:37:58 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark, KB7QHC wrote:
>"10 - 20%" (Efficiency of the incandescent lamp).
>
>I thought, can`t be. I`d remembered 5% all these years. Looked-up these
>efficiencies in a source quoting lumens per watt for everything from
>Edison`s original issue carbonized string lamp to the most modern, and
>Richard Clark is right!
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard, Gary,

Just a lucky guess based on years of working with optics. Please note I cannot emphasize "luck" enough, because so much of optical measurement is confounded by the eye's experience (which is vastly superior to almost any detector), and what seems simple - simply because we can see it - is by far and away extremely difficult in practice!

Another note. The radiation from an incandescent light bulb conforms very closely to a black body radiator. The single best detector for this source is any built around silicon. That is because these detectors exhibit a sensitivity curve that also matches the shape of a black body radiator (and few other detectors do). However, there are very few practical applications that use the full black body spectrum of any source.

73's
Richard Clark, KB7QHC

4051. Re: HT ANTENNAS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 00:38:52 UTC
From: Daniel Friedrichs <dan@willinet.net>
Message-ID: <3A9EEB9B.CA3FB8EB@willinet.net>
Source record: 169325

Making your own HT antennas is simple. A few months ago, I was looking for a VERY small "stubby" antenna for my HT, but couldn't find one and ended up making it myself. For my antenna, I just cut a piece of #22 wire to 1/2 wavelength of the frequency I was going to be using most often (in this case it was 3' 3"). I connected one end of the wire to the center conductor of a BNC connector, and wound the rest of the wire tightly around a pencil. Remove the pencil from the center, and you have a little coil of wire. Then I dipped the whole antenna in a substance called "Plasti-dip" that you can buy at hardware stores. It's litterally a "liquid plastic". After the plasti-dip dried on the antenna, it worked wonderfully.
Note : you might want to test the SWR and tune the antenna before you plasti-dip it :).

Dustin Knau wrote:

> I am looking for some good sources on homemade HT Antennas.. If anyone can
> help you can email me at knau@swbell.net or post to the news group.

--
Daniel Friedrichs
dan@willinet.net
KC0IPG

4052. Opinions on Hustler 5BTV? Good or what?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 00:51:35 UTC
From: Randy & Cara Randall <crrandal@seidata.com>
Message-ID: <3A9EEE97.A2010BC9@seidata.com>
Source record: 169326

What do you think? E-ham sez 4.6 out of 5.

Thanks,
Randy kb8aso

4053. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 01:05:49 UTC
From: kb7qhc@home.com
Message-ID: <3a9fe90a.27612274@news.seanet.com>
Source record: 169327

On Thu, 1 Mar 2001 10:04:20 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>
>Is not simply that the charge density is less on the outer surface merely
>because it is at a greater radius and therefore a larger area, and therefore
>current does not flow into a higher charge density region on the inner
>surface, like charges of the electrons repelling.
>
>Should the sphere we connected to a point how much will the voltage increase
>at the point?
>
>Will charge from the surface of the sphere actually move to the point?
>
>I don't expect a lightening answer BTW.
>
>Next coming to this space the Homopolar generator.:)
>--
>Gary7SLL
> 51ï¿½ 23' 50" N 1ï¿½ 19' 58"W

Hi Gary,

I've already corresponded with John Fakan, a designer of a million amp
homopolar generator for NASA (you maybe familiar with his work ca.
1960's) - Richard Harrison can fill in for this side thread too.

However, you still miss the point of the sphere. The inside radius of
the hollow sphere cannot contain a charge - period. Any attempt to
place a charge within a hollow, truncated sphere will immediately
result in that charge moving to the outside surface - period. There
is no other operational criteria. There are no other states.

That charge goes to the outside of the hollow sphere by the nature of
charge seeking the smallest radius (the inside of the hollow sphere
does not qualify in the least).

A simple proof of this is with the hollow sphere itself. That is, the
sphere must be absolutely smooth. Any burr or artifact on the surface
will become the smallest radius in the system and charge will flow to
it. In such a case, the charge accumulation at this point will
eventually cause a dielectric breakdown far in advance of the larger
sphere's capacity to store a greater charge and thus discharge the
reservoir. This condition is classic and common practice seeks to
reduce artifacts and radical changes in radius.

When you speak of a "point," that is simply a surface with a smaller radius, which of course satisfies the charge flow requirement. This is also why you see demonstrations of high charge being controlled by pointy instruments from reservoirs of large hollow spheres.

Radius: Geometry is the first principle.

73's
Richard Clark, KB7QHC

4054. K730370

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 01:18:50 UTC
From: Manolo Pasquini <manolo@nospancronos.it>
Message-ID: <_xCn6.45787$Y93.1329643@news.infostrada.it>
Source record: 169328

Where could I find DDr (3-dimensional) of Kathrain 730370 at 902, 925 or 947 Mhz?
Thanks

Manolo.

4055. Re: Vac Variable To Tune Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 01:37:58 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3A9EF976.20F16A4B@oio.net>
Source record: 169329

Donnie wrote:
>
> Thinking of using a Vacuum Variable at the feed point to
> help tune a Inverted L. any comments?
> Donnie

Donnie,
If it covers the corect capacitance range, it ought to
work fine/last a long time.
'Doc

4056. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 01:50:00 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3a9efc23.41508403@news.aepnet.org>
Source record: 169330
Body handling: HTML body converted to readable text

PLEASE use ASCII text.

On Fri, 02 Mar 2001 00:13:33 GMT, Irv Finkleman
wrote:

>
>
>Richard Harrison wrote:
>
Gene Gardner wrote:
>
"There is an obvious mistake in a figure on p.5-4 describing the Army
>
Loop."
>
In my copy of the 19th edition, the army loop is Fig 15(A) on page 5-11
>
of the ARRL Antenna Book.
>
Agreed, there is a mistake. The loop is shorted in the figure. Won`t
>
work!
>
The book, however, is correct that imbalance is the principal cause
>of
>
parallel line radiation. Amplitude of the unbalanced current directly
>
relates to the amplitude of radiation from the line, but is not the
>
cause. The cause is the imbalance.
>
The book is also correct when it says that dipoles fed directly with
>
coax can in many cases work beautifully with no baluns. I`ve erected
>
many that way myself without a trace of troubles.
>
Best regards, Richard Harrison, KB5WZI

>
>

Figure 5(a) is not in error. If you read the accompanying text you
>will find that the loop "...appears as a parellel tuned circuit, fed by
>a tapped capacitance impedance-matching network. The Hart loop, shown
>in Fig 15B, has the tuning capacitor separate from the matching network."
>In Fig 15A you can see the two caps marked as "resonance (tune)"
>
and "load". It's tricky, but it is correct.
>

>
--
>
Please hit 'REPLY TO' e-mail address before sending. Thanks.
>
Irv Finkleman,
>
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
>
Calgary, Alberta, Canada
>

>

4057. Re: Chevy Tahoe Mobile Installation Questions (2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 02:16:03 UTC
From: jeffrey.steinberg@Mothernature.com
Message-ID: <3a9f01c8$0$65503$45beb828@newscene.com>
Source record: 169331

Can you explain how you use it on the top of the door (where you mount
it and what you do with the cable. We have kids that use all of the doors. Do
you?

--jeffrey

In article <3A9EB22C.4C37063B@grove.iup.edu>, yetbbwa@grove.iup.edu says...
>
>You definately want to check out the Diamond K400-3/8C mount. Very very thin
teflon
>coax (RG-316???) and very modern looking. I use it on the top of my door on my
>Silverado (I also use a FT-100). I swap in mono band antennas.
>
>Scott.
>
>
>
>Jeffrey Steinberg wrote:
>
>> Dear Group,
>>
>> I am in need of some assistance. First, let me describe what I currently
have,
>> what I am planning to get and then the two questions.
>>
>> **Current installation** 2m/440 radio wired to battery with magmaount
dual-band
>> antenna on roof fed with RG-8X/PL259 through rear barn door (double doors
>> hinged on the side).
>>
>> I am getting some water leaks (surprise, surprise) after several months of
no
>> problem.
>>
>> **Future radio** I am planning on upgrading to HF with an FT-100.
>>
>> Question #1: Is there anyone who makes a magmount that uses a few feet of
the
>> very thin RG-188 and will that prevent the water coming on or is any cable
>> coming through a door going to distort the water seal enough that water
wickes
>> past it?
>>
>> Question #2: If I have to drill holes into the car (which I don't mind),
>> should I wait until I get the HF radio and drill one hole for a combo

antenna
>> or would it be better to have one antenna for 2m/70cm and another one for HF
>> (I.e. drill now and add another hole later).
>>
>> Question #2a: What's a recommended
>>
>> --Jeffrey, KC2GUC, Scarsdale, NY
>

4058. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 02:19:53 UTC
From: richardharrison@webtv.net
Message-ID: <22455-3A9F0349-1@storefull-117.iap.bryant.webtv.net>
Source record: 169333

Richard Clark, KB7QHC wrote:
"The single best detector for this source (incandescent lamp) is any
built around silicon. This is because these detectors exhibit a
sensitivity curve that also matches the shape of the black body radiator
(and few other detectors do)."

I need a translation. A body may appear black because it absorbs all colors of light. A black body also absorbs heat as we know from black clothes and black automobiles, etc. We also know that black radiates about as well as it absorbs. That`s why heat sinks are colored black, isn`t it?

So, is Richard Clark nsaying the silicon photovoltaic cell is an ideal optical energy detector because it is a broadband nondiscriminatory device which responds equally well to heat and light?

I thought that when an incandescent lamp converted 15 watts into light it was converting 85 watts into heat.

If a silicon cell responded indifferently to heat and light, how could it be used to determine the efficiency of an incandescent lamp?

I guess all one needs are appropriate filters to pass the visible spectrum while rejecting the invisible spectrum, or vice versa.

Best regards, Richard Harrison, KB5WZI

4059. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 02:35:21 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3A9F06E8.70A7@bellsouth.net>
Source record: 169332

Jim Rodenkirch wrote:
>
> "Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3A588B3F.8D748EFB@IEEE.org...
> Hmm... doesn't look like an F-150, maybe a Ram? What?
>
> > GMC, the most electrically noiseless vehicle I have ever owned.>
>
> Cecil: friends don't let friends drive GMC products! It's a Ford F-250
> with the Power Stroke Diesel or nothing!
>
> Regards, Jim R.

Does your fuel pump talk to you? LOL!

Jerry
K4KWH

4060. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 02:51:01 UTC
From: richardharrison@webtv.net
Message-ID: <4719-3A9F0A95-1@storefull-114.iap.bryant.webtv.net>
Source record: 169335

Irv, VE6BP wrote:
"If you read the accompanying text you will find that the loop appears as a paralleled tuned circuit, fed by a tapped capacitance impedance-matching network."

As I strolled after posting, it dawned on me that one could tap a closed loop at points to provide a chosen impedance and use variable capacitors for fine adjustments. But, I dismissed the thought and I still haven`t looked back at the book. If I were making an illustration (figure), I would take care to indicate that I was making a match similar to a delta or a gamma.

Best regards, Richard Harrison, KB5WZI

4061. Re: Gap Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 03:07:02 UTC
From: k4ia@aol.com
Message-ID: <20010301220702.10257.00000079@ng-cp1.aol.com>
Source record: 169334

I believe my ladder line fed dipole outperforms my Gap Titan all the time. If you have the room for a 70 foot (or so) dipole you may want to give it a try. Check out www.spiromfg.com and look at the AS-2
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

4062. Re: 2.4Ghz directional antenna for LAN (home RF)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 03:31:18 UTC
From: Ron Zancola <zancola@optonline.net>
Message-ID: <3A9F4060.2540A342@optonline.net>
Source record: 169336

Who's transceiver are you using? I work at a company that makes 802.11 radios (also 2.4GHz, but not HomeRF). You might be able to use on of our Yagi's but from your comments I assume there is no connector on the unit.

The idea about the corner reflects is probably your best bet if there are connectors.

Trying to couple another antenna to it will only one cause mistuning on the unit (since by definition the unit's antenna will strongly 'see' your new antenna) and the coupling loss probably won't exceed your new antenna's gain so you will have a washout in net gain. Good luck.

mindy wrote:

> Hi All
>
> Iï¿½m trying to extend the range of my wireless (2.4Ghz Spread Spectrum)
> LAN system in my house.
>
> I need to extend it to around 1000ft ï¿½ Standard is 150-200 ft with the
> Omni
> directional antennas. It only needs to be point-to-point, so a
> directional antenna
> will work fine. The path is all line of sight with a single tree about
> half way.
>
> The transceivers have standard dipole antenna on them. They appear to be
> either
> 0db or ï¿½3db dipoles.
>
> My though was to build either a Helical or a Yagi antenna with an
> appropriate
> gain to overcome my losses. I figure the gain should be +9db for the
> extended
> range plus all the cable and connector losses.
>
> I am an electrical engineer, but I have no experience in antenna or RF
> design.
> I have a HP network analyzer at my disposal, so can make measurement on
> the system.
>
> Now here is my question:
>
> 1) I would prefer not to tear into the transceiver and attach the coax
> to the circuit

> board.
>
> Is it possible to couple the signal to the existing dipole
> efficiently enough to make
> this work ?
>
> What would be the loss if I ran the output of, say an 18db
> helical antenna,
> through a coax to a ï¿½ wave dipole and place it next to the
> transceiverï¿½s
> antenna. ?
>
> Does this idea have any chance of working ?
>
> If so is there an optimal position or configuration that I can
> employ?
>
> Is there any impedance issues that I need to deal with?
>
> 2) If I have to tear into the transceiver and connect the antenna
> directly to the
> circuit board, I assume that the impedances are not going to be matched.
>
> What will I have to do to match it close enough to work ?
>
> Any other Ideas would be greatly appreciated.
>
> Thanks
> Mindy
>
> mindy1701@hortmail .com

4063. Re: Omni Antenna and Point to Point

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 03:49:57 UTC
From: Ron Zancola <zancola@optonline.net>
Message-ID: <3A9F44C0.ACE297B8@optonline.net>
Source record: 169338

Any antenna can be used for a point-to-point, just need two points!!! However when setting up a point-to-point system the idea is to send almost all (ideally all) of your energy towards the other end. Sending the energy in any other direction is a waste since you're trying to get it to a particular location. You use a directional antenna for this reason. Be doing so you can have the points separated by further distances then you could if you used omni's (again directional antennas focus the all the energy where you want it giving a stronger signal). Hope this helps....

Kell Jemison wrote:

> Hello,
>
> I wanted to know if 2 Omni antennas arecapable of being used as a point to
> point system?
>
> example:
> Building A - Omni antenna
>
> Building B - Omni antenna
>
> Or, does one of the antennas need to be of the directional type?
>
> Thank you in advance
> Kell Jemison

4064. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 03:50:17 UTC
From: richardharrison@webtv.net
Message-ID: <4716-3A9F1879-13@storefull-114.iap.bryant.webtv.net>
Source record: 169339

I`ve looked at the book again. Fig 15(A) shows a loop with a gap. Each end of the gap is fed by a variable capacitor. Problem is both capacitors are connected to the same point, the center conductor of a coax feeder. Further the feeder center conductor is grounded, But the shield of the feeder is groundeed through a variable capacitor.

It still won`t work. There has to be an impedance between the variable capacitors where they connect to the feeder, but none is indicated. Irv, the text doesn`t say there is enough impedance provided between attachment points of the capacitors to make a tuned circuit.

The text says the loop makes a parallel tuned circuit fed by a tapped impedance matching network. Normally, you need to connect one end of the loop to ground and remove the short circuit on the center conductor to ground to accomplish the described circuit.

I did not see the original QST article, so I have no idea how it was presented. But something was sure lost in translation.

Best regards, Richard Harrison, kB5WZI

4065. Strange antenna behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 03:57:01 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <mOEn6.4165$qv3.1873058@nnrp5-w.sbc.net>
Source record: 169337
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

At the suggestion of those who replied to my earlier msg(2m transmission range), I got on the roof and lowered the antenna for inspection. I checked all the connections for shorts and faults, everything was connected properly. As I was measuring across the frequency range using the SWR meter, I noticed a very strange thing. Around 50M, with antenna lowered and placed almost level, SWR reading is below 3, as soon as the antenna is erected the SWR jumps to above 8. Also if I rearranged the cable a little bit, the SWR would vary 2-3 times around 50M. The above does NOT happen in 2m band. No matter how I placed the antenna or the cable, I would get consistent SWR reading around 1.6 throughout the 2m band. So it does not look like a cable problem, does it? Also, with antenna erected,it is about 2-3 feet away from a chimney. Is the metal cover of the chimney affecting the antenna somehow? I'm perplexed. What do you guys think might be wrong? Thx.

4066. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 04:27:53 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3a9f214d$0$46006$1dc6e903@news.corecomm.net>
Source record: 169341

It's called a Faraday Cage....

Richard Clark wrote:
>
> On Thu, 1 Mar 2001 10:04:20 -0000, "Gary Peach" <xcg34@dial.pipex.com>
> wrote:
>
> >
> >Is not simply that the charge density is less on the outer surface merely
> >because it is at a greater radius and therefore a larger area, and therefore
> >current does not flow into a higher charge density region on the inner
> >surface, like charges of the electrons repelling.
> >
> >Should the sphere we connected to a point how much will the voltage increase
> >at the point?
> >
> >Will charge from the surface of the sphere actually move to the point?
> >
> >I don't expect a lightening answer BTW.
> >
> >Next coming to this space the Homopolar generator.:)
> >--
> >Gary7SLL
> > 51° 23' 50" N 1° 19' 58"W
>
> Hi Gary,
>
> I've already corresponded with John Fakan, a designer of a million amp
> homopolar generator for NASA (you maybe familiar with his work ca.
> 1960's) - Richard Harrison can fill in for this side thread too.
>
> However, you still miss the point of the sphere. The inside radius of
> the hollow sphere cannot contain a charge - period. Any attempt to
> place a charge within a hollow, truncated sphere will immediately
> result in that charge moving to the outside surface - period. There
> is no other operational criteria. There are no other states.
>
> That charge goes to the outside of the hollow sphere by the nature of
> charge seeking the smallest radius (the inside of the hollow sphere
> does not qualify in the least).
>
> A simple proof of this is with the hollow sphere itself. That is, the
> sphere must be absolutely smooth. Any burr or artifact on the surface
> will become the smallest radius in the system and charge will flow to

> it. In such a case, the charge accumulation at this point will
> eventually cause a dielectric breakdown far in advance of the larger
> sphere's capacity to store a greater charge and thus discharge the
> reservoir. This condition is classic and common practice seeks to
> reduce artifacts and radical changes in radius.
>
> When you speak of a "point," that is simply a surface with a smaller
> radius, which of course satisfies the charge flow requirement. This
> is also why you see demonstrations of high charge being controlled by
> pointy instruments from reservoirs of large hollow spheres.
>
> Radius: Geometry is the first principle.
>
> 73's
> Richard Clark, KB7QHC

4067. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 04:29:33 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <u16u9tovsebs3sfl06rade97er3k6v2m0u@4ax.com>
Source record: 169340

On Thu, 1 Mar 2001 20:19:53 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Richard Clark, KB7QHC wrote:
>"The single best detector for this source (incandescent lamp) is any
>built around silicon. This is because these detectors exhibit a
>sensitivity curve that also matches the shape of the black body radiator
>(and few other detectors do)."
>
>I need a translation. A body may appear black because it absorbs all
>colors of light. A black body also absorbs heat as we know from black
>clothes and black automobiles, etc. We also know that black radiates
>about as well as it absorbs. That`s why heat sinks are colored black,
>isn`t it?
>
>So, is Richard Clark nsaying the silicon photovoltaic cell is an ideal
>optical energy detector because it is a broadband nondiscriminatory
>device which responds equally well to heat and light?
>
>I thought that when an incandescent lamp converted 15 watts into light
>it was converting 85 watts into heat.
>
>If a silicon cell responded indifferently to heat and light, how could
>it be used to determine the efficiency of an incandescent lamp?

>

>I guess all one needs are appropriate filters to pass the visible
>spectrum while rejecting the invisible spectrum, or vice versa.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

A Black Body radiator is a source of very wide band emission with a
Gibraltor shaped curve (the steep decline is in the short wave
lengths).

Most of the curve for the standard light bulb falls into the
wavelengths below 600 nM.

The HEAT you speak of is either what you percieve as convection or
conduction. However, there is a vast spectrum (unseen) of radiation
that occurs and is as much light/HEAT as that which you "see/feel."
Silicon detectors are quite well frequency paired with this spectrum -
being most sensitive to the frequencies where the poor lightbulb

peaks, and least sensitive to those frequencies that the poor lightbulb also cannot provide for very well. This spectrum is roughly 1000 nM wide at the half power points. In contrast, the eye can observe a half-power spectrum only 100 nM wide.

Now, as for filtering out IR. This, too, is extremely difficult if you are passing any amount of visible light. Almost every IR filter on the market has huge gaps in its exclusionary spectrum. It is only by luck and happenstance that the applications employing these filters are often blind at these leakage wavelengths.

73's
Richard Clark, KB7QHC

4068. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 04:52:08 UTC
From: ogardner@uiuc.edu
Message-ID: <YFFn6.7166$dL4.94739@vixen.cso.uiuc.edu>
Source record: 169342

>Richard Harrison wrote: in my copy....army loop is on page 5-11...

You are correct..(I can't read my own scribbling) and you are also correct that the loop can't possibly work as shown. (My 16th Ed. shows it correctly, as described above).

4069. Re: Strange antenna behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 05:07:50 UTC
From: BD <bodu@pobox.com>
Message-ID: <6VFn6.260$Jp3.154597@nnrp3.sbc.net>
Source record: 169343
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

I still think the prob's in the HT setup, not your 'base station'..
Otherwise, you'd not be hearing anything (besides static) at the house,
unless someone were trasmitting within the same 1.5 mile distance from you
or with quite a bit of power, which I atleast assume isn't a prob......

And have you tried the same test with the antenna that came with/on the HT
yet? I'd bet you'll see very much of an improvement. Lots of people assume
that because a longer wire (ie the taller magmount in this case) often seems
to perform better for receiving, that the same will apply to transmitting..
Not quite so, tho..

"Michael" <hkc2001@pacbell.net> wrote in message
news:mOEn6.4165$qv3.1873058@nnrp5-w.sbc.net...
> At the suggestion of those who replied to my earlier msg(2m transmission
> range), I got on the roof and lowered the antenna for inspection. I
checked
> all the connections for shorts and faults, everything was connected
> properly.

4070. Re: Opinions on Hustler 5BTV? Good or what?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 05:51:51 UTC
From: "John P. Franklin" <jpfrankl@teleport.com>
Message-ID: <2uGn6.1208$K66.1215282@nntp1.onemain.com>
Source record: 169344

I have the 4btv and have regularly worked DX with it..........gotta use it against a good ground reference tho.

Pat

4071. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 06:04:26 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3A9F3819.B25AD257@earthlink.net>
Source record: 169345

Gary Peach wrote:

>
> > I have another one: a capacitor is charged with a certain charge/voltage,
> then
> > it is dissolved in a non-conductive acid solution (hey, we're talking
> theory).
> > Where did the energy go now?
>
> Was this not one of the very earliest experiments using a capacitor (Leyden
> Jar)constructed from two silver tumblers separated by a glass tumbler.
> The assembled capacitor was charged and the charge demonstrated by an
> electroscope, pith balls.
> The capacitor was carefully dismantled and the silver tumblers demonstrated
> no charge.
> The whole was reassembled and the charge was once again demonstrated to be
> present.
> Thus it was inferred that the charge was held in the dielectric glass
> tumbler.

Hm, so where's the charge held if the dielectric is air or vacuum? I think KB5WZI got it right.

Anyway, that one was too easy. Here's another one: we wind up a spring which is then believed to be storing a certain amount of kinetic energy. Then we drop the spring in the same acid solution and it dissolves quickly without unwinding. Where did all that kinetic energy go now?

73 .... Zoran WA7AA

4072. Re: Omni Antenna and Point to Point

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 07:39:21 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <97nin9$7ue$4@bashir.peak.org>
Source record: 169347

Kell Jemison wrote:

: I wanted to know if 2 Omni antennas arecapable of being used as a point to
: point system?
:
: example:
: Building A - Omni antenna
:
: Building B - Omni antenna

If the resultant signal strengths are strong enough, it will certainly
work.

: Or, does one of the antennas need to be of the directional type?

No.

--
Bill Nelson (billn@peak.org)

4073. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 07:44:16 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <97nj0g$7ue$5@bashir.peak.org>
Source record: 169346

Zoran Brlecic <zbrlecic@earthlink.net> wrote:

: Anyway, that one was too easy. Here's another one: we wind up a spring which is
: then believed to be storing a certain amount of kinetic energy. Then we drop the
: spring in the same acid solution and it dissolves quickly without unwinding.
: Where did all that kinetic energy go now?

The spring is storing potential energy - not kinetic energy. The same is true
of a book sitting on a bookshelf.

With that as a hint - let's see if someone figures out the answer.

--
Bill Nelson (billn@peak.org)

4074. Re: 2.4Ghz directional antenna for LAN (home RF)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 11:46:14 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <qt1v9t41msrdmphu0re7b0bp5b4jmddp6o@4ax.com>
Source record: 169348

On Sun, 18 Feb 2001 17:48:13 -0000, "captbrian"
<captbrian@ukonline.co.uk> wrote:

>Put a simple corner reflector around existing antenna. Touch nothing. Get at
>least 10 db gain.
>
>Bryan.
>
larger distances, up to 10 km:

http://home.iprimus.com.au/jhecker/
w.

4075. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 12:32:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97o3plpki1@neptunium.btinternet.com>
Source record: 169349

> > Is this the Q that Reg disparages?
>
> We take what Reg disparages with a pinch of salt.
==========

It is not I who disparages Q.

It is others who exalt it, extol it, worship it, even adore and pay homage to it, and place it on a pedestal with SWR and computer programs alongside the Angels.

But everything has a use. Is a widget the unfledged offspring of a widgeon ?

Reg, G4FGQ

4076. Re: Strange antenna behavior

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 12:57:08 UTC
From: Matt <doormattNOSPAM@bigpond.com>
Message-ID: <yyMn6.6728$v5.25164@newsfeeds.bigpond.com>
Source record: 169350
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna

To check if the radio is at fault, try transmitting through the discone and see what kind of range you get - see what repeaters you can access with it. I would suggest that if you are able to access repeaters which are further than 1.5 miles that the problem wouldn't be with the radio or the discone. The next thing to check would be the antenna that you have on the car - they have been known to play up, particularly when you are mobile. When I used to run a 2m HT in the car I used to operate a 5/8 on a mag mount and used to access some of the repeaters at distances of up to 100 km, so don't be to concerned with running an HT in your ca, nor of operating using a discone at home. I am currently running a UHF HT through a discone and I can talk to a mate approximately 30km away - and there are some decent hills in the way between us - and on same discone, I can also on the odd occaision access a 2m repeater at least 100km to the South of me (BIG hills in the way). The SWR situation is a bit on the weird side, my gut feeling is that the antenna is being effected by interaction with the metal on your chimney - more noticeable on the lower frequencies than the higher ones. My experience on VHF and UHF has shown that if possible it is better to get the antenna at least one wavelength (absolutely must be more than a half wavelength) away from the nearest metallic object.

Cheers

Matt

Michael <hkc2001@pacbell.net> wrote in message
news:mOEn6.4165$qv3.1873058@nnrp5-w.sbc.net...
> At the suggestion of those who replied to my earlier msg(2m transmission
> range), I got on the roof and lowered the antenna for inspection. I
checked
> all the connections for shorts and faults, everything was connected
> properly. As I was measuring across the frequency range using the SWR
meter,
> I noticed a very strange thing. Around 50M, with antenna lowered and
placed
> almost level, SWR reading is below 3, as soon as the antenna is erected
the
> SWR jumps to above 8. Also if I rearranged the cable a little bit, the SWR
> would vary 2-3 times around 50M. The above does NOT happen in 2m band. No
> matter how I placed the antenna or the cable, I would get consistent SWR
> reading around 1.6 throughout the 2m band. So it does not look like a
cable
> problem, does it? Also, with antenna erected,it is about 2-3 feet away
from
> a chimney. Is the metal cover of the chimney affecting the antenna

somehow?
> I'm perplexed. What do you guys think might be wrong? Thx.
>
>

4077. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 12:57:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97o5admun1@plutonium.btinternet.com>
Source record: 169351

> Heath recommends using the plug-in coils this way to determine
unknown
> capacitor values. One can start with the coil`s parasitic
capacitance
> value. It seems to work.
============================
Indeed it does. Although when connections are made to a coil its self-capacitance re-distributes itself and changes somewhat, the value of an unknown capacitor placed across the coil can be determined from the inductance and the new resonant frequency followed by subtracting the value of the stray capacitance. It's accurate enough.

But there's no need to become involved with the stray capacitance at all. All that's needed are the two resonant frequencies and the LF inductance.

In the 21st Century, instead of an 1/2-hour +/- 15% job, the value of a capacitor can be determined by your hand-held analyser within 15 seconds with an accuracy of a few percent. But I cannot say I'm any happier for all these mod-cons.

Reg

4078. Re: Chevy Tahoe Mobile Installation Questions (2)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 13:41:23 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9fa478$0$30002$44a10c7e@news.net-link.net>
Source record: 169353

Run the coax down the body on the outside of the molding all the way down to
the bottom, hold in place with tape, form a drip loop at the bottom then
bring into the vehicle and run under the seats and floor mats. Tell your
kids to watch the wires or they will lose privileges!
Jeffrey Steinberg wrote in message
<3a9f01c8$0$65503$45beb828@newscene.com>...
>Can you explain how you use it on the top of the door (where you mount
>it and what you do with the cable. We have kids that use all of the doors.
Do
>you?
>
>--jeffrey
>
>
>
>In article <3A9EB22C.4C37063B@grove.iup.edu>, yetbbwa@grove.iup.edu says...
>>
>>You definately want to check out the Diamond K400-3/8C mount. Very very
thin
>teflon
>>coax (RG-316???) and very modern looking. I use it on the top of my door
on my
>>Silverado (I also use a FT-100). I swap in mono band antennas.
>>
>>Scott.
>>
>>
>>
>>Jeffrey Steinberg wrote:
>>
>>> Dear Group,
>>>
>>> I am in need of some assistance. First, let me describe what I
currently
>have,
>>> what I am planning to get and then the two questions.
>>>
>>> **Current installation** 2m/440 radio wired to battery with magmaount
>dual-band
>>> antenna on roof fed with RG-8X/PL259 through rear barn door (double
doors
>>> hinged on the side).
>>>
>>> I am getting some water leaks (surprise, surprise) after several months

of
>no
>>> problem.
>>>
>>> **Future radio** I am planning on upgrading to HF with an FT-100.
>>>
>>> Question #1: Is there anyone who makes a magmount that uses a few feet
of
>the
>>> very thin RG-188 and will that prevent the water coming on or is any
cable
>>> coming through a door going to distort the water seal enough that water
>wickes
>>> past it?
>>>
>>> Question #2: If I have to drill holes into the car (which I don't
mind),
>>> should I wait until I get the HF radio and drill one hole for a combo
>antenna
>>> or would it be better to have one antenna for 2m/70cm and another one
for HF
>>> (I.e. drill now and add another hole later).
>>>
>>> Question #2a: What's a recommended
>>>
>>> --Jeffrey, KC2GUC, Scarsdale, NY
>>
>

4079. Re: Opinions on Hustler 5BTV? Good or what?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 13:45:56 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3a9fa479$0$30002$44a10c7e@news.net-link.net>
Source record: 169352

I have had one for 15 years or so and it works great. Has held up awesome
in all kinds of Michigan wx. Need a good ground radial system however. I
got best performance when I lived on a lake and had the antenna mounted at
the water's edge. I had one &#65533;" copper pipe about 20 feet long going out
into the lake. Always good good sig reports in that direction.
Randy & Cara Randall wrote in message <3A9EEE97.A2010BC9@seidata.com>...
>What do you think? E-ham sez 4.6 out of 5.
>
>Thanks,
>Randy kb8aso
>
>
>

4080. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 14:04:21 UTC
From: GUYTON <warsaw@bayou.com>
Message-ID: <3A9FA865.6289573A@bayou.com>
Source record: 169354

Gotta be heat.

Bill Nelson wrote:
>
> Zoran Brlecic <zbrlecic@earthlink.net> wrote:
>
> : Anyway, that one was too easy. Here's another one: we wind up a spring which is
> : then believed to be storing a certain amount of kinetic energy. Then we drop the
> : spring in the same acid solution and it dissolves quickly without unwinding.
> : Where did all that kinetic energy go now?
>
> The spring is storing potential energy - not kinetic energy. The same is true
> of a book sitting on a bookshelf.
>
> With that as a hint - let's see if someone figures out the answer.
>
> --
> Bill Nelson (billn@peak.org)

4081. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 14:37:24 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97obn6hrv1@lure.pipex.net>
Source record: 169355

"Zoran Brlecic" wrote ..
> Gary Peach wrote:
...
> > Thus it was inferred that the charge was held in the dielectric glass
> > tumbler.
>
> Hm, so where's the charge held if the dielectric is air or vacuum? I think
> KB5WZI got it right.

In air it is in the air, in Vacuum probably in the dielectric materials
neccassary to constrain a practical vacuum on earth.

As a side issue in space the original manned spacecraft had glass windows,
very tough glass windows, but they proved to be a problem because in the
vacuum of Space the charge on them did not leak away and the water that it
was neccassary to vent to space at that time would hang around and stick on
the window by dielectric vacuos adsorption.

They coated the windows with the slightest film of gold, problem solved.

I have one on my wall in front of me as I type.

NASA had a large number of trial windows at the end of the experiments of
which they wished to dispose. They added some a world map of the Deep Space
Network, also in Gold and distributed them amongst the workers, ostensibly
as peanut dishes; a 5 mm thick dished glass elipse 210 x 160 mm

Not a very big window through which to see the Universe. :)

Mine is inscribed

DEEP SPACE INSTRUMENTATION FACILITY
there is a picture in gold and Cambridge blue a picture of a 210 foot
diameter parabolic AZ-EL dish and an 85 foot dish Equitorial mount.

The band on the outside says
RANGER * MARINER * SURVEYOR * LUNAR ORBITER * PIONEER * APOLLO

DSS 41 Woomera * DSS 42 TIDBINBILLA * DSS 11 - 12 GOLDSTONE *
DSS 71 CAPE KENNEDY * DSS 61-62 MADRID * DSS 51 JOHANNESBURG

> Anyway, that one was too easy. Here's another one: we wind up a spring
which is
> then believed to be storing a certain amount of kinetic energy.

Actually It is Potential Energy.
Kinetic Energy is what you get when a mass is moving with respect to some
reference frame which contains the observer.

A penduluum has Potential Energy at the two extremes of its swing, the charged Capacitor, this all becomes Kinetic Energy (Minus the friction losses of the air and the suspension) as it passes through the lowest point of it's swing, the Inductive Current.

Pendulum clocks only keep ticking by clever design because Potential Energy from a wound spring or suspended weight via the escapement restores the energy lost to friction.
The most important element to the regularity of a mechanical clock is the stickiness of the oil that is used. Finding the right oil was part of Harrison's success with the Longitude WATCH/Clock. Of course modern clock oils are much better than anything available in the eighteenth century.

>Then we drop the
> spring in the same acid solution and it dissolves quickly without unwinding.

Some trick,
perhaps you should glue the turns of the spring together with some inert glue before you drop it into the acid.
BTW do you also drop the shaft on which it is wound and the case that holds the other end of the spring into this magic acid??

> Where did all that kinetic energy go now?

Loverly mind experiment, but a trifle inaccurate when it comes to reality, I fear
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4082. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 15:03:13 UTC
From: David Richardson <firsty@alphalink.com.au>
Message-ID: <3aa05195@news.alphalink.com.au>
Source record: 169356

Exactly Bill. But adding a resistor clouds the issue a bit. So lets re
hash the experiment somewhat.
Suppose we use a 2-pole change-over switch instead of a single pole, to
connect the two equal capacitors in parallel. The switch is arranged so
that when the switch is thrown, the connections of one capacitor are
reversed.
Now we charge both parallel capacitors to the same voltage.
When the switch is thrown, the voltage across both capacitors becomes zero.
Where did ALL the energy go?

Bill Manley wrote in message ...
>Excellent thought. Now set the resistor value = 0. It no longer heats up.
>So where did the energy go?
>
>Bill.
>"David Richardson" <firsty@alphalink.com.au> wrote in message
>news:3a9edfb5@news.alphalink.com.au...
>> Try adding a resistor in series with the switch. When the switch is
>closed,
>> the resistor heats up and guess what? The final value of voltage on the
>> equal value capacitors (V/2) is the same as without the resistor!

4083. Re: Gap Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 15:26:23 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9FBB9F.3524B4F@IEEE.org>
Source record: 169357

K4IA wrote:
> I believe my ladder line fed dipole outperforms my Gap Titan all the time.

On receive, I have never heard a 40m signal that is stronger on my
33ft/8-radial 40m vertical than it is on my ladder-line fed dipole.
In addition, the vertical invariably has a higher noise level by
about two S-units. I'm going to perform some A/B transmitting
tests.
--
http://www.mindspring.com/~w6rca

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4084. Hamfest Mar 4 - Lindenhurst LI

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 16:15:19 UTC
From: GSBARC <info@gsbarc.org>
Message-ID: <rGPn6.53599$Vj5.8701064@news02.optonline.net>
Source record: 169358
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.cb,rec.radio.scanner,rec.radio.swap

HAMFEST March 4, 2001 - Lindenhurst, LI

GREAT SOUTH BAY AMATEUR RADIO CLUB and SUFFOLK COUNTY RADIO CLUB
ARRL APPROVED LONG ISLAND HAMFEST - March 4, 2001

LINDENHURST, LI - NY

On March 4, 2001 the Great South Bay Amateur Radio Club will again sponsor an indoor Hamfest-Computer Show. The location will be at the:

Knights of Columbus
400 South Broadway, Lindenhurst, NY.
This is an ARRL approved Hamfest.

There will be radio equipment, electronic components, computers and accessories, software, books, technical manuals, ARRL information, Amateur Radio License Exams, Door Prizes.

Advanced registration is $18.00 each table. Tables at the door are $25.00 each. Contact Walter Wenzel KA2RGI at 631 957-0218 for table reservations. NO TABLES WILL BE RESERVED WITHOUT PRIOR PAYMENT due to the space available.

General admission is $ 6.00. Wife's and children under 12 admitted with no charge.

VE - ARRL - 12:00 NOON at Babylon Town Hall, 200 E Sunrise Hwy, Lindenhurst. For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID), and the examination fee, to the exam session. Current ARRL/VEC fee is $10.00, exact change is appreciated.

Talk-in will be via GSBARC Repeater on 146.685 -600 136.5 PL.

Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 PM following the Newsline Report on the W2GSB repeater, 146.685 -600 136.5 PL required. You may also write to:

Great South Bay ARC
P.O. Box 1356
West Babylon, NY 11704-0356

E-mail GSBARC info@gsbarc.org or visit GSBARC online at
http://www.gsbarc.org/hamfest.htm

Next Hamfest
October 28, 2001 - Great South Bay ARC

73,
GSBARC & SCRC

4085. Want Maxcon & Butternut Ant items.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 17:24:38 UTC
From: Skipp <skipp@pilot.ucdavis.edu>
Message-ID: <97ol0mgha2@woodrow.ucdavis.edu>
Source record: 169359

re: want for Maxcon & Butternut antenna items...

Hello Sailors,

I'm still on the prowl for an Original Maxcon Antenna Interface, if you have one drop me a note as I'd like to buy, borrow (measure it only), rent or talk about the internals. Any of the models sold would be great... I know what it is/was... I just want one to measure it for potential in other applications. yep... I'm an experimenter...

I'd like to locate a used Butternut Vertical that wouldn't be to crazy to have shipped in or pickup near the greater Sacramento (where I domicile). The dual band 80/40 version or the 10 through 80 version would be killer. Let me know if you can sell one in most any usable condition, else I have to go buy one new... ouch..!

Thanks much, Email me at the below address with only ham radio related items, that means no spam please.

Also visit the sonic server listed below for the amateur radio pages...

cheers

skipp@pilot.ucdavis.edu
http://sonic.ucdavis.edu

4086. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 17:46:57 UTC
From: ardujenski@aol.com
Message-ID: <20010302124657.15936.00000159@ng-fs1.aol.com>
Source record: 169360

Because of the limitiation of the mast height I did some experimenting and for 20m+ you can achieve remarkable results with the PANFISH:

MINI-ME: Using NF0R's SLV design you can make a base helix/coil using 300 ohm line (about 23 turns) and a 4m vertical radiator that will achieve about 40-50percent efficiency on 20 and 15m. I use 12 16ft radials made from 7 conductor ribbon line

UMBRELLA: my term for the special inverted-L type antenna. Because of the lack of rigidity at the top in lieu of a single wire I have used three like a guying system and as a top hat greatly improves efficiency without typical coil losses

Unless someone can figure out a way to use viagra with these poles the flxible nature must be delt with whether the PAN FISH, the 20ft BLACK WIDOW, or the DK9SQ.

To work out your own backpackable design you may want to take advantage of this site:
http://www.btinternet.com/~g4fgq.regp/page3.html#S301"

Alan KB7MBI

4087. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 17:48:44 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97omds$s7a$1@agate.berkeley.edu>
Source record: 169361

Patrick Croft <mai@iquest.net> wrote:

> The last robotic satellite pole (9" collapsed to 30' extended seen
> surplus went on eBay for around a hundred bucks...a fraction of the

Wow, you were serious. :-)

> For supporting coils I suggest some foam pipe insulation of varying
> diameters. This material is easily layered to host a coil upon a rod

Good idea. Do you wind the coil on some rigid form, like PVC and then use the pipe insulation between the PVC and the rod, or do you wind the coil right onto the pipe insulation? Seems like either would work, but the latter could get smushed.

Sounds like you've maybe used these poles... any suggestions on keeping them upright?

cheers,
Dave
N3WTK

4088. Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 18:05:57 UTC
From: cm13141@aol.com
Message-ID: <20010302130557.16441.00000137@ng-mh1.aol.com>
Source record: 169362

i am making my first dipole antenna,i want to use it 10-80 meters,I would like to use ladderline from the dipole to my antenna tuner.Do you think that the 300 ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline where i live.I have found the 300 ohm type at Radio shack.Any and all advice is most welcome.
Thanks,
James

4089. Re: Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 18:12:45 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9FE29D.67188D9C@IEEE.org>
Source record: 169363

Cm13141 wrote:
>
> i am making my first dipole antenna,i want to use it 10-80 meters,I would like
> to use ladderline from the dipole to my antenna tuner.Do you think that the 300
> ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline
> where i live.I have found the 300 ohm type at Radio shack.Any and all advice is
> most welcome. Thanks, James

For anti-resonant one wavelength dipoles, 300 ohm line will yield a
higher SWR and may be harder to match than 450 ohm line so you can
expect matching problems on some bands. Hopefully, those won't be
your favorite bands.

Make your dipole 1/2WL on the lowest frequency of operation and feed
it with an integral multiple of 1/2WL feedline. Fine tune the other
bands from there.
--
http://www.mindspring.com/~w6rca

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4090. GAP INFORMATION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 18:26:02 UTC
From: ardujenski@aol.com
Message-ID: <20010302132602.15797.00000162@ng-fs1.aol.com>
Source record: 169364

for an informed discussion on the GAP you are invited to review the comments at:
http://www.njqrp.org/data/gap.html.

I am a GAP TITAN user and realize like ALL antennas they are compromise. I have been very please with the performance on 40-10m. One of the common problems is folks ask the same question time in and time out. IS THE GAP A GOOD ANTENNA?. Well depending upon your operating needs and limitations the GAP may or may not be a good choice. The LOBE patterns are more than adequate for my location and does exceptionally well for my QRP operations both CW and SSB.

Even the revered DOUBLET has it drawbacks with deep nulls. I do take exception with the folks that make remarks comparing it to a DUMMY LOAD. But that is to be expected in large groups like this. With ALL antennas you need to review first your goals and objectives and then balance with the reality of pracitical limitations you have----MY 2 CENTS (smile) Alan KB7MBI

4091. Re: Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 18:26:50 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3A9FE5C0.B8D28697@home.com>
Source record: 169365

Cm13141 wrote:

> i am making my first dipole antenna,i want to use it 10-80 meters,I would like
> to use ladderline from the dipole to my antenna tuner.Do you think that the 300
> ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline
> where i live.I have found the 300 ohm type at Radio shack.Any and all advice is
> most welcome.
> Thanks,
> James

I used the cheapest 300 ohm twinlead I could buy (Radio Scrap). The antenna was put up as 'temporary' and when I took it down 13 years later the twinlead was as good as
when I put it up. I got consistent compliments on my signals from local and Dx stations.

--

Please hit 'REPLY TO' e-mail address before sending. Thanks.
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4092. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 18:52:11 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97oq4rstv1@agate.berkeley.edu>
Source record: 169366

ARDUJENSKI <ardujenski@aol.com> wrote:
> Unless someone can figure out a way to use viagra with these poles the flxible
> nature must be delt with whether the PAN FISH, the 20ft BLACK WIDOW, or the
> DK9SQ.

I could be wrong (not having actually made one yet) but it seems like it
wouldn't be all that bad for the antenna to bend over and flex a little
bit (maybe as much as 5-10 degrees??). Presumably, the first 6-8 feet
will be fairly rigid, and the major flexing will occur only in the top
1/2 or so.

However, the other issue is how to hold the antenna up at all, and there
I can see that guys might help.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4093. Re: apartment dwellers indoor antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 18:54:07 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3A9FEC4F.1B326A07@eskom.co.za>
Source record: 169367

Have a look at Harry's site
http://hem.passagen.se/sm0vpo/
Stan

jack beltz wrote:

> live on the first floor of an apartment.no outside antennas.
> what to do for hf.80-10 meters?
> thanks jack

4094. Re: Mobile HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 19:06:41 UTC
From: kf4yun <dapastaguy@sc.rr.com>
Message-ID: <97or13ddi1@news3.infoave.net>
Source record: 169368

Thanks for the input. I am leaning more towards the spider arrangement everyday.

John KF4YUN

4095. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 19:26:44 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3A9FF3F4.3BE4DBE2@IEEE.org>
Source record: 169219

David Snyder Hale wrote:
> I could be wrong (not having actually made one yet) but it seems like it
> wouldn't be all that bad for the antenna to bend over and flex a little
> bit (maybe as much as 5-10 degrees??).

The flexing causes the SWR to change, sometimes enough to cause foldback.
--
http://www.mindspring.com/~w6rca

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4096. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 20:33:21 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3AA00391.C2DA1473@iquest.net>
Source record: 169220

Dave,

> > The last robotic satellite pole (9" collapsed to 30' extended) seen
> > surplus went on eBay for around a hundred bucks...a fraction of the
>
> Wow, you were serious. :-)

well, our government gets serious when they know the service call will
be in the millions and usually takes months to schedule. ;')

>
> > For supporting coils I suggest some foam pipe insulation of varying
> > diameters. This material is easily layered to host a coil upon a rod
>
> Good idea. Do you wind the coil on some rigid form, like PVC and then use
> the pipe insulation between the PVC and the rod, or do you wind the coil
> right onto the pipe insulation? Seems like either would work, but the
> latter could get smushed.

As for coils, I normally B&W, AirDux, or one of the junk box finds.
Winding isn't a difficult issue, just easier and faster to use off the
shelf stock. These are supported via plastic rods as part of the
manufacturing process.

The pipe insulation foam has a seam that allows you to open it. Just
place around the pole, then add another piece around that one,
alternating the open seam. If the coil is 6" long make the foam 6-8".
Two or three layers will be a good fit to allow slipping the coil over
the foam (for a 2"-3" coil). Very flexible and non permanent.

>
> Sounds like you've maybe used these poles... any suggestions on keeping
> them upright?
>

I've used LOTS of variations of poles and LOTS of mounting methods. The
location has a big influence on mounting. Also the type of antenna will
make a difference. If you're attempting simply install a temporary
vertical using a 20' or less composite pole, I suggest a stake mount.
The Sunny Days and Black Widow poles lowest section will fit snugly into
1.5" PVC water pipe. A host of adapters are available at most hardware
stores. I prefer using a 12" length of pipe, placing a TEE on one end.
A carriage bolt or landscaping nail of 8" or more secured to a pipe
cap. Place the cap assembly over the lower end of the TEE. The pole is
simply wedged into the other end of the 12" PVC pipe. This has been
successful in most locations (sand, clay soil, etc.). Should one desire

to install without penatrating earth/surface, a concrete block will make a great base anchor. Improvising is part of the fun, right? These poles weigh about 3 pounds. That makes them easy to work with. The TEE has one other function. The nipple that is horizontal gets a cap as well. On this one I like to install a connector (BNC) and a ground lug. Now you've got a fixed point to run radials from and a secure attachment point for the feed line.

Toss a couple bungee cords/straps into your traveling station package as well. This well let you strap a pole to a railing, gutter, etc.

Using these poles for portable rotatable dipoles or mini yagi's is fun too.

Hope these tips keep you QRV.

bests,

Patrick
W9GTA

> cheers,
> Dave
> N3WTK

4097. Re: apartment dwellers indoor antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 20:42:43 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <ta01a66l5baif1@corp.supernews.com>
Source record: 169221

If you're going to operate CW or some other low power
favored mode, you might get away with it running no more
than a watt or two.

However, forget working phone on the low bands without at
least several hundred watts output.

Of course, if you do run higher power indoors, you can
expect your VCR, microwave oven, stereo, programmable
clocks, the apartment's thermostat, and anything else that
might use a microprocessor, to perform strange unnatural
acts. Also, the tenants in other apartments (if any) will be
experiencing the same problems and will come looking for the
culprit.

Having lived in an apartment for the first several years of
my amateur radio experience, I can honestly say that you
will have much more success if you were to assemble your low
bands ham station in your automobile and operate as a
mobile.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

<stan.holmes@eskom.co.za> wrote in message
news:3A9FEC4F.1B326A07@eskom.co.za...
> Have a look at Harry's site
> http://hem.passagen.se/sm0vpo/
> Stan
>
>
> jack beltz wrote:
>
> > live on the first floor of an apartment.no outside
antennas.
> > what to do for hf.80-10 meters?
> > thanks jack
>

4098. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:25:02 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3AA00FAE.6927882B@iquest.net>
Source record: 169223

I've never experienced enough change to cause serious foldback. This includes using the 10 meter long DK9SQ's in 35-45 mph winds at beach settings. They do whip about, but short of a wire breaking or the whole thing falling down, my experience differs. Monitoring the SWR on most any antenna (yagi, vertical, dipole) in a windy situation is likely to so some SWR bouncing.

Bests,

Patrick
W9GTA

W6RCecilA wrote:
>
> David Snyder Hale wrote:
> > I could be wrong (not having actually made one yet) but it seems like it
> > wouldn't be all that bad for the antenna to bend over and flex a little
> > bit (maybe as much as 5-10 degrees??).
>
> The flexing causes the SWR to change, sometimes enough to cause foldback.
> --
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>
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4099. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:27:43 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97p38f$22i$1@agate.berkeley.edu>
Source record: 169222

ARDUJENSKI <ardujenski@aol.com> wrote:
> To work out your own backpackable design you may want to take advantage of
> this site:
> http://www.btinternet.com/~g4fgq.regp/page3.html#S301"

Great programs, but what is the difference between LOADCOIL and VERTLOAD ??

73,
--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4100. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:32:35 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3AA01173.DE8DA477@iquest.net>
Source record: 169224

Dave -

the very top couple sections are quite small on all these types of
poles. The base is typically 1.5" in diameter while the last section is
.0625". They flex considerably as most fishermen will confirm. They
are reasonably strong, but for safety I usually leave the top section
collapsed and attach on the more rigid section for dipoles or L's. In
vertical modes, wrap the wire about the pole a few times helically and
let it sway.

bests,

Patrick
W9GTA

David Snyder Hale wrote:
>
> ARDUJENSKI <ardujenski@aol.com> wrote:
> > Unless someone can figure out a way to use viagra with these poles the flxible
> > nature must be delt with whether the PAN FISH, the 20ft BLACK WIDOW, or the
> > DK9SQ.
>
> I could be wrong (not having actually made one yet) but it seems like it
> wouldn't be all that bad for the antenna to bend over and flex a little
> bit (maybe as much as 5-10 degrees??). Presumably, the first 6-8 feet
> will be fairly rigid, and the major flexing will occur only in the top
> 1/2 or so.
>
> However, the other issue is how to hold the antenna up at all, and there
> I can see that guys might help.
>
> --
> Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4101. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:46:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3aa01497_2@news3.prserv.net>
Source record: 169225

1. Forget PVC at 2455 MHz. Even though it is not "microwave oven" lossy, it is low Q and high dielectric constant, throwing all your calculations off. Use polystyrene foam of the lowest density which will provide the necessary mechanical strength. Good luck on weather protection. No other metal or plastic can be in the near vicinity of the helix.

2. Drill and tap two small holes behind the wire which runs from the connector to the helix and is spaced a couple of mm from the reflector. The holes should be about a quarter wave apart. Run two brass screws through the holes and adjust for match.

3. Forget modeling and simulation. They never take into consideration the necessities, like mechanical mounts or matching networks fabricated from actual hardware. Mostly they rely on the scientific version of magic.
--
Crazy George

4102. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:48:51 UTC
From: gene@ews.uiuc.edu
Message-ID: <7zUn6.7321$dL4.97657@vixen.cso.uiuc.edu>
Source record: 169226

A simple modeling program on EZNEC clearly verifies that a pure figure 8
pattern occurs only when you have symmetry with respect to the center of
a dipole: I modeled the half wave in two parts (butted together). I used
two sources, 1% from the middle on either side, then hung a half-wave wire
straight down from the midpoint. Using "free space", the figure-8 pattern
remains perfect, same as if the wire is not there. Then repeated the
same scheme with the dipole divided with wires, 1/3 and 2/3 of the dipole
length....again dropping a single 1/2 wl wire down from the junction.
This completely destroys the deep nulls and destroys much of the direct-
ivity. These effects are also described in the ARRL Antenna book.
--

Internet, BITNET: gene@csl.uiuc.edu

4103. Re: Backpack antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:51:26 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97p4ku$22i$2@agate.berkeley.edu>
Source record: 169227

Patrick Croft <mai@iquest.net> wrote:
> Hope these tips keep you QRV.

Indeed. Excellent suggestions.

I've already got some additional ideas, such as a PVC fitting I've seen that looks like a coupler with four fittings at 90 deg around the sides (for a total of six "ports"). Use the top for the pole, the bottom for the endcap+nail, and the 4 sides for PVC "radials" for stability or when a spike can't be driven in the ground.

cheers,
--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4104. Re: Backpack antenna (PANFISH)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:54:20 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97p4qc$22i$3@agate.berkeley.edu>
Source record: 169228

ARDUJENSKI <ardujenski@aol.com> wrote:
> To work out your own backpackable design you may want to take advantage of
> this site:
> http://www.btinternet.com/~g4fgq.regp/page3.html#S301"

From what I gather, VERTLOAD designs something like this, where
mast-coil-rod are all in series, and mast is end-fed with L network...

```
| rod
|
) coil
)
|
| mast
|
coax center---*--L----*
shield |
| C
| |
GND GND
```

Is this correct?

But then how does LOADCOIL differ? I suppose there is some difference in
the feedpoint. (?)

I gather also that in either case, ground radials would be helpful.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4105. g4fgq antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 21:57:23 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97p503$22i$4@agate.berkeley.edu>
Source record: 169229

I have a question about the antenna design software located at

http://www.btinternet.com/~g4fgq.regp/page3.html#S301

Specifically, what is the difference between LOADCOIL and VERTLOAD?

From what I gather, VERTLOAD designs something like this, where
mast-coil-rod are all in series, and mast is end-fed with L network...

```
| rod
|
) coil
)
|
| mast
|
coax center---*--L----*
shield |
| C
| |
GND GND
```

Is this correct?

But then how does LOADCOIL differ? I suppose there is some difference in
the feedpoint. (?)

I gather also that in either case, ground radials would be helpful.

TNX,
--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4106. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 22:54:15 UTC
From: kk4tl@aol.com
Message-ID: <20010302175415.20349.00000373@ng-ch1.aol.com>
Source record: 169230

>It's a Ford F-250 with the Power Stroke
>Diesel or nothing!
>
Roger on that one. Gotta love that power stroke diesel. And yes the fuel pump came in loud and clear till the noise supressors.

4107. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-02 23:40:03 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <nbWn6.158$D6.21416@typhoon.mw.mediaone.net>
Source record: 169231

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:97eflgnjf1@lure.pipex.net...
> Consider what happens when a switch starts to open.
> Initially the spacing is very small and a voltage exists across it. As the
> contacts open the capacitance decreases, but the charge remains constant,
> therefore the voltage across the opening contacts rises.
> No wonder switches arc as the voltage rises above the breakdown voltage of
> air.

First. You can say the electric field intensity starts out very high at the moment, and at the physical point, where the switch starts to open because of geometry. The field intensity could exceed the break down value of the surrounding air at that point.

Second. No physical circuit is completely inductance free. When the switch begins to open, the resistance change across the contacts is not a perfect step function, the current wants to rapidly fall. Because V=L*di/dt, where L is the always present stray inductance, the voltage rises, trying to maintain the current flow. The faster the switch contact goes from conduction to non conduction, the higher the voltage. For proof just hold the metal probe of an old style Ohmmeter in each hand. Then measure the resistance of the winding of a large motor, or transformer. Keep your fingers on the metal probe tips when you remove one of the probes from the connection point. The shock you get should be convincing enough proof of the above concept. This is also why they stick diodes across relay coils in a DC circuit too.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

4108. Re: g4fgq antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 01:07:48 UTC
From: ardujenski@aol.com
Message-ID: <20010302200748.19311.00000206@ng-fe1.aol.com>
Source record: 169232

Send a note directly to Reg who provides that site. He is the best person to ask. He has been very helpful in the past.

Alan KB7MBI

4109. Re: g4fgq antenna design question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 01:12:32 UTC
From: David Snyder Hale <david@isi9.mtwilson.edu>
Message-ID: <97pge0$574$1@agate.berkeley.edu>
Source record: 169233

TNX, I will.

ARDUJENSKI <ardujenski@aol.com> wrote:
> Send a note directly to Reg who provides that site. He is the best person to
> ask. He has been very helpful in the past.

--
Dave * N3WTK (DM04xf) * http://isi.mtwilson.edu * n3wtk@arrl.net

4110. Re: Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 01:33:31 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <hUmgOiC1V6q2AEr0emDccGY7RO0D@4ax.com>
Source record: 169234

cm13141@aol.com (Cm13141) wrote:

>i am making my first dipole antenna,i want to use it 10-80 meters,I would like
>to use ladderline from the dipole to my antenna tuner.Do you think that the 300
>ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline
>where i live.I have found the 300 ohm type at Radio shack.Any and all advice is
>most welcome.
>Thanks,
>James

You can always order it. http://www.thewireman.com/ has several selections under
Balanced Line...

Bob
k5qwg

4111. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 01:40:44 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97pi2a$fp1$1@slb1.atl.mindspring.net>
Source record: 169235

Reg:

Heh, heh. I know a widget when I see one, but....

I've never known a widgeon... what?

Q is so ephemeral... just when you get it right, it disappears right over
the horizon into infinity!

Reg, have you ever used commercial pot cores and wound precision inductors
from the manufacturer's "iso-Q" contour charts?

I have often wondered if there is a similar iso-Q chart that one can create
for the solenoid inductor.

Iso-Q charts correspond to a given pot core design, which has a fixed
physical dimension and a fixed magnetic air gap resulting in a fixed value
of Al, the charts have inductance on the ordinate and frequency on the
abscissa and consists of closed "loops" tracing the "curves" of constant Q.
It is actually a graphical representation of a surface of Q values over the
co-ordinates of L and f. To be a valid inductor the pot core has to be
"filled" with wire. i.e. once the number of turns is chosen using the Al
value to fix a given L, then the size of the wire must be chosen to fill the
pot core cavity, and then the resulting Q can be read from the iso-Q
contours.

Reg, if one were to fix a given set of solenoid dimensions, i.e. say a
length l and a diameter d could one arrive at a set of iso-Q contours over a
plane of L versus f for a solenoid? Does this make sense? Can your program
plot such a set of curves?

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:97o3plpki1@neptunium.btinternet.com...
> > > Is this the Q that Reg disparages?
> >
> > We take what Reg disparages with a pinch of salt.
> ============================
>
> It is not I who disparages Q.
>
> It is others who exalt it, extol it, worship it, even adore and pay
> homage to it, and place it on a pedestal with SWR and computer
> programs alongside the Angels.
>
> But everything has a use. Is a widget the unfledged offspring of a

> widgeon ?
> ----
> Reg, G4FGQ
>
>

4112. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 02:38:32 UTC
From: richardharrison@webtv.net
Message-ID: <21763-3AA05928-80@storefull-116.iap.bryant.webtv.net>
Source record: 169236

Peter Brackett wrote:
"I`ve never known a widgeon...what?

In the U.S. it is a small civilian flying boat very popular with oil companies in the bayou country of Louisiana.

Best regards, Richard Harrison, KB5WZI

4113. Re: Gap Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 03:06:58 UTC
From: Bill Bishop <wbishop@micron.net>
Message-ID: <3AA05FD1.15283D63@micron.net>
Source record: 169237

I'm very pleased with my GAP Titan. If I can hear em I can work 'em with 150 - 200 watts. I live in a rural area so I have little problems with noise. My signal reports are great and commensurate with other operators in the area with beams. There is a little benefit that I miss from the directional nature of a beam that might help a little on 40 meters for example.

I'd plan on guying the Gap.

I'd buy another tomorrow. BUT I'm going to strip some wire for local 80 meter work. The polarization becomes an issue locally.

Good luck -- I think it's a great antenna.

KD7KFZ

4114. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 08:41:00 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <ldb1atspnv688k7146srkeqg6krmn3ljt9@4ax.com>
Source record: 169238

On Fri, 2 Mar 2001 15:46:00 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

Many thanks for your posting.
The PVC material is said to be "good for HF" because
of the microwave oven test, but that is not the whole story,
I was already suspicious, thanks for your input.

What do you think about Teflon as supporting structure?
The TV LNB's use Teflon sheets as cover material.

Commercial makers of helixes use aluminium
as center bar, that works probably because the coil
does a kind of shielding, the interior of the coil is probably
electrically inactive, only magnetically active.
Well, I will do just that, aluminium rod with teflon stays,
leaves enough space in the coil and the wire windings
are not affected by any material losses.

Thanks and best wishes.

w.
>1. Forget PVC at 2455 MHz. Even though it is not "microwave oven" lossy,
>it is low Q and high dielectric constant, throwing all your calculations
>>........

4115. Re: Opinions on Hustler 5BTV? Good or what?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 11:49:22 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3aa0da3e_1@news.cybertours.com>
Source record: 169239

Fair- Rugged construction, But Electrically not quite as good as a
Butternut. IMHO. - Dave

"Randy & Cara Randall" <crrandal@seidata.com> wrote in message
news:3A9EEE97.A2010BC9@seidata.com...
> What do you think? E-ham sez 4.6 out of 5.
>
> Thanks,
> Randy kb8aso
>
>
>

4116. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 12:44:42 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <97rjkq$36c$1@lure.pipex.net>
Source record: 169248

"Leland C. Scott wrote ...
> "Gary Peach" > wrote
> > Consider what happens when a switch starts to open.
...
>This is also why they stick diodes across relay coils in a DC
> circuit too.

Did you ever hear of a "Metrosil"?
I very high resistance to a low voltage and a low resistance to a high voltage.
Diodes alone do not completely stop the ringing, some form of resistance to dissipate the surplus energy seems to be a good idea.

Actually a resistor in series with a capacitor across a relay coil can do a good job.
But you really need to use the old fashioned solid carbon rods for the function. I have seen sparks jump out through the painted colour code on helical laser trimmed resistors used to damp Relay Back EMF. The air path broke down because the inductance of one turn permitted L di/dt to exceed the breakdown value for paint and air. Since L for a single turn is very small we conclude that di/dt is very large. As I is limited this make di very small indeed, or the frequency is very high.
Presumably this is why they generate noise up into VHF/UHF
By Far the best solution to damping the Back EMF of Relay coils is by fitting a REFER, these devices are a potted R and C in series especially developed for spark suppression. Every Thermostat switch SHOULD have one across it.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4117. FA: Riser Bond SWR/Cable Fault Locator Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 15:24:43 UTC
From: Robert Selman <we6a@wt.net>
Message-ID: <3aa10d54_4@data.wt.net>
Source record: 169241

Have for auction Top-of-the-Line antenna and feedline analyzer made. This one is "as new!"

Please check it out at

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1217765925

4118. WTB: MFJ-259B

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 15:26:16 UTC
From: Robert Selman <we6a@wt.net>
Message-ID: <3aa10db1_1@data.wt.net>
Source record: 169240

Looking for a used one to help me tune my quad. Anyone out there have one they are willing to sell?

Doc WE6A

4119. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 16:51:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97r7gc$h97$1@slb2.atl.mindspring.net>
Source record: 169242

Richard:

Thanks for that "widgeon" information. I've never heard that term before, of course I've encountered lots of "widgets", both low Q and high Q widgets. The high Q widgets are the best!

Incidently, I've been to Lafayette, LA a few times. Went to a Doug Kershaw, Jimmy C. Newman concert, and danced with those Cajun girls... and I do have a few Cajun friends from there, but never saw those flying boats to which you refer.

In bayou country, I just saw and rode in the airboats, like the ones they use in the Florida everglades. Been on those swamp airboats in both places, LA and FL. Fun but noisey.

On small flying boats, I've never been on one myself, but I have seen em in action. They are really neat...

Chalk Airlines used to fly a wing of small flying boats out of Miami, FL harbor over to the Bahamas on a regular schedule. Don't know if they still do that. I never flew on them, but used to watch them taking off and landing alongside the ocean going vessels in the harbor back when I lived in Miami.

Would those Chalk flying boats have been widgeons?

ThanQ

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:21763-3AA05928-80@storefull-116.iap.bryant.webtv.net...
> Peter Brackett wrote:
> "I`ve never known a widgeon...what?
>
> In the U.S. it is a small civilian flying boat very popular with oil
> companies in the bayou country of Louisiana.
>
> Best regards, Richard Harrison, KB5WZI
>

4120. Re: GAP INFORMATION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 16:57:52 UTC
From: k9sqg@aol.com
Message-ID: <20010303115752.28664.00000222@ng-fp1.aol.com>
Source record: 169243

Has anybody gotten to this site successfully recently? I've tried quite a number of times during the past 24 hours and I always get an error message that the site is not responding.

73s,

Evan

4121. GAP TITAN (site access)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 17:30:11 UTC
From: ardujenski@aol.com
Message-ID: <20010303123011.27628.00000256@ng-fd1.aol.com>
Source record: 169244

Try http://www.njqrp.org/data/gap.html

Alan KB7MBI

4122. Portable antenna information

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 17:44:07 UTC
From: ardujenski@aol.com
Message-ID: <20010303124407.27621.00000256@ng-fd1.aol.com>
Source record: 169245

University of Hawaii has a great site for info on portable antennas
http://www.chem.hawaii.edu/uham/index.html
Alan KB7MBI

4123. Re: GAP INFORMATION

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 17:54:32 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3AA12FD7.296F4188@ix.netcom.com>
Source record: 169246

Two Sites to visit for GAP Antennas:
http://www.gapantenna.com/
AND
http://www.njqrp.org/data/gap.html
Both work fine here
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========

K9SQG wrote:

> Has anybody gotten to this site successfully recently? I've tried quite a
> number of times during the past 24 hours and I always get an error message that
> the site is not responding.
>
> 73s,
>
> Evan

4124. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 19:24:59 UTC
From: richardharrison@webtv.net
Message-ID: <21763-3AA1450B-157@storefull-116.iap.bryant.webtv.net>
Source record: 169247

Peter Brackett wrote:
"Thanks for the "widgeon" information."

A widgeon is a small fresh-water duck between the mallard and teal in size. Grumman named several civilian aircraft after water-fowl.

Chalk Airlines would probably use larger aircraft unless they were doing charter service. The widgeon only can carry a handful of people.

When I lived in Portugal, I watched a start-up airline unpack and assemble several U.S. surplus PBY flying boats (Catalinas). These are larger than widgeons. They were to be outfitted with a few rows of seats and other passenger amenities. Unfortunately, their fledgling pilots crashed them all before they ever went into regular service. This is no reflection on TAP the government airline. They have one of the best safety records in the business. No reflection on the PBY`s either. They are superb aircraft.

When Peter visited Lafayette, had he poked arund the hangars there, he probably would have seen several widgeons. At least Texaco and Union Oil stationed widgeons there.

Take-off from a runway is unremarkable. They are amphibians. Take-off from the water is something else. At one point the props pick up floods of water and inundate the cockpit. The pilot can`t see a thing. You just hope there isn`t a log or big gator lurking in the take-off path.

Best regards, Richard Harrison, KB5WZI

4125. Re: HF Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 20:41:48 UTC
From: garneval@aol.com
Message-ID: <20010303154148.12057.00000347@ng-mc1.aol.com>
Source record: 169249

I use #14 stranded insulated house wire for my antennas. I paid $16 dollars for a 500 ft. roll at our local Menards store,kind of like a home depot.The wire is almost completely kink proof and very strong,also it is blue and blends into the sky.insulation is uv resistant and protects the wire from corrosion and it works great. Gary ki8dj

4126. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 21:33:27 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <1492atc4okfsikio4hmfs0r9udgjnj8go0@4ax.com>
Source record: 169250

On Tue, 6 Feb 2001 22:07:48 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:
>Dick Carroll wrote:
>"The state Public Service organization I worked for bought ONE."
>(lightweight satellite portable earth station)
>
>That leaves 49 other states probably averaging one or more and willing
>to share for a dire emergency with the understanding it will be
>immediately returned to owner in case the owner has an immediate need.

FEMA bought a bunch of flyaway packs just before Hugo. They are complete PBX systems with cellular interfaces capable of tying their own integral cellsite, or other available cellsites, to long distance satellite channels. (They can interface to surviving wired infrastructure too, of course.) Setup is quick, a few minutes after arriving on site. They fit in a pair of ordinary size suitcases for easy air transport. (These are mostly 16 line T1 grade systems.)

They have priority calling capabilites so that particular phone numbers can be given priority in a disaster. This is a necessary feature to prevent the general public from overloading the systems. Note that *any* cellular system can be programmed to do this, but most haven't installed the necessary software to do it. A few have, and I know of one police department that has gone totally cellular with phone numbers that have been programmed into the cellular system to have priority access in case of emergencies. Non-priority calls can be bumped off the system as necessary to accomodate the priority phones.

By contrast, when the ARC's HF comm van arrived after Hugo, the FEMA folks told them to park it over beyond the dish farm, out of the way. They didn't need HF Morse or voice capabilities. They told them that if they didn't have VHF capability, they might as well go home, because the only real use they had for hams was for local tactical comm with their damage survey teams. They could've used a few extra repeaters to support that, but the ARC van wasn't equipped to provide that, so they came home.

>How many of these are there? Industry has many. They were agressively
>marketed and the network fees were very reasonable when compared with
>almost anything else that could be often used over relatively long
>distances. Most of the world`s supply of these is outside a band of 200
>miles either side of the Mississippi River.

There are *lots* of SCPC systems on rooftops, but not a lot of portables. I doubt many hams would know how to use the ones available to them in the local area for talkback (provided they survived and could be put back in operation). Most of the regular users of the systems wouldn't either.

But someone who did understand them could easily press them into
emergency service. Most hams aren't that someone, because they
haven't self-trained on that sort of technology, and don't have the
information or skills needed to make use of that surprisingly large
and resilient long distance capability. (For one thing, you need to
know how to reconfigure them to contact satellite control, simple
if you know how, and request to be integrated into an emergency
voice or data comm network.)

>In the case of a newsworthy disaster, the media will arrive immediately
>and the dishes will bloom like flowers in the spring. Most of the time
>they won`t be feeding program. They will be obligated to render needed
>communications help via their satellite links. That`s no answer to the
>complete problem, but it sure can help.

My company alone could field 22 uplink trucks and 12 flyaway packs.
All of the flyaway packs could be in place and operating in the New Madrid
area in a few hours. Four of the trucks could be on site in less than 8 hours,
2 are already in the area. The rest could be available in 24 to 48 hours if
given routing priority on the area's damaged road systems. Other broadcast
chains have similar capabilities.

But they aren't setup to handle multichannel voice or data comms. They only
have one two way SCPC capability for scheduling and talkback purposes,
plus one Orbcom messaging unit (in the trucks, the flyaways don't have
this), and the crews may have one or more handheld satellite cellphones
with them.

A digital CO would have to be interfaced with them to provide multichannel.
That's feasible because their modulators and demodulators can deal with
any digital data stream up to 24 Mb/sec (that'd handle 384 simultaneous
calls, or 4 compressed standard definition video channels, our newer trucks
have two independent channels with double that capacity), but it isn't a
capability that's ready to go out of the box. I wonder how many hams could
figure out how to utilize it? Our engineers can, and they know who to contact
to coordinate the satellite resources, because they deal with them every day.

(Someone who knows how to configure systems to interface with the regular
telco systems on the other end is required too. We have that capability in house
as a side effect of our video on demand project, but some other stations probably
don't, and would need to call on local telco people for special terminal equipment
and support. In other words, the bandwidth is there and available, but the knowledge
to interface the systems back into the regular telco fiber network may be lacking.)

So broadcast can bring a lot of bandwidth to bear on the emergency communications
situation, and can do it pretty rapidly, but it isn't a simple turnkey thing by any means.
Knowledgeable and skilled people familiar with the technologies and systems are
required to make it all work.

On another front, Iridium had to be rescued from bankruptcy by DOD (DOD
makes heavy use of Iridium satellite cellphones), but there are 3 other companies
providing satellite phone service, and seem to be doing well with it, at least none
of the latter have declared bankruptcy yet. These latter systems are digital, and

fairly inexpensive multistandard handheld phones are available to make use of them. This is an immediately available resource that can operate independent of local infrastructure.

Also, many over the road trucks now have Orbcom 2 way messaging capabilities, and any passenger vehicle with OnStar also has satellite comm capabilities. These latter two systems seem to be overlooked as an increasingly widely deployed emergency communications resource. They have their own independent power (from the vehicle) and don't need large dishes or special pointing to operate. There is already central coordination and interface to the ordinary communications networks via their Earth stations too. It is likely there soon will be enough of them in any area of the US to provide
the first responder alert that's needed in a disaster.

Then there is Starband, which provides a two way satellite high speed internet link. That's just rolling out in a big way, but it should be popular in rural areas like those around New Madrid where cable modems and DSL phone lines aren't likely to be available in the foreseeable future. The dishes are small, and easily oriented. Anyone with one of these systems, and emergency power, would be able to quickly restore access to the internet after a disaster.

So long distance comm capacity shouldn't be a problem in any major disaster like another New Madrid quake. (In the Northridge quake, the plain old wired internet still worked in most of the area.) There are plenty of satellite systems which can handle it (and any required dish repointing is a trivial task, except for some of the big older C band systems which probably wouldn't fare well in a quake or hurricane). Most hams either aren't aware of them, or wouldn't know how to make use of them for their served agencies, though.

This is a serious shortcoming, because what would be needed most would be people familiar with the available resources, and skilled with interfacing them into coherent controlled emergency communications networks for their served agencies. Most hams aren't self-training to fullfill this role. Most hams are still self-training for19th century style communications.

After the Mexico City earthquake, the amateur NTS was running a *23 day* backlog of message traffic. Amateur HF, as currently used by amateurs, is totally inadequate to meet the comm needs of major large scale disasters, even low priority traffic like H&W messages. For a while it looked like HF packet might be able to pick up the slack, but some poor initial technical choices, and inability to cooperate, has caused that to mostly die away.

If we want to be valuable as comm assets in major disasters, we need to become familiar with the many modern high capacity systems available to us so that we will be prepared to help integrate communications for served agencies. We can no longer be content to provide a 19th century level of service.

Amateurs do have the advantage that some of them are likely to be on the ground at the site of most disasters when they occur. But that means that their homes and stations will also bear the brunt of the damage, and aren't likely to be operable when needed. Most amateurs don't even have emergency

backup power, so when their HT batteries run down, they're out of business.

It doesn't have to be this way, of course, but it mostly is. Most amateurs aren't interested in learning about modern communications systems, or in employing variants of those technologies in their own operations. Most amateurs aren't making preparations to be able to keep their own systems running, or to cooperatively tie them in with others, amateur or non-amateur, if a disaster requiring communications capabilities does occur. (Tying in to available non-amateur systems seems to make some hams unreasonably angry, but it is a vital skill that amateurs interested in emergency comms should have in their bag of tricks.)

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I'm not saying much that's new here, OpEd pieces have appeared in QST and other places saying much the same things in recent years. We need to rethink our role in disaster communications if we want to remain relevant and useful to our served agencies. We need to develop much better cooperative skills, and we need to understand other available technologies and systems, and ways we can integrate with them to best serve our role.

It should be obvious (but apparently isn't to some) that the romantic image of the lone headphone wearing amateur pounding brass is no longer sufficient to deal with the sorts of communications required by our served agencies. (It never was, but once it was all we had to offer.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4127. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 22:00:44 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <4so2at4f6dhnt01bneoonfnkl7hgmhndsp@4ax.com>
Source record: 169251

On 7 Feb 2001 06:41:35 GMT, Bill Nelson <billn@spock.peak.org> wrote:
>Richard Harrison <richardharrison@webtv.net> wrote:
>
>: There is plenty of portable and mobile satellite equipment residing at
>: more than two hundred miles from the Mississippi Valley.
>
>Yep. And satellite equipment is a waste of bandwidth. All that is needed
>for most emergency communication is CW or voice - not video.

Video has a large role to play in conveying damage assessment. As the
old saw goes, a picture is worth a thousand words. But there is plenty of
satellite equipment that handles only a voice or data channel, SCPC
systems. They are in very wide use by businesses to form private data
networks. The equipment has become inexpensive, and the dishes required
are small. There are also the Orbcom 2 way messaging systems now
installed in many over the road trucks, and the OnStar system installed
in new passenger cars. They are becoming plentiful enough to replace
the amateur as first responder in most cases where a terrestrial cellphone
doesn't suffice.

>: Single-channel network equipment includes an earth station which one man
>: can easily carry and link to the satellite. The dishmount just sets on
>: the floor or other flat surface. The whole thing only weighs a few
>: pounds and works like Gangbusters. It`s been around for decades.
>
>Why don't the networks use it then - instead of the vans and large
>dishes that they do use?

The networks have very little satellite equipment anymore. They depend
on their affiliates to supply the facilities for feeds. As the largest NBC affiliate,
my company has 22 sat trucks and 12 flyaway packs. We use the trucks for
several reasons. First, they are fully self-contained production and editing
facilities. Second, they have sufficient independent power to supply heavy
lighting loads. And third, they carry big enough dishes and TWTs to let us use
the old (and much cheaper to rent) C band satellites for backhaul feeds. By
contrast, our small light flyaway packs must use the Ku birds. The difference
in transponder rental rates can amount to several hundred dollars an hour
at peak usage times, so there's an economic advantage to using the larger
trucks when feasible.

That's changing as we transition to all digital. With digital feeds, we don't
need as much uplink power or as large a dish to use the satellites. So we
can now use the flyaways on the old C band birds too. Some of the Ku birds
are also getting old, and rental rates on them are declining too. So the
economic incentive to use the big trucks is disappearing. They're still

very useful as mobile production facilities, though, so while the dishes they carry may get smaller, we'll probably keep using some of the big trucks.

Gary

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4128. FS: 3-ele cubex quad

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 22:18:32 UTC
From: k6stu@aol.com
Message-ID: <20010303171832.05299.00000335@ng-cu1.aol.com>
Source record: 169252

I have a 3 ele cubex quad, boom, 3-spiders, 12 spreaders.
covers 20-10 meters. No Wire. $175.00
Mike

4129. FS: 4-ele Cubex QUAD

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 22:20:51 UTC
From: k6stu@aol.com
Message-ID: <20010303172051.05299.00000336@ng-cu1.aol.com>
Source record: 169253

For Sale 4 element quad. Boom, 4-spiders, 16 spreaders, no wire. Covers 20-10 meters.
$325.00
MIke

4130. FS: 20 mtr beams

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 22:23:49 UTC
From: k6stu@aol.com
Message-ID: <20010303172349.05299.00000337@ng-cu1.aol.com>
Source record: 169254

I have for sale two 20 meter Cushcraft beams.
One 3-element 203BAS and one 4 element 204BAS.
Pick up only in Los Angeles Area.
MIke

4131. FS: Mosley TA-36 6-ele 20/15/10 beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 22:25:53 UTC
From: k6stu@aol.com
Message-ID: <20010303172553.05299.00000338@ng-cu1.aol.com>
Source record: 169255

For Sale MosleyTA 36, 6 element beam.
Pick up only Los Angeles.
Mike

4132. Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-03 22:58:38 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <3aa17724@turakina.six.asn.au>
Source record: 169256

Hi antenna gurus,

I would like to find out more about travelling wave HF antennas.
Particularly how they work and how good they are. Haveing one antenna to
cover the entire HF band is very appealing, however they do not seem to be
used much and there is not much information on them.

None of the ARRL or Radio Handbooks I have has enough on them to make any
sense of.

I have found two designs on the web.

One is:

http://www.paws.dircon.co.uk/draka.htm

The second:

was on the ARRL TIS site but seems to have been taken down (from QST
November 1995 pp 22)

I have a few questions about these.

1. Why aren't travelling wave/broadband antennas used more often?
2. Are there any more designs on the web I can view?
3. Is there any descriptions on the web how they work?
4. Is there anyone who knows how to drive NEC who would be prepared to
model the voltage and current distributions of the first design for me
(about every 5MHz)?
5. What is the approximate "efficiency" of a normal wire dipole antenna one
quarter wavelength from the ground?

thanks in advance

Michael Hart
VK2JXI

4133. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 01:09:14 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA195BA.DD769639@IEEE.org>
Source record: 169257

Michael Hart wrote:
> 1. Why aren't travelling wave/broadband antennas used more often?

These antennas are usually many wavelengths long and are very
directional. I don't have room for one and if I did I don't
know which direction I would aim it.
--
http://www.mindspring.com/~w6rca

4134. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 01:43:40 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97s6l8$r75$1@slb2.atl.mindspring.net>
Source record: 169258

Michael:

As Cecil points out such travelling wave antennas, e.g. Rhombics, Beverages, etc... are not really applicable to the most common amateur radio uses.

These large travelling wave antennas have found their greatest application and usage in military HF fixed point to point network links or "circuits". In these applications they are permanently set up aimed at a particular very remote other station with which they intend to maintain almost continuous contact. And they are then only used for that particular "circuit".

If you have a particular station with which you wish to maintain a good communications path most of the time and lots of room at each location then you have a clear advantage for this type of antenna, just set up large rhombics at each end pointed at each other.

-Peter K1PO

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3AA195BA.DD769639@IEEE.org...
> Michael Hart wrote:
> > 1. Why aren't travelling wave/broadband antennas used more often?
>
> These antennas are usually many wavelengths long and are very
> directional. I don't have room for one and if I did I don't
> know which direction I would aim it.
> --
> http://www.mindspring.com/~w6rca

4135. shunt feeding a tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 02:15:24 UTC
From: "Larry D. Clark" <me@nowwhere.com>
Message-ID: <3AA1A53C.B435D69E@swbell.net>
Source record: 169259

wonder if some one could supply a url
or two that shows how to shunt feed
a tower on 160m.

tnx

larry
kd5foy

4136. WTB:Heathkit SA-1480 Remote Coax Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 02:59:59 UTC
From: "P.Thamm" <WB4LZE@EROLS.COM>
Message-ID: <97sb86lvd1@bob.news.rcn.net>
Source record: 169260
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

I am looking to buy a Heathkit SA-1480 Remote coax switch or a similar remote switch which uses a rotary solenoid with ceramic switch. Please email price and condition.
Best regards,
Peter WB4LZE

4137. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 03:05:19 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AA1B0EF.F54F6A38@bctv.com>
Source record: 169261

W6RCecilA wrote:
>
> Michael Hart wrote:
> > 1. Why aren't travelling wave/broadband antennas used more often?
>
> These antennas are usually many wavelengths long and are very
> directional. I don't have room for one and if I did I don't
> know which direction I would aim it.

Think of a center-pivot spray system used in agriculture.

Mount one end to a "center pivot" -- say, one corner of your backyard --
and string the other end to various points for aiming. You only need a
90-degree arc.

4138. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 04:35:08 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <mgq2atsnc8utqe4jc99u3045nt8t4td1jl@4ax.com>
Source record: 169262

On Wed, 7 Feb 2001 07:31:25 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:
>On the other hand, the TV remote vans use large dishes because they have
>5 MHz of bandwidth to convey, and accept a 5MHz slice of noise. They
>need proportionally more signal strength for the same signal to noise
>ratio. Larger dishes produce larger power gains to get the larger signal
>strength needed.

Actually, we need 32 MHz of bandwidth for analog satellite video, because we use FM modulation. Of course we benefit from the FM threshold effect, so our CNR doesn't have to be very high to give us a good baseband SNR. (We need a 40 dB baseband SNR to have broadcast quality pictures.)

Our new digital systems are different, we use compression, FEC, and QPSK modulation. We can fit into a quarter transponder bandwidth (8 MHz), and the FEC lets us run with a CNR of only 2 dB. That's a 16 dB total advantage over the analog system. That means much smaller dishes and less uplink power required.

Gary
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4139. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 07:01:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <97sp87$es7$0@208.207.71.174>
Source record: 169263

If you're referring to a fullscale, full capability communications operation in relief of a widespread major disaster anywhere, it probably isn't going to happen, anywhere, neither by amateur radio nor any governmental nor other organization(s). Ask the people in Homestead, Florida, many of whom sat for a week before they ever saw or heard from any relief person whatever, following Hurricane Andrew.
Ham radio operators will at best have emergency communications facilities avaliable to use to call attention to their local situations and direct aid coming in, and work with their local authorities as and if needed. Beyond that they will, as usual, handle lots of health and welfare traffic during the aftermath.
There just isn't the necessary impetus put on much more than that. And if hams showed up asking to be allowed to get hands-on time to try to learn any news or other organization's satellite gear they no doubt would be sent packing, and regarded as nuts.

Dick

Gary Coffman wrote:
>
> On Tue, 6 Feb 2001 22:07:48 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:
> >Dick Carroll wrote:
> >"The state Public Service organization I worked for bought ONE."
> >(lightweight satellite portable earth station)
> >
> >That leaves 49 other states probably averaging one or more and willing
> >to share for a dire emergency with the understanding it will be
> >immediately returned to owner in case the owner has an immediate need.
>
> FEMA bought a bunch of flyaway packs just before Hugo. They are complete
> PBX systems with cellular interfaces capable of tying their own integral
> cellsite, or other available cellsites, to long distance satellite channels. (They
> can interface to surviving wired infrastructure too, of course.) Setup is quick,
> a few minutes after arriving on site. They fit in a pair of ordinary size suitcases
> for easy air transport. (These are mostly 16 line T1 grade systems.)
>
> They have priority calling capabilites so that particular phone numbers can be given
> priority in a disaster. This is a necessary feature to prevent the general public
> from overloading the systems. Note that *any* cellular system can be programmed
> to do this, but most haven't installed the necessary software to do it. A few have,
> and I know of one police department that has gone totally cellular with phone numbers
> that have been programmed into the cellular system to have priority access in case
> of emergencies. Non-priority calls can be bumped off the system as necessary to
> accomodate the priority phones.

>
> By contrast, when the ARC's HF comm van arrived after Hugo, the FEMA folks told
> them to park it over beyond the dish farm, out of the way. They didn't need HF Morse
> or voice capabilities. They told them that if they didn't have VHF capability, they
> might as well go home, because the only real use they had for hams was for
> local tactical comm with their damage survey teams. They could've used a few
> extra repeaters to support that, but the ARC van wasn't equipped to provide that,
> so they came home.
>
> >How many of these are there? Industry has many. They were agressively
> >marketed and the network fees were very reasonable when compared with
> >almost anything else that could be often used over relatively long
> >distances. Most of the world`s supply of these is outside a band of 200
> >miles either side of the Mississippi River.
>
> There are *lots* of SCPC systems on rooftops, but not a lot of portables.
> I doubt many hams would know how to use the ones available to them in
> the local area for talkback (provided they survived and could be put back
> in operation). Most of the regular users of the systems wouldn't either.
>
> But someone who did understand them could easily press them into
> emergency service. Most hams aren't that someone, because they
> haven't self-trained on that sort of technology, and don't have the
> information or skills needed to make use of that surprisingly large
> and resilient long distance capability. (For one thing, you need to
> know how to reconfigure them to contact satellite control, simple
> if you know how, and request to be integrated into an emergency
> voice or data comm network.)
>
> >In the case of a newsworthy disaster, the media will arrive immediately
> >and the dishes will bloom like flowers in the spring. Most of the time
> >they won`t be feeding program. They will be obligated to render needed
> >communications help via their satellite links. That`s no answer to the
> >complete problem, but it sure can help.
>
> My company alone could field 22 uplink trucks and 12 flyaway packs.
> All of the flyaway packs could be in place and operating in the New Madrid
> area in a few hours. Four of the trucks could be on site in less than 8 hours,
> 2 are already in the area. The rest could be available in 24 to 48 hours if
> given routing priority on the area's damaged road systems. Other broadcast
> chains have similar capabilities.
>
> But they aren't setup to handle multichannel voice or data comms. They only
> have one two way SCPC capability for scheduling and talkback purposes,
> plus one Orbcom messaging unit (in the trucks, the flyaways don't have
> this), and the crews may have one or more handheld satellite cellphones
> with them.
>
> A digital CO would have to be interfaced with them to provide multichannel.
> That's feasible because their modulators and demodulators can deal with

> any digital data stream up to 24 Mb/sec (that'd handle 384 simultaneous
> calls, or 4 compressed standard definition video channels, our newer trucks
> have two independent channels with double that capacity), but it isn't a
> capability that's ready to go out of the box. I wonder how many hams could
> figure out how to utilize it? Our engineers can, and they know who to contact
> to coordinate the satellite resources, because they deal with them every day.
>
> (Someone who knows how to configure systems to interface with the regular
> telco systems on the other end is required too. We have that capability in house
> as a side effect of our video on demand project, but some other stations probably
> don't, and would need to call on local telco people for special terminal equipment
> and support. In other words, the bandwidth is there and available, but the knowledge
> to interface the systems back into the regular telco fiber network may be lacking.)
>
> So broadcast can bring a lot of bandwidth to bear on the emergency communications
> situation, and can do it pretty rapidly, but it isn't a simple turnkey thing by any
means.
> Knowledgeable and skilled people familiar with the technologies and systems are
> required to make it all work.
>
> On another front, Iridium had to be rescued from bankruptcy by DOD (DOD
> makes heavy use of Iridium satellite cellphones), but there are 3 other companies
> providing satellite phone service, and seem to be doing well with it, at least none
> of the latter have declared bankruptcy yet. These latter systems are digital, and
> fairly inexpensive multistandard handheld phones are available to make use of
> them. This is an immediately available resource that can operate independent
> of local infrastructure.
>
> Also, many over the road trucks now have Orbcom 2 way messaging capabilities,
> and any passenger vehicle with OnStar also has satellite comm capabilities. These
> latter two systems seem to be overlooked as an increasingly widely deployed emergency
communications resource. They have their own independent power (from the vehicle)
> and don't need large dishes or special pointing to operate. There is already central
> coordination and interface to the ordinary communications networks via their Earth
> stations too. It is likely there soon will be enough of them in any area of the US to
provide
> the first responder alert that's needed in a disaster.
>
> Then there is Starband, which provides a two way satellite high speed internet
> link. That's just rolling out in a big way, but it should be popular in rural areas
> like those around New Madrid where cable modems and DSL phone lines aren't
> likely to be available in the foreseeable future. The dishes are small, and easily
> oriented. Anyone with one of these systems, and emergency power, would be
> able to quickly restore access to the internet after a disaster.
>
> So long distance comm capacity shouldn't be a problem in any major disaster
> like another New Madrid quake. (In the Northridge quake, the plain old wired
> internet still worked in most of the area.) There are plenty of satellite systems
> which can handle it (and any required dish repointing is a trivial task, except
> for some of the big older C band systems which probably wouldn't fare well

> in a quake or hurricane). Most hams either aren't aware of them, or wouldn't
> know how to make use of them for their served agencies, though.
>
> This is a serious shortcoming, because what would be needed most would
> be people familiar with the available resources, and skilled with interfacing
> them into coherent controlled emergency communications networks for their
> served agencies. Most hams aren't self-training to fullfill this role. Most hams
> are still self-training for19th century style communications.
>
> After the Mexico City earthquake, the amateur NTS was running a *23 day*
> backlog of message traffic. Amateur HF, as currently used by amateurs, is
> totally inadequate to meet the comm needs of major large scale disasters,
> even low priority traffic like H&W messages. For a while it looked like
> HF packet might be able to pick up the slack, but some poor initial technical
> choices, and inability to cooperate, has caused that to mostly die away.
>
> If we want to be valuable as comm assets in major disasters, we need to
> become familiar with the many modern high capacity systems available to
> us so that we will be prepared to help integrate communications for served
> agencies. We can no longer be content to provide a 19th century level
> of service.
>
> Amateurs do have the advantage that some of them are likely to be on the
> ground at the site of most disasters when they occur. But that means that
> their homes and stations will also bear the brunt of the damage, and aren't
> likely to be operable when needed. Most amateurs don't even have emergency
> backup power, so when their HT batteries run down, they're out of business.
>
> It doesn't have to be this way, of course, but it mostly is. Most amateurs
> aren't interested in learning about modern communications systems, or
> in employing variants of those technologies in their own operations. Most
> amateurs aren't making preparations to be able to keep their own systems
> running, or to cooperatively tie them in with others, amateur or non-amateur,
> if a disaster requiring communications capabilities does occur. (Tying in to
> available non-amateur systems seems to make some hams unreasonably
> angry, but it is a vital skill that amateurs interested in emergency comms
> should have in their bag of tricks.)
>
> Most amateurs are content to consider amateur radio just another hobby,
> one that lets them yak with friends or compete in contentless radio games
> to collect postal cards from around the world. That's poor preparation for
> the day an amateur may need to be able to step forward and be a vital
> communications asset for his community. In fact, the skill sets that most
> amateurs do have are counterproductive to the sort of disciplined
> cooperative enterprise that is modern disaster communications. That
> leaves amateur radio mostly playing around the edges, and sometimes
> getting in the way, of the important communications tasks needed to be
> done in disaster situations.
>
> I'm not saying much that's new here, OpEd pieces have appeared in

> QST and other places saying much the same things in recent years.
> We need to rethink our role in disaster communications if we want
> to remain relevant and useful to our served agencies. We need to
> develop much better cooperative skills, and we need to understand
> other available technologies and systems, and ways we can integrate
> with them to best serve our role.
>
> It should be obvious (but apparently isn't to some) that the romantic
> image of the lone headphone wearing amateur pounding brass is no
> longer sufficient to deal with the sorts of communications required
> by our served agencies. (It never was, but once it was all we had
> to offer.)
>
> Gary
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> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

4140. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 07:04:15 UTC
From: mike.luther@ziplog.com
Message-ID: <ta3q7f5kmjmf84@corp.supernews.com>
Source record: 169264

In <3aa17724@turakina.six.asn.au>, "Michael Hart" <mhart@NOSPAM.terrigal.net.au> writes:
>Hi antenna gurus,

There is information on them in the old Jasik antenna book bible.

>I would like to find out more about travelling wave HF antennas.
>Particularly how they work and how good they are. Haveing one antenna to
>cover the entire HF band is very appealing, however they do not seem to be
>used much and there is not much information on them.

There are trade-off's, as in most everything else in Life as well!

>I have a few questions about these.

>1. Why aren't travelling wave/broadband antennas used more often?

They can be large affairs for HF use..

>2. Are there any more designs on the web I can view?
>3. Is there any descriptions on the web how they work?

Open up your Web Browser. Open up www.google.com. Enter the phrase,
"Travelling Wave Antenna" ,,, You'll get about 4200 hits to look
through covering the subject from A(ustralia!) to Z(ealand!).

>thanks in advance

>Michael Hart
>VK2JXI

This is one of these deals where you prolly won't thank us so much when
you get to poking about the literature! Grin..

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

4141. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 07:26:31 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <3aa1ee31@turakina.six.asn.au>
Source record: 169265

Thanks Peter and Cecil,

Both the designs I looked at cover from the 80m to 10m HF band and both are similar length, if not smaller, than a normal 80m dipole. Further more its also claimed that these types of antennas can also be mounted in an inverted V configuration (see www.bushcomm.com.au). So space wise they seem similar to or better than a resonant antenna.

The rhombics in my Radio Handbook (1979) look more like they are resonant antennas [in contrast to travelling wave antennas] - multiband resonant ones that is with 350 foot or leg lengths just for the 20, 15 & 10 metre bands. I always considered rhombics to be more like V beams with a "director" type element and large rhomics having more directivity by virtue of their multiple wavelength elements. Is this reasonable?

Michael

Peter O. Brackett wrote in message <97s6l8$r75$1@slb2.atl.mindspring.net>...
>Michael:
>
>As Cecil points out such travelling wave antennas, e.g. Rhombics,
Beverages,
>etc... are not really applicable to the most common amateur radio uses.
>
>These large travelling wave antennas have found their greatest application
>and usage in military HF fixed point to point network links or "circuits".
>In these applications they are permanently set up aimed at a particular
very
>remote other station with which they intend to maintain almost continuous
>contact. And they are then only used for that particular "circuit".
>
>If you have a particular station with which you wish to maintain a good
>communications path most of the time and lots of room at each location then
>you have a clear advantage for this type of antenna, just set up large
>rhombics at each end pointed at each other.
>
>-Peter K1PO
>
>"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>news:3AA195BA.DD769639@IEEE.org...
>> Michael Hart wrote:
>> > 1. Why aren't travelling wave/broadband antennas used more often?
>>
>> These antennas are usually many wavelengths long and are very
>> directional. I don't have room for one and if I did I don't

>> know which direction I would aim it.
>> --
>> http://www.mindspring.com/~w6rca
>
>

4142. Diamond X500HA info? opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 08:30:55 UTC
From: kd4xv@aol.comzzz
Message-ID: <20010304033055.04929.00000388@nso-fv.aol.com>
Source record: 169266

I used a Diamond antenna for years on our repeaters and when Lightening vaporized it, I couldn't find another Diamond so I put up a similar Comet antenna. I have had repeated problems with the Comet where I have to take it down about every other year and clean the connections between the sections. I have replaced the Comet with another Comet and It did the same thing.

I am thinking about going back to Diamond and I found a Heavy Duty version of the antenna I used before. The Information that I can find dosn't really explain what makes this antenna any better than the regular one.. Has anyone any experience with the "heavy duty" Diamond antenna? What's the difference?

Wally - KD4XV

Please remove trailing "zzz" spam filter to email me!

4143. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 13:36:44 UTC
From: richardharrison@webtv.net
Message-ID: <24771-3AA244EC-219@storefull-112.iap.bryant.webtv.net>
Source record: 169267

Louis wrote:
"Know a source (for 12v d-c to a-c converters for sale)?"

Browsing yesterday, I saw them at EPO, an electronic parts outlet, and at Mac Frugal, a distressed merchandise outlet. They were cheap. Just look around. They seem to be everywhere.

Best regards, Richard Harrison, KB5WZI

4144. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 13:49:32 UTC
From: k4ia@aol.com
Message-ID: <20010304084932.19184.00000533@ng-fe1.aol.com>
Source record: 169268

Radio Shack has a 350 watt inverter on sale for $50. Go to their website and
and look for item 980-0708
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate,
International, Toll Free, Callback, Calling Cards, Pagers and more Tune to
http://www.ld.net/?bucksavers

4145. Heathkit Twins for Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 14:19:51 UTC
From: Gary <gary@heathkits.com>
Message-ID: <baso6.14678$7Y1.1467687@newsread2.prod.itd.earthlink.net>
Source record: 169169

```
AM twins MR-1 and MT-1 for Sale see at http://www.heathkits.com
30 other Heathkit items also posted...I will be posting 40+ pieces of test
equipment later this week
```

--
Gary KIMJ 44 years of Heathkit fun http://www.heathkits.com

4146. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 15:11:32 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <97tm7mcek1@nntp9.atl.mindspring.net>
Source record: 169170

"Louis" <lou1@westnet.com> wrote in message
news:97t8p5$d7g$14@mycroft.westnet.com...
>
>
> anyone have a 12v dc to ac converter for sale>?
>
> know a source?
>
> louis
>
> lou1@westnet.com
>
Radioshack, Kmart, Sears, Walmart

4147. Re: Diamond X500HA info? opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 16:03:35 UTC
From: Tad Danley <taddanley@nospamatatt.net>
Message-ID: <3AA268AB.B710FD02@att.net>
Source record: 169171

KD4XV wrote:

> I used a Diamond antenna for years on our repeaters and when Lightening
> vaporized it, I couldn't find another Diamond so I put up a similar Comet
> antenna. I have had repeated problems with the Comet where I have to take it
> down about every other year and clean the connections between the sections. I
> have replaced the Comet with another Comet and It did the same thing.
>
> I am thinking about going back to Diamond and I found a Heavy Duty version of
> the antenna I used before. The Information that I can find dosn't really
> explain what makes this antenna any better than the regular one.. Has anyone
> any experience with the "heavy duty" Diamond antenna? What's the difference?

Wally:

I believe they are the same antennas, made in the same manufacturing plant. I
have seen a deterioration in quality in both Company's products over the past two
years. You may be seeing the same thing.

You might want to visit a ham store where you can compare them side by side.

Good luck and 73,

--
Tad Danley, K3TD
mailto:taddanley@att.net

Caution: Anti-spam address in use!

4148. Absolutely horrible TVI problems.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 16:10:39 UTC
From: Frizz <kg4ivt@hotmail.spamsucks.goaway.leavemealone.com>
Message-ID: <97tp6s$jd9$1@bob.news.rcn.net>
Source record: 169172

I am in an area with antenna restrictions so I run an attic mounted discone for 2m. For some reason, I am coming over two TV's in my house that are both below me as I am on the second floor. I only thought this happened when I turned my 35 watt amp on but it turns out I do it on stock power as well. Basically what will happen is I will key up and a loud hum can be heard from the TV. Since I am the only ham in the house no one is willing to compromise for me so I have to get this fixed. We have both satellite TV and cable with lines for both running in the attic. Also, the idiot that put in the cable television ran the line through the closet in my room, about 8 feet away from my station and this goes to both the problem TVs. There is no way to move this effectively. I have tried disconnecting the radio from its power supply and running off a battery, high pass filters, a ferrite core around the coax line and power leads to the radio and amp and nothing seems to remedy this problem. I am basically about to give up since I can't use the radio unless no one is home or they aren't watching the problem sets (which are the main ones in the house). Anything I can do? This has been going on for the past few months. Failing a resolution, anyone want to buy an Yaesu FT-411 ht, samlex power supply, and Rf Concepts amplifier?

Thanks

kg4ivt.

4149. Re: shunt feeding a tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 16:27:08 UTC
From: mike.luther@ziplog.com
Message-ID: <ta4r6sehftpm6d@corp.supernews.com>
Source record: 169173

In <3AA1A53C.B435D69E@swbell.net>, "Larry D. Clark" <me@nowwhere.com> writes:

>wonder if some one could supply a url
>or two that shows how to shunt feed
>a tower on 160m.
>
>tnx
>
>larry
>kd5foy

Other than what's in the handbooks, some notes for you. You'll have to in almost all cases, insulate the guy wires from the tower. But maybe not all of them! Maybe you will wnat to leave portions of them connected up at the top! Read on..

Your beam(s) are, in effect, a large capacity hat, which has the effect of lowering the frequency of the tower. However, thinking about that carefully, you will realize that it is also possible to extend that idea by using the guy wires at the top to make the tower capacity hat BIGGER, thus moving the reasonance frequency of the affair downward if you need to.

Keep that in mind.

I use the gamma match technique style to do this. You'll see it in broadcast installations as a slant wire affair, but I've found a more convenient way to do it at our level of the game.

With the tower isolated from the guys, to start with, then what you do is make a spacer arm set. One will do for the initial tests. The spacing is interesting. I feed both 40 and 80 meter shunt fed towers with a stack of 6 inch TV guy wire stand-offs! What I do is simply pass the shunt wire, no more than just plain old multi-strand copper antenna wire through the little brown plastic insulators. At the top, I run the wire over to the mast and clamp it under a stainless steel automotive hose clamp. Make that triangle big enough so that you don't put undue load on that top TV standoff to keep it from bending when you gently cinch up the final design!

I've never tried this on 160 meters, but it works fine on 80 meters with Rohn 25G. You may find it necessary to use a wider stand-off on 160 than these six inch TV Twin Lead items. As well, if you use the TV items, be prepared to replace the little brown instulators in them every five years or so. They eventually get brittle, crumble, and the wire will begin to touch the metal ring, creating the strangest intermittents you have ever seen. That drove me nuts until I learned to change out the

little brown insulators every now and then!

The initial length for a Rohn 20G self-supporting 60 foot stack with a 1-1/4 inch lightweight EMT conduit stinger on top for reasonance is about half way up the tower, in this case, done this way. That's obviously the 80 meter case. The 40 meter case is about half that, thus there is some element of scale here. It obviously makes a difference how far away from the tower the gamma match section. I've not gotten to the 160 meter game yet, but the logic says that the idea will scale and be about half way up a full quarter wave tower.

That also tells me, just from a thought standpoint, that unless your tower is at least 60 feet up there, shunt feeding it may be a lost cause on 160 meters!

Assumming things are still going OK here, you terminate the ground end of the gamma wire into a variable capacitor. For all my 40 and 80 meter stuff, I use the old capacitors out of BC-375 tuning units and the like. You will need a decent spacing and a transmitting capacitor here for KW levels of power. However there is another trick you can play that will let you use a receiving style unit to set it up. Have some spare RG-8 coax ready if you do that! Ten feet or so is plenty.

You use an MFJ or similar SWR meter with the little power generator in it that will hit 160 meters. Tie it on the free end of that variable and to the base off the tower. Set it to the center frequency you want and take a look at the SWR. You'll adjust the capacitor and the length of that gamma section for minimum SWR. Sorry for the climbing of the stick to move the gamma tap, but that's the way I've always done it.

If you have a willing son, daughter or wife, who will do the work downstairs while you stay up there at the top end to shift the tap, it will save time and effort. In my case, my son was on top until we got the first stalk of the 80 meter 4 square phased array done. Then using the pattern we found, I did the remaining three sticks just like it. My son likes to do the work up there. The man on top is the boss, period, in tower work we do. The phrase, "Thank you!", means you are free to turn loose of what you are handing off to the partner. He finds that fascinating! I know of one ham family marriage that was, perhaps, saved this way, when he and she learned to do tower work together; she favors the top slot! Huge grin!

You will soon learn from the measurement tools whether you will have to add more metal bulk to the capacity hat up there or not. I think you will find that the available literature will suggest that the typical tri-band stack at 60 feet up will yield a functional solution.

When you are done fiddling with that capacitor down at ground level, you may take a chunk of RG-8 or large coax and make a capacitor out of it to take the place of your smaller variable. You use the center for one end of the capacitor, the shield for the other! Do that at the same end and simply cut off the far end until you get the bucking capacitance you

need, leaving enough exposed center insulation at the free end to keep it from arcing. Tape it over with Scotch 33 and forget the whole deal. The correct length turns out to be around two feet on 40 meters, about twice that on 80 meters!

Actually, this is shunt feed, in a way, but compared to the slant wire conventional feed operations in broadcast work, the length of the shunt section is far longer. That's a factor of the spacing etc. In reality, this whole affair is shunt feed, but as well, is approaching what we call a folded monopole antenna.

After looking at what Lawrence Behr did at WTAW for a three element such lower height tower array for WTAW-AM on 1150Khz, I realized that you can likely take a single 66 foot stalk of Rohn 25G, like I have. You can likely then make a separate six inch or so ladder line from top to bottom. You can likely then simply ground it to the tower at the bottom, if you want to use the gamma feed on 80. If you remove the gamma feed on 80 and then unground the longer feed section, and feed it there on 160 meters, my bet is that there is a "Tap Point of Joy", new phrase coined here folks, at which you can alternately feed a conventional quarter-wave vertical on 80 meters or a folded monopole on 160 meters with nothing more than a DC relay throw. You'll be able to get that switching voltage out there down the coax center conductor, if you DC isolate that line, one way or another, at the shack end of the job.

If you do that, don't forget to plan for the lightning mitigation needed. The shunt feed game does *WONDERS* for giving you and easy way to keep the spikes out of the shack, but you still have to plan for the left-overs from the Devil's kitchen!

I've got too much to do at the moment in the computer sustem game to try the dual frequency approach. As sunspot cycle fades, there will be more interest in such things, I bet, and the idea may be worth climbing up there and trying!

Have fun .. I've tried to lay out the practical sum of what is in all the books. That done because, in these deals, they are all cut and try affairs anwyay. In that each collage is diferent anyway, the practical part of how to get it working, at least to me, was the real problem, when I first tried it!

--> Sleep well; OS2's still awake! ;)

Mike - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

4150. experiences with Sommer T-25/s

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 16:34:04 UTC
From: OE1MWW <send.me.nomail@now>
Message-ID: <ofr4at42gdah1pq2g9ec95tnk7283utdlv@4ax.com>
Source record: 169174

Hi to all,

has anyone experiences with the Sommer T-25/S ?

Does it work as advertised ?

73's
Wolfgang OE1MWW

4151. Re: Absolutely horrible TVI problems.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 16:47:10 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AA2718E.AA4933FA@dialpoint.net>
Source record: 169175

You need to determin if the transmitter is comming in on the TV by the antenna or power lines. An RCA receiver at the house was picking up most of my TVI via the power lines. Installed a filter at the TV power line to eliminate that. Try disconnecting the antennas and if you have a VCR playing a tape to see if it is gettig TVI then. On 2 meters you can expect ot get some TVI on the cable channels around 17 to 19 by the antenna as this is the frequencies around the two meter band. Could be poor shielded coax. Are all the connecting cables for the tv the foil shielded kind ?
There is not much you can do at the transmitter to cure the TVI, especially if yo are having problems with under 5 watts.

Frizz wrote:
>
> I am in an area with antenna restrictions so I run an attic mounted discone
> for 2m. For some reason, I am coming over two TV's in my house that are
> both below me as I am on the second floor. I only thought this happened
> when I turned my 35 watt amp on but it turns out I do it on stock power as
> well. Basically what will happen is I will key up and a loud hum can be
> heard from the TV. Since I am the only ham in the house no one is willing
> to compromise for me so I have to get this fixed. We have both satellite TV
> and cable with lines for both running in the attic. Also, the idiot that
> put in the cable television ran the line through the closet in my room,
> about 8 feet away from my station and this goes to both the problem TVs.
> There is no way to move this effectively. I have tried disconnecting the
> radio from its power supply and running off a battery, high pass filters, a
> ferrite core around the coax line and power leads to the radio and amp and
> nothing seems to remedy this problem. I am basically about to give up since
> I can't use the radio unless no one is home or they aren't watching the
> problem sets (which are the main ones in the house). Anything I can do?
> This has been going on for the past few months. Failing a resolution,
> anyone want to buy an Yaesu FT-411 ht, samlex power supply, and Rf Concepts
> amplifier?
>
> Thanks
>
> kg4ivt.

4152. Re: Absolutely horrible TVI problems.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 17:01:36 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Z3OiOgbOQpwsq1eUU75AGUXBWSvF@4ax.com>
Source record: 169176

"Frizz" <kg4ivt@hotmail.spamsucks.goaway.leavemealone.com> wrote:

>I am in an area with antenna restrictions so I run an attic mounted discone
>for 2m.

Is it strictly a 2m discone or one of those discones that covers a wide range of frequencies? You might try an alternative antenna, a homebrew ground plane, dipole or j-pole strictly for 2 meters, and move it around your premises. Might cause less interference.

Bob
k5qwg

4153. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 17:03:49 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <+XSiOrFI6wLYQXcXohTpZ2ux0GN9@4ax.com>
Source record: 169177

Louis <lou1@westnet.com> wrote:

>
>
>anyone have a 12v dc to ac converter for sale>?
>
>know a source?
>
>louis
>
>lou1@westnet.com
>

If it's 12 volts dc to 120 volts ac, just about everybody sells "inverters." Try any auto parts store.

Bob
k5qwg

4154. Re: Money for nothing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 18:42:15 UTC
From: PWR <bkavas@bigfoot.com>
Message-ID: <97u891npp1@as121.tel.hr>
Source record: 169181
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

```
> >
> > -- >
> > > > > Details: HIS REALLY CAN MAKE YOU EASY MONEY!! IT WORKS!!! A little
> > while
> > > > > back, I was browsing through newsgroups, just like you are now,
and
> > came
> > > > > across an article similar to this that said you could make
thousands
> > of
> > > > > dollars within weeks with only an initial investment of $6.00! So
I
> > > > > thought," Yeah, right, this must be a scam". But like most of us,
I
> > was
> > > > > curious. So I kept reading. Anyway, it said that you send $1.00 to
> > each
> > > > of
> > > > > the 6 names and address stated in the article. You then place your
> own
> > > > name
> > > > > and address in the bottom of the list at #6, and post the article
in
> > at
> > > > > least 200 newsgroups. (There are thousands) No catch! That was it.
> So
> > > > after
> > > > > thinking it over and talking to a few people first, I thought
about
> > trying
> > > > > it. I figured what have I got to lose except 6 stamps and $6.00,
> > right?
> > > > Like
> > > > > most of us I was a little skeptical and a little worried about the
> > legal
> > > > > aspects of it all. So I checked it out with the U.S. Post Office
> > > > > (1-800-725-2161) and they confirmed that it is indeed legal! Then
I
> > > > invested
> > > > > the measly $6.00. Well GUESS WHAT!!... within 7 days, I started
> > getting
> > > > > money in the mail! I was shocked! I figured it would end soon, but
> the
```

> > > > money
> > > > > just kept coming in. In my first week, I made about $25.00. By the
> end
> > > of
> > > > > the second week I had made a total of over $1,000.00! In the third
> > week
> > > I
> > > > > had over $10,000.00 and it's still growing. This is now my fourth
> week
> > > and
> > > > I
> > > > > have made a total of just over $42,000.00 and it's still coming in
> > > > rapidly.
> > > > > It's certainly worth $6.00, and 6 stamps. I have spent more than
> that
> > on
> > > > the
> > > > > lottery!! Let me tell you how this works and most importantly, why
> it
> > > > > works....also,make sure you print a copy of this article NOW, so
you
> > can
> > > > get
> > > > > the information off of it as you need it.You must send the money
to
> > get
> > > > put
> > > > > on the mailing lists.
> > > > >
> > > > > STEP 1: Get 6 separate pieces of paper and write the following on
> each
> > > > piece
> > > > > of paper: "PLEASE PUT ME ON YOUR MAILING LIST." Now, get 6 US
$1.00
> > > bills
> > > > > and place ONE inside EACH of the 6 pieces of paper so the bill
will
> > not
> > > be
> > > > > seen through the envelope to prevent thievery. Next, place one
paper
> > in
> > > > each
> > > > > of the 6 envelopes and seal them. You should now have 6 sealed
> > > envelopes,
> > > > > each with a piece of paper stating the above phrase, your name and
> > > > address,
> > > > > and a $1.00 bill. What you are doing is creating a service by
this.
> > You

> > > > must
> > > > > send the money to get put on the mailing lists. THIS IS ABSOLUTELY
> > > LEGAL!
> > > > > Mail the 6 envelopes to the following addresses:
> > > > >
> > > > > #1) Barry Taylor, 35 Silverlaw, Annan, Dumfriesshire, Scotland,
Dg12
> > > 5eq,
> > > > > United Kingdom
> > > > > #2) Joseph Stultz, 165 LaArroya Dr., Weatherford, Texas 76088
> > > > > #3) JoAnna Ramon, 108 A Salazar St., Cotulla, Texas 78014
> > > > > #4) Domagoj Turina, Kvaternikova 58,51000 Rijeka, Croatia
> > > > > #5) Bojan Kavas, F.Matkovica 21, 51000 Rijeka, Croatia
> > > > > #6) Corey Chuck, P.O. Box 2757 Chandler, AZ 85244
> > > > >
> > > > > STEP 2: Now take the #1 name off the list that you see above, move
> the
> > > > other
> > > > > names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as
> > number
> > > 6
> > > > on
> > > > > the list.
> > > > >
> > > > > STEP 3: Change anything you need to, but try to keep this article
as
> > > close
> > > > > to original as possible. Now, post your amended article to at
least
> > 200
> > > > > newsgroups. (I think there is close to 24,000 groups) All you need
> is
> > > 200,
> > > > > but remember, the more you post, the more money you make!
> > > > >
> > > > > ---DIRECTIONS -----
> > > > >
> > > > > HOW TO POST TO NEWSGROUPS------------
> > > > >
> > > > > Step 1) You do not need to re-type this entire letter to do your
own
> > > > > posting. Simply put your cursor at the beginning of this letter
and
> > drag
> > > > > your cursor to the bottom of this document, and select 'copy' from
> the
> > > > edit
> > > > > menu. This will copy the entire letter into the computers memory.
> > > > >
> > > > > Step 2) Open a blank 'notepad' file and place your cursor at the

top
> > of
> > > > the
> > > > > blank page. From the 'edit' menu select 'paste'. This will paste a
> > copy
> > > of
> > > > > the letter into notepad so that you can add your name to the list.
> > > > > >
> > > > > Step 3) Save your new notepad file as a .txt file. If you want to
do
> > > your
> > > > > postings in different sittings, you'll always have this file to go
> > back
> > > > > to.
> > > > > >
> > > > > Step 4) Use Netscape or Internet explorer and try searching for
> > various
> > > > > newsgroups (on-line forums, message boards, chat sites,
> discussions.)
> > > > > >
> > > > > Step 5) Visit these message boards and post this article as a new
> > > message
> > > > by
> > > > > highlighting the text of this letter and selecting paste from the
> edit
> > > > menu.
> > > > > Fill in the subject, this will be the header that everyone sees as
> > they
> > > > > scroll through the list of postings in a particular group, click
the
> > > post
> > > > > message button. You're done with your first one!
> > > Congratulations...THAT'S
> > > > > IT! All you have to do is jump to different newsgroups and post
> away.
> > > > After
> > > > > you get the hang of it, it will take about 30 seconds for each
> > > newsgroup!
> > > > > **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU
WILL
> > > MAKE!!
> > > > > BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin
> > > receiving
> > > > > money from around the world within days! You may eventually want
to
> > rent
> > > a
> > > > > P.O.Box due to the large amount of mail you will receive. If you
> wish
> > to

> > > > > stay anonymous, you can invent a name to use, as long as the
postman
> > > will
> > > > > deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.** Now
> the
> > > WHY
> > > > > part: Out of 200 postings, say I receive only 5 replies (a very
low
> > > > > example). So then I made $5.00 with my name at #6 on the letter.
> Now,
> > > each
> > > > > of the 5 persons who just sent me $1.00 make the MINIMUM 200
> postings,
> > > > each
> > > > > with my name at #5 and only 5 persons respond to each of the
> original
> > 5,
> > > > > that is another $25.00 for me. Those 25 each make 200 MINIMUM
posts
> > with
> > > > my
> > > > > name at #4 and only 5 replies each, I will bring in an additional
> > > $125.00!
> > > > > Now, those 125 persons turn around and post the MINIMUM 200 with
my
> > name
> > > > at
> > > > > #3 and only receive 5 replies each, I will make an additional
> $626.00!
> > > OK,
> > > > > now here is the fun part. Each of those 625 persons post a MINIMUM
> 200
> > > > > letters with my name at #2 and they each only receive 5 replies,
> that
> > > just
> > > >
> > > >
> > > >
> > > > > made me $3,125.00!!! Those 3,125 persons will all deliver this
> message
> > > to
> > > > > 200 newsgroups with my name at #1 and if still 5 persons per 200
> > > newsgroups
> > > > > react I will receive $15,625,00! With an original investment of
only
> > > > $6.00!
> > > > > AMAZING! When your name is no longer on the list, you just take
the
> > > latest
> > > > > posting in the newsgroups, and send out another $6.00 to names on

> the
> > > > list,
> > > > > putting your name at number 6 again. And start posting again. The
> > thing
> > > to
> > > > > remember is, do you realize that Thousands of people all over the
> > world
> > > > > are
> > > > > joining the internet and reading these articles everyday, JUST
LIKE
> > YOU
> > > > > are
> > > > > now!! So can you afford $6.00 and see if it really works?? I think
> > so...
> > > > > People have said, "what if the plan is played out and no one sends
> you
> > > the
> > > > > money? So what! What are the chances of that happening when there
> are
> > > tons
> > > > > of new honest users and new honest people who are joining the
> internet
> > > and
> > > > > newsgroups everday and are willing to give it a try? Estimates are
> at
> > > > 20,000
> > > > > to 50,000 new users, every day, with thousands of those joining
the
> > > actual
> > > > > internet. : THIS REALLY CAN MAKE YOU EASY MONEY!! IT WORKS!!!
> > > > >
> > > > >
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4155. Re: Money for nothing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 18:42:29 UTC
From: PWR <bkavas@bigfoot.com>
Message-ID: <97u89f$n2g$1@as121.tel.hr>
Source record: 169182
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

> > > -- >
> > > > > Details: HIS REALLY CAN MAKE YOU EASY MONEY!! IT WORKS!!! A
little
> > > while
> > > > > back, I was browsing through newsgroups, just like you are now,
> and
> > > came
> > > > > across an article similar to this that said you could make
> thousands
> > > of
> > > > > dollars within weeks with only an initial investment of $6.00!
So
> I
> > > > > thought," Yeah, right, this must be a scam". But like most of
us,
> I
> > > was
> > > > > curious. So I kept reading. Anyway, it said that you send $1.00
to
> > > each
> > > > of
> > > > > the 6 names and address stated in the article. You then place
your
> > own
> > > > > name
> > > > > and address in the bottom of the list at #6, and post the
article
> in
> > > at
> > > > > least 200 newsgroups. (There are thousands) No catch! That was
it.
> > So
> > > > > after
> > > > > thinking it over and talking to a few people first, I thought
> about
> > > > trying
> > > > > it. I figured what have I got to lose except 6 stamps and $6.00,
> > > right?
> > > > > Like
> > > > > most of us I was a little skeptical and a little worried about
the
> > > legal
> > > > > aspects of it all. So I checked it out with the U.S. Post Office

> > > > > > (1-800-725-2161) and they confirmed that it is indeed legal!
Then
> I
> > > > > invested
> > > > > > the measly $6.00. Well GUESS WHAT!!... within 7 days, I started
> > > getting
> > > > > > money in the mail! I was shocked! I figured it would end soon,
but
> > the
> > > > > money
> > > > > > just kept coming in. In my first week, I made about $25.00. By
the
> > end
> > > > of
> > > > > > the second week I had made a total of over $1,000.00! In the
third
> > > week
> > > > I
> > > > > > had over $10,000.00 and it's still growing. This is now my
fourth
> > week
> > > > and
> > > > > I
> > > > > > have made a total of just over $42,000.00 and it's still coming
in
> > > > > rapidly.
> > > > > > It's certainly worth $6.00, and 6 stamps. I have spent more than
> > that
> > > on
> > > > > the
> > > > > > lottery!! Let me tell you how this works and most importantly,
why
> > it
> > > > > works....also,make sure you print a copy of this article NOW, so
> you
> > > can
> > > > > get
> > > > > > the information off of it as you need it.You must send the money
> to
> > > get
> > > > > put
> > > > > > on the mailing lists.
> > > > > >
> > > > > > STEP 1: Get 6 separate pieces of paper and write the following
on
> > each
> > > > > piece
> > > > > > of paper: "PLEASE PUT ME ON YOUR MAILING LIST." Now, get 6 US
> $1.00
> > > > bills

> > > > > > and place ONE inside EACH of the 6 pieces of paper so the bill
> will
> > > not
> > > > be
> > > > > > seen through the envelope to prevent thievery. Next, place one
> paper
> > > in
> > > > > each
> > > > > > of the 6 envelopes and seal them. You should now have 6 sealed
> > > > envelopes,
> > > > > > each with a piece of paper stating the above phrase, your name
and
> > > > > address,
> > > > > > and a $1.00 bill. What you are doing is creating a service by
> this.
> > > You
> > > > > must
> > > > > > send the money to get put on the mailing lists. THIS IS
ABSOLUTELY
> > > LEGAL!
> > > > > > Mail the 6 envelopes to the following addresses:
> > > > > >
> > > > > > #1) Barry Taylor, 35 Silverlaw, Annan, Dumfriesshire, Scotland,
> Dg12
> > > 5eq,
> > > > > > United Kingdom
> > > > > > #2) Joseph Stultz, 165 LaArroya Dr., Weatherford, Texas 76088
> > > > > > #3) JoAnna Ramon, 108 A Salazar St., Cotulla, Texas 78014
> > > > > > #4) Domagoj Turina, Kvaternikova 58,51000 Rijeka, Croatia
> > > > > > #5) Bojan Kavas, F.Matkovica 21, 51000 Rijeka, Croatia
> > > > > > #6) Corey Chuck, P.O. Box 2757 Chandler, AZ 85244
> > > > > >
> > > > > > STEP 2: Now take the #1 name off the list that you see above,
move
> > the
> > > > > other
> > > > > > names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as
> > > number
> > > > 6
> > > > > on
> > > > > > the list.
> > > > > >
> > > > > > STEP 3: Change anything you need to, but try to keep this
article
> as
> > > > close
> > > > > > to original as possible. Now, post your amended article to at
> least
> > > 200
> > > > > > newsgroups. (I think there is close to 24,000 groups) All you

need
> > is
> > > > 200,
> > > > > > but remember, the more you post, the more money you make!
> > > > > >
> > > > > > ---DIRECTIONS -----
> > > > > >
> > > > > > HOW TO POST TO NEWSGROUPS------------
> > > > > >
> > > > > > Step 1) You do not need to re-type this entire letter to do your
> own
> > > > > > posting. Simply put your cursor at the beginning of this letter
> and
> > > drag
> > > > > > your cursor to the bottom of this document, and select 'copy'
from
> > the
> > > > > > edit
> > > > > > menu. This will copy the entire letter into the computers
memory.
> > > > > >
> > > > > > Step 2) Open a blank 'notepad' file and place your cursor at the
> top
> > > of
> > > > > > the
> > > > > > blank page. From the 'edit' menu select 'paste'. This will paste
a
> > > copy
> > > > > of
> > > > > > the letter into notepad so that you can add your name to the
list.
> > > > > >
> > > > > > Step 3) Save your new notepad file as a .txt file. If you want
to
> do
> > > > your
> > > > > > postings in different sittings, you'll always have this file to
go
> > > back
> > > > > > to.
> > > > > >
> > > > > > Step 4) Use Netscape or Internet explorer and try searching for
> > > various
> > > > > > newsgroups (on-line forums, message boards, chat sites,
> > discussions.)
> > > > > >
> > > > > > Step 5) Visit these message boards and post this article as a
new
> > > > message
> > > > > > by

> > > > > > highlighting the text of this letter and selecting paste from
the
> > edit
> > > > > > menu.
> > > > > > > Fill in the subject, this will be the header that everyone sees
as
> > > they
> > > > > > > scroll through the list of postings in a particular group, click
> the
> > > > post
> > > > > > > message button. You're done with your first one!
> > > > Congratulations...THAT'S
> > > > > > > IT! All you have to do is jump to different newsgroups and post
> > away.
> > > > > After
> > > > > > > you get the hang of it, it will take about 30 seconds for each
> > > > newsgroup!
> > > > > > > **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU
> WILL
> > > > > MAKE!!
> > > > > > > BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will
begin
> > > > > receiving
> > > > > > > money from around the world within days! You may eventually want
> to
> > > rent
> > > > > a
> > > > > > > P.O.Box due to the large amount of mail you will receive. If you
> > wish
> > > > to
> > > > > > > stay anonymous, you can invent a name to use, as long as the
> postman
> > > > > will
> > > > > > > deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**
Now
> > the
> > > > > WHY
> > > > > > > part: Out of 200 postings, say I receive only 5 replies (a very
> low
> > > > > example). So then I made $5.00 with my name at #6 on the letter.
> > Now,
> > > > > each
> > > > > > > of the 5 persons who just sent me $1.00 make the MINIMUM 200
> > postings,
> > > > > > each
> > > > > > > with my name at #5 and only 5 persons respond to each of the
> > original
> > > > 5,
> > > > > > > that is another $25.00 for me. Those 25 each make 200 MINIMUM
> posts

> > > with
> > > > > my
> > > > > > name at #4 and only 5 replies each, I will bring in an
additional
> > > > $125.00!
> > > > > > Now, those 125 persons turn around and post the MINIMUM 200 with
> my
> > > name
> > > > > at
> > > > > > #3 and only receive 5 replies each, I will make an additional
> > $626.00!
> > > > OK,
> > > > > > now here is the fun part. Each of those 625 persons post a
MINIMUM
> > 200
> > > > > > letters with my name at #2 and they each only receive 5 replies,
> > that
> > > > just
> > > > >
> > > > >
> > > > >
> > > > > > made me $3,125.00!!! Those 3,125 persons will all deliver this
> > message
> > > > to
> > > > > > 200 newsgroups with my name at #1 and if still 5 persons per 200
> > > > newsgroups
> > > > > > react I will receive $15,625,00! With an original investment of
> only
> > > > > $6.00!
> > > > > > AMAZING! When your name is no longer on the list, you just take
> the
> > > > latest
> > > > > > posting in the newsgroups, and send out another $6.00 to names
on
> > the
> > > > > list,
> > > > > > putting your name at number 6 again. And start posting again.
The
> > > thing
> > > > > to
> > > > > > remember is, do you realize that Thousands of people all over
the
> > > world
> > > > > are
> > > > > > joining the internet and reading these articles everyday, JUST
> LIKE
> > > YOU
> > > > > > are
> > > > > > now!! So can you afford $6.00 and see if it really works?? I
think

> > > so...
> > > > > > People have said, "what if the plan is played out and no one
sends
> > you
> > > > the
> > > > > > money? So what! What are the chances of that happening when
there
> > are
> > > > tons
> > > > > > of new honest users and new honest people who are joining the
> > internet
> > > > and
> > > > > > newsgroups everday and are willing to give it a try? Estimates
are
> > at
> > > > > 20,000
> > > > > > to 50,000 new users, every day, with thousands of those joining
> the
> > > > actual
> > > > > > internet. : THIS REALLY CAN MAKE YOU EASY MONEY!! IT WORKS!!!
> > > > > >
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4156. ATAS 100

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 19:09:25 UTC
From: Ed <vk2isj@pacbell.net>
Message-ID: <JGwo6.136$gc4.40007@news.pacbell.net>
Source record: 169178

I just got my ATAS installed and everything hooked up through a tri-plexer..
So I fire up the 847 and press the tune button and nothing happens with the
ATAS 100.
I change bands and still nothing...

Any ideas?
PS: I also checked the MENU to make sure "tuner" was set and it is..
N5XIE - Ed

4157. SB-100 For Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 19:41:18 UTC
From: Gary <gary@heathkits.com>
Message-ID: <yTwo6.14283$%4.1587176@newsread1.prod.itd.earthlink.net>
Source record: 169179

```
Rare Heathkit SB-100 for Sale http://www.heathkits.com nice
```

--
Gary K IMJ 44 years of Heathkit fun http://www.heathkits.com

4158. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 19:44:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <97u5t0dvf1@neptunium.btinternet.com>
Source record: 169180

Dear Pete,

Being a practical engineer I've never found the iso-Q contour
charts for ferrite pot cores of any use. The operating instructions
for bobbin winding machine have always been the most essential
documents.

I suppose it would be possible to use a solenoid computing program
to assist a team of 4 people to produce iso-Q charts for coils. It
would take about 5 years and a lot of guesswork by which time any
need for them would have completely evaporated.

The present need must be quite small. After all, we've managed very
well without solenoid iso-Q charts for the last 100 years.

Regards, Reg, G4FGQ

****

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:97pi2a$fp1$1@slb1.atl.mindspring.net...
> Reg:
>
> Heh, heh. I know a widget when I see one, but....
>
> I've never known a widgeon... what?
>
> Q is so ephemeral... just when you get it right, it disappears
right over
> the horizon into infinity!
>
> Reg, have you ever used commercial pot cores and wound precision
inductors
> from the manufacturer's "iso-Q" contour charts?
>
> I have often wondered if there is a similar iso-Q chart that one
can create
> for the solenoid inductor.
>
> Iso-Q charts correspond to a given pot core design, which has a
fixed
> physical dimension and a fixed magnetic air gap resulting in a
fixed value
> of Al, the charts have inductance on the ordinate and frequency
on the
> abscissa and consists of closed "loops" tracing the "curves" of

constant Q.
> It is actually a graphical representation of a surface of Q
values over the
> co-ordinates of L and f. To be a valid inductor the pot core has
to be
> "filled" with wire. i.e. once the number of turns is chosen
using the Al
> value to fix a given L, then the size of the wire must be chosen
to fill the
> pot core cavity, and then the resulting Q can be read from the
iso-Q
> contours.
>
> Reg, if one were to fix a given set of solenoid dimensions, i.e.
say a
> length l and a diameter d could one arrive at a set of iso-Q
contours over a
> plane of L versus f for a solenoid? Does this make sense? Can
your program
> plot such a set of curves?
>
>
> -Peter K1PO
>
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:97o3plpki1@neptunium.btinternet.com...
> > > > Is this the Q that Reg disparages?
> > >
> > > We take what Reg disparages with a pinch of salt.
> > ============================
> >
> > It is not I who disparages Q.
> >
> > It is others who exalt it, extol it, worship it, even adore and
pay
> > homage to it, and place it on a pedestal with SWR and computer
> > programs alongside the Angels.
> >
> > But everything has a use. Is a widget the unfledged offspring
of a
> > widgeon ?
> > ----
> > Reg, G4FGQ
> >
> >
>
>

4159. Re: Heat shrink tube

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 21:25:03 UTC
From: richardharrison@webtv.net
Message-ID: <22160-3AA2B2AF-63@storefull-117.iap.bryant.webtv.net>
Source record: 169183

Goldredged wrote:
"DEFINITELY wrap it w/tape."

My successful experience is that moisture is excluded from coax joints by first wrappinf with electrician`s tape (the sticky, gummy, rubbery stuff) taking care to cover tightly and completely by stretching the tape as you cover. If there is an up and down, start at the bottom and work up as you would with shingles.

After the rubber tape covers the joint, cover with PVC tape, shrink tubing or dope.

Best regards, Richard Harrison, KB5WZI

4160. Re: experiences with Sommer T-25/s

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 23:07:15 UTC
From: scott <sjd2@home.com>
Message-ID: <3AA2CC3E.BF66027F@home.com>
Source record: 169184

it works...but it is a major pain in the a-- to get it to where you want it....it took me all day long to get it assembled and to solder the wires together....(no pl 259 here)..and you have to get a dummy load (another expense) and you have to worry about 2 transformer type of components.....overall ...its a pain.....mine did not work as advertised.....the sommer owner suggested i send back one of the transfromers....but wants to charge my credit card before hell do it....i dont think so....over all the antenna works good on 10- 20 meters....its terrible on 80 and forget 160......i have to use a tuner as well......im using the icom 746......in retrospect i should have got the cushcraft R8 ....i learned the hard way......hope this helps scott

OE1MWW wrote:

> Hi to all,
>
> has anyone experiences with the Sommer T-25/S ?
>
> Does it work as advertised ?
>
> 73's
> Wolfgang OE1MWW

4161. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 23:18:49 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA2CD59.24F3@wt.net>
Source record: 169185

Michael Hart wrote:
>
> Thanks Peter and Cecil,
>
> Both the designs I looked at cover from the 80m to 10m HF band and both are
> similar length, if not smaller, than a normal 80m dipole. Further more its
> also claimed that these types of antennas can also be mounted in an inverted
> V configuration (see www.bushcomm.com.au). So space wise they seem similar
> to or better than a resonant antenna.
>
> The rhombics in my Radio Handbook (1979) look more like they are resonant
> antennas [in contrast to travelling wave antennas] - multiband resonant ones
> that is with 350 foot or leg lengths just for the 20, 15 & 10 metre bands.
> I always considered rhombics to be more like V beams with a "director" type
> element and large rhomics having more directivity by virtue of their
> multiple wavelength elements. Is this reasonable?

> >
The rhombics and vee beams are both traveling wave type antennas. The
rhombic being a variation of the v beam. "Two V beams back to back".
Both types are non resonant antennas. And both require long lengths in
wavelength to show a lot of gain. The gain is also effected by the
included angle of the wires.Generally , the longer the V beam or
rhombic, the narrower the angle should be. For the V beams , the average
gain can be large if the antenna is long enough. 12 wavelengths will avg
about 14 dbi or so. Two waves long will do about 6-7 dbi. With the
rhombic ant, 12 waves long will do about 17 dbi +-. A rhombic 20 waves
long can do near 19-20 dbi . A rhombic two waves long will do about 8-9
dbi. All these numbers assume the proper included angles used. So the
bottom line is, the antennas are non resonant and usually fed with
ladder line etc, and need to be big to show a whole lot of gain. There
are designs for resonant rhombics also, but they tend to be watered down
versions of the real deal.There are also multiband V beams and rhombic
designs using multiple wires. They used to use rhombics for TV reception
in the old days. For the VHF frequencies, one not too awful big could
have a lot of gain. But most went to steerable antennas. Also for best
results a rhombic should be at least 1 wavelength high. Same as a
dipole. Don't confuse these with beverages which like to be near the
ground. MK
--
http://web.wt.net/~nm5k

4162. Antenna support

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 23:29:38 UTC
From: Willaim Ellis <wb9cac@home.com>
Message-ID: <CdAo6.9426$DY.3414213@news1.mntp1.il.home.com>
Source record: 169186

Would like to put up a dipole antenna, but have no natural supports(trees).
Are there any ideas for supports out there ?

Bill, WB9CAC

4163. Re: Diamond X500HA info? opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-04 23:34:49 UTC
From: Keith McQueen <kb7m@arrl.net>
Message-ID: <uiAo6.1590$hZ4.544507@news.uswest.net>
Source record: 169187

I have had a Diamon X-500 on a TV mast here at home for more than 10 years now. I have had zero problems with it. I recently inspected it and except for a thin layer of dirt it is as if it were new.

"KD4XV" <kd4xv@aol.comzzz> wrote in message news:20010304033055.04929.00000388@nso-fv.aol.com...
> I used a Diamond antenna for years on our repeaters and when Lightening
> vaporized it, I couldn't find another Diamond so I put up a similar Comet
> antenna. I have had repeated problems with the Comet where I have to take it
> down about every other year and clean the connections between the sections. I
> have replaced the Comet with another Comet and It did the same thing.
>
> I am thinking about going back to Diamond and I found a Heavy Duty version of
> the antenna I used before. The Information that I can find dosn't really
> explain what makes this antenna any better than the regular one.. Has anyone
> any experience with the "heavy duty" Diamond antenna? What's the difference?
>
> Wally - KD4XV
>
>
> Please remove trailing "zzz" spam filter to email me!

4164. Heathkit HW-101

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 00:27:38 UTC
From: Gary <gary@heathkits.com>
Message-ID: <_3Bo6.16434$7Y1.1623910@newsread2.prod.itd.earthlink.net>
Source record: 169188

Very nice Heathkit HW-101 For Sale....lots of pictures of this transceiver
at http://www.heathkits.com

--
Gary K�IMJ 44 years of Heathkit fun http://www.heathkits.com

4165. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 02:45:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97uum0$l6n$1@slb2.atl.mindspring.net>
Source record: 169189

Reg:

Iso-Q curves...

Well... back in the "old days" in one of my former electronic company employers, when we were designing and selling a lot of "precision" LC filters and LC group delay equalizers, we made extensive use of pot cores and pot core iso-Q curves.

Most of those filters and all-pass group delay equalizers that we designed were for use in the frequency range from audio up to a couple of MHz and were never in the HF band.

In many cases they were "narrow band", i.e. say spanned a 3.4kHz voice channel say in the "group" band of 60kHz to 104kHz, or VFCT, voice frequency carrier telegraph channels, etc...

These were "precision" filters and equalizers, often of very high order. The highest order that I ever personally designed and put into production was of order 22. i.e. a precise design comprising 11 inductors and 11 capacitors, not counting Norton transformations and tapped inductors, etc...

Now in order to get the actual production filters to "hit" the design spec within the desired tolerances [Which were often of the order of +-0.1dB in the passbands], we had to actually synthesize "pre-distorted" designs.

We had to pre-distort the inductors for two effects, both the Q and the stray capacitance of the coil, or self-resonant frequency of the coil. In practice most of our capacitors could be considered to be "ideal" and consequently we seldom pre-distorted a design for the C's. We did this only for the L's. This is/was called "semi-uniform" pre-distortion.

To do this predistortion accurately we had to know the inductor "Q"s in the filter passbands fairly precisely, we used the iso-Q contours to help us with this. We also had to pre-distort the design for the "effective or apparent" inductance. i.e. the actual apparent inductance in the filter passband taking into account the stray intra and inter winding capacitance and the self resonant effect of the inductor. In other words we actually had to offset the design inductance by an amount to take into account the capacitive reactance of the inductor stray capacitance, at least across the band of interest. Our precise value of design inductance was the apparent inductance at a given frequency of the structure of the inductance and stray capacitance acting together. Below resonance, this apparent value of L, call it Lapp, is always slightly higher than the actual inductance. The deviation of Lapp from L rising as the self-resonant frequency is approached.

The pot core manufacturer's iso-Q contours and their "effective inductance" correction factors allowed us to design and manufacture inductors which were then used in the "pre-distorted" precision designs with great accuracy. The iso-Q contours were actually plotted on a plane of actual or real frequency f versus apparent inductance Lapp.

We used computer analysis and synthesis to generate the "pre-distorted" filter and/or equalizer designs. i.e. we would begin with a specific ideal "target" design, say for instance a Cauer Parameter [Elliptic Function Filter] filter of order12 or more... then we would first design the ideal filter to get the first pass non-predistorted values for L's and C's... then we would design, on paper, the "ideal" inductors required. Then we would find the actual practical Q for those inductors from the iso-Q contours provided by the pot core manufacturer, within our passband of interest.

Then we would average the value of those inductor Q's to get an average coil Q which we called Qavg for the whole filter. Then we would take the mathematical "ideal poles" of the ideal filter and pre-distort or shift them to the right [towards the jw axis] by an amount equal to 1/2*Qavg. Then we would use our computer algorithms to re-synthesize the whole filter from those "pre-distorted poles". We generally did not pre-distort the stopband zeros, since the "error" in the notches in the stopbands was tolerable, it was the passband errors that really caused the difficulties. And we would then design and manufacture the actual filter using the new, nearby, values of inductors obtained from the synthesis of the pre-distorted design. And... presto... when the filter was built and put in production using the actual coils [rather than the mathematical ideal coils] the actual filter would be "right on the money". Note the capacitor values would also now be slightly different as well.

Thus we could design filters that used practical finite Q coils, including the effect of self-resonance, to manufacture very nearly exactly perfect precison filters and equalizers. Our competitors often tried to achieve the same thing by adding additional correction amplitude and delay equalizers to a poor non-predistorted design. i.e. since they did not know how or could not pre-distort the design, they just took the poor design and added a bunch more of inductors and capacitors to correct the errors in the design. Consequently our precision designs cost usually 20 - 30% less than theirs and were much more precise, with fewer parts and smaller altogether.

Pre-distortion for all-pass group delay equalizers was a little more complicated, since the group delay eqalizers have both poles and zeros that need to be pre-distorted. No one seems to care about this passive LC all-pass equalizer stuff anymore today folks do delay equalization digitally today, but we did some really neat stuff in that passive LC all-pass network area! I believe that we were the only firm that did pre-distorted delay equalizer designs.

Over a period of about 10 years we created perhaps 50 different passive LC filter and group delay equalizers, and produced them in many thousands of units for use in all kinds of commercial FDM equipment.

And so... I don't know about others, but we did find iso-Q contours to be both useful, and profitable.

Now I agree that the average ham or person doing low order, low precision, designs in the HF band would have no use for iso-Q contours, however...

those curves do illustrate some interesting and practical physical phenomena, and help with the intuitive understanding of the underlying physical phenomena, for instance...

The fact that the iso-Q contours for all pot cores seem to be closed curves in the (Lapp, f) plane is interesting.

Why are the curves all closed? What can we learn from that?

And.. the fact that there seems to be only one particular (Lapp, f) co-ordinate where a particular physical dimension of pot core inductor has maximum Q... why is that? i.e.

the Q surface over the (Lapp, f) plane is mono-modal. Why? Why does the maximum occur where it does? etc...

and so... getting back to the thread topic, I have often wondered for a solenoid single layer inductor... of length l and diameter d...

what is the maximum value of Q?

....and for what value of Lapp and f does it occur?

etc...

is there in fact a unique single maximum value of Q for a solenoid on the (Lapp,f) plane?

For instance, can your program be used to plot the maximum values of Q for a solenoid of dimensions l and d over the range of 1 MHz to 30 MHz, and the range of 1uHy to 100uHy... I presume that the wire diameter at each point would be set by the program to maximize the Q at any point etc....

Then once the first set of iso-Qs for a given (l, d) are plotted, one could go on to plot curves for various (l, d) values to perhaps eventually discover the question which we all desparately want answered!

What is the solenoid coil which has the highest Q value in the HF band?

i.e. does there exists a solenoid of given l and d, wound with copper wire and of apparent inductance Lapp, at frequency f which has the maximum value of Q of all possible inductors? If so, what is it? Can we not all use it?

Let us designate this optimum solenoid HF inductor the "closest inductor to the perfect inductor" and we will name it the "Henry" or something like that!

Then, for it's discovery, I will personally offer the "Brackett" prize! A free dinner at KFC!

How about it? Your program "solenoid" is a good start!

Best,

-Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:97u5t0dvf1@neptunium.btinternet.com...
> Dear Pete,
>
> Being a practical engineer I've never found the iso-Q contour
> charts for ferrite pot cores of any use. The operating instructions
> for bobbin winding machine have always been the most essential
> documents.
>
> I suppose it would be possible to use a solenoid computing program
> to assist a team of 4 people to produce iso-Q charts for coils. It
> would take about 5 years and a lot of guesswork by which time any
> need for them would have completely evaporated.
>
> The present need must be quite small. After all, we've managed very
> well without solenoid iso-Q charts for the last 100 years.
>
> Regards, Reg, G4FGQ
>
>
> **********
>
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
> news:97pi2a$fp1$1@slb1.atl.mindspring.net...
> > Reg:
> >
> > Heh, heh. I know a widget when I see one, but....
> >
> > I've never known a widgeon... what?
> >
> > Q is so ephemeral... just when you get it right, it disappears
> right over
> > the horizon into infinity!
> >
> > Reg, have you ever used commercial pot cores and wound precision
> inductors
> > from the manufacturer's "iso-Q" contour charts?
> >
> > I have often wondered if there is a similar iso-Q chart that one
> can create
> > for the solenoid inductor.
> >
> > Iso-Q charts correspond to a given pot core design, which has a
> fixed
> > physical dimension and a fixed magnetic air gap resulting in a
> fixed value
> > of Al, the charts have inductance on the ordinate and frequency
> on the

> > abscissa and consists of closed "loops" tracing the "curves" of
> constant Q.
> > It is actually a graphical representation of a surface of Q
> values over the
> > co-ordinates of L and f. To be a valid inductor the pot core has
> to be
> > "filled" with wire. i.e. once the number of turns is chosen
> using the Al
> > value to fix a given L, then the size of the wire must be chosen
> to fill the
> > pot core cavity, and then the resulting Q can be read from the
> iso-Q
> > contours.
> >
> > Reg, if one were to fix a given set of solenoid dimensions, i.e.
> say a
> > length l and a diameter d could one arrive at a set of iso-Q
> contours over a
> > plane of L versus f for a solenoid? Does this make sense? Can
> your program
> > plot such a set of curves?
> >
> >
> > -Peter K1PO
> >
> >
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:97o3plpki1@neptunium.btinternet.com...
> > > > > Is this the Q that Reg disparages?
> > > > >
> > > > We take what Reg disparages with a pinch of salt.
> > > > ============================
> > > >
> > > It is not I who disparages Q.
> > >
> > > It is others who exalt it, extol it, worship it, even adore and
> pay
> > > homage to it, and place it on a pedestal with SWR and computer
> > > programs alongside the Angels.
> > >
> > > But everything has a use. Is a widget the unfledged offspring
> of a
> > > widgeon ?
> > > ----
> > > Reg, G4FGQ
> > >
> > >
> >
> >
>

>

4166. Re: Antenna support

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 03:00:31 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA3014F.7D75@wt.net>
Source record: 169190

Willaim Ellis wrote:
>
> Would like to put up a dipole antenna, but have no natural supports(trees).
> Are there any ideas for supports out there ?
>
> Bill, WB9CAC

I use push up masts. I use the trees to keep the ends high. A single
mast will support an inv vee just fine. MK
--
http://web.wt.net/~nm5k

4167. And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 05:09:05 UTC
From: k3bu@aol.com
Message-ID: <20010305000905.16911.00000476@ng-mb1.aol.com>
Source record: 169191

This found at
http://www.cnn.com/2001/TECH/science/03/02/new.weapon.02/index.html
I hope that FCC and ARRL will now modify the RF exposure standards.
Here is the proof that RF is harmless :-)
What would we do without our "allcaring" governments?

Yuri, K3BU
Tesla RC N2EE
****

>>>Pentagon's latest weapon: a pain beam

Computer rendering of proposed Vehicle Mounted Active Denial System prototype

March 2, 2001
Web posted at: 3:02 p.m. EST (2002 GMT)

WASHINGTON -- The Pentagon is touting a new "non-lethal" weapon designed to control threatening crowds by using a directed energy beam to inflict a painful but brief burning sensation.

The weapon could be deployed during peacekeeping missions when deadly force is not necessary, military officials announced Thursday.

The weapon, called "active denial technology," was developed by Air Force research laboratories in New Mexico and Texas as part of a multi-service program run by the Marine Corps.

"This revolutionary force-protection technology gives U.S. service members an alternative to using deadly force," said Marine Corps Col. George P. Fenton, director of the program at Quantico, Virginia.

The weapon is designed to stop people by firing millimeter-wave electromagnetic energy in a beam that quickly heats up the surface of the victim's skin. Within seconds the person feels pain that is akin to touching a hot light bulb.

Like being burned
"It's the kind of pain you would feel if you were being burned," said Rich Garcia, a spokesman for the Air Force Research Laboratory at Kirtland Air Force Base, New Mexico. "It's just not intense enough to cause any damage."

The Pentagon has made a strong push to develop "non-lethal" weapons in the aftermath of a humanitarian mission in Somalia in 1992-93 that put soldiers in the line of fire in urban areas where civilians were present.

A demo version of the technology can test the level of pain

The beam reaches only 1/64 of an inch underneath the skin, causing no permanent injury, Pentagon researchers said.

"When it penetrates in, it activates the pain sensors, and you feel a lot of pain," Garcia said. "But there's no damage. It truly is a non-lethal device."

Michael Murphy, an Air Force lab researcher, said the beam could be used safely.

"We've tested 72 humans that have had over 6,500 exposures," he said.

The military will test a prototype of the weapon on goats and humans in Kirtland over the next few months. The Marine Corps said $40 million was spent developing the weapon during the past decade.

The Marine Corps plans to mount the microwave weapon on top of Humvees, the Jeep-like vehicles used by both the Marines and the Army. Later it might be used on aircraft and ships, officials said.

The weapon could be fielded by 2009, officials said.

Concerns remain
William Arkin, senior military adviser to Human Rights Watch, questioned whether a pain weapon would be safe to use against civilians in combat situations.

"What about children in the crowd? What about pregnant women and the elderly?" he said.

"We have developed a non-lethal weapon which causes pain. What happens when someone continues to walk toward the source of the high-power microwave? What happens when panic ensues in a crowd as a result of high-power microwave? What happens when it's focused on someone's eye?" Arkin said.

Another Humans Rights Watch activist expressed other concerns:

"It may fall into the (wrong) hands. It may be eventually sold to other countries to police forces, military forces that don't have the degree of accountability that you see in this country," Joost Hiltermann said.

CNN Military Affairs Correspondent Jamie McIntyre and The Associated

<<<

4168. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 05:32:05 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA324D5.C4F@wt.net>
Source record: 169192

Peter O. Brackett wrote:
>
> George:
>
> Power transformer thump... hmmm musta been running a kW. My puny little
> power transformer just "clicked".
>
> Ahhhh those 866's. Standing tall and proud, those big ceramic plate caps
> squating there on top of the bottles, with the HT wire hanging down...
>
> The "glow" actually changed color, shape, and intensity as the current
> surged through those beautiful bottles with each press of the key. More
> than a glow... sort of like a captured miniature version of the aurora
> boreolis inside the 866's glass. Wonderful. You could almost see those
> individual electrons streaming across.
>
> My 866s were standing tall in the open for all to see from the front.
> Didn't have to watch the flickering on the back wall of the shack. Of
> course I had a big sign posted nearby that power supply saying, "Hands Off"
> and "Danger - High Voltage"! And with that cathode keying circuit you hadda
> keep your fingers on the key's insulated knob, or Wow!
>
> Of course with the neon bulbs, taped to the open wire feeders with masking
> tape, flashing in synbchronism with the key strokes, it all kept onlookers
> at bay. Heh, heh.
>
> Fun! Radio Shacks are just "too clean" today.

I ask you... Where's the "romance" and "glow" in solid state?
>
> -Peter K1PO

In my puter screen...:) . I remember when I first got my novice and
bought a viking valiant transmitter. It had a pair of 866's. I didn't
know about the blue glow as no one mentioned it when I bought it. I
fired it up, and the tubes went blue, and I thought, uh no, gassy tubes.
I shut it down and went and bought a pair of new 866's. Put em in, and
it still glowed blue. Uh no.... This rig has a serious problem I
thought. I called the guy up where I bought the tubes and I finally
found out that glow was normal. Boy, I felt like a dummy....Oh well,
another day, another 2.41 cents. I still have a "semi-tube" setup with
the TS-830 and the henry 2K classic, also still have a bunch of drake
gear, but my tube days are quickly numbered. Lately, I use the 706 more
than the 830, and am fixing to go solid state for an amp. Also building
a level converter to puter control the rig. Already run the audio thru

the sound card, so after I get the rig control, I'll be almost all puter driven and audio manipulated, with the rig a CB sized 706. I might get a 746 later for a bigger house rig. I've been trying alot of digi stuff etc. Was listening to MFSK16 on 80m tonight. That stuff copies pretty well thru the noise on 80m. This setup Also does good SSTV etc. I copied a few pix from the amsat net on the local repeater the other day, and looked like digi-snapshots. Real nice quality. The 706 easily lets me do all this stuff on any band up to 440. I used to like the "big" shacks with 40 tons of gear laying around looking impressive, but now I'm about to the point of a puter controled CB on steroids..:/ A lot has changed in the past 10 years. MK
--
http://web.wt.net/~nm5k

4169. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 05:34:44 UTC
From: richardharrison@webtv.net
Message-ID: <14981-3AA32574-67@storefull-116.iap.bryant.webtv.net>
Source record: 169193

Peter Brackett wrote:
"In many cases they were "narrow band", i.e. say spanned a 3.4kHz voice channel say in the "group" band of 60kHz to 104kHz, or VFCT, voice frequency carrier telegraph channels, etc."

OK, except the usual frequency division multiplex allows 4kHz per voice channel to permit signaling and supervision at the edge of the voice channel. The bandwidth retained for the voice band might vary slightly from 3.4kHz.

The "base group" is normally 12 of these 4-kHz channels between 60 and 108 kHz. These same 12 channels (the base group) are used over and over again throughout the baseband by translation. They are simply heterodyned either directly or via some super-group to any group-spot in the baseband.

The 12-channel group occupying 108 to 156 kHz is exactly the same 12-channel group as that occupying the 60 to 108 kHz spot. It has just been translated.

Modern analog practice is to use a universal channel which can be programmed for any carrier frequency multiple of 4 kHz within the baseband. These are SSB channels. Only a single modem is needed as a replacement for any channel modem in the system.

As Peter implied, it is desirable to have the same delay for every frequency in the baseband.

Filter flanking is a big deal to fit all the channels together.

Peter also wrote:
"Below resonance, this apparent value of L, call it Lapp, is always higher than the actual inductance."

In my experience, Lapp was a manufacturer of high-power vacuum tubes, vacuum capacitors, and ceramic insulating hardware.

Best regards, Richard Harrison, KB5WZI

4170. Ringo vs. J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 11:51:16 UTC
From: keith733057843@aol.com
Message-ID: <20010305065116.16222.00000971@ng-md1.aol.com>
Source record: 169194

Side-by-side, same height (30 ft), and properly mounted, which is better for local 2meter FM operation: Basic Ringo or a basic J-pole? I've got both of them but only want to put up one of them.

Thanks,

Keith

4171. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 12:09:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <97vvg8fnb1@slb6.atl.mindspring.net>
Source record: 169195

Mark: Keep the old gear for nostalgia and start another "museum". Heh,
heh. Best, -Peter K1PO

"Mark Keith" <nm5k@wt.net> wrote in message news:3AA324D5.C4F@wt.net...
> Peter O. Brackett wrote:
> >
> > George:
> >
> > Power transformer thump... hmmm musta been running a kW. My puny little
> > power transformer just "clicked".
> >
> > Ahhhh those 866's. Standing tall and proud, those big ceramic plate
caps
> > squating there on top of the bottles, with the HT wire hanging down...
> >
> > The "glow" actually changed color, shape, and intensity as the current
> > surged through those beautiful bottles with each press of the key. More
> > than a glow... sort of like a captured miniature version of the aurora
> > boreolis inside the 866's glass. Wonderful. You could almost see those
> > individual electrons streaming across.
> >
> > My 866s were standing tall in the open for all to see from the front.
> > Didn't have to watch the flickering on the back wall of the shack. Of
> > course I had a big sign posted nearby that power supply saying, "Hands
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> > and "Danger - High Voltage"! And with that cathode keying circuit you
hadda
> > keep your fingers on the key's insulated knob, or Wow!
> >
> > Of course with the neon bulbs, taped to the open wire feeders with
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> > tape, flashing in synbchronism with the key strokes, it all kept
onlookers
> > at bay. Heh, heh.
> >
> > Fun! Radio Shacks are just "too clean" today.
>
> I ask you... Where's the "romance" and "glow" in solid state?
> >
> > -Peter K1PO
>
> In my puter screen...:) . I remember when I first got my novice and
> bought a viking valiant transmitter. It had a pair of 866's. I didn't
> know about the blue glow as no one mentioned it when I bought it. I

> fired it up, and the tubes went blue, and I thought, uh no, gassy tubes.
> I shut it down and went and bought a pair of new 866's. Put em in, and
> it still glowed blue. Uh no.... This rig has a serious problem I
> thought. I called the guy up where I bought the tubes and I finally
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> another day, another 2.41 cents. I still have a "semi-tube" setup with
> the TS-830 and the henry 2K classic, also still have a bunch of drake
> gear, but my tube days are quickly numbered. Lately, I use the 706 more
> than the 830, and am fixing to go solid state for an amp. Also building
> a level converter to puter control the rig. Already run the audio thru
> the sound card, so after I get the rig control, I'll be almost all puter
> driven and audio manipulated, with the rig a CB sized 706. I might get a
> 746 later for a bigger house rig. I've been trying alot of digi stuff
> etc. Was listening to MFSK16 on 80m tonight. That stuff copies pretty
> well thru the noise on 80m. This setup Also does good SSTV etc. I copied
> a few pix from the amsat net on the local repeater the other day, and
> looked like digi-snapshots. Real nice quality. The 706 easily lets me do
> all this stuff on any band up to 440. I used to like the "big" shacks
> with 40 tons of gear laying around looking impressive, but now I'm about
> to the point of a puter controled CB on steroids..:/ A lot has changed
> in the past 10 years. MK
> --
> http://web.wt.net/~nm5k

4172. Re: And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 12:20:27 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <QtLo6.55$p35.1020@newsfeed.slurp.net>
Source record: 169196

Hello Yuri. I saw this very "ray gun" in action, on the news hour Saturday. The news reporters asked a lot of questions and the only answer that was given by the government was that it was harmless. What a bunch of BS!!! I bet they told that to the soldiers during the testing of atom bomb in the 1940's. Do not be fooled about this "ray gun" or testing by the governments on anything.
"Yuri Blanarovich" <k3bu@aol.com> wrote in message news:20010305000905.16911.00000476@ng-mb1.aol.com...
> This found at
> http://www.cnn.com/2001/TECH/science/03/02/new.weapon.02/index.html
> I hope that FCC and ARRL will now modify the RF exposure standards.
> Here is the proof that RF is harmless :-)
> What would we do without our "allcaring" governments?
>
> Yuri, K3BU
> Tesla RC N2EE
> **********
>
> >>>Pentagon's latest weapon: a pain beam
>
> Computer rendering of proposed Vehicle Mounted Active Denial System prototype
>
>
> March 2, 2001
> Web posted at: 3:02 p.m. EST (2002 GMT)
>
> WASHINGTON -- The Pentagon is touting a new "non-lethal" weapon designed to
> control threatening crowds by using a directed energy beam to inflict a painful
> but brief burning sensation.
>
> The weapon could be deployed during peacekeeping missions when deadly force is
> not necessary, military officials announced Thursday.
>
> The weapon, called "active denial technology," was developed by Air Force
> research laboratories in New Mexico and Texas as part of a multi-service
> program run by the Marine Corps.
>
> "This revolutionary force-protection technology gives U.S. service members an
> alternative to using deadly force," said Marine Corps Col. George P.

Fenton,
> director of the program at Quantico, Virginia.
>
> The weapon is designed to stop people by firing millimeter-wave
electromagnetic
> energy in a beam that quickly heats up the surface of the victim's skin.
Within
> seconds the person feels pain that is akin to touching a hot light bulb.
>
> Like being burned
> "It's the kind of pain you would feel if you were being burned," said Rich
> Garcia, a spokesman for the Air Force Research Laboratory at Kirtland Air
Force
> Base, New Mexico. "It's just not intense enough to cause any damage."
>
> The Pentagon has made a strong push to develop "non-lethal" weapons in the
> aftermath of a humanitarian mission in Somalia in 1992-93 that put
soldiers in
> the line of fire in urban areas where civilians were present.
>
>
> A demo version of the technology can test the level of pain
>
> The beam reaches only 1/64 of an inch underneath the skin, causing no
permanent
> injury, Pentagon researchers said.
>
> "When it penetrates in, it activates the pain sensors, and you feel a lot
of
> pain," Garcia said. "But there's no damage. It truly is a non-lethal
device."
>
> Michael Murphy, an Air Force lab researcher, said the beam could be used
> safely.
>
> "We've tested 72 humans that have had over 6,500 exposures," he said.
>
> The military will test a prototype of the weapon on goats and humans in
> Kirtland over the next few months. The Marine Corps said $40 million was
spent
> developing the weapon during the past decade.
>
> The Marine Corps plans to mount the microwave weapon on top of Humvees,
the
> Jeep-like vehicles used by both the Marines and the Army. Later it might
be
> used on aircraft and ships, officials said.
>
> The weapon could be fielded by 2009, officials said.
>

> Concerns remain
> William Arkin, senior military adviser to Human Rights Watch, questioned
> whether a pain weapon would be safe to use against civilians in combat
> situations.
>
> "What about children in the crowd? What about pregnant women and the
elderly?"
> he said.
>
> "We have developed a non-lethal weapon which causes pain. What happens
when
> someone continues to walk toward the source of the high-power microwave?
What
> happens when panic ensues in a crowd as a result of high-power microwave?
What
> happens when it's focused on someone's eye?" Arkin said.
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> Another Humans Rights Watch activist expressed other concerns:
>
> "It may fall into the (wrong) hands. It may be eventually sold to other
> countries to police forces, military forces that don't have the degree of
> accountability that you see in this country," Joost Hiltermann said.
>
> CNN Military Affairs Correspondent Jamie McIntyre and The Associated
>
> <<<

4173. Re: How to measure self-resonant frequency of solenoid

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 12:20:48 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9800ac$56$1@slb1.atl.mindspring.net>
Source record: 169197

Hello Richard:

I note that you too messed around with FDM systems. I used to do a lot of passive LC filter and equalizer designs but those skills and knowledge are now un-marketable.

In recent years I have set my objectives toward a similar task, but using more modern technology (DSP), and am now committed to putting more bps/Hz/Dollar down long runs of twisted pairs of copper.

Next we are looking at doing the same for single strands of Silica. Sort of like Kestrel Solutions and Centerpoint are doing.

Electrical waves, light waves....

Some things never change!

Best,

-Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:14981-3AA32574-67@storefull-116.iap.bryant.webtv.net...
> Peter Brackett wrote:
> "In many cases they were "narrow band", i.e. say spanned a 3.4kHz voice
> channel say in the "group" band of 60kHz to 104kHz, or VFCT, voice
> frequency carrier telegraph channels, etc."
>
> OK, except the usual frequency division multiplex allows 4kHz per voice
> channel to permit signaling and supervision at the edge of the voice
> channel. The bandwidth retained for the voice band might vary slightly
> from 3.4kHz.
>
> The "base group" is normally 12 of these 4-kHz channels between 60 and
> 108 kHz. These same 12 channels (the base group) are used over and over
> again throughout the baseband by translation. They are simply
> heterodyned either directly or via some super-group to any group-spot in
> the baseband.
>
> The 12-channel group occupying 108 to 156 kHz is exactly the same
> 12-channel group as that occupying the 60 to 108 kHz spot. It has just
> been translated.
>
> Modern analog practice is to use a universal channel which can be
> programmed for any carrier frequency multiple of 4 kHz within the
> baseband. These are SSB channels. Only a single modem is needed as a
> replacement for any channel modem in the system.

>
> As Peter implied, it is desirable to have the same delay for every
> frequency in the baseband.
>
> Filter flanking is a big deal to fit all the channels together.
>
> Peter also wrote:
> "Below resonance, this apparent value of L, call it Lapp, is always
> higher than the actual inductance."
>
> In my experience, Lapp was a manufacturer of high-power vacuum tubes,
> vacuum capacitors, and ceramic insulating hardware.
>
> Best regards, Richard Harrison, KB5WZI
>

4174. Re: ARRL Ant Book feedline comments (19th Ed.)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 12:29:30 UTC
From: w1rfi@aol.com
Message-ID: <20010305072930.04859.00000623@ng-da1.aol.com>
Source record: 169198

>From: richardharrison@webtv.net (Richard Harrison)

>I did not see the original QST article, so I have no idea how it was
>presented. But something was sure lost in translation.

Upon reading the thread, I took the unprecedented step of forwarding it to the Antenna Book editor. Dean responded to it, indicating that the Figure in question is in error.

73,
Ed Hare, W1RFI

4175. Re: And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 13:37:22 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA39692.F7FB51B@IEEE.org>
Source record: 169200

Dick Elliott wrote:
> I saw this very "ray gun" in action, on the news hour Saturday.
> The news reporters asked a lot of questions and the only answer that was
> given by the government was that it was harmless. What a bunch of BS!!!

I wonder if it violates the FCC EM emission level standards. :-)
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4176. Heathkit Twins

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 13:45:16 UTC
From: Gary <gary@heathkits.com>
Message-ID: <MLMo6.18488$7Y1.1790030@newsread2.prod.itd.earthlink.net>
Source record: 169199

I still have the SB-301 and SB-401 For Sale, and I would really like them
out of here MAKE ME AN OFFER http://www.heathkits.com 73

--

--
Gary K�IMJ 44 years of Heathkit fun http://www.heathkits.com

4177. Re: And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 14:50:01 UTC
From: richardharrison@webtv.net
Message-ID: <22586-3AA3A799-62@storefull-111.iap.bryant.webtv.net>
Source record: 169202

Dick Elliot wrote:
"The news reporters asked a lot of questions and the only answer that was given by the government was that it was harmless. What a bunch of BS!!!"

Yes, it may be quite bebeficial in the long-run. I worked for years in the middle of an HF megawatt field. An accidental contact with a 50-KW transmission line turned one of my ears to a black lump that resembled a piece of coal. No permanent damage. My experience may have been therapeutic. We had over 200 people working in and around that transmitting plant and saw no unusual health problems. In fact, it was an unusually healthy group. Our experience may have been therapeutic, The mileage of others may vary.

Best regards, Richard Harrison, KB5WZI

4178. Rebuild MFJ-968

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 15:04:59 UTC
From: wrhood@exis.net
Message-ID: <3aa3a997.8266100@news.exis.net>
Source record: 169201

A friend brough over a burnt-out tuner for me to fix. The inductor
was removed and all of the balum and out-put wiring. Does any one have
a copy of the skematic that they could e-mail me to at least make an
L/C combination T-tuner using the present variable cap and a junk box
roller inductor. I just want to use the originial design as a guide.
Sonny, K4WYS <wrhood@exis.net>

4179. Inexpensive Support for Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 15:41:01 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3aa3b4b2$0$1519$6daed22a@news.infinet.com>
Source record: 169203

Shortly, the XYL and I will be moving to a new QTH with lots of land (4 acres), but no trees. I'd like to quickly (and inexpensively - lot's of other expenses right now) put up a wire antenna (such as a Carolina Windom) so that I won't be off the air after the move. The towers have to wait for more cash.

What's the least expensive way to get the antenna 40 + feet up? I've looked in a couple of books and they have plans for a simple mast made from 3 20 foot 2x4's. For the Carolina Windom, I suspect I'll need at 3 supports. There's a caution on the Radio Works website about not installing them in an inverted vee configuration.

Any idea how much it would cost to have 3 telephone poles installed? And will they need to be guyed since the antenna won't provide the support that the normal wires would?

73,
Mark

4180. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:00:38 UTC
From: richardharrison@webtv.net
Message-ID: <26546-3AA3B826-72@storefull-115.iap.bryant.webtv.net>
Source record: 169204

Dick Carroll wrote:
"Ask the people of Homestead, Florida, many of whom sat for a week before they ever saw or heard from any relief person whatever."

Ham radio and Morse code had relevance? The victims` plight was unknown? There was an Air Force base at Homestead. The Air Force immediately investigated and reported in the aftermath.

There was a sheriff. There were police. There was a fire department. There is a Florida National Guard. There is a Red Cross. Washington has a FEMA and the armed forces to send in when necessary.

If the people of Homestead were without relief for a week after Hurricane Andrew, it wasn`t because their plight was unknown. There would have been little amateur radio could have done to speed aid to the victims.

In situations such as Andrew, the media immediately publicize the situation. Elected officials respond to send needed help as quickly as possible so that they will be perceived as being effective. Electrical power companies and communications companies send crews from many states to restore services as quickly as they can. These guys have their own radios. Hams are mostly superfluous.

Get a grip on reality and the 21st century.

Best regards, Richard Harrison, KB5WZI

4181. Re: Ringo vs. J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:30:26 UTC
From: arrow146@aol.com
Message-ID: <20010305113026.27684.00000587@ng-fc1.aol.com>
Source record: 169205

>Subject: Ringo vs. J-pole
>From: keith733057843@aol.com (Keith733057843)
>Date: Mon, Mar 5, 2001 4:51 AM
>Message-id: <20010305065116.16222.00000971@ng-md1.aol.com>
>
>Side-by-side, same height (30 ft), and properly mounted, which is better
>for
>local 2meter FM operation: Basic Ringo or a basic J-pole? I've got both
>of
>them but only want to put up one of them.
>
>Thanks,
>
>Keith

Both are 1/2 wave antennas, If the J-Pole is made correctly,
both should work equally well, at least to start with.
How long they last, depends on how long it take one of the
many connections to corrode.

73 Al Lowe N0IMW

4182. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:34:52 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <980fhj$l11$1@newpoisson.nosc.mil>
Source record: 169208

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A9D59DB.6A84306A@IEEE.org...
Jim Rodenkirch wrote:
<snip> Again, my friend, what are the requirements?

Cecil replied, "The requirements are that it costs $20. :-)"

Ah, finally Cecil, I've got this thread where I wanted it! The originator of the thread, Richard, mentioned dollars once in his second posting, ". Looking for the best overall performance for 400 dollars or less.

The next instance of a money quote comes from you and your ubiquitous postings on a dipole-better-than-a-vertical-for-less-bucks-blah,blah and it being a $20 dollar solution.

No my friend, the thrust of my climbing in remains - nail down his requirements (again, is he horizontally challenged) first before everyone jumps on the dipole-better-than efforts.

Regards, Jim R.

4183. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:38:40 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <980fol$l15$1@newpoisson.nosc.mil>
Source record: 169207

Well, Steve, good! You and I feel better about our re-living Naval HF
Communications systems. However, I suspect we're the only ones that know or
care. LOL! Regards, and besst 73s. Jim R.
"VE9SRB" <srbest@att.net> wrote in message
news:Gbdn6.7576$rL4.552447@bgtnsc04-news.ops.worldnet.att.net...
>
> "Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
> news:97jkncipq1@newpoisson.nosc.mil...
> > Steve: having served on 4 Navy destroyers during my 21 years in the
> "Bloody
> > Navy" as an Electronics Technician, I found your post informative.
> However,
> > your statement, "The choice of upper operating frequency (6 or 8 MHz) is
> > based on the configuration of the HF transceivers used to cover the
2.0 -
> > 30.0 MHz frequency band" may not be entirely accurate. The HF
> transmitters
> > I remember being connected to the HF fan antennas (principally SRC-16
> > variations) were operable in the 2 - 30 MHZ range. It was the antenna
> > couplers for the transmitters that dictated which fan they were
connected
> > to. The three coupler ranges were, to the best of my recollection,
always
> > 2 - 6, 4- 12, and 10 to 30 MHZ. Modern day Spruance/Aegis destroyers
and
> > force level ships (e.g., CV/CVN/LHA/LHD) employ a HF system similar to
the
> > SRC-16 (I can't remember the Spruance model number) but some Aegis and
> force
> > level utilize a URC-109 (Canadian model) or a Harris version.
> >
> > An aside note: The HF transmitters or transceivers that I've worked
with,
> > from WRT-2s through URC-32s in the early years (1960 through 1970s)
> through
> > the modern day URT-23 had an antenna (often 30 foot verticals)
> specifically
> > "designated"; meaning that xmtr's antenna coupler was located at the
base
> of
> > a specific antenna. However, patch panels were employed where one
could
> > switch a transmitter's output around; so that, if a coupler or
transmitter

> > went wheels up, you could patch around that defective unit although
> > operating the tuner of one with the transmitter of another could be a
> > challenge.
> >
> > How'd I do? It's been a while since I've been back aboard a ship to
mess
> > with the HF systems - sure brings back fond memories, believe me.
> >
> > Regards, Jim R.
> >
>
> Good job Jim, you are quite correct. The URT-23 transmitter does operate
> over the full 2 - 30 MHz band. The equipment dictating the HF frequency
> band separations is in fact the HF multicouplers. The AN/SRA-56 operates
> 2 - 6 MHz; the AN/SRA-57 operates 4 - 12 MHz and the AN/SRA-58 operates
10 -
> 30 MHz. Alternately, the URT-23 could be directly connected to a
dedicated
> whip with a remotely located AN/URA-38 tuner/coupler.
>
> I would have to check in detail to identify the configurations on the
DDG-47
> (Aegis) and the DD-963 (Spruance) class. I think the newer installations
> are the broadband Harris equipments that interface with a narrowband or a
> broadband RF distribution system.
>
> Steve
>
>
>
>

4184. Re: ATAS 100

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:39:38 UTC
From: gpewitt@execpc.com
Message-ID: <3aa3c271$0$70805$272ea4a1@news.execpc.com>
Source record: 169206

The transceiver puts 12v on the co-ax shield to power the electric
motor in the antenna. You will need a -good- ground between them.
Or you can do what I did and trade it in for some Isotrons (for base
use of course). I was trying to use it at home and it just did not
work. The Isotrons, 80/40 and 20/15/10 work great without a ground.
Of course if you are working mobile they would cause a -lot- of wind
drag. 8-) 73 Gary N9ZSV

On Sun, 4 Mar 2001 11:09:25 -0800, "Ed" <vk2isj@pacbell.net> wrote:

>I just got my ATAS installed and everything hooked up through a tri-plexer..
>So I fire up the 847 and press the tune button and nothing happens with the
>ATAS 100.
>I change bands and still nothing...
>
>Any ideas?
>PS: I also checked the MENU to make sure "tuner" was set and it is..
>N5XIE - Ed
>
>

Gary Pewitt N9ZSV
414 355 8147

4185. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:48:25 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <980gau$l5j$1@newpoisson.nosc.mil>
Source record: 169211

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:3A9F06E8.70A7@bellsouth.net...
Does your fuel pump talk to you? LOL!

Jerry
K4KWH

Nope, once I put the suppressors in it didn't. BUT, then again, I'm not operating mobile from my Ford - I'm pulling a 12,000 lb fifth wheel with it so "fuel pump talk" is a moot point. Regards, Jim R.

4186. Comet CA-UHV coil problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 16:59:32 UTC
From: Adam Adkins <km5nNoSpam@earthlink.net>
Message-ID: <MPG.150d81f9a7919aff989681@news.earthlink.net>
Source record: 169209

I have been having some problems with the coils on my CA-UHV that
I would like to get an opinion about.

The 15 and 17 meter coils initially worked just fine when I
installed them, but now both of them show sky high SWR regardless of what
I do with the tuning whips. I have cleaned up both the antenna and the
inside of the mounting brackets on the coils with fine sandpaper. The
antenna itself is grounding well to the body / chassis of the vehicle.
There is good continuity throughout the coils. I have not yet checked
the resonant frequency of the coils themselves (grid dipper decided to
quit working).
The 20 meter coil works fine, as long as there is no rain. If it
gets wet, the resonant frequency drops by about 60 kHz, making 20 pretty
much unusable until it dries out again.
The 40 and 10 meter coils work fine all the time. Never a problem
with them at any time, wet or dry. Likewise, 2 and 6 meters always work
very well (though there are no coils for these).

I contacted Comet, and their response was less than impressive.
"Might the the base coil," they said. "Send it in and we'll check it
out." If worse comes to worse I will do that, but I would rather have a
solution without having to go antenna-less on my car for the several
weeks it would require.

Has anyone heard of these problems before? Any suggestions? I
really want to put the 15 meter coil back on, now that 10 is starting to
fade.

Thanks!

73,

Adam, KM5N
(please excuse the anti-spam return address)

4187. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 17:06:45 UTC
From: Russ Ellsworth <erg6@qwest.net>
Message-ID: <OEPo6.725$AG3.185301@news.uswest.net>
Source record: 169210

I have a Tripp Lite "Omnipower" 1200 watts UPS (Uninterruptible Power Supply) which is an AC(120VAC) to 12 VDC back to AC converter. I used it for my business computer systems for many years. It has been sitting unused for about 5 years without the self contained 12 volt battery in it. It weighs about 25-30 pounds without the battery(don't have the battery). It is available to anyone who is interested FREE but you have to pick it up or arrange for shipping. I don't have the manual but the company is very much still in business. This is a quite sophisticated device and worked very well last time it was operational.

I am in Boise, Idaho

Russ Ellsworth
WA6CWV

"Louis" <lou1@westnet.com> wrote in message
news:97t8p5$d7g$14@mycroft.westnet.com...
>
>
> anyone have a 12v dc to ac converter for sale>?
>
> know a source?
>
> louis
>
> lou1@westnet.com
>
>
>

4188. Re: One More Backpack antenna Idea

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 17:13:17 UTC
From: Gene <webmaster@zylay.com>
Message-ID: <3AA3C92D.6E61140B@zylay.com>
Source record: 169212

have never had a problem with tangles that the 3 oz sinker or a good
hard tug on the line couldn't clear, and it was heavy enough that I
didn't need a second line to hang the antenna with.

Rudy Marcelletti wrote:
>
> I would not use 50lb mono line to shoot into the trees because you can't
> break it or pull the knot out when you get hung up (you will get hung up).
> I like about 12 to 20 lb mono--the high vis yellow works good--then I tie on
> my support line--high vis orange or green/yellow 150lb test nylon planer
> board line. I use a small 1 to 2 oz tear drop sinker and a wrist rocket
> sling shot, depending on how far you need to shoot it. Keep the lines on
> factory spool and lay on ground. Shot from opposite of where you want to
> hall your antenna up. This way you don't have to cut any line and have
> plenty of mono for when you tangle it (you will tangle it and they don't
> sell it in the bush).
> Gene wrote in message <3A9D2B17.CF1714F0@zylay.com>...
> >I wouldn't worry about carrying a mast. A wrist rocket and some 50-lb
> >monofilament line is a lot easier to carry, and unless you're in
> >Antarctica (or some other desert), there's usualy something to shoot a
> >line into. WIth the 50-lb line, you can use the same line to pull your
> >antenna up as you shot into the tree.
> >
> >Patrick Croft wrote:
> >>
> >> I failed to mention that if your goal is to pack away the mast instead
> >> of using as a 'walking stick' yoou may want to consider one of the many
> >> fishing poles the retract to a foot or so in length. Check here for
> >> such: http://www.cabelas.com
> >>
> >> Other outlets offer like items. The smaller and stronger the pole the
> >> higher the cost. Cabela's house brands go for around $20 at the 12'
> >> length.
> >>
> >> Bests,
> >>
> >> Patrick Croft
> >> W9GTA
> >>
> >> Dwight Stewart wrote:
> >> >
> >> > David Snyder Hale wrote:
> >> >
> >> > > I've found various sources for telescoping

> >> > > masts. One can of course buy these meant
> >> > > for antennas but they are usually too big
> >> > > for backpacking. There are telescoping
> >> > > fishing poles and telescoping wind-sock
> >> > > supports. Both are lightweight and tall,
> >> > > but don't collapse small enough for my
> >> > > taste (4ft). [snip]
> >> >
> >> > The VERY best portable telescoping mast I've found are those aluminum
> >> > telescoping masts used by professional window washers. These can be
> >> > purchased from most hardware stores (or office supply stores) and can
> be
> >> > found in lengths up to about 60 feet.
> >> >
> >> > I have a 19 foot one that telescopes down to about 4.3 feet, and
> weighs
> >> > almost nothing. With a rubber cap (for chair leg) over the large end,
> it
> >> > also makes a nice walking stick.
> >> >
> >> > Dwight Stewart (W5NET)
> >> >
> >> > http://www.qsl.net/w5net

4189. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 18:06:33 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA3D5A9.E74055C4@IEEE.org>
Source record: 169213

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "Ask the people of Homestead, Florida, many of whom sat for a week
> before they ever saw or heard from any relief person whatever."

> Get a grip on reality and the 21st century.

Dick seems to believe that people can survive on dits and dahs. :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4190. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 18:09:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA3D65A.7F1DE7D3@IEEE.org>
Source record: 169214

Jim Rodenkirch wrote:
>
> Jim Rodenkirch wrote:
> <snip> Again, my friend, what are the requirements?
>
> Cecil replied, "The requirements are that it costs $20. :-)"
>
> No my friend, the thrust of my climbing in remains - nail down his
> requirements (again, is he horizontally challenged) first before everyone
> jumps on the dipole-better-than efforts.

Jim, do you know what :-) means?
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4191. Re: Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 18:16:32 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <980l4r$ck7$1@news.tribune.com>
Source record: 169215

I have used Radio Shack 300 ohm feedline on all of my wire antenna's for the last 25 years. It is much lighter than the 450 stuff, and since the antenna is Non Resonant I don't know what the impeadance of the antenna is anyway.

KA9CAR

Cm13141 <cm13141@aol.com> wrote in message news:20010302130557.16441.00000137@ng-mh1.aol.com...
> i am making my first dipole antenna,i want to use it 10-80 meters,I would like
> to use ladderline from the dipole to my antenna tuner.Do you think that the 300
> ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline
> where i live.I have found the 300 ohm type at Radio shack.Any and all advice is
> most welcome.
> Thanks,
> James

4192. Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 18:21:17 UTC
From: Hans Kaper <hanskap@kaper-1.tmfweb.nl>
Message-ID: <980lnq$m20$1@cyan.nl.gxn.net>
Source record: 169216

Hello,

Is there somebody who can advice me about a vertical antenna
if possible hidden "in" a tree?
I think about a vertical for 20 meters, which will be about 10 meters
tall. (Half wave) I'll need buried radials, at least 12, preferably more,
5 meters long or longer each.
My neighbours don't fancy antennas so I might consider erecting it
alongside a tree to hide it more or less.
I need advice about the effect. Would the antenna work better if it
stood "alone" and if so, how much do I loose when I hide it
alongside the tree?
They can't forbid me erecting the antenna, our constitution guarantees
freedom of collecting information from all over the world. (Free
translation) But if possible I will be kind to my neighbours.

Thanks in advance,

Hans Kaper PA3HGM
pa3hgm@amsat.org

4193. Re: Ringo vs. J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 18:36:11 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <980mar$3ri$1@news.netmar.com>
Source record: 169218

If you already have the Ringo, put it up. I would not buy the basic Ringo.
The J-Pole may not perform quite as well, but not enough to matter. Now the
more expensive models do perform much better.

In article <20010305065116.16222.00000971@ng-md1.aol.com>, Keith733057843
<keith733057843@aol.com> writes:
>Side-by-side, same height (30 ft), and properly mounted, which is better for
>local 2meter FM operation: Basic Ringo or a basic J-pole? I've got both of
>them but only want to put up one of them.
>
>Thanks,
>
>Keith

----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

4194. QEX, fractal antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 18:38:47 UTC
From: HUMINT@opsyhopsy.com
Message-ID: <jUsT.aNoTheR.mEsSaGe.iD.98381735219407@opsyhopsy.com>
Source record: 169217

Back in September, Fractenna wrote:

In a major shift in its position, the ARRL has made a policy decision
to run a fractal antenna article in QEX (an ARRL publication), according

to Doug Smith, editor... In the past, the ARRL has called the submission
of a fractal antenna
MS "an April Fool's joke" and has not published any fractal antenna
articles
in its publications, since this original submission in February 1994.

==========

Has the article been published, or is it still in press?

--
Posted from host4.websitesource.com [209.239.38.252]
via Mailgate.ORG Server - http://www.Mailgate.ORG

4195. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 20:05:36 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AA3F190.97AE2E67@oio.net>
Source record: 169269

Hans,
Sure, it will work. How well it will work is
another matter. It would be much better if it
were away from any near by objects.
Instead of 10 meters tall (1/2w), make it 5
meters tall (1/4w), same as the radials. If you
do try an antenna like this, I would be very
interested in how it works, let us know...
'Doc

4196. Re: Inexpensive Support for Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 20:11:55 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AA3F30B.4D63AE3D@oio.net>
Source record: 169270

Mark,
I'd recomend you to start checking prices at local
lumber-yards. Prices vary greatly, and it just depends
on where you are. Same for the telephone poles, except
more so! Where I live, T-poles are going for about
$1.50 - $3.00 per foot (not cheap!), then delivery is
up to you. Ever tried moving a 50' T-pole? The one
person locally who has a dolly to move poles charges
the same as the cost of a T-pole, so it's like puting
up a tower as far as $$ goes. Good luck...
'Doc

4197. Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 20:40:10 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <wMSo6.142$uv2.54864@news.pacbell.net>
Source record: 169271
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

I've got a question for the group,

What do you guys use for antenna lightening protection? I have a rooftop antenna. Is it necessary to intall lightening protection? I always disconnect my radio when the storm approaches. What's the worst that can happen(without lighten protection)? What kind of system do you recommend? Is it going to affect the antenna performance? Thanks

4198. Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 21:05:40 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA3FFA4.7A18F922@IEEE.org>
Source record: 169272

Somewhere I saw a chart of gain VS height of radials.
Does anybody know where I might have seen it? Was it
on this newsgroup? thanks
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4199. Re: Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 21:16:50 UTC
From: abockelm@optonline.net
Message-ID: <3aa40152.19893618@news.optonline.net>
Source record: 169273

On Mon, 5 Mar 2001 12:16:32 -0600, "KA9CAR" <nospam@nospam.usa> wrote:

>I have used Radio Shack 300 ohm feedline on all of my wire antenna's for the
>last 25 years. It is much lighter than the 450 stuff, and since the
>antenna is Non Resonant I don't know what the impeadance of the antenna is
>anyway.
>
>KA9CAR
>
>Cm13141 <cm13141@aol.com> wrote in message
>news:20010302130557.16441.00000137@ng-mh1.aol.com...
>> i am making my first dipole antenna,i want to use it 10-80 meters,I would
>like
>> to use ladderline from the dipole to my antenna tuner.Do you think that
>the 300
>> ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline
>> where i live.I have found the 300 ohm type at Radio shack.Any and all
>advice is
>> most welcome.
>> Thanks,
>> James
>
>
I use a 132 ft. dipole with 450 ohm ladder line but 300 is fine.
Either way you have to use a tuner as you know. You can look in any
Ham magazine and find several sources for 450 ohm line also.
Good luck. 73 de K2ES

4200. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 21:33:56 UTC
From: B-Squared <rbethman@home.com>
Message-ID: <8DTo6.152505$B6.34551349@news1.rdc1.md.home.com>
Source record: 169274
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

1) A good healthy ground

2) Yes.

3) Burn down your house

You need to get a good ground up to the mast or whatever you have for your antenna support. It should not be bent in sharp angles as you work it down to your ground rod(s). Multiple ground rods in a grid is probably the best protection, creating a ground "window".

As to antenna performance, you may actually improve it.

Bob
N0DGN

"Michael"
> I've got a question for the group,
>
> What do you guys use for antenna lightening protection? I have a rooftop
> antenna. Is it necessary to intall lightening protection? I always
> disconnect my radio when the storm approaches. What's the worst that can
> happen(without lighten protection)? What kind of system do you recommend?
Is
> it going to affect the antenna performance? Thanks
>
>

4201. Re: Comet CA-UHV coil problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 21:39:56 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC807819FBD@www.premiersi.com>
Source record: 169277

Once the antenna is dry and working well, try to isolate the problem by
squirting water (maybe a weak water/detergent mix) just on the coil(s), to
see if that is where the problem is. Might be moisture into someplace else
than the coils. Careful aquirting might help you figure out if it is the
sides or ends of the coil, if that is where the problem lies.

"Adam Adkins" <km5nNoSpam@earthlink.net> wrote in message
news:MPG.150d81f9a7919aff989681@news.earthlink.net...
> I have been having some problems with the coils on my CA-UHV that
> I would like to get an opinion about.
>
> The 15 and 17 meter coils initially worked just fine when I
> installed them, but now both of them show sky high SWR regardless of what
> I do with the tuning whips. I have cleaned up both the antenna and the
> inside of the mounting brackets on the coils with fine sandpaper. The
> antenna itself is grounding well to the body / chassis of the vehicle.
> There is good continuity throughout the coils. I have not yet checked
> the resonant frequency of the coils themselves (grid dipper decided to
> quit working).
> The 20 meter coil works fine, as long as there is no rain. If it
> gets wet, the resonant frequency drops by about 60 kHz, making 20 pretty
> much unusable until it dries out again.
> The 40 and 10 meter coils work fine all the time. Never a problem
> with them at any time, wet or dry. Likewise, 2 and 6 meters always work
> very well (though there are no coils for these).
>
> I contacted Comet, and their response was less than impressive.
> "Might the the base coil," they said. "Send it in and we'll check it
> out." If worse comes to worse I will do that, but I would rather have a
> solution without having to go antenna-less on my car for the several
> weeks it would require.
>
> Has anyone heard of these problems before? Any suggestions? I
> really want to put the 15 meter coil back on, now that 10 is starting to
> fade.
>
> Thanks!
>
> 73,
>
> Adam, KM5N
> (please excuse the anti-spam return address)

4202. Re: Antenna support

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 21:50:51 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa40a33$0$45996$bbae4d71@news.net-link.net>
Source record: 169275

Try using "sky hooks" about 1 wavelength up. Seriously though--if no trees, you need to go the mast or tower route. For a decent mast, you could use irrigation pipe. Fair Radio has nice military masts for about $135.00 for the whole kit I believe. Not exactly portable by civilian standards, but once up should last quite a while. Use one, two, three or four of them (inverted V, dipole with center sagging, with center supported, or for horizontal loop, or 4 verticals).

You could even rig some sort of support on each end of your house using TV mast.
Willaim Ellis wrote in message ...
>Would like to put up a dipole antenna, but have no natural supports(trees).
>Are there any ideas for supports out there ?
>
>Bill, WB9CAC
>
>
>

4203. golf ball retreaver antenna support

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 22:01:51 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa40cc4$0$46006$bbae4d71@news.net-link.net>
Source record: 169279

In my garage the other day and noticed my golf ball retriever in the corner. About 18 feet long extended and fairly stiff, yet collapses down to the length of a golf club. Mine is aluminum and has plastic joints so can't load it up. I think the fishing pole would be the better way, especially if you are going camping and plan on some fishing also, but if you already have a ball retriever, and it happens to be a fiberglass one.....I suppose it would work like a paint roller extender or light bulb changer pole.

4204. Re: Ladderline question,need advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 22:03:10 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa40d13$0$46007$bbae4d71@news.net-link.net>
Source record: 169278

order it from www.radioworks.com
Cm13141 wrote in message <20010302130557.16441.00000137@ng-mh1.aol.com>...
>i am making my first dipole antenna,i want to use it 10-80 meters,I would
like
>to use ladderline from the dipole to my antenna tuner.Do you think that the
300
>ohm TV type ladderline will work for me?I cant find any 450 ohm ladderline
>where i live.I have found the 300 ohm type at Radio shack.Any and all
advice is
>most welcome.
>Thanks,
>James

4205. Re: Ringo vs. J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 22:09:57 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AA40EB5.2E68F160@dialpoint.net>
Source record: 169276

Side by side I would take a dummy load over the ringo. Well, atleast a
1/4 wave dipole.

Keith733057843 wrote:
>
> Side-by-side, same height (30 ft), and properly mounted, which is better for
> local 2meter FM operation: Basic Ringo or a basic J-pole? I've got both of
> them but only want to put up one of them.
>
> Thanks,
>
> Keith

Keith733057843 wrote:
>
> Side-by-side, same height (30 ft), and properly mounted, which is better for
> local 2meter FM operation: Basic Ringo or a basic J-pole? I've got both of
> them but only want to put up one of them.
>
> Thanks,
>
> Keith

4206. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 22:20:40 UTC
From: k6mhe@arrl.net
Message-ID: <3aa410f0.468382@news.mcn.org>
Source record: 169280

Cecil,

In Orr and Cowan's book" Vertical Antennas" there is such a chart,
however, no mention is given where the figures came from.

73
Danny

On Mon, 05 Mar 2001 15:05:40 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Somewhere I saw a chart of gain VS height of radials.
>Does anybody know where I might have seen it? Was it
>on this newsgroup? thanks

4207. Re: Visit today - www.ab7sl.com - check it out.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 23:03:34 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <9A619F3DDE82B77E.911BF6C30FA9B89B.367E0285027C11ED@lp.airnews.net>
Source record: 169281
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"Anonymous" <alias@microsoft.com> wrote in message
news:MuUo6.1875$AG3.381450@news.uswest.net...

> Getting your computer infected with Spyware, malicious cookies, and/or
web-bugs
> that collect your personal/private info and tracks your every move in the
> internet... all for free :-)

You are sadly mistaken ...none of that nonsense at my site ....

Just good informative Ham Radio pages ......

--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages
http://www.ab7sl.com

4208. Re: Mobile Top Hats

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 23:28:32 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AA42120.4136@bellsouth.net>
Source record: 169075

LOL!

Jerry

Jim Rodenkirch wrote:
>
> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> news:3A9F06E8.70A7@bellsouth.net...
> Does your fuel pump talk to you? LOL!
>
> Jerry
> K4KWH
>
> Nope, once I put the suppressors in it didn't. BUT, then again, I'm not
> operating mobile from my Ford - I'm pulling a 12,000 lb fifth wheel with it
> so "fuel pump talk" is a moot point. Regards, Jim R.

4209. Re: Absolutely horrible TVI problems.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-05 23:58:14 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <qKVo6.354$X73.76925@news7.onvoy.net>
Source record: 169282

Is your tv coax all RG-59/RG-6 style or is it 300ohm flat lead. If any of it is flat lead, replace it with the round style. Check all the cable connections and make sure they are good connections and tight. If any ends are frayed or coming apart, replace them.

Once that is done, i also agree to unplug the coax and see if it comes through with no antenna hookd up. Another good suggestion was to use a different antenna designed for the frequency you are transmitting on. Can you move it farther away from the tv coax. Is there a tv amp in the attic?

Frizz <kg4ivt@hotmail.spamsucks.goaway.leavemealone.com> wrote in message news:97tp6s$jd9$1@bob.news.rcn.net...
> I am in an area with antenna restrictions so I run an attic mounted discone
> for 2m. For some reason, I am coming over two TV's in my house that are
> both below me as I am on the second floor. I only thought this happened
> when I turned my 35 watt amp on but it turns out I do it on stock power as
> well. Basically what will happen is I will key up and a loud hum can be
> heard from the TV. Since I am the only ham in the house no one is willing
> to compromise for me so I have to get this fixed. We have both satellite TV
> and cable with lines for both running in the attic. Also, the idiot that
> put in the cable television ran the line through the closet in my room,
> about 8 feet away from my station and this goes to both the problem TVs.
> There is no way to move this effectively. I have tried disconnecting the
> radio from its power supply and running off a battery, high pass filters, a
> ferrite core around the coax line and power leads to the radio and amp and
> nothing seems to remedy this problem. I am basically about to give up since
> I can't use the radio unless no one is home or they aren't watching the
> problem sets (which are the main ones in the house). Anything I can do?
> This has been going on for the past few months. Failing a resolution,
> anyone want to buy an Yaesu FT-411 ht, samlex power supply, and Rf Concepts
> amplifier?
>
> Thanks
>
> kg4ivt.
>
>

4210. Re: QEX, fractal antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 00:05:19 UTC
From: Gilbert Mouget <gilbert.mouget@waika9.com>
Message-ID: <MPG.150e482c8089001989683@news.free.fr>
Source record: 169283

In article <jUsT.aNoTheR.mEsSaGe.iD.98381735219407@opsyhopsy.com>,
HUMINT@opsyhopsy.com says...

> Has the article been published, or is it still in press?

Publication due in next April's issue.

4211. FS: 800MHZ MINI DUPLEXER

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 00:19:13 UTC
From: DBTech <dbraggs@hcis.net>
Message-ID: <3aa42b62_4@corp.newsfeeds.com>
Source record: 169284

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4212. wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 00:21:20 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AA42D80.CCD70E06@bellsouth.net>
Source record: 169285
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

anyone have one of those GATOR 108" whips laying aroung they want to get
rid of?
thanks chris

4213. wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 00:34:41 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AA430A1.AB7FB8C5@bellsouth.net>
Source record: 169286

wtb 108" fiberglass whip anyone have one?

4214. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 01:08:19 UTC
From: BD <bodu@pobox.com>
Message-ID: <9NWo6.261$0n3.5235@nnrp1.sbc.net>
Source record: 169287
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

Can't static-electricity also build up in the antenna, which will fry your
rig and/or you when plugged into it, if there's no ground?...

"B-Squared" <rbethman@home.com> wrote in message
news:8DTo6.152505$B6.34551349@news1.rdc1.md.home.com...
> 1) A good healthy ground
>
> 2) Yes.
>
> 3) Burn down your house
>
> You need to get a good ground up to the mast or whatever you have for your
> antenna support. It should not be bent in sharp angles as you work it
down
> to your ground rod(s). Multiple ground rods in a grid is probably the
best
> protection, creating a ground "window".
>
> As to antenna performance, you may actually improve it.
>
> > What do you guys use for antenna lightening protection? I have a rooftop
> > antenna. Is it necessary to intall lightening protection? I always
> > disconnect my radio when the storm approaches. What's the worst that can
> > happen(without lighten protection)? What kind of system do you
recommend?
> Is
> > it going to affect the antenna performance? Thanks

4215. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 01:20:06 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <981eboccf1@nntp9.atl.mindspring.net>
Source record: 169288

Yes.
--
CW
KC7NOD
"BD" <bodu@pobox.com> wrote in message
news:9NWo6.261$0n3.5235@nnrp1.sbc.net...
> Can't static-electricity also build up in the antenna, which will fry your
> rig and/or you when plugged into it, if there's no ground?...
>

4216. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 01:54:55 UTC
From: Alan Watts <awatts@neo.rr.com>
Message-ID: <PrXo6.9964$a7.115232@typhoon.neo.rr.com>
Source record: 169289

Smiley recognition or not, horizontal is almost always better than vertical. A dipole is better than an inverted V. A dipole is better than a sloper. A dipole is better than even the longest long-wire unless the long-wire is at a great height, is very long, and if the directionality that would result would not be a problem.

For HF, a dipole at least 1/2 wavelength above ground is almost always better than almost any other thing.

I'm old. From years of experience, I know this.

Alan
WA8NSU

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3AA3D65A.7F1DE7D3@IEEE.org...

> Jim, do you know what :-) means?

4217. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:09:02 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <981gva$riv4j$1@ID-20128.news.dfncis.de>
Source record: 169293
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

R/S has some fiberglass 102" 1/4wave whips they will sell you for $15. each

--
714 Sandpile,
The Mad Dog wavin' good bye
"cf" <cfox007@bellsouth.net> wrote in message
news:3AA42D80.CCD70E06@bellsouth.net...
> anyone have one of those GATOR 108" whips laying aroung they want to get
> rid of?
> thanks chris
>

4218. Re: Visit today - www.SPAM.com - check it out.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:10:27 UTC
From: Peter Lemken <plemken@gmx.de>
Message-ID: <981gug$qudfb$1@ID-31.news.dfncis.de>
Source record: 169292
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Charles Johnston wrote:
>
> You are sadly mistaken ...none of that nonsense at my site ....

Just good old SPAM.

--
DeeeeeeeX'ing in the new Millenium. Scream for an hour and go
check the online logs to see if you gotta scream for an hour again
tomorrow nite. [KH2D in rec.radio.amateur.dx]

4219. Re: Help with possible new antenna set-up

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:19:54 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <ePXo6.358$X73.78520@news7.onvoy.net>
Source record: 169294

With a 300 ft feedline, you will loose what ever signal you gain by moving the tower to the higher place. Unless you use at least 7/8 inch hardline for vhf and maybe even larger lower loss coax for the higher freq's. You are looking at about 4-6 bucks a foot for it new.

Just put up the tower next to the house and invest in high gain antennas and the best coax you can afford.

Tracy L. Brooks <rescue@wilkes.net> wrote in message news:97b4ne$6lfo$1@news3.infoave.net...
> Greetings all,
>
> I'm thinking about making a new (used) multi-functioning tower for my
> new house.
> If anyone can offer advise, I'd be most appreciated.
>
> This antenna will be used mainly (90% +) for receive. It may be
however
> be used
> for tranmitting in the future.
>
> The specs are as follows:
>
> Tower height: at least 40 ft.
> Distance from house to bottom of tower: approx. 300 ft.
> Frequencies (devices) on tower:
> 1- VHF hi band antenna (tx and rx) (Public safety and business
> bands)
> 1- UHF antenna (tx and rx) (Public safety and business
bands)
> 1- 800 antenna (tx and rx)
> 1- conventional TV antenna (for local TV stations)
> 1- Mini dish satellite antenna (Dish 500)
>
> Reason: My home is in a hole and I would like the antennas to be at the
> highest spot on my
> property. I was interested in finding out what type of coax would best be
> suited for running
> such long lenths. Also, should I separate the coax into different
conduits
> or will they
> all work in one? One more thing: I don't have the tower yet, I would
> prefer a free standing
> tower but a guidewire will work. Where is the best place to find used
ones?

>
>
> Thanks for any help,
>
> Tracy L. Brooks,
> rescue@wilkes.net
>
>
>

4220. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:24:45 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AA44A6D.9D8161F@bellsouth.net>
Source record: 169295
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

i am looking for one that is 108" need the extra inches to be able to tune
10-40 meters.

Mad Dog wrote:

> R/S has some fiberglass 102" 1/4wave whips they will sell you for $15. each
>
> --
> 714 Sandpile,
> The Mad Dog wavin' good bye
> "cf" <cfox007@bellsouth.net> wrote in message
> news:3AA42D80.CCD70E06@bellsouth.net...
> > anyone have one of those GATOR 108" whips laying aroung they want to get
> > rid of?
> > thanks chris
> >

4221. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:27:39 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AA44B1B.545DF854@bellsouth.net>
Source record: 169296
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

stainless steel will work for me also.

cf wrote:

> anyone have one of those GATOR 108" whips laying aroung they want to get
> rid of?
> thanks chris

4222. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:32:55 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <r%Xo6.359$X73.78765@news7.onvoy.net>
Source record: 169297

Did you look at this site?
http://members.aol.com/k5oe/index.htm
It has some details of building the helix antenna.

Helmut Wabnig <hwabnig@aon.at> wrote in message
news:fbma9tc4nr9e6ojh32e02b0lqv6bdllaj8@4ax.com...
>
> Dear readers,
> am trying to solve a mystery.
>
> Have surfed at about 20 WWW pages with description,
> about helix antennas, but all, with no exception, avoid strictly to
> explain the matching section. There are drawings without explanations,
> there are photos with hide just the critical details.
>
> Yes, there are references to the ARRL Antenna handbook.
> Yes, I bought the ARRL Antenna Handbook 19th edition.
>
> To anticipate the result:
> The ARRL chapter about the Helix is complete BULLSHIT.
>
> The helix is very critical to match, this I know from my experiments.
> At higher frequencies, say 2450 MHz, the geometrical dimensions
> must be within millimeters of tolerance. To match the 140 Ohms
> to the 50 Ohm cable, several possibilities I found:
>
> 1.)Quarter wavelenght transformer, about 84 Ohms.
> Helix ends 0.13 * lambda above reflector plate.
> Theoretically easy to calculate the dimensions, but practically
> difficult to make, because already the N connector
> is of a considerable size compared to the geometrical dimensions.
> Impossible to adjust correctly without measuring equipment.
> ARRL shows an illustration with a "feed wire" running
> from the helix end to the N connector page 19-23.
> Thats no match, listen, its bullshit.
>
> 2.)Bending the lowest winding towards the reflector plate.
> Contradictory to the 0.13 * lamda formula.
> No theoretical insight how that would fit.
>
> 3.)Soldering a strip to the last quarter turn. ARRL does give
> a picture, without the information how to dimension the strip.
> No explanation given, just bend the wire, until you loose patience.
>

> 4.) Not given by ARRL: make a microwave impedance
> transformer by cutting a metal sheet to the form of an
> elongated triangle, wide end soldered to N connector,
> tip of the triangle soldered to helix end opposite of N.
> For this I would like to find the dimensions calculations.
>
> Instead of giving detailed information about the technical
> aspects of that antenna, the author goes astray and blusters
> about how to make wood weather proof.
> Would you use wetted wood in a microwave antenna?
> Good luck then :-)
>
> Its beyond my comprehension why the ARRL author insists
> on matching to 52 Ohm cable. Am not quite sure about that,
> but as I recall, my cable catalogue lists only 50 Ohm cables.
>
> Dear reader, what we should go for is not a cooking recipe
> "thats how I do things", we need some theoretical
> insights before we start cutting and soldering
> sheet metal. Hints to literature, www, or paper,
> exact broadband and narrowband helix matching welcome.
>
>
> Thanks for reading,
> W.
> OE8UWW

4223. Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 02:59:11 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3aa44545_3@news1.prserv.net>
Source record: 169290

I have read that ladder line, when wet, has somewhat altered characteristics. I erected a 30m dipole recently, fed with about 110' of 450-ohm ladder line, and I use it on 30 - 12 meters. (My Dentron cannot seem to load it on 10m.) When the line is wet (rain or heavy condensation) the antenna is almost dead. Are moisture effects on ladder line usually this drastic? Does "real" open line have the same problem?

Bill Ogden
W2WO

4224. Verne Wright Superantenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 03:01:41 UTC
From: Scott Hanes <shanes_ca@hotmail.com>
Message-ID: <ilk8atsjg6ooa5oqnogl98r0520kvmg2aq@4ax.com>
Source record: 169298

Anybody tried one of Verne Wright's, (W6MMA) "Superantennas" modified
from his St. Louis Vertical kit?

4225. TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 03:02:52 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3aa44623_3@news1.prserv.net>
Source record: 169291

I have been looking at the larger Tentec antenna tuner. It has two primary elements (coil and variable capacitor) and a switch to make several configurations from these two base elements. Most other current tuners use two capacitors and a coil. What are the pros and cons of these designs? I don't think I have ever seen a used Tentec tuner (this model) for sale. Does that mean that few people buy them, or that they are so good that no one sells them?

Bill Ogden
W2WO

4226. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 03:17:41 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <981l01$r2bs3$1@ID-20128.news.dfncis.de>
Source record: 169299
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

```
Okay ,but a longer antenna will lower the resonant frequency.
I could see hitting 10,11 and 12meters using a matcher but reception on
40meters
will suffer greatly. A matcher only fools the radio with a 50ohm load via
adjustable
capacitive/inductive circuit. It wont change the resonant frequency of your
antenna.
--
KG4LBP, George

--
714 Sandpile,
The Mad Dog wavin' good bye
"cf" <cfox007@bellsouth.net> wrote in message
news:3AA44A6D.9D8161F@bellsouth.net...
> i am looking for one that is 108" need the extra inches to be able to tune
> 10-40 meters.
>
> Mad Dog wrote:
>
> > R/S has some fiberglass 102" 1/4wave whips they will sell you for $15.
each
> >
> > --
> > 714 Sandpile,
> > The Mad Dog wavin' good bye
> > "cf" <cfox007@bellsouth.net> wrote in message
> > news:3AA42D80.CCD70E06@bellsouth.net...
> > > anyone have one of those GATOR 108" whips laying aroung they want to
get
> > > rid of?
> > > thanks chris
> > >
>
```

4227. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 03:31:55 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <ta8mdc48722m84@corp.supernews.com>
Source record: 169300

I'm not expert on 450 ohm twinlead feedline. With that
said - I have noticed that different tuner settings are
necessary whenever precipitation or dew is on the
feedline/antenna combo. However, I have not noticed a
quantifiable difference in how the antenna system performs.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"Bill Ogden" <wogden@attglobal.net> wrote in message
news:3aa44545_3@news1.prserv.net...
> I have read that ladder line, when wet, has somewhat
altered
> characteristics. I erected a 30m dipole recently, fed
with about 110' of
> 450-ohm ladder line, and I use it on 30 - 12 meters. (My
Dentron cannot
> seem to load it on 10m.) When the line is wet (rain or
heavy condensation)
> the antenna is almost dead. Are moisture effects on
ladder line usually
> this drastic? Does "real" open line have the same
problem?
>
> Bill Ogden
> W2WO
>
>

4228. D2T 1.5 - 200 Mhz Continuous Coverage Antenna - Huh?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 03:59:04 UTC
From: "Dave Alden (KB8VJD)" <dalden@home.com>
Message-ID: <56768185466061D7.830B448B4B7698FC.5A8A0BE142964A06@lp.airnews.net>
Source record: 169301

While surfing I came across this Italian manufacturers antenna with remarkable claims. Anybody know anything about it?

http://www.antenna.it/world.htm

Dave Alden KB8VJD

4229. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 04:05:01 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AA461ED.35B4@bellsouth.net>
Source record: 169074
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

cf wrote:
>
> i am looking for one that is 108" need the extra inches to be able to tune
> 10-40 meters.

Add a spring to the bottom and it will bring you close to the required
length.

Jerry

>
> Mad Dog wrote:
>
> > R/S has some fiberglass 102" 1/4wave whips they will sell you for $15. each
> > >
> > > --
> > > 714 Sandpile,
> > > The Mad Dog wavin' good bye
> > > "cf" <cfox007@bellsouth.net> wrote in message
> > > news:3AA42D80.CCD70E06@bellsouth.net...
> > > > anyone have one of those GATOR 108" whips laying aroung they want to get
> > > > rid of?
> > > > thanks chris
> > > >

4230. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 04:19:56 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA4656C.DBAEDA4C@IEEE.org>
Source record: 169302
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

cf wrote:
> i am looking for one that is 108" need the extra inches to be able to tune
> 10-40 meters.

The extra inches won't help much but you can buy extensions
to install under the whip. Hustler makes them and the Texas
Bugcatcher guy makes them.

The RS fiberglas whips were designed for 5 watts and the center
wire is very small. I don't know if it will take 100w or not.
--
http://www.mindspring.com/~w6rca

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4231. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 04:27:47 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA46743.373FB18@IEEE.org>
Source record: 169303

Bill Ogden wrote:
> I have read that ladder line, when wet, has somewhat altered
> characteristics.

Yep, it does. Ladder-line should be kept vertical and not run
horizontal where it can get wet. Mine comes vertically down
to the eave of my house and then runs horizontal under the eave
out of the rain. It's been very wet here in East Texas so far
this year but I have had very little detuning problems caused
by moisture.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4232. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 04:31:02 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA46806.616ABE32@IEEE.org>
Source record: 169304

Bill Ogden wrote:
> I have been looking at the larger Tentec antenna tuner. It has two primary
> elements (coil and variable capacitor) and a switch to make several
> configurations from these two base elements. Most other current tuners use
> two capacitors and a coil. What are the pros and cons of these designs? I
> don't think I have ever seen a used Tentec tuner (this model) for sale.
> Does that mean that few people buy them, or that they are so good that no
> one sells them?

If the input and output can be reversed, an L-network can tune most
antenna systems. Those switches are what allow the two components
to cover the necessary matching ranges. IMO, it's a good design.
--
http://www.mindspring.com/~w6rca

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4233. Re: Help with possible new antenna set-up

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 04:36:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA4694E.707EC55@IEEE.org>
Source record: 169305

Rosco wrote:
> With a 300 ft feedline, you will loose what ever signal you gain by moving
> the tower to the higher place.

One way to solve the problem is to use open-wire feedline for that
300ft run. Of course, that presents matching problems which will
need to be solved but can be as simple as a 12:1 balun on each end.
Sevick tells how to make 12:1 baluns.
--
http://www.mindspring.com/~w6rca

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4234. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 04:51:18 UTC
From: Michael <hkc2001@pacbell.net>
Message-ID: <WYZo6.7064$qv3.3127032@nnrp5-w.sbc.net>
Source record: 169306
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

Thanks for all the replies. If I get it correct, I need to connect the antenna ground to a ground rod. What about the radiating element? There must be electric charge buildup on the radiating elemnent as well. As I found out, the antenna mast is coated with an insulating paint. So I need to ground the mast separately as well, right?

Thanks
"BD" <bodu@pobox.com> wrote in message
news:9NWo6.261$0n3.5235@nnrp1.sbc.net...
> Can't static-electricity also build up in the antenna, which will fry your
> rig and/or you when plugged into it, if there's no ground?...
>
> "B-Squared" <rbethman@home.com> wrote in message
> news:8DTo6.152505$B6.34551349@news1.rdc1.md.home.com...
> > 1) A good healthy ground
> >
> > 2) Yes.
> >
> > 3) Burn down your house
> >
> > You need to get a good ground up to the mast or whatever you have for
your
> > antenna support. It should not be bent in sharp angles as you work it
> down
> > to your ground rod(s). Multiple ground rods in a grid is probably the
> best
> > protection, creating a ground "window".
> >
> > As to antenna performance, you may actually improve it.
> >
> > > What do you guys use for antenna lightening protection? I have a
rooftop
> > > antenna. Is it necessary to intall lightening protection? I always
> > > disconnect my radio when the storm approaches. What's the worst that
can
> > > happen(without lighten protection)? What kind of system do you
> recommend?
> > Is
> > > it going to affect the antenna performance? Thanks
>
>
>
>

4235. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:06:12 UTC
From: mailfrmpa@aol.com
Message-ID: <20010306000612.27002.00000565@ng-bh1.aol.com>
Source record: 169307

>I have read that ladder line, when wet, has somewhat altered
>characteristics.

>When the line is wet (rain or heavy condensation)
>the antenna is almost dead. Are moisture effects on ladder line usually
>this drastic?

I feed my low band antenna with window wire. In snow, ice, and rain all I
notice is that the tuner settings change a bit.

Kï¿½MB

4236. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:16:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <981rqoonm0@208.207.71.173>
Source record: 169308
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Who told you an antenna had to be resonant?

Mad Dog wrote:
>
> Okay ,but a longer antenna will lower the resonant frequency.
> I could see hitting 10,11 and 12meters using a matcher but reception on
> 40meters
> will suffer greatly. A matcher only fools the radio with a 50ohm load via
> adjustable
> capacitive/inductive circuit. It wont change the resonant frequency of your
> antenna.
> --
> KG4LBP, George
>
> --
> 714 Sandpile,
> The Mad Dog wavin' good bye
> "cf" <cfox007@bellsouth.net> wrote in message
> news:3AA44A6D.9D8161F@bellsouth.net...
> > i am looking for one that is 108" need the extra inches to be able to tune
> > 10-40 meters.
> >
> > Mad Dog wrote:
> >
> > > R/S has some fiberglass 102" 1/4wave whips they will sell you for $15.
> each
> > >
> > > --
> > > 714 Sandpile,
> > > The Mad Dog wavin' good bye
> > > "cf" <cfox007@bellsouth.net> wrote in message
> > > news:3AA42D80.CCD70E06@bellsouth.net...
> > > > anyone have one of those GATOR 108" whips laying aroung they want to
> get
> > > > rid of?
> > > > thanks chris
> > > >
> >

4237. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:17:02 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <981rseonm1@208.207.71.173>
Source record: 169309
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

W6RCecilA wrote:
>
> cf wrote:
> > i am looking for one that is 108" need the extra inches to be able to tune
> > 10-40 meters.
>
> The extra inches won't help much but you can buy extensions
> to install under the whip. Hustler makes them and the Texas
> Bugcatcher guy makes them.
>
> The RS fiberglas whips were designed for 5 watts and the center
> wire is very small. I don't know if it will take 100w or not.
>

It will.

4238. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:28:36 UTC
From: richardharrison@webtv.net
Message-ID: <22629-3AA47584-55@storefull-115.iap.bryant.webtv.net>
Source record: 169312

George, KG4LBP wrote:
"A matcher only fools the radio with a 50-ohm load via capacitive/inductive circuit. It won`t change the resonant frequency of your antenna."

It is true that nearly all antennas have resonances which depend on their sizes. At an antenna`s resonant frequencies, its capacitance and inductance are balanced, producing zero net reactance, and its impedance is is a pure resistance. Maximum power transfer from the feedline to the antenna requires zero net reactance and a resistance match between the feedline and the antenna.

Often we need to use the antenna at a frequency it isn`t cut for, or in other words, off-resonance. The antenna may or may not have the same resistance as the feedline off-resonance, but for sure it will present a reactance. The reactance will stand in the way of getting the most current into the antenna. It needs to be neutralized with the opposite kind of reactance to get the maximum out of the antenna.

Our tuner/matcher needs to supply the complimentary reactance needed for a net zero reactance at the antenna`s feedpoint. This reactance provision is in addition to performing a resistance transformation if needed between the antenna and feedline. The resistance has to look the same in both directions for a bumpless transfer between feedline and antenna.

When our tuner/matcher has produced a zero reactance at the antenna, we may consider the external reactance as having retuned the antenna to resonance at the desired operating frequency. It all depends on how you look at the antenna as to whether its resonant frequency has been changed by the external reactance added by the tuner/matcher, or by the reactance of certain lengths of transmission lines of certain impedances.

Best regards, Richard Harrison, KB5WZI

4239. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:34:07 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA476CF.5ACB@wt.net>
Source record: 169310

W6RCecilA wrote:
>
> Somewhere I saw a chart of gain VS height of radials.
> Does anybody know where I might have seen it? Was it
> on this newsgroup? thanks
> --

I haven't seen that one here. I have seen one in the Orr books that estimates the number of radials at a certain height needed to equal 120 on the ground. It uses a graph. But to me, stating a certain gain increase or decrease just by the height of the antenna could be haphazard at best. I usually rate an antenna with it's free space gain regardless of height. To find out the effects of height over ground, I think modeling is better as you can specify the ground conditions etc.
MK
--
http://web.wt.net/~nm5k

4240. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:41:34 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA4788E.1604@wt.net>
Source record: 169311

BD wrote:
>
> Can't static-electricity also build up in the antenna, which will fry your
> rig and/or you when plugged into it, if there's no ground?...

In rare cases. Usually in dry winter weather. Thats almost unheard of
here in Houston. The only static you'll have to worry about here is
lightning. The ground doesn't mean anything unless you suppress the
feedline with a gas tube etc to ground. Just being grounded in itself
wouldn't help you as far as static charges if you don't use a suppressor
before the rig. MK
--
http://web.wt.net/~nm5k

4241. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:56:33 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA47C11.6F2@wt.net>
Source record: 169313

Michael wrote:
>
> Thanks for all the replies. If I get it correct, I need to connect the
> antenna ground to a ground rod. What about the radiating element? There must
> be electric charge buildup on the radiating elemnent as well. As I found
> out, the antenna mast is coated with an insulating paint. So I need to
> ground the mast separately as well, right?

You would use a coax suppressor before the rig, which connects to your ground. Myself, I don't use anything. I just unhook when stormy and ground all coaxes to ground outside. My mast is well grounded which is probably the most important part. It all starts there. If you don't direct the strike to ground at that point with a low resistance connection, everything else you do will be a waste of time. So you want a good fat ground wire running from the base "ground" of the antenna going to a good ground connection below with no sharp turns or bends. An 8 ft ground rod at that point would be a minimum. One thing about trying to suppress currents from lightning..If you are not willing to do the WHOLE shack with suppressors on every wire going in and out, antenna, power, phone, etc, etc, I think you are better off just unhooking during storms. Just suppressing the antenna, and leaving the rest open is worse than no protection at all I think. I'd rather unhook the whole shack from the outside world otherwise. I've taken a direct hit with all grounded out outside and had no problems. So the cheapest way out will work as long as you unhook everything and ground all coaxes to a good ground outside. Also all grounds outside should be tied together. You don't want seperate grounds at different potentials. MK
--
http://web.wt.net/~nm5k

4242. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 05:57:58 UTC
From: CW <cmagers@sprynet.com>
Message-ID: <981ukuaie1@slb5.atl.mindspring.net>
Source record: 169314
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Use the stainless. Power handling will be assured. Get the 102 inch and a
spring mount.
--
CW
KC7NOD
"cf" <cfox007@bellsouth.net> wrote in message
news:3AA44B1B.545DF854@bellsouth.net...
> stainless steel will work for me also.
>
> cf wrote:
>
> > anyone have one of those GATOR 108" whips laying aroung they want to get
> > rid of?
> > thanks chris
>

4243. Re: Inexpensive Support for Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 06:18:27 UTC
From: Richard Karlquist <rick@area.com>
Message-ID: <Ti%o6.14405$6i1.1146293@news1.frmt1.sfba.home.com>
Source record: 169315

When I was in college, I built the 40 foot mast of 3 20 foot 2x4's which
even
then had been in the ARRL Antenna Book for years. Worked fine; just make
sure you guy it well; it isn't self supporting!

Another cheap solution is irrigation tubing. The advantage is that you can
go higher with it. On my web site: www.karlquist.com I show a 90 foot
irrigation tubing vertical. I have also hung inverted vees at 60 and 90
feet
from irrigation tubing. You can sometimes get the irrigation tubing for
nothing
or almost nothing.

I couldn't imagine going to the trouble of telephone poles!

Rick Karlquist N6RK
www.karlquist.com

Mark Erbaugh <mark@nospam.microenh.com> wrote in message
news:3aa3b4b2$0$1519$6daed22a@news.infinet.com...
> Shortly, the XYL and I will be moving to a new QTH with lots of land (4
> acres), but no trees. I'd like to quickly (and inexpensively - lot's of
> other expenses right now) put up a wire antenna (such as a Carolina
Windom)
> so that I won't be off the air after the move. The towers have to wait for
> more cash.
>
> What's the least expensive way to get the antenna 40 + feet up? I've
looked
> in a couple of books and they have plans for a simple mast made from 3 20
> foot 2x4's. For the Carolina Windom, I suspect I'll need at 3 supports.
> There's a caution on the Radio Works website about not installing them in
an
> inverted vee configuration.
>
> Any idea how much it would cost to have 3 telephone poles installed? And
> will they need to be guyed since the antenna won't provide the support
that
> the normal wires would?
>
> 73,
> Mark
>
>

4244. Re: Internal Ant. Tuner with External SWR Meter???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 06:19:36 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA48178.50A0@wt.net>
Source record: 169316

Peter O. Brackett wrote:
>
> Mark: Keep the old gear for nostalgia and start another "museum". Heh,
> heh. Best, -Peter K1PO

I don't think I'll ever sell my old drakes. I have an old R4 that is serial#0058. It's getting to be a collectable. But the xmtr a T4XB. Not quite as old. Also have a 2c and 2cq. Probably never sell any of them. Doubt I could get enough for them to be worth it. The 830 is a good old rig, and still pretty high performance, but I'm not as attached to it as much as the drakes, as I haven't had it near as long. After using the new 706 for a while, I'm tempted to sell the TS-830 and the VFO-230 and apply to a IC-746. But, dunno...The 746 may not be any better as far as basic radio performance. The 830 is still the best HF recvr I have in here right now as far as hard core performance and filtering etc. But I like zip zapping around with the 706. I've been using it today copying ACARS. Also got the selcal decoder going with it for HF. I do alot of aviation listening, both HF and VHF. MK
--
http://web.wt.net/~nm5k

4245. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 06:28:17 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA48381.1067@wt.net>
Source record: 169317

Alan Watts wrote:
>
> Smiley recognition or not, horizontal is almost always better than
> vertical. A dipole is better than an inverted V. A dipole is better
> than a sloper. A dipole is better than even the longest long-wire
> unless the long-wire is at a great height, is very long, and if the
> directionality that would result would not be a problem.
>
> For HF, a dipole at least 1/2 wavelength above ground is almost always
> better than almost any other thing.
>
> I'm old. From years of experience, I know this.
>
> Alan
> WA8NSU

Overall, I agree with most of what you say, but still is apples to oranges. It all depends where you are going to talk, on what band, and at what time of day, as which is best. For regional 40m in the day, sure, everything you say will usually prove to be true, but if you work VK land on the same band 12 hours later, a good vertical will almost always beat the dipole. Doesn't mean either one is better. Just applying the best of each to a particular need. I used to run both on 40m at night. The dipole NEVER won overseas. Not even once. And it had the most theoretical gain. But the dipole hardly ever lost in the daytime, or to medium distances under 800-1000 miles. MK
--
http://web.wt.net/~nm5k

4246. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 06:57:12 UTC
From: R E Heath <re.heath@sympatico.ca>
Message-ID: <3AA489E0.3C8FBE81@sympatico.ca>
Source record: 169318

BE PATRIOTIC -- ERECT A FLAGPOLE !!

Bob, VA3BZ

Hans Kaper wrote:
>
> Hello,
>
> Is there somebody who can advice me about a vertical antenna
> if possible hidden "in" a tree?
> I think about a vertical for 20 meters, which will be about 10 meters
> tall. (Half wave) I'll need buried radials, at least 12, preferably more,
> 5 meters long or longer each.
> My neighbours don't fancy antennas so I might consider erecting it
> alongside a tree to hide it more or less.
> I need advice about the effect. Would the antenna work better if it
> stood "alone" and if so, how much do I loose when I hide it
> alongside the tree?
> They can't forbid me erecting the antenna, our constitution guarantees
> freedom of collecting information from all over the world. (Free
> translation) But if possible I will be kind to my neighbours.
>
> Thanks in advance,
>
> Hans Kaper PA3HGM
> pa3hgm@amsat.org

4247. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 08:33:14 UTC
From: Rod Marsh <rredbeak2@dingoblue.net.au>
Message-ID: <3aa4a120$0$25464$7f31c96c@news01.syd.optusnet.com.au>
Source record: 169119

I agree with BOB.
cheers Rod VK4XI

4248. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 09:51:12 UTC
From: Helmut Wabnig <hwabnig@aon.at>
Message-ID: <okc9at8gjhjoot10cbuj3lq280n6fmkims@4ax.com>
Source record: 169120

On Tue, 06 Mar 2001 02:32:55 GMT, "Rosco" <rvaagen@nospam.hotmail.com>
wrote:

>Did you look at this site?
>http://members.aol.com/k5oe/index.htm
>It has some details of building the helix antenna.
>
>
Thanks for the link.

"here is a close-op of the feedpoint arrangement"

hehe, it's really funny, you don't see anything.
Must be a national security secret.

:-)

W.

4249. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 12:16:09 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <vA4p6.1171$pQ3.4101783@nntp3.onemain.com>
Source record: 169121
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

It would probably help this discussion if cf told us what he had in mind. Somewhere I have the feeling that he got onto one of those mobile base coils that adjusts all over creation. They did indeed use 108" whips, pretty standard in the pre-CB days.

My guess is that 102 would be equally inefficient.

Dick N&#65533;BK

"Mad Dog" <lgssl@netzero.net> wrote in message news:981l01$r2bs3$1@ID-20128.news.dfncis.de...
> Okay ,but a longer antenna will lower the resonant frequency.
> I could see hitting 10,11 and 12meters using a matcher but reception on
> 40meters
> will suffer greatly. A matcher only fools the radio with a 50ohm load via
> adjustable
> capacitive/inductive circuit. It wont change the resonant frequency of your
> antenna.
> --
> KG4LBP, George
>
>
> --
> 714 Sandpile,
> The Mad Dog wavin' good bye

4250. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 12:43:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <982m2l$7av$1@uranium.btinternet.com>
Source record: 169122

Rainwater is a fairly low-loss material. It also has a high
dielectric constant.

But a twin transmission line is not immersed in it. At worst the
line has a temporary thin surface layer of water.

In a tropical downpour line impedance Zo decreases by a few
percent. Propagation velocity also decreases by a few percent. Ice
and dry snow has similar effects.

It is necessary only to re-tune the ATU by a small amount. No need
to be concerned until steam rises from the line.

"Real" open line is affected to an even smaller extent because the
wettable surface area of spacing rods is much less.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Bill Ogden <wogden@attglobal.net> wrote in message
news:3aa44545_3@news1.prserv.net...
> I have read that ladder line, when wet, has somewhat altered
> characteristics. I erected a 30m dipole recently, fed with about
110' of
> 450-ohm ladder line, and I use it on 30 - 12 meters. (My Dentron
cannot
> seem to load it on 10m.) When the line is wet (rain or heavy
condensation)
> the antenna is almost dead. Are moisture effects on ladder line
usually
> this drastic? Does "real" open line have the same problem?
>
> Bill Ogden
> W2WO
>
>

4251. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 13:04:57 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <Zf5p6.52653$Z8.9075919@typhoon.southeast.rr.com>
Source record: 169123

There is a nice design for a three band vertical using rotor cable as radials in one of W6SAI's books. He used wood as a support. I've used PVC pipe painted with gren and brown "camoflage" paint. Works very well, even though it is hanging from a tree limb with the top at about 25-30 feet.

I've used four radials made of three conductor rotor line, one wire of each line cut for a quarter wave on 10,15 and 20m.

Good Luck,

Bill, W4WNT

Hans Kaper <hanskap@kaper-1.tmfweb.nl> wrote in message news:980lnq$m20$1@cyan.nl.gxn.net...
> Hello,
>
> Is there somebody who can advice me about a vertical antenna
> if possible hidden "in" a tree?
> I think about a vertical for 20 meters, which will be about 10 meters
> tall. (Half wave) I'll need buried radials, at least 12, preferably more,
> 5 meters long or longer each.
> My neighbours don't fancy antennas so I might consider erecting it
> alongside a tree to hide it more or less.
> I need advice about the effect. Would the antenna work better if it
> stood "alone" and if so, how much do I loose when I hide it
> alongside the tree?
> They can't forbid me erecting the antenna, our constitution guarantees
> freedom of collecting information from all over the world. (Free
> translation) But if possible I will be kind to my neighbours.
>
> Thanks in advance,
>
> Hans Kaper PA3HGM
> pa3hgm@amsat.org
>
>

4252. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 13:17:39 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <982oc5$8m5$1@newpoisson.nosc.mil>
Source record: 169124

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA3D65A.7F1DE7D3@IEEE.org...
Jim Rodenkirch wrote:

Jim Rodenkirch wrote:
<snip> Again, my friend, what are the requirements?

Cecil replied, "The requirements are that it costs $20. :-)"

No my friend, the thrust of my climbing in remains - nail down his requirements (again, is he horizontally challenged) first before everyone jumps on the dipole-better-than efforts.

Jim, do you know what :-) means?

Ooooooops! My apologizes, Cecil. I was focused too singularly and didn't catch your drift - I'll get better - LOL! - as I spend more time on this bulletin board. Regards, Jim R.

4253. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 13:25:42 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <982or2$8qg$1@newpoisson.nosc.mil>
Source record: 169126

"Alan Watts" wrote in message
news:PrXo6.9964$a7.115232@typhoon.neo.rr.com...
Smiley recognition or not, horizontal is almost always better than
vertical. A dipole is better than an inverted V. A dipole is better than a
sloper. A dipole is better than even the longest long-wire
unless the long-wire is at a great height, is very long, and if the
directionality that would result would not be a problem.

For HF, a dipole at least 1/2 wavelength above ground is almost always
better than almost any other thing.

I'm old. From years of experience, I know this.

Alan

Alan: are you Cecil's long lost brother or what? You've been reading too many antenna books for too long (you said you were old, remember) and have forgotten the essence of systems engineering - understand the requirements first, then design a solution. I'm focused (with an additional apology to Cecil for not espying his smiley face AND its intent) on the requirements here. So, your "dipole-better-than-vertical" gyrations fall on deaf ears, especially when you state "almost always better." What part of systems engineering does "almost always better" play in understanding requirements and designing or purchasing a solution?

Sorry, Buds. The thread started out looking for a vertical antenna solution because the individual was horizontally challenged. I return to that basis each time because it makes my case for understanding the requirements first. PLUS, it allows me an opportunity to crack on Cecil who's the first one to jump on the dipole-better-than-vertical bandwagon, with you close in pursuit - : -) - or something like that. How'd I do, Cecil?

Regards to all (and I love these threads - gives me a chance to learn, smiley face(s) and all! Jim R.

4254. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 13:33:07 UTC
From: BD <bodu@pobox.com>
Message-ID: <uH5p6.567$0n3.12513@nnrp1.sbc.net>
Source record: 169125
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

Your antenna came with no instructions?... ;)
I know that mine always have included pretty decent info on grounding..

"Michael" <hkc2001@pacbell.net> wrote in message
news:WYZo6.7064$qv3.3127032@nnrp5-w.sbc.net...
> Thanks for all the replies. If I get it correct, I need to connect the
> antenna ground to a ground rod. What about the radiating element? There
must
> be electric charge buildup on the radiating elemnent as well. As I found
> out, the antenna mast is coated with an insulating paint. So I need to
> ground the mast separately as well, right?

4255. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 14:29:24 UTC
From: richardharrison@webtv.net
Message-ID: <21670-3AA4F444-1@storefull-117.iap.bryant.webtv.net>
Source record: 169128

Mark Keith wrote:
"I used to run both (a good vertical and a horizontal dipole) on 40m at night. The dipole NEVER won overseas."

Suspect the dipole was not in the clear and up at least 66 feet, which is 1/2-wave at 40m.

Mark lives in a high soil conductivity area. High soil conductivity helps vertical antennas but actually hurts low-angle radiation from low horizontal antennas.

The efficiency of a vertical over lossy ground suffers dramatically by comparison with a horizontal dipole. an elaborate ground system is needed with the vertical but not with the horizontal. The reflection from the ground is of reversed polarity and cancels low-angle radiation from a low horizontal dipole. So, poor soil conductivity is better for low horizontal antennas. Better to lose signal in ground loss than to have it reflected in reversed polarity and cancel the direct DX radiation you want.

For a comparison between the radiation of a 1/2-wave vertical dipole with its center 1/2-wave over ground, and the radiation of a 1/2-wave horizontal dipole, 1/2-wave over ground, see: Fig 4(A) on page 3-5 of the 19th edition of the ARRL Antenna Book.

The solid outline of the big signal is for the horizontal antenna. The dashed outline of the puny signal is for the vertical antenna. Both antennas are over "average ground".

Best regards, Richard Harrison, KB5WZI

4256. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 14:29:55 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA4F463.75A8809C@IEEE.org>
Source record: 169127

Mark Keith wrote:
> To find out the effects of height over ground, I
> think modeling is better as you can specify the ground conditions etc.

For what it's worth, I modeled a 1/4WL vertical with four 1/4WL
horizontal radials using EZNEC. Here's the height of the radials,
gain in dBi, and take-off angle. 10 -.09@22deg, 20 .06@18deg,
25 .08@17deg, 30 .06@16deg, 40 -.13@15deg Note that from one ft
to 40ft the gain is maximum at 25ft for a 40m vertical.

Drooping the radials down at 45deg from a height of 25ft yielded
a gain of .23@20deg. Adding another identical array 1/4WL away
and feeding it at 90deg gave the expected cardioid pattern with
a gain of about 3dBi.
--
http://www.mindspring.com/~w6rca

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4257. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 14:39:41 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA4F6AD.AC95AFC0@IEEE.org>
Source record: 169129

Jim Rodenkirch wrote:
> How'd I do, Cecil?

I was born during the Great Depression. IMO, the cheapest antenna that will get the job done is the best choice. That is almost never a store-bought $350 vertical monstrosity.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4258. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:42:54 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <mhyfB7A+VQp6EAPi@ifwtech.plus.net>
Source record: 169159

W4WNT wrote:
>There is a nice design for a three band vertical using rotor cable as
>radials in one of W6SAI's books. He used wood as a support. I've used PVC
>pipe painted with gren and brown "camoflage" paint. Works very well, even
>though it is hanging from a tree limb with the top at about 25-30 feet.
>
>I've used four radials made of three conductor rotor line, one wire of each
>line cut for a quarter wave on 10,15 and 20m.
>
>Good Luck,
>
>Bill, W4WNT
>
>Hans Kaper <hanskap@kaper-1.tmfweb.nl> wrote in message
>news:980lnq$m20$1@cyan.nl.gxn.net...
>> Hello,
>>
>> Is there somebody who can advice me about a vertical antenna
>> if possible hidden "in" a tree?
>> I think about a vertical for 20 meters, which will be about 10 meters
>> tall. (Half wave) I'll need buried radials, at least 12, preferably more,
>> 5 meters long or longer each.
>> My neighbours don't fancy antennas so I might consider erecting it
>> alongside a tree to hide it more or less.
>> I need advice about the effect. Would the antenna work better if it
>> stood "alone" and if so, how much do I loose when I hide it
>> alongside the tree?
>> They can't forbid me erecting the antenna, our constitution guarantees
>> freedom of collecting information from all over the world. (Free
>> translation) But if possible I will be kind to my neighbours.
>>

If Hans wants a "stealth" antenna, the radials should be on/in the
ground where they will not be seen.

Coming up is a great time to do this: when the grass is beginning to
grow, cut it extremely short and lay some radial wires - as many and as
long as you can - down on the ground. Fasten the wires down with
"hairpins" made from heavy wire, so they will not interfere with the
mower blades at normal height. By mid-summer, the grass will have fully
grown back and the wires will be completely covered - so much so, they
will be hard to pull up. (Statutory warning: "Your Backyard and Climate
May Vary", but it's OK for where Hans lives.)

Actually a half-wave vertical for 20m will not benefit much from radials, because the ground losses occur too far out for practical-length radials to help. A simple ground spike would probably be OK for 20m. However, adding some radials will make the same antenna very useful on 30m and 40m.

Sorry I can't comment on the effects of trees (it would be nice to have some here) but if you can space a thin black or dark green wire away from the tree it will be almost invisible to the neighbours.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

4259. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa507bd$0$1614$bbae4d71@news.net-link.net>
Source record: 169130
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>Use the stainless. Power handling will be assured. Get the 102 inch and a
>spring mount.
>--
>CW
>KC7NOD
>"cf" <cfox007@bellsouth.net> wrote in message
>news:3AA44B1B.545DF854@bellsouth.net...
>> stainless steel will work for me also.
>>
>> cf wrote:
>>
>> > anyone have one of those GATOR 108" whips laying aroung they want to
get
>> > rid of?
>> > thanks chris
>>
>
>

4260. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa5093b$0$1618$bbae4d71@news.net-link.net>
Source record: 169131
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>Use the stainless. Power handling will be assured. Get the 102 inch and a
>spring mount.
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>CW
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>"cf" <cfox007@bellsouth.net> wrote in message
>news:3AA44B1B.545DF854@bellsouth.net...
>> stainless steel will work for me also.
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>> cf wrote:
>>
>> > anyone have one of those GATOR 108" whips laying aroung they want to
get
>> > rid of?
>> > thanks chris
>>
>
>

4261. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa50ad8$0$1614$bbae4d71@news.net-link.net>
Source record: 169132
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
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>spring mount.
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>> stainless steel will work for me also.
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>> cf wrote:
>>
>> > anyone have one of those GATOR 108" whips laying aroung they want to
get
>> > rid of?
>> > thanks chris
>>
>
>

4262. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa50e28$0$1615$bbae4d71@news.net-link.net>
Source record: 169135
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>Use the stainless. Power handling will be assured. Get the 102 inch and a
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>CW
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>news:3AA44B1B.545DF854@bellsouth.net...
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>> cf wrote:
>>
>> > anyone have one of those GATOR 108" whips laying aroung they want to
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>> > rid of?
>> > thanks chris
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>

4263. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa5110b$0$1598$bbae4d71@news.net-link.net>
Source record: 169136
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>Use the stainless. Power handling will be assured. Get the 102 inch and a
>spring mount.
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>CW
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4264. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa513f3$0$1618$bbae4d71@news.net-link.net>
Source record: 169138
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4265. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa514e4$0$1596$bbae4d71@news.net-link.net>
Source record: 169139
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4266. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa517b8$0$1620$bbae4d71@news.net-link.net>
Source record: 169140
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4267. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa51a8f$0$1614$bbae4d71@news.net-link.net>
Source record: 169141
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4268. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa51bdd$0$1598$bbae4d71@news.net-link.net>
Source record: 169142
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4269. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa51d08$0$1616$bbae4d71@news.net-link.net>
Source record: 169143
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4270. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa51fec$0$1618$bbae4d71@news.net-link.net>
Source record: 169146
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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4271. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:52:36 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa5218a$0$1599$bbae4d71@news.net-link.net>
Source record: 169147
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
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>
>

4272. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:55:46 UTC
From: richardharrison@webtv.net
Message-ID: <11470-3AA50882-79@storefull-116.iap.bryant.webtv.net>
Source record: 169133

Mark Keith, NM5K wrote:
"Also all grounds outside should be tied together."

That is required by the National Electrical Code. So, it`s good advice. Many jurisdictions incorporate the NEC into their ordinances. It`s sensible too, to connect your antenna ground to the same service entrance ground connection spot used by the electric company and telephone company. Don`t make the ground connection in the service center box as you don`t want the common impedance of the wire between the box and the ground rod or cold water pipe if that is the actual ground connection point.

The phone company uses the same grounding point as the electric company because they don`t want lightning bolts crashing between the phone and powerline connections inside your house. You don`t want flashes between your radio and the powerline connected equipment or the phone, either. So, use the same connecting point to ground that the companies use.

If you really must keep equipment surges low, put low-pass pi-net filters in every wire, including the neutral, supplying power to your equipment. I use tower lighting chokes as the series element to handle the equipment current requirements. Shunt the input and output capacitors of the pi-nets with MOV`s. Follow installation practices effective for interference suppression. Lightning is just big-time interference.

Best regards, Richard Harrison, KB5WZI

4273. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 15:58:58 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa52214$0$1598$bbae4d71@news.net-link.net>
Source record: 169148

Might be a tuner problem. I use 450 ladder line, about 150 feet or so, to feed a 160 meter dipole. I have the line twisted. The window line even goes through sever pine trees and rests on the limbs. I have used it in the rain and even with several inches of snow on it or with ice coatings. I do need to tweak the tuner setting some from usual dry conditions but that's it. MFJ-986 tuner. I have not found a frequency within the range of this tuner that I can't get "tuned" using the above antenna and a W9INN remote balun box and about 30 feet of RG-213 coax (I think--might be 9913F or plain RG-8--can't remember).
Bill Ogden wrote in message <3aa44545_3@news1.prserv.net>...
>I have read that ladder line, when wet, has somewhat altered
>characteristics. I erected a 30m dipole recently, fed with about 110' of
>450-ohm ladder line, and I use it on 30 - 12 meters. (My Dentron cannot
>seem to load it on 10m.) When the line is wet (rain or heavy condensation)
>the antenna is almost dead. Are moisture effects on ladder line usually
>this drastic? Does "real" open line have the same problem?
>
>Bill Ogden
>W2WO
>
>

4274. Suitable vertical HF antenna info needed.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 16:15:47 UTC
From: nz8c@aol.com
Message-ID: <20010306111547.25771.00000010@ng-fw1.aol.com>
Source record: 169134

Hello!
I am trying to find a suitable HF antenna for my situation. I live in an apartment and can not put up any vertical over 20 feet tall. A dipole or any such wire antenna would be impossable to install up on the roof. I am mainly interested in working 10- 20m and maybe 40 and 80. I was looking at both the MFJ 1796 and the Hygain 18V and was wondering if they would work out OK. Has anyone used such antennas in my same sort of situation? How effective are they? Or is there a better antenna to choose? Please email me direct at: NZ8C@aol.com with any info.
Thanks!
73,
NZ8C

4275. Re: 3 ele yagi for 6m feed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 16:36:45 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3AA51202.1D2D5FEE@earthlink.net>
Source record: 169137

do a web search for that there is a website out there that tells you how to
build that antenna but i lost the URL so i cant help

Gary wrote:

> Does anyone have any, good and practical drawings for a 3 element yagi for
> six meters? Gamma or folded dipole, or even T-match would suit our needs.
>
> 73, Kari, oh8mfh in KP34UG

4276. Re: How to match a Helix Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:22:21 UTC
From: richardharrison@webtv.net
Message-ID: <10725-3AA51CCD-3@storefull-114.iap.bryant.webtv.net>
Source record: 169149

Helmut Wabnig wrote:
"ARRL shows an illustration with a "feed wire" running from the helix end to the N connector on page 19-23."

In my book there is Fig 41 on page 19-25. It shows one of (4) tapered lines which raise the 140-ohm impedance of the helix to 208 ohms so that when connected in parallel the impedance will be 52 ohms at the N connector. If you can use a better antenna, why not exactly copy the ARRL 4-element array?

The problem with a line which tapers from 140 ohms down to 52 ohms is the tiny spacing at 52-ohms, especially when the tapered line is only one wire against a ground plane and not two wires. The spacing is only half what it would be for two wires.

If you want to transform 140 ohms down to 52, go ahead. In the same book, ARRL has tapered line information on page 26-6. In (Eq 8) the Zo and S-distance are halved.

Best regards, Richard Harrison, KB5WZI

4277. Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:27:02 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <9836mfhcd1@slb7.atl.mindspring.net>
Source record: 169144

Greetings,

I am considering installing an autotuner (AH-4) in my vehicle to allow multiband tuning of a fixed length whip. I realize there are other antenna solutions that are more efficient (screwdriver, bugcatcher, etc) but for my specific purposes, the positives of this configuration may out weigh the negatives. I am not going to detail my personal needs in this forum.

I understand that an 102" stainless whip is likely the poorest antenna that can be tuned by the AH-4. SGC uses a dual, helically wound fiberglass whip that has two separate resonances . The Icom whip appears to be just a stainless whip, but it may have some base loading(not sure).

I was trying to determine the best antenna to use with an autotuner. This is also helpful for me to have a better understanding of different antenna configurations. What is the best way to improve the efficiency of an autotuner configuration? (no flames or wise cracks needed).

Here are my brainstorms...

Idea #1)
I am considering homebrewing a helically wound whip, with a top hat. I was considering stripping down a 7 foot fiberglass Firestick whip. Then rewinding with one or two lengths (ala SGC) of insulated copper wire for the antenna. The top of these Firestick's have a brass screw for tuning. This would make attachment of a top hat very simple.

Should I just wind as much wire on the whip as possible?

Is there advantage to wider spaced winding at the bottom, with closer spaced winding at the top?

Is a top hat of any real benefit to this configuration.?

Idea #2)
Installing a hamstick style antenna, let the tuner do it's thing, and seeing how well it loads up on multiple bands. (Which band hamstick?). Since these are resonant antennas I was not sure how well they would load up on other bands. I was just brain storming and thought using an 80m whip (it has the most wire) and trying it on the higher bands. Maybe adding a longer stinger so it is no longer resonant in the ham bands?

Idea #3)
Adding a Hustler mast to the bottom of a hamstick for additional physical length? (approx 12 feet).

Idea #4)
I just picked up a 10m hamstick style antenna from Iron Horse. The base and

stinger end both have 3/8x24 threads. This allows me to unscrew the stinger assembly from one antenna, then in it's place, install another full hamstick antenna. This provides additional overall length (12 feet) as well additional helical windings (2 hamstick base sections).

Any other autotuner antennas?

Your sincere input is very much appreciated.

Tracy, W7TRX

4278. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:41:05 UTC
From: A Marzo <aerome@evl.net>
Message-ID: <3AA52131.D5EAF9BD@evl.net>
Source record: 169145
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

What did he say?

Rudy Marcelletti wrote:

> Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you
> are looking for. I have this setup mounted on top of a Suburban and hits a
> lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit
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> you are in motion when you key up!
> CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
> >Use the stainless. Power handling will be assured. Get the 102 inch and a
> >spring mount.
> >--
> >CW
> >KC7NOD
> >"cf" <cfox007@bellsouth.net> wrote in message
> >news:3AA44B1B.545DF854@bellsouth.net...
> >> stainless steel will work for me also.
> >>
> >> cf wrote:
> >>
> >> > anyone have one of those GATOR 108" whips laying aroung they want to
> get
> >> > rid of?
> >> > thanks chris
> >>
> >>
> >>

4279. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:44:59 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa522f1$0$1598$bbae4d71@news.net-link.net>
Source record: 169150
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>Use the stainless. Power handling will be assured. Get the 102 inch and a
>spring mount.
>--
>CW
>KC7NOD
>"cf" <cfox007@bellsouth.net> wrote in message
>news:3AA44B1B.545DF854@bellsouth.net...
>> stainless steel will work for me also.
>>
>> cf wrote:
>>
>> > anyone have one of those GATOR 108" whips laying aroung they want to
get
>> > rid of?
>> > thanks chris
>>
>
>

4280. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:44:59 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa5435c$0$70816$bbae4d71@news.net-link.net>
Source record: 169160
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Ditto that--102" stainless whip and 6" spring on a ball gives the 108" you are looking for. I have this setup mounted on top of a Suburban and hits a lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit scrapes the roofs at gas stations and banks. The whip is just very slightly bent near the top. Fiberglass will not hold up to this abuse. I use an Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be advised there are much better antenna systems out there, but they WILL NOT take the abuse that a stainless whip and spring will. Even my SGC whip antenna will not take this abuse and that is why I mount that on the left side of the vehicle (center of the road has less over head obstructions) and about 2 feet lower than the stainless whip. The SGC antenna performs better, but I will swap it out and put the stainless whip on if I am going to seriously abuse it, like go fast off road in woods. To improve performance of the stainless whip, add about 10 feet of fine wire (22 to 28 gauge) with a gator clip. Do this at night because it looks goofy. Be sure you are in motion when you key up!
CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>Use the stainless. Power handling will be assured. Get the 102 inch and a
>spring mount.
>--
>CW
>KC7NOD
>"cf" <cfox007@bellsouth.net> wrote in message
>news:3AA44B1B.545DF854@bellsouth.net...
>> stainless steel will work for me also.
>>
>> cf wrote:
>>
>> > anyone have one of those GATOR 108" whips laying aroung they want to
get
>> > rid of?
>> > thanks chris
>>
>
>

4281. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:45:17 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa5435d$0$70816$bbae4d71@news.net-link.net>
Source record: 169161

Might be a tuner problem. I use 450 ladder line, about 150 feet or so, to feed a 160 meter dipole. I have the line twisted. The window line even goes through sever pine trees and rests on the limbs. I have used it in the rain and even with several inches of snow on it or with ice coatings. I do need to tweak the tuner setting some from usual dry conditions but that's it. MFJ-986 tuner. I have not found a frequency within the range of this tuner that I can't get "tuned" using the above antenna and a W9INN remote balun box and about 30 feet of RG-213 coax (I think--might be 9913F or plain RG-8--can't remember).
Bill Ogden wrote in message <3aa44545_3@news1.prserv.net>...
>I have read that ladder line, when wet, has somewhat altered
>characteristics. I erected a 30m dipole recently, fed with about 110' of
>450-ohm ladder line, and I use it on 30 - 12 meters. (My Dentron cannot
>seem to load it on 10m.) When the line is wet (rain or heavy condensation)
>the antenna is almost dead. Are moisture effects on ladder line usually
>this drastic? Does "real" open line have the same problem?
>
>Bill Ogden
>W2WO
>
>

4282. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:45:18 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <3AA5222E.44A05877@alumni.caltech.edu>
Source record: 169151

Hans Kaper wrote:
[snip]
> They can't forbid me erecting the antenna, our constitution guarantees
> freedom of collecting information from all over the world. (Free
> translation) But if possible I will be kind to my neighbours.

Hans, why not involve them in the decision? Take them two drawings, one of a commercial vertical on a rooftop and another of a multi-band yagi atop a 30-metre tower, and ask them which of the two they would rather have in their neighborhood.

Also, point out the benefits of having an amateur radio operator in the neighborhood should a disaster occur.

4283. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 17:45:37 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa5435e$0$70816$bbae4d71@news.net-link.net>
Source record: 169162

Take a look in ON4UN's book--there is some info in there about elevated
radials and gain, but only for 40, 80 and 160 meters I believe.
W6RCecilA wrote in message <3AA3FFA4.7A18F922@IEEE.org>...
>Somewhere I saw a chart of gain VS height of radials.
>Does anybody know where I might have seen it? Was it
>on this newsgroup? thanks
>--
>http://www.mindspring.com/~w6rca
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4284. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:23:26 UTC
From: Hans Kaper <hanskap@kaper-1.tmfweb.nl>
Message-ID: <983b18hhi1@cyan.nl.gxn.net>
Source record: 169156

Hi Doc,

'Doc <w5lz@oio.net> schreef in berichtnieuws 3AA3F190.97AE2E67@oio.net...
>
>
> Hans,
> Sure, it will work. How well it will work is
> another matter. It would be much better if it
> were away from any near by objects.
> Instead of 10 meters tall (1/2w), make it 5
> meters tall (1/4w), same as the radials. If you
> do try an antenna like this, I would be very
> interested in how it works, let us know...
> 'Doc

Sure will do that.
Rothammels Antennenbuch (my antenna-bible)
says it should be 1/2w plus buried radials. You
describe what we call a ground plane which is 1/4w,
elevated and 3 radials under 45 degrees with
horizon (or 135 degr. to vertical) I use a GP to
talk on 2 meters via the repeater.

Hans PA3HGM

4285. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:25:42 UTC
From: Hans Kaper <hanskap@kaper-1.tmfweb.nl>
Message-ID: <983b1ahhi2@cyan.nl.gxn.net>
Source record: 169153

Hi Bob,

R E Heath <re.heath@sympatico.ca> schreef in berichtnieuws
3AA489E0.3C8FBE81@sympatico.ca...
> BE PATRIOTIC -- ERECT A FLAGPOLE !!
>
> Bob, VA3BZ

Done already.
You're not much of a help though.

Hans. PA3HGM

4286. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:27:01 UTC
From: Hans Kaper <hanskap@kaper-1.tmfweb.nl>
Message-ID: <983b1ahhi3@cyan.nl.gxn.net>
Source record: 169154

Hi Rod,

Rod Marsh <rredbeak2@dingoblue.net.au> schreef in berichtnieuws
3aa4a120$0$25464$7f31c96c@news01.syd.optusnet.com.au...
> I agree with BOB.
> cheers Rod VK4XI
>
You're no help either.

Hans PA3HGM

4287. HF Mobile Antenna Plans?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:28:24 UTC
From: Steve Woodruff <sjwoodr.nospam@nospam.email.com>
Message-ID: <983addlgl1@flood.xnet.com>
Source record: 169152

Looking to save $$ and build some type of HF mobile antenna.
Looking for 20/40/80m only, anything else is a bonus. I've seen
hamsticks and the likes, (yes they are not expensive) but i'd prefer
a single antenna rather than a collection sitting in my trunk. Screwdriver
antennas looks interesting, but i don't want to spend the $$.... any
good plans available? I'd prefer something that i can mag-mount
for easy removal.

73, Steve, N9XBJ

4288. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:32:53 UTC
From: Hans Kaper <hanskap@kaper-1.tmfweb.nl>
Message-ID: <983b1bhhi4@cyan.nl.gxn.net>
Source record: 169157

Hi Bill,

Thanks for answering me, though I can't do much
with your suggestions. I don't have access to W6SAI's books easily
and I don't know what rotor cable might be.

Hans. PA3HGM

W4WNT <w4wnt@carolina.rr.com> schreef in berichtnieuws
Zf5p6.52653$Z8.9075919@typhoon.southeast.rr.com...
> There is a nice design for a three band vertical using rotor cable as
> radials in one of W6SAI's books. He used wood as a support. I've used PVC
> pipe painted with gren and brown "camoflage" paint. Works very well, even
> though it is hanging from a tree limb with the top at about 25-30 feet.
[SNIP]

4289. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:41:26 UTC
From: Hans Kaper <hanskap@kaper-1.tmfweb.nl>
Message-ID: <983b1chhi5@cyan.nl.gxn.net>
Source record: 169155

Hi Don,

Don Putnick <dputnick@alumni.caltech.edu> schreef in berichtnieuws
3AA5222E.44A05877@alumni.caltech.edu...
>
> Hans Kaper wrote:
> [snip]
> > They can't forbid me erecting the antenna, our constitution guarantees
> > freedom of collecting information from all over the world. (Free
> > translation) But if possible I will be kind to my neighbours.
>
> Hans, why not involve them in the decision? Take them two drawings,
> one of a commercial vertical on a rooftop and another of a multi-band
> yagi atop a 30-metre tower, and ask them which of the two they would
> rather have in their neighborhood.

Guess they will detest both. But on top of that, a 30 meter tower is too
expensive so there wil be no choosing.

>
> Also, point out the benefits of having an amateur radio operator in
> the neighborhood should a disaster occur.

Our country (Netherlands) is too small for a full size disaster. The last
disaster we had was in 1953. Flooding of Zeeland, a province of the
Newtherlands. All "disasters" since may well be covered with
hand phones (How do you call those in English?)

Hans PA3HGM

4290. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 18:52:14 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <983bo1$42q8$1@ID-20128.news.dfncis.de>
Source record: 169158
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Can you repeat that , i could'nt get a good
copycopycopycopycopycopycopycopycopycopycopy
.....

--
714 Sandpile,
The Mad Dog wavin' good bye
"A Marzo" <aerome@evl.net> wrote in message
news:3AA52131.D5EAF9BD@evl.net...
> What did he say?
>
> Rudy Marcelletti wrote:
>
> > Ditto that--102" stainless whip and 6" spring on a ball gives the 108"
you
> > are looking for. I have this setup mounted on top of a Suburban and
hits a
> > lot of stuff at speed--low wires, limbs, traffic lights and bridges.
Hit
> > scrapes the roofs at gas stations and banks. The whip is just very
slightly
> > bent near the top. Fiberglass will not hold up to this abuse. I use an
> > Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be
> > advised there are much better antenna systems out there, but they WILL
NOT
> > take the abuse that a stainless whip and spring will. Even my SGC whip
> > antenna will not take this abuse and that is why I mount that on the
left
> > side of the vehicle (center of the road has less over head obstructions)
and
> > about 2 feet lower than the stainless whip. The SGC antenna performs
> > better, but I will swap it out and put the stainless whip on if I am
going
> > to seriously abuse it, like go fast off road in woods. To improve
> > performance of the stainless whip, add about 10 feet of fine wire (22 to
28
> > gauge) with a gator clip. Do this at night because it looks goofy. Be
sure
> > you are in motion when you key up!
> > CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
> > >Use the stainless. Power handling will be assured. Get the 102 inch and
a
> > >spring mount.

> > >--
> > >CW
> > >KC7NOD
> > >"cf" <cfox007@bellsouth.net> wrote in message
> > >news:3AA44B1B.545DF854@bellsouth.net...
> > >> stainless steel will work for me also.
> > >>
> > >> cf wrote:
> > >>
> > >> > anyone have one of those GATOR 108" whips laying aroung they want
to
> > get
> > >> > rid of?
> > >> > thanks chris
> > >>
> > >
> > >
>

4291. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 20:12:45 UTC
From: Tad Danley <taddanley@nospamatatt.net>
Message-ID: <3AA54616.15A31239@att.net>
Source record: 169163

Bill Ogden wrote:

> I have been looking at the larger Tentec antenna tuner. It has two primary
> elements (coil and variable capacitor) and a switch to make several
> configurations from these two base elements. Most other current tuners use
> two capacitors and a coil. What are the pros and cons of these designs? I
> don't think I have ever seen a used Tentec tuner (this model) for sale.
> Does that mean that few people buy them, or that they are so good that no
> one sells them?

My Ten-Tec Model 238 tuner is not for sale - I bought it used in 1990! No problems with false resonances - there is only one setting for minimum SWR. Also works over a wide frequency range, including 160 meters to a limited degree.

73,

--
Tad Danley, K3TD
mailto:taddanley@att.net

Caution: Anti-spam address in use!

4292. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 20:24:41 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <3AA54789.3A8AA183@alumni.caltech.edu>
Source record: 169164

W6RCecilA wrote:
> Somewhere I saw a chart of gain VS height of radials.
> Does anybody know where I might have seen it? Was it
> on this newsgroup? thanks

A while ago I posted a reference to a simulation:
http://www.arising.com.au/people/Holland/Ralph/shortvert.htm
Might that be what you remember?

Truth in lending: others in this newsgroup questioned the
validity of the simulation. I have no reason to doubt them.

4293. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 20:31:52 UTC
From: Don Putnick <dputnick@alumni.caltech.edu>
Message-ID: <3AA54938.908BCFBF@alumni.caltech.edu>
Source record: 169165

Hans Kaper wrote:
[snip]
> Guess they will detest both. But on top of that, a 30 meter tower is too
> expensive so there wil be no choosing.

Odds are they would choose the vertical.

[snip]
All "disasters" since may well be covered with
> hand phones (How do you call those in English?)

Cell phones.

A couple other ideas for you

The ARRL has a book titled "Vertical Antenna Classics". I recall it being not very expensive. You can probably buy it from their web site.

Also one of the antenna vendors advertises an antenna and tripod suitable for use in the back yard or garden. I'm having a senior moment - don't remember their name.

4294. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 21:15:14 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa55357$0$70804$bbae4d71@news.net-link.net>
Source record: 169167
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

What did you not comprehend?
A Marzo wrote in message <3AA52131.D5EAF9BD@evl.net>...
>What did he say?
>
>Rudy Marcelletti wrote:
>
>> Ditto that--102" stainless whip and 6" spring on a ball gives the 108"
you
>> are looking for. I have this setup mounted on top of a Suburban and hits
a
>> lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit
>> scrapes the roofs at gas stations and banks. The whip is just very
slightly
>> bent near the top. Fiberglass will not hold up to this abuse. I use an
>> Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be
>> advised there are much better antenna systems out there, but they WILL
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>> take the abuse that a stainless whip and spring will. Even my SGC whip
>> antenna will not take this abuse and that is why I mount that on the left
>> side of the vehicle (center of the road has less over head obstructions)
and
>> about 2 feet lower than the stainless whip. The SGC antenna performs
>> better, but I will swap it out and put the stainless whip on if I am
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>> to seriously abuse it, like go fast off road in woods. To improve
>> performance of the stainless whip, add about 10 feet of fine wire (22 to
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>> gauge) with a gator clip. Do this at night because it looks goofy. Be
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>> you are in motion when you key up!
>> CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
>> >Use the stainless. Power handling will be assured. Get the 102 inch and
a
>> >spring mount.
>> >--
>> >CW
>> >KC7NOD
>> >"cf" <cfox007@bellsouth.net> wrote in message
>> >news:3AA44B1B.545DF854@bellsouth.net...
>> >> stainless steel will work for me also.
>> >>
>> >> cf wrote:
>> >>

>> >> > anyone have one of those GATOR 108" whips laying aroung they want to
>> get
>> >> > rid of?
>> >> > thanks chris
>> >>
>> >
>> >
>

4295. Re: QEX, fractal antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 21:17:56 UTC
From: accrider3@aol.comnojunque
Message-ID: <20010306161756.02318.00000067@ng-mg1.aol.com>
Source record: 169166

Oh no not the F word again
73
Dale KG4KZG

4296. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 21:42:33 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA559C9.164A@wt.net>
Source record: 169168

Richard Harrison wrote:
>
> Mark Keith wrote:
> "I used to run both (a good vertical and a horizontal dipole) on 40m at
> night. The dipole NEVER won overseas."
>
> Suspect the dipole was not in the clear and up at least 66 feet, which
> is 1/2-wave at 40m.

Thats a good point.It was in the clear, but closer to 1/4 wave up than 1/2 wave. The ground plane I was using was at the same height. But even if I had the dipole at 1/2 wave up, and kept the GP at 1/4 wl up, I still think the vertical would have won. After all, in order for the dipole to win in such a case to say VK land, the signal from the dipole would have to increase to them over 4 s units. How much gain this equates to I dunno. Doesn't really matter. It's not the gain that does the trick, it's the pattern.Everyone knows a dipole has more free space gain than a 1/4 wl GP. I don't think raising the dipole up to 66 ft would have made it the winner. Maybe much closer, but I think the GP still would have won out. I just don't see the dipole gaining four S units to VK just from raising another 30 ft. I may be wrong, But I kinda doubt it.

> For a comparison between the radiation of a 1/2-wave vertical dipole
> with its center 1/2-wave over ground, and the radiation of a 1/2-wave
> horizontal dipole, 1/2-wave over ground, see: Fig 4(A) on page 3-5 of
> the 19th edition of the ARRL Antenna Book.

I don't see that in mine. I have the 16th edition.
>
> The solid outline of the big signal is for the horizontal antenna. The
> dashed outline of the puny signal is for the vertical antenna. Both
> antennas are over "average ground".

This doesn't really make sense at all to me. How can a 1/2 wave vertical at 1/2 wave high have a puny signal compared to the same antenna horizontal? On many tests on 10m antennas I've never seen this to be the case in the real world. Both are relatively clear from the ground. In the real world, I don't think there is much difference in efficiency between the two, just different patterns. Actually, a 1/2 up is not a very good height to mount a vertical for many of the same reasons you state for the low dipole. Not in efficiency per say, but pattern wise. A vertical at 1/2 wave up shows quite a bit higher angle radiation than one at 1/4 wl up. But lets take 10m as an example..At my average height of 35-40 ft up, which would be over a wavelength high, I see very little

difference between a horizontal or vertical 1/2 wave in apparent efficiency. Only the pattern makes a big change. I know from real world use, I'd rather have the vertical anyday. Not because it's any more efficient, but it puts the power where I want it. Mostly at low angles with the null overhead instead of off to both sides. I've got a 10m 1/2 vertical at 20 ft right now. I'd be willing to bet if I mounted a horizontal dipole at the same 20 ft, it wouldn't be any better. Likely worse to many people I bet. My point is not to really claim either type as better, but rather use the type that fits the need. There are times when a dipole is the way to go. But there are also times when the vertical is the logical choice. Just depends on what you want to do. It's the "verticals always lose" comments that get me going. I know from my experience this is just not the case. But then on the other hand, if you are going to use a vertical, use a REAL vertical properly mounted. Not a 350$ piece of junk with an improper radial system. I always have good results with verticals because I never compromise on construction, size, or radial systems. Or at least if I do, I don't blame it on the antenna if it doesn't work to expectations. This is the case with 75% of the people that downplay verticals. They say they don't work, because they refuse to do the work needed to make one work properly. I've never spent a dime on an HF vertical. I build them myself. But all mine were still full size, with proper radial systems that likely would outdo the "average" setup by a large magnitude. I once compared my full size 32 ft radiator with a hustler multiband vertical. What a joke the hustler was...A dummy load on a stick. Totally useless as far as my vertical standards go. I bet my 8 ft mobile antenna was better or at least equal in performance. And your right, the good ground here doesn't hurt things either, but I still designed mine to have a radial system that could be used over poor ground and still do well. I say, use both types. They both have their place. It's fun to switch back and forth and see the differences. I noticed alot of weird things about propogation on 40m at night doing this. MK
--
http://web.wt.net/~nm5k

4297. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 21:46:36 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA55ABC.679D4C54@IEEE.org>
Source record: 169069
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Rudy Marcelletti wrote:
> What did you not comprehend?

Why you posted the same message eleven times?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4298. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 21:50:42 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA55BB2.E1B37687@IEEE.org>
Source record: 169070

W7TRX wrote:
> Any other autotuner antennas?

I ran a 12ft whip with an SGC230. It worked well on 20m-10m.
It worked better than I expected on 40m.
--
http://www.mindspring.com/~w6rca

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4299. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:04:54 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA55F06.21EE@wt.net>
Source record: 169072

W6RCecilA wrote:
>
> Mark Keith wrote:
> > To find out the effects of height over ground, I
> > think modeling is better as you can specify the ground conditions etc.
>
> For what it's worth, I modeled a 1/4WL vertical with four 1/4WL
> horizontal radials using EZNEC. Here's the height of the radials,
> gain in dBi, and take-off angle. 10 -.09@22deg, 20 .06@18deg,
> 25 .08@17deg, 30 .06@16deg, 40 -.13@15deg Note that from one ft
> to 40ft the gain is maximum at 25ft for a 40m vertical.
>
> Drooping the radials down at 45deg from a height of 25ft yielded
> a gain of .23@20deg. Adding another identical array 1/4WL away
> and feeding it at 90deg gave the expected cardioid pattern with
> a gain of about 3dBi.

Hummm, I think even modeling can be deceptive sometimes. I know in the real world, 36 ft up was better than 25 ft up. I've noticed comparing dipoles and verticals with modeling that the results can skew towards the dipole in many cases. The real world performance didn't really agree too much unless I set the ground cdx for the vertical as "VG". I noticed when I modeled my 40m GP using "average" ground cdx the results didn't match the real world results at all when comparing against a dipole at the same height. I did notice when upping the GP height to 1/2 wl up, the pattern went all to heck. I'm not sure if this is quite a drastic in the real world or not. I've never been able to run a 40m GP at 66 ft to try. I do know from the real world, and eznec seems to confirm, a 1/4 wl up is a real nice height for a 40m GP. 25 ft is ok, but I'd rather be at 36 ft regardless of what the modeling says. I know from the real world results, the higher one did a bit better. MK
--
http://web.wt.net/~nm5k

4300. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:05:14 UTC
From: Jack Thurston <fire228@cybertrails.com>
Message-ID: <3AA55F1A.1191D0EF@cybertrails.com>
Source record: 169071
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

On fiberglass whips,

Something in a 96" model some of you may wish to
consider/try. The Francis CB-28 Wheeler Dealer or
the CB-50 Amazer. If the 96" will work for your
particular set-up I heartily recommend the CB-50.

73,
NAO911/Jack

http://www.angelfire.com/az/firecommunications/

4301. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:08:20 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA55FD4.204D@wt.net>
Source record: 169073

W6RCecilA wrote:
>
> Mark Keith wrote:
> > To find out the effects of height over ground, I
> > think modeling is better as you can specify the ground conditions etc.
>
> For what it's worth, I modeled a 1/4WL vertical with four 1/4WL
> horizontal radials using EZNEC. Here's the height of the radials,
> gain in dBi, and take-off angle. 10 -.09@22deg, 20 .06@18deg,
> 25 .08@17deg, 30 .06@16deg, 40 -.13@15deg Note that from one ft
> to 40ft the gain is maximum at 25ft for a 40m vertical.
>
> Drooping the radials down at 45deg from a height of 25ft yielded
> a gain of .23@20deg. Adding another identical array 1/4WL away
> and feeding it at 90deg gave the expected cardioid pattern with
> a gain of about 3dBi.

One other point...I don't know if the decrease in performance from lowering to 25 ft from 36 ft, was due to the extra ground losses, or the pattern changes. I suspect the ground loss, being as I only used 4 radials. MK

--
http://web.wt.net/~nm5k

4302. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:11:02 UTC
From: jflanders2@home.com
Message-ID: <3aa56009.7849389@news>
Source record: 169076

On Tue, 06 Mar 2001 15:50:42 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>
>I ran a 12ft whip with an SGC230. It worked well on 20m-10m.
>It worked better than I expected on 40m.
>--
>http://www.mindspring.com/~w6rca
>
How good was that? Can you compare it to anything - maybe a 40M
hamstick, for instance?

Jerry W4UK

4303. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:31:08 UTC
From: A Marzo <aerome@evl.net>
Message-ID: <3AA5652C.2450FB35@evl.net>
Source record: 169077
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

We can't comprehend why it was posted 11 times. It seems a just a tad bit strange! ;-)

Rudy Marcelletti wrote:

> What did you not comprehend?
> A Marzo wrote in message <3AA52131.D5EAF9BD@evl.net>...
> >What did he say?
> >
> >Rudy Marcelletti wrote:
> >
> >> Ditto that--102" stainless whip and 6" spring on a ball gives the 108"
> you
> >> are looking for. I have this setup mounted on top of a Suburban and hits
> a
> >> lot of stuff at speed--low wires, limbs, traffic lights and bridges. Hit
> >> scrapes the roofs at gas stations and banks. The whip is just very
> slightly
> >> bent near the top. Fiberglass will not hold up to this abuse. I use an
> >> Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip. Be
> >> advised there are much better antenna systems out there, but they WILL
> NOT
> >> take the abuse that a stainless whip and spring will. Even my SGC whip
> >> antenna will not take this abuse and that is why I mount that on the left
> >> side of the vehicle (center of the road has less over head obstructions)
> and
> >> about 2 feet lower than the stainless whip. The SGC antenna performs
> >> better, but I will swap it out and put the stainless whip on if I am
> going
> >> to seriously abuse it, like go fast off road in woods. To improve
> >> performance of the stainless whip, add about 10 feet of fine wire (22 to
> 28
> >> gauge) with a gator clip. Do this at night because it looks goofy. Be
> sure
> >> you are in motion when you key up!
> >> CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
> >> >Use the stainless. Power handling will be assured. Get the 102 inch and
> a
> >> >spring mount.
> >> >--
> >> >CW
> >> >KC7NOD
> >> >"cf" <cfox007@bellsouth.net> wrote in message
> >> >news:3AA44B1B.545DF854@bellsouth.net...

> >> >> stainless steel will work for me also.
> >> >>
> >> >> cf wrote:
> >> >>
> >> >> > anyone have one of those GATOR 108" whips laying aroung they want to
> >> get
> >> >> > rid of?
> >> >> > thanks chris
> >> >>
> >> >
> >> >
> >

4304. Re: Inexpensive Support for Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:33:02 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <+WKlOrO76rwXnxgSj3MiP9Rijftj@4ax.com>
Source record: 169078

"Mark Erbaugh" <mark@nospam.microenh.com> wrote:

>
>What's the least expensive way to get the antenna 40 + feet up?
>
>73,
>Mark
>

The 19th edition (last year's) of the ARRL Antenna Book shows, on page 22-4, an A-Frame mast made of three 2"x2"s, each 22' long, for a height of just over 40'. Requires 3 guy wires. Looks like a relatively inexpensive weekend project with lumber you can get at any yard.

Also, my 2001 Radio Shack catalog shows a 36-foot telescoping, guyed metal mast at $70.

Bob
k5qwg

4305. Re: QEX, *ractal antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:36:01 UTC
From: Gilbert Mouget <gilbert.mouget@waika9.com>
Message-ID: <MPG.150f84ba42607e06989684@news.free.fr>
Source record: 169079

In article <20010306161756.02318.00000067@ng-mg1.aol.com>,
accrider3@aol.comnojunque says...

> Oh no not the F word again
> 73
> Dale KG4KZG

Are the french banned from the newsgroup then ?
73
Gilbert F6BOM

4306. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:45:42 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA56896.7B515F2A@IEEE.org>
Source record: 169080

Jerry Flanders wrote:
>
> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> >I ran a 12ft whip with an SGC230. It worked well on 20m-10m.
> >It worked better than I expected on 40m.

> How good was that? Can you compare it to anything - maybe a 40M
> hamstick, for instance?

It was one S-unit down from my homemade bugcatcher.
--
http://www.mindspring.com/~w6rca

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4307. Re: Inexpensive Support for Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 22:52:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA56A44.8ADA398F@IEEE.org>
Source record: 169081

Bob Miller wrote:
> The 19th edition (last year's) of the ARRL Antenna Book shows, on page 22-4, an
> A-Frame mast made of three 2"x2"s, each 22' long, for a height of just over 40'.
> Requires 3 guy wires. Looks like a relatively inexpensive weekend project with
> lumber you can get at any yard.

I've found no reason to make it an A-frame for a fixed installation.
I use 2x4s in a 4x4 configuration for the first 26 ft and then use
a 20ft piece of 1.25" fiberglas for the next 16ft. I use treated lumber
and dig a 3ft hole for the 4x4.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4308. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:05:41 UTC
From: Mad Dog <lgssl@netzero.net>
Message-ID: <983qlj$671v$1@ID-20128.news.dfncis.de>
Source record: 169082
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

What was posted 11X, i only got 1 reply on all 11 of my
computers.............
Are we there yet Dad,I'm hungry .LOL

--
714 Sandpile,
The Mad Dog wavin' good bye
"A Marzo" <aerome@evl.net> wrote in message
news:3AA5652C.2450FB35@evl.net...
> We can't comprehend why it was posted 11 times. It seems a just a tad bit
> strange! ;-)
>
> Rudy Marcelletti wrote:
>
> > What did you not comprehend?
> > A Marzo wrote in message <3AA52131.D5EAF9BD@evl.net>...
> > >What did he say?
> > >
> > >Rudy Marcelletti wrote:
> > >
> > >> Ditto that--102" stainless whip and 6" spring on a ball gives the
108"
> > you
> > >> are looking for. I have this setup mounted on top of a Suburban and
hits
> > a
> > >> lot of stuff at speed--low wires, limbs, traffic lights and bridges.
Hit
> > >> scrapes the roofs at gas stations and banks. The whip is just very
> > slightly
> > >> bent near the top. Fiberglass will not hold up to this abuse. I use
an
> > >> Icom AH-4 antenna coupler that tunes 40 to 6 meters with this whip.
Be
> > >> advised there are much better antenna systems out there, but they
WILL
> > NOT
> > >> take the abuse that a stainless whip and spring will. Even my SGC
whip
> > >> antenna will not take this abuse and that is why I mount that on the
left
> > >> side of the vehicle (center of the road has less over head
obstructions)

> > and
> > >> about 2 feet lower than the stainless whip. The SGC antenna performs
> > >> better, but I will swap it out and put the stainless whip on if I am
> > going
> > >> to seriously abuse it, like go fast off road in woods. To improve
> > >> performance of the stainless whip, add about 10 feet of fine wire (22
to
> > 28
> > >> gauge) with a gator clip. Do this at night because it looks goofy.
Be
> > sure
> > >> you are in motion when you key up!
> > >> CW wrote in message <981ukuaie1@slb5.atl.mindspring.net>...
> > >> >Use the stainless. Power handling will be assured. Get the 102 inch
and
> > a
> > >> >spring mount.
> > >> >--
> > >> >CW
> > >> >KC7NOD
> > >> >"cf" <cfox007@bellsouth.net> wrote in message
> > >> >news:3AA44B1B.545DF854@bellsouth.net...
> > >> >> stainless steel will work for me also.
> > >> >>
> > >> >> cf wrote:
> > >> >>
> > >> >> > anyone have one of those GATOR 108" whips laying aroung they
want to
> > >> get
> > >> >> > rid of?
> > >> >> > thanks chris
> > >> >>
> > >> >
> > >> >
> > >
>

4309. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:21:55 UTC
From: W7TRX <w7trx@mindspring.com>
Message-ID: <983rfn$2vc$1@nntp9.atl.mindspring.net>
Source record: 169083

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA56896.7B515F2A@IEEE.org...
> Jerry Flanders wrote:
> >
> > W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> > >I ran a 12ft whip with an SGC230. It worked well on 20m-10m.
> > >It worked better than I expected on 40m.
>
> > How good was that? Can you compare it to anything - maybe a 40M
> > hamstick, for instance?
>
> It was one S-unit down from my homemade bugcatcher.
> --
> http://www.mindspring.com/~w6rca
>

Cecil,

Thanks for the "hands-on" data. To get those results on 40m-10m from a 12ft whip is great news.

What was the mounting location on your vehicle? I know the middle of the roof is ideal, but a 12ft whip up top is going to get whacked!!! If this kind of performance can be achieved with a bumper or rear side panel mount that would be ideal for my needs.

Also what was the source of your 12ft whip? I planned on trying a 102" whip with a Hustler mast.

Thanks, Tracy
W7TRX

4310. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:33:31 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AA573CB.1B46@bellsouth.net>
Source record: 169108
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Hey, Dick,

You just reminded me of something. Speaking of "base coils" that adjust all over creation, I have one of those ancient Bay Mobile antennas that was the fore runner of the Webster Bandspanner. It has the 1 1/2" base coil with a 102" whip that slides in and out to resonate on frequency. I found it at a local hamfest (Charlotte, NC) for 10 bucks. I just bought it for nostalgia and, mostly, it hangs on a rack in the garage. It's not very efficient, of course, but I suppose in its time, it was considered "neat". Musta been around 1950 or so? I have used it on 20-10 meters and it works pretty fair. Seventy five sucks! Just for kicks, I once pondered a way to move it up and down like a screwdriver. NAH! Not worth the trouble. Still, it's in excellent condition and, I suppose, it spent quite a few years in someone's barn judging from the lack of wear--even the whip isn't bent.

I once loaned it to a friend and he broke it! But, being a machinist, he repaired it good as new (or even better)! Can't tell it was ever damaged and it works as ever--which was never all that good. LOL!

73

Jerry
K4KWH

Richard McCollum wrote:
>
> It would probably help this discussion if cf told us what he had in mind.
> Somewhere I have the feeling that he got onto one of those mobile base
> coils that adjusts all over creation. They did indeed use 108" whips,
> pretty standard in the pre-CB days.
>
> My guess is that 102 would be equally inefficient.
>
> Dick Nï¿½BK
>
> "Mad Dog" <lgssl@netzero.net> wrote in message
> news:981l01$r2bs3$1@ID-20128.news.dfncis.de...
> > Okay ,but a longer antenna will lower the resonant frequency.
> > I could see hitting 10,11 and 12meters using a matcher but reception on
> > 40meters
> > will suffer greatly. A matcher only fools the radio with a 50ohm load
> via
> > adjustable
> > capacitive/inductive circuit. It wont change the resonant frequency of

> your
> > antenna.
> > --
> > KG4LBP, George
> >
> >
> > --
> > 714 Sandpile,
> > The Mad Dog wavin' good bye

4311. Heathkit HW-101

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:38:47 UTC
From: docky <docky@earthlink.net>
Message-ID: <byep6.1387$oz.152906@newsread1.prod.itd.earthlink.net>
Source record: 169084

I have dropped the price on the 101 by $50 take a look
http://www.heathkits.com 73

4312. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:42:05 UTC
From: B-Squared <rbethman@home.com>
Message-ID: <hBep6.157058$B6.35188592@news1.rdc1.md.home.com>
Source record: 169085
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

If you ground the antenna mast, and the antenna is installed as instructions directed, then the static issue should not be a problem.

"Michael"
> Thanks for all the replies. If I get it correct, I need to connect the
> antenna ground to a ground rod. What about the radiating element? There
must
> be electric charge buildup on the radiating elemnent as well. As I found
> out, the antenna mast is coated with an insulating paint. So I need to
> ground the mast separately as well, right?
>
> Thanks
> "BD" <bodu@pobox.com> wrote in message
>
> > Can't static-electricity also build up in the antenna, which will fry
your
> > rig and/or you when plugged into it, if there's no ground?...
> >
> > "B-Squared" <rbethman@home.com> wrote in message
> >
> > > 1) A good healthy ground
> > >
> > > 2) Yes.
> > >
> > > 3) Burn down your house
> > >
> > > You need to get a good ground up to the mast or whatever you have for
> your
> > > antenna support. It should not be bent in sharp angles as you work it
> > down
> > > to your ground rod(s). Multiple ground rods in a grid is probably the
> > best
> > > protection, creating a ground "window".
> > >
> > > As to antenna performance, you may actually improve it.
> > >
> > > > What do you guys use for antenna lightening protection? I have a
> rooftop
> > > > antenna. Is it necessary to intall lightening protection? I always
> > > > disconnect my radio when the storm approaches. What's the worst that
> can
> > > > happen(without lighten protection)? What kind of system do you
> > recommend?

> > > Is
> > > > it going to affect the antenna performance? Thanks
> >
> >
> >
> >
>
>

4313. Rebuilding MFJ-968 Need Diagram

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:43:00 UTC
From: wrhood@exis.net
Message-ID: <3aa574ac.9745445@news.exis.net>
Source record: 169086

I guess my first post looked more like a for sale tittle, so the re-post. Ihave afriend gutted MFJ-968, someone burnt out the coil and cut out the balum and connection wires. I need a diagram on installing a junk box roller inductor. and use the split variable cap. We want to at least use the box and RF indicator and the cap, if we can
Sonny, K4WYS <wrhood@exis.net>

4314. Re: HF Mobile Antenna Plans?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-06 23:56:49 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AA57941.5929@bellsouth.net>
Source record: 169106

Steve,

There are as many solutions to this as liver pills in a bottle. One
way is to find a plastics supplier and have him machine you a coil
form from nylon or Delrin. Have him thread the circumference of the
form at 10 turns per inch and mill indentions at equal distances around
the form. This will allow you to tap the coil at various places for
different bands (not my favorite way, but it *does* work). Use #14
silverplate wire to wind the coil. Cost of coil and wire about $30.
Have the machinist bore thru the center and pipe thread each end for
a 1/2" X 1/8" brass bushing--common item in home and hardware stores for
less than $2 each. The threads inside this bushing are the same as the
3/8" X 24 TPI used on most masts and whips. You might want to "chase"
these threads with a 3/8" X 24 tap for good measure. Screw these into
the ends of this coil tightly. Wind the wire onto the form and secure
at each end with a stainless screw. This is to keep the wire tight and
allow for adjustment if needed. Then attach each end of the windings
to the coil. For your form, it depends on how large you want it--
2-3" dia works well at around 14" long for the 3" size. Stop your
windings about 1 1/2" from each end (you don't want the brass bushings
within the windings.

For a lower mast 3 or 4 ft long, buy 3/8" brass rod OR get some 3/4"
copper tubing and braze or rivet two of those same bushings.

There's a lot of ways to do this. I have made many loading coils this
way and they work very well--nothing beats a good center-loaded whip
for performance. You are only limited by your own imagination.

73

Jerry
K4KWH

Steve Woodruff wrote:
>
> Looking to save $$ and build some type of HF mobile antenna.
> Looking for 20/40/80m only, anything else is a bonus. I've seen
> hamsticks and the likes, (yes they are not expensive) but i'd prefer
> a single antenna rather than a collection sitting in my trunk. Screwdriver
> antennas looks interesting, but i don't want to spend the $$.... any
> good plans available? I'd prefer something that i can mag-mount
> for easy removal.
>
> 73, Steve, N9XBJ

4315. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 00:07:27 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA57BBF.15C0@wt.net>
Source record: 169087

W7TRX wrote:
>
> Greetings,
>
> I am considering installing an autotuner (AH-4) in my vehicle to allow
> multiband tuning of a fixed length whip. I realize there are other antenna
> solutions that are more efficient (screwdriver, bugcatcher, etc) but for my
> specific purposes, the positives of this configuration may out weigh the
> negatives. I am not going to detail my personal needs in this forum.
>
> I understand that an 102" stainless whip is likely the poorest antenna that
> can be tuned by the AH-4. SGC uses a dual, helically wound fiberglass whip
> that has two separate resonances . The Icom whip appears to be just a
> stainless whip, but it may have some base loading(not sure).
>
> I was trying to determine the best antenna to use with an autotuner. This is
> also helpful for me to have a better understanding of different antenna
> configurations. What is the best way to improve the efficiency of an
> autotuner configuration? (no flames or wise cracks needed).
>
> Here are my brainstorms...
>
> Idea #1)
> I am considering homebrewing a helically wound whip, with a top hat. I was
> considering stripping down a 7 foot fiberglass Firestick whip. Then
> rewinding with one or two lengths (ala SGC) of insulated copper wire for the
> antenna. The top of these Firestick's have a brass screw for tuning. This
> would make attachment of a top hat very simple.
>
> Should I just wind as much wire on the whip as possible?

I don't think I'd go that route. You could get it to work well on the
lowest band, but the high bands likely wouldn't be too hot. I guess it
would be fairly easy to try though, say using a stock 80m hamstick etc.
>
> Is there advantage to wider spaced winding at the bottom, with closer spaced
> winding at the top?

In general, yes. I think the lower the frequency the more difference it
makes. What it amounts to is a normal whip with a narrow lumped coil
instead of the non varying pitch. The current distribution is improved
on the "lumped" type setup. Tne drawback can be increased losses due to
a tightly wound lumped coil. For the best performance, use thick wire,
and slightly seperate the windings. This is easy if you use insulated
wire. The insulation acts as a spacer for winding.

>
> Is a top hat of any real benefit to this configuration.?

Only on the lowest bands in general. I don't use a hat myself. Too much visual clutter, and windload for my lightweight antennas. I just try to use the longest stingers I can.

>
> Idea #2)
> Installing a hamstick style antenna, let the tuner do it's thing, and seeing
> how well it loads up on multiple bands. (Which band hamstick?). Since these
> are resonant antennas I was not sure how well they would load up on other
> bands. I was just brain storming and thought using an 80m whip (it has the
> most wire) and trying it on the higher bands. Maybe adding a longer stinger
> so it is no longer resonant in the ham bands?

This goes back to number #1. if you do this, it's best to use a higher band stick, and add longer stinger to it for lower bands. Lets say you have a 11m firestick that uses no real stinger. "Some are this way". This antenna works ok on 10 as is. It will work on all the lower bands down to 20m with a fairly short added stinger. On 20m, you would probably need about a 2-2.5 ft stinger to tune the 11m antenna to 20m. Each band, 17,15,12 would use an increasingly shorter stinger. Sure, you have to get out and switch, but at least you have a properly functioning antenna on each of these bands that will work well. A 20m stick can work 40m with about 3 more feet of stinger. Varies with the stick used. I have one 20m stick that works 20m with no stinger. "it's fairly lousy on 20m due to this fact. But with a 3 ft stinger it works 40m, and does it very well. I get S9 plus reports commonly with 100w radio around the state in the daytime.

>
> Idea #3)
> Adding a Hustler mast to the bottom of a hamstick for additional physical
> length? (approx 12 feet).

For a high band antennna this can make it way too long. On a low band antenna where the coil is on the upper section, the mast will make very little difference in resonant frequency. But, with it raising the coil up on the structure, it greatly increases efficiency. I have a 3 ft solid mast that I add to my normal 8-9 ft antenna when I'm parked. On 80m, I might only shift freq maybe 200 kc by adding this lower mast. But my efficiency takes a BIG jump. Well worth it for the low bands. I do it all the time.

>
> Idea #4)
> I just picked up a 10m hamstick style antenna from Iron Horse. The base and
> stinger end both have 3/8x24 threads. This allows me to unscrew the stinger
> assembly from one antenna, then in it's place, install another full hamstick
> antenna. This provides additional overall length (12 feet) as well
> additional helical windings (2 hamstick base sections).

This can work. But use a long stinger on top of all that or it will be a mobile dummy load.
>
> Any other autotuner antennas?

My all band antenna is a 11m firestick that is 5 ft tall. I cut out the windings in the middle and added a 80m loading coil that is nearly 3 inches wide. I have a tap on this coil for 40m if needed. Now, with the basic antenna with a 2 inch stinger, and the coil bypassed with a jumper, I tune 10m. For each higher band up to 20m, I have a longer stinger. Appx 2 ft for 20m. All the rest shorter as you go up band. So we're workin 20-10 so far ... Now for 40m, I unhook the coil jumper, and hook it to the 40m tap, and add a almost 4 ft stinger. Viola! We're on 40m. With bugcatcher performance I might add due to the big coil. 80m, unhook the jumper and run the whole coil with the same 4 ft stinger. 80m with again, bugcatcher performance . Works all bands and weighs very little. No spring needed. No heavy mounting gear. Add the 3 ft solid mast under this for 80/40m when parked and you are really with the program. Actually , I've driven with it that way with no problems. But don't do it too often. I'm going to make a higher performance version of this all bander pretty soon. A bit taller and the coil higher up on the stick. For the present coil I used wide plastic tubing as the form. at each end I have a "plug" with a hole in the middle that lets the stick slide thru. I mount the coil on the stick, and glue it on so it won't move. I used #12 insulated house wire to wind the coil. Then the coil has a black plastic covering over this to match the rest of the stick. The antenna is all black. Looks like a black plastic coated bugcatcher sorta. MK
--
http://web.wt.net/~nm5k

4316. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 00:21:31 UTC
From: joe and tanya <bocephu-s-1@home.com>
Message-ID: <fafp6.349768$w35.56267967@news1.rdc1.nj.home.com>
Source record: 169088
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

yes it does no probs yet 2 months now good bandwith and low swr
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA4656C.DBAEDA4C@IEEE.org...
> cf wrote:
> > i am looking for one that is 108" need the extra inches to be able to
tune
> > 10-40 meters.
>
> The extra inches won't help much but you can buy extensions
> to install under the whip. Hustler makes them and the Texas
> Bugcatcher guy makes them.
>
> The RS fiberglas whips were designed for 5 watts and the center
> wire is very small. I don't know if it will take 100w or not.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4317. Radio Shack AntennaQST Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 00:28:37 UTC
From: Gary Danaher <gdanaher@home.com>
Message-ID: <3AA580A3.939B6234@home.com>
Source record: 169089
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

I'm looking for an article published in QST in what I thought was the summer of 1998 to use a specific Radio Shack TV antenna for 2 meters. I built the antenna and it works just great, but have been asked to do a presentation at the local club, and can't find the original article. I've searched the QST technical data base for a title but haven't located the article. Anybody happen to remember the article and could let me know the month and year? Certainly would be helpful.

Gary
AB5RM

4318. Re: 3 ele yagi for 6m feed?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 00:48:39 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <9840h7geg1@news.netmar.com>
Source record: 169090

http://www.uksmg.org/smallantenna.htm

http://members.aol.com/n2kbk/6m.html

In article <9754js$7li$1@news.kolumbus.fi>, Gary <heppu@boxi.net> writes:
>Does anyone have any, good and practical drawings for a 3 element yagi for
>six meters? Gamma or folded dipole, or even T-match would suit our needs.
>
> 73, Kari, oh8mfh in KP34UG
>
>

----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

4319. Re: Radio Shack AntennaQST Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 01:27:43 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <qd3batof4gg60tul443f7r6dp4fqss9gv4@4ax.com>
Source record: 169091

The only thing I see in 1998 that might be it is in the January issue.
The article is, "A 2-Meter Phased Array Antenna." Didn't see anything
in 1997 or 1999.

Dick - W6CCD

On Wed, 07 Mar 2001 00:28:37 GMT, Gary Danaher <gdanaher@home.com>
wrote:

>I'm looking for an article published in QST in what I thought was the
>summer of 1998 to use a specific Radio Shack TV antenna for 2 meters. I
>built the antenna and it works just great, but have been asked to do a
>presentation at the local club, and can't find the original article.
>I've searched the QST technical data base for a title but haven't
>located the article. Anybody happen to remember the article and could
>let me know the month and year? Certainly would be helpful.
>
>Gary
>AB5RM
>

4320. Re: Radio Shack AntennaQST Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 01:35:50 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <98439mjhv1@news.netmar.com>
Source record: 169093
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

http://www.geocities.com/kd4owl/pdf/2m_yagi_from_tv.pdf

In article <3AA580A3.939B6234@home.com>, Gary Danaher <gdanaher@home.com>
writes:
>I'm looking for an article published in QST in what I thought was the
>summer of 1998 to use a specific Radio Shack TV antenna for 2 meters. I
>built the antenna and it works just great, but have been asked to do a
>presentation at the local club, and can't find the original article.
>I've searched the QST technical data base for a title but haven't
>located the article. Anybody happen to remember the article and could
>let me know the month and year? Certainly would be helpful.
>
>Gary
>AB5RM
>
>

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http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

4321. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 01:40:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9843fkrek1@plutonium.btinternet.com>
Source record: 169092

A short (in terms of wavelength) helical HF antenna is VERY sharply resonant on a single 1/4-wave frequency only.

Use of an ATU, whether automatic or not, will permit the range of resonant frequencies to be pulled only a little, perhaps over some tens of kHz in the same band.

On other higher frequency bands, although an automatic tuner may indicate what it thinks is an impedance match, the helical antenna will be extremely inefficient. On higher frequencies the helical winding may be several lossy wavelengths long. If it radiates at all, everything will go straight up and perhaps straight through the ionosphere. An ATU cannot convert what is essentially a single-band antenna to a multiband job.

The situation is no different to trying to pull the frequency of a quartz crystal-controlled oscillator into another band by means of a tightly couple variable L+C network. Loss becomes so great the poor thing just stops oscillatiing before its been dragged, protesting, more than a few 100 kHz at most.

The AH-4 tuner manages OK at any frequency above 3.5 MHz with any (unloaded) antenna longer than some relatively short length. If you wan't to work 160 meter band with a 102" whip, there's nothing which can be done about it except to stop the car and, with the help of an aligator clip, attach an extra length of wire.

If you base-load the whip, or load it in any other way than with a top capacitance hat, then it reverts to a single-band antenna. It may, of course, work after a fashion on more than one band if you deliberately make the loading coil lossy.

A capacitance hat without a coil is the most efficient way of loading any short vertical. It will allow the tuner to operate OK at a lower frequency without increasing antenna height. On the other hand, at the lowest frequency most of the lost power will be used to heat up the tuner coils. So some judicious de-rating of the manufacturer's stated power handling ability may be in order.

If you have no great desire to work below 7 MHz you will very likely find the AH-4 and a 102" whip are an efficient multi-band combination. The AH-4 will behave exactly as a base-loading coil on all bands.
--
****
Regards, Reg, G4FGQ

Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

W7TRX <w7trx@mindspring.com> wrote in message
news:9836mfhcd1@slb7.atl.mindspring.net...
> Greetings,
>
> I am considering installing an autotuner (AH-4) in my vehicle to
allow
> multiband tuning of a fixed length whip. I realize there are
other antenna
> solutions that are more efficient (screwdriver, bugcatcher, etc)
but for my
> specific purposes, the positives of this configuration may out
weigh the
> negatives. I am not going to detail my personal needs in this
forum.
>
> I understand that an 102" stainless whip is likely the poorest
antenna that
> can be tuned by the AH-4. SGC uses a dual, helically wound
fiberglass whip
> that has two separate resonances . The Icom whip appears to be
just a
> stainless whip, but it may have some base loading(not sure).
>
> I was trying to determine the best antenna to use with an
autotuner. This is
> also helpful for me to have a better understanding of different
antenna
> configurations. What is the best way to improve the efficiency of
an
> autotuner configuration? (no flames or wise cracks needed).
>
>
> Here are my brainstorms...
>
> Idea #1)
> I am considering homebrewing a helically wound whip, with a top
hat. I was
> considering stripping down a 7 foot fiberglass Firestick whip.
Then
> rewinding with one or two lengths (ala SGC) of insulated copper
wire for the
> antenna. The top of these Firestick's have a brass screw for
tuning. This
> would make attachment of a top hat very simple.
>
> Should I just wind as much wire on the whip as possible?

>
> Is there advantage to wider spaced winding at the bottom, with
closer spaced
> winding at the top?
>
> Is a top hat of any real benefit to this configuration.?
>
> Idea #2)
> Installing a hamstick style antenna, let the tuner do it's thing,
and seeing
> how well it loads up on multiple bands. (Which band hamstick?).
Since these
> are resonant antennas I was not sure how well they would load up
on other
> bands. I was just brain storming and thought using an 80m whip
(it has the
> most wire) and trying it on the higher bands. Maybe adding a
longer stinger
> so it is no longer resonant in the ham bands?
>
> Idea #3)
> Adding a Hustler mast to the bottom of a hamstick for additional
physical
> length? (approx 12 feet).
>
> Idea #4)
> I just picked up a 10m hamstick style antenna from Iron Horse.
The base and
> stinger end both have 3/8x24 threads. This allows me to unscrew
the stinger
> assembly from one antenna, then in it's place, install another
full hamstick
> antenna. This provides additional overall length (12 feet) as
well
> additional helical windings (2 hamstick base sections).
>
> Any other autotuner antennas?
>
> Your sincere input is very much appreciated.
>
> Tracy, W7TRX
>
>
>
>

4322. Re: And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:04:27 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6CB015A.4914%stewartx@sccoast.net>
Source record: 169094

Richard Harrison wrote:

> Yes, it may be quite bebeficial in the
> long-run. I worked for years in the
> middle of an HF megawatt field. An
> accidental contact with a 50-KW
> transmission line turned one of my ears
> to a black lump that resembled a piece
> of coal. No permanent damage. My
> experience may have been therapeutic. We
> had over 200 people working in and around
> that transmitting plant and saw no
> unusual health problems. In fact, it was
> an unusually healthy group. Our
> experience may have been therapeutic,
> The mileage of others may vary.

Richard, if you think turning one of your ears into a "black lump that resembled a piece of coal" was therapeutic, then working around "for years in the middle of an HF megawatt field" was certainly not that healthy (at least not when it comes to your mental health). ;-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4323. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:06:12 UTC
From: richardharrison@webtv.net
Message-ID: <14665-3AA59794-130@storefull-112.iap.bryant.webtv.net>
Source record: 169096

Mark Keith wrote:
"It`s the "verticals always lose" comments that get me going."

Of course verticals don`t always lose. Their biggest advantage is that they are non-directional. Hams often would like to contact stations from many directions. Most horizontal antennas of reasonable height favor some directions over others. In the lower frequency shortwave bands it is often impractical to rotate the horizontal antenna for best operation in all directions.

However, that is not how commercial h-f radio operates. Broadcasting and communications relay nearly always have well defined targets. Any energy not directed at a specific target is considered wasted. Omnidirectional antennas are just about excluded from commercial service.

Directional arrays use vertical polarization at low and medium radio frequencies. There are almost no vertical directional arrays used commercially for shortwave (higher frequencies).

RCA International Division Chief Engineer Ed Laport published an excellent book, "Radio Antenna Engineering", copyrighted in 1952, which covers all manner of antennas for use up to 30 MHz. He has 170 pages on h-f antennas. All of the shortwave antennas are horizontals. Why? Because that is what is used commercially. The reason commercial h-f point-to-point radio users and broadcasters use horizontal antennas for transmitting and receiving is simple. Horizontal antennas are the best shortwave bargain, unless you are operating over sea water or a salt marsh.

Best regards, Richard Harrison, KB5WZI

4324. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:09:30 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98458qcsl0@208.207.71.136>
Source record: 169095

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "Ask the people of Homestead, Florida, many of whom sat for a week
> before they ever saw or heard from any relief person whatever."
>
> Ham radio and Morse code had relevance? The victims` plight was unknown?
> There was an Air Force base at Homestead. The Air Force immediately
> investigated and reported in the aftermath.
>
> There was a sheriff. There were police. There was a fire department.
> There is a Florida National Guard. There is a Red Cross. Washington has
> a FEMA and the armed forces to send in when necessary.
>
> If the people of Homestead were without relief for a week after
> Hurricane Andrew, it wasn`t because their plight was unknown. There
> would have been little amateur radio could have done to speed aid to the
> victims.
>
> In situations such as Andrew, the media immediately publicize the
> situation. Elected officials respond to send needed help as quickly as
> possible so that they will be perceived as being effective. Electrical
> power companies and communications companies send crews from many states
> to restore services as quickly as they can. These guys have their own
> radios. Hams are mostly superfluous.
>
> Get a grip on reality and the 21st century.

You may be a whiz at big rig engineering but it's clear you don't have
much of a grip on disasters nor the relief thereof.

First, all those police, firemen, sherrifs etc in the area are just as
much victims of a big breeze like Andrew as the rest of the populace.
Their homes, families, vehicles, radio towers, headquarters, and
powerlines are just as destroyed as any homeowners. Not to mention the
roads they use to get around.
The first fact any wide area planning group recognizes is that local
officialdom will be just as desperate for help as the general
population, at least that must be assumed at the outset. No one can
accurately predict just how any situation will develop, but it is simply
uninformed folly to assume that your tax dollars are sufficient, and
your elected officials are well enough informed, competent and have
access to the necessary resources to set into place expensive releif
mechanisms which, for the most part, will never be used. Mostly tax
money doesn't get spent for that sort of thing in the amounts necessary

to fully cover the event, or really even come close. Other priorities prevail.

If you think any of us believes that ham radio is about to "save the day" in any of this you are simply misinformed. Even good ol' CW won't do too much good. But if doesn't take much understanding to grasp the simple fact that whatever communications that still exists in a workable state will be useful in the extreme, and no one will care a whit that it is an amateur and not a professional doing the talking.

If I had lived in the middle of the Homestead mess I'd have soon had something on the air on some ham net frequency- yes, hams operate a variety of emergency relief and assistance nets when those things happen- so as to inform the relief agencies that yes, we had a problem, here is were we're located, and what we need immediately, or ASAP. If our needs are a priority, such as injury/infants/elderly/medicine, relievers can helicopter to us, when they can. The people who sat for a week waiting in the blind had to depend on a block-by-block canvas, where every block was a roadclearing operation, and they just happened to be many hundreds of blocks into the mess. Anyone who was in a critical situation there would have been out of luck with no way to call for help.

I know that ham radio, to you, will never be anything more than just a pleasant passtime, you've made that quite clear. What is odd is that after a long career in radio you still don't understand the value of radio communications-even ham radio communications.

Even the local NOAA meteorlogists state, rather forcefully, that ham radio storm spotters are a valauable part of their early warning operation, in spite of all the police, shriffs, firemen, and many other public employees about. Do you wonder why?

I fear your advice about "reality and the 21st century" is misdirected. 180 degrees out, in fact.

73, Dick W0EX

4325. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:20:56 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6CB0538.4915%stewartx@sccoast.net>
Source record: 169097
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

A Marzo wrote:

> We can't comprehend why it was posted 11 times.
> It seems a just a tad bit strange! ;-)
>
> Rudy Marcelletti wrote:
>
>> What did you not comprehend?
>> A Marzo wrote in message <3AA52131.D5EAF9BD@evl.net>...
>>> What did he say?
>>>
>>> Rudy Marcelletti wrote:
>>>
>>>> Ditto that--102" stainless whip [snip]

Have you guys been drinking? It only showed up twice on my server (which probably means that I'm seeing double, but that is far better than being so bad off you're seeing it 11 times).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4326. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:25:43 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AA59C27.559ACDD9@bwcc.com>
Source record: 169099
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Dwight Stewart wrote:
> A Marzo wrote:
>
> > We can't comprehend why it was posted 11 times.
> > It seems a just a tad bit strange! ;-)
> Have you guys been drinking? It only showed up twice on my server (which
> probably means that I'm seeing double, but that is far better than being so
> bad off you're seeing it 11 times).

It really appeared 11 times with eleven unique Message-IDs from news.net-link.net.

4327. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:28:13 UTC
From: 2w8ji@akorn.net
Message-ID: <3aa59c17.122430291@news.accessunited.com>
Source record: 169098

On Tue, 06 Mar 2001 20:12:45 GMT, Tad Danley
<taddanley@nospamatatt.net> wrote:

>My Ten-Tec Model 238 tuner is not for sale - I bought it used in 1990! No
>problems with false resonances - there is only one setting for minimum SWR.
>Also works over a wide frequency range, including 160 meters to a limited
>degree.
>
>73,
>
>--
>Tad Danley, K3TD

What is a "false resonance"?

Why is only having one setting so good?

73 Tom

4328. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:39:08 UTC
From: k6mhe@arrl.net
Message-ID: <3aa59da8.22278469@news.mcn.org>
Source record: 169104

I am surprised that Wes hasn't commented on this thread thus far.

He had done a study which was published in the ARRL Antenna Compendium Vol. 6 on ladder line and gave measurement data that he made comparing the changes encountered when the line was wet. I suggest you check out his findings.

Several years ago I attempted to measure the so called 450 Ohm ladder line. I used a 75 foot section of new clean line and measured the line loss wet and dry. While my loss figures were different that those Wes had measured I did ascertain that, in my case, the wet line had double the amount of loss that when it was dry.

In applications were there is a very high amount of reactance on the line this additional loss can be substantial.

Danny, K6MHE

On Mon, 5 Mar 2001 21:59:11 -0500, "Bill Ogden" <wogden@attglobal.net> wrote:

>I have read that ladder line, when wet, has somewhat altered
>characteristics. I erected a 30m dipole recently, fed with about 110' of
>450-ohm ladder line, and I use it on 30 - 12 meters. (My Dentron cannot
>seem to load it on 10m.) When the line is wet (rain or heavy condensation)
>the antenna is almost dead. Are moisture effects on ladder line usually
>this drastic? Does "real" open line have the same problem?
>
>Bill Ogden
>W2WO
>

4329. Re: Travelling Wave HF antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:43:08 UTC
From: richardharrison@webtv.net
Message-ID: <10725-3AA5A03C-10@storefull-114.iap.bryant.webtv.net>
Source record: 169102

Michael Hart wrote:
"Both the designs I looked at cover from the 80m to 10m HF band and are similar length, if not smaller, than a normal 80m dipole."

Traveling wave antennas are usually defined as being one to eight wavelengths long. 80 meters is 262 feet.

What distinguishes a traveling wave antenna from a standing wave antenna is the reflected wave which produces a standing wave pattern on the standing wave antenna. The traveling wave antenna is terminated at its far end in a resistor equal to the characteristic resistance of the antenna to avoid a reflection. Rhombics, Beverages, and other long terminated wires are traveling wave antennas which favor the direction of the termination resistor.

Traveling wave antennas can`t be very efficient if they are shorter than 1/2-wavelength.

Best regards, Richard Harrison, KB5WZI

4330. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 02:51:05 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9847mpkpv0@208.207.71.136>
Source record: 169100

Mark Keith wrote:
>
> Richard Harrison wrote:
> >
> > Mark Keith wrote:
> > "I used to run both (a good vertical and a horizontal dipole) on 40m at
> > night. The dipole NEVER won overseas."
> >
> > Suspect the dipole was not in the clear and up at least 66 feet, which
> > is 1/2-wave at 40m.
>
> Thats a good point.It was in the clear, but closer to 1/4 wave up than
> 1/2 wave. The ground plane I was using was at the same height. But even
> if I had the dipole at 1/2 wave up, and kept the GP at 1/4 wl up, I
> still think the vertical would have won.

I don't see Tom Raush W8JI in here on this thread, he must be off
somewhere, or else he's just tired of saying it, but-

He's the guy who put up 300 foot towers so that he could have his
dipole *UP* in the clear, without any question whatever about it. And,
guess what- his verticals beat the socks off all his high dipoles.
Without question. His disappointment is palpable.

Dick

4331. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:01:25 UTC
From: Doug Hall <k4dsp@pobox.com>
Message-ID: <rk6batk4ctudtfdoes0bkjcocn8s7dk9d9@4ax.com>
Source record: 169101

On Wed, 7 Mar 2001 01:40:24 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:
>If you have no great desire to work below 7 MHz you will very
>likely find the AH-4 and a 102" whip are an efficient multi-band
>combination. The AH-4 will behave exactly as a base-loading coil on
>all bands.

I assume that some folks have used such a combination and were satisfied with it. But I don't see how you could describe it as efficient. My own tests have shown it to be quite inefficient on 40 and 30m. True, the AH-4 acts as a base-loading coil, albeit a poor one. Maybe there's something wrong with my AH-4?

Try this test: Go to 40m and tune a 102" whip with the AH-4. Then see how long you can send a constant 50-60w carrier before components in the tuner heat up and the SWR rises to the point that the PA folds back. With my AH-4 on 40m it happens in less than 20 seconds. I get similar results on 30m. Even on 40m phone with the relatively low duty cycle of SSB I see the SWR creep up as something in the tuner heats up.

Is this atypical of AH-4 performance? I've always wondered if there was something wrong with my tuner. It will match a 102" whip on 40-10m, but operating CW on 40 and 30m with such a setup results in very poor performance compared to even a hamstick, notwithstanding the "rising SWR" problem.

I'd appreciate hearing from folks successfully using the above on 40-10m.
73,
Doug, K4DSP

4332. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:10:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA5A6AF.A6104DDB@IEEE.org>
Source record: 169103

W7TRX wrote:
> What was the mounting location on your vehicle?

I mounted a threaded rod in the trailer hitch of my pickup and I removed
the tail gate. The antenna mount was fastened to the threaded rod.

> Also what was the source of your 12ft whip? I planned on trying a 102" whip
> with a Hustler mast.

I bought a three foot bottom section from Henry, the Texas Bugcatcher
guy. Three feet plus a nine foot whip made it twelve feet.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4333. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:15:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA5A7DF.C6E3A252@IEEE.org>
Source record: 169105
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Dwight Stewart wrote:
> Have you guys been drinking? It only showed up twice on my server ...

It showed up 15 times on my server.
--
http://www.mindspring.com/~w6rca

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------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4334. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:34:02 UTC
From: Doug Hall <k4dsp@pobox.com>
Message-ID: <tr9batoc083mh1ppkkslvo1vn3bd729irh@4ax.com>
Source record: 169110

On Wed, 07 Mar 2001 02:28:13 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:
>
>What is a "false resonance"?
>
Perhaps he meant "self resonance." MFJ claims an exclusive feature on one of their tuners that keeps "damaging self-resonances away from your operating frequency." It works, too. I have an MFJ tuner on the shelf in the storage room and to my knowledge I've never had any damage due to a self-resonance.

>Why is only having one setting so good?
>
MFJ advertises it as a feature on one of their tuners. I think it's a great idea. If you have a tuner that gives minimum SWR at two or more settings then you have to decide which one to use, and there are enough decisions to make in life as it is.

>73 Tom

4335. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:36:10 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <tabb1ajt677e0f@corp.supernews.com>
Source record: 169107

Perhaps the loss is substantial under such conditions, but
what other feedline could one use with a dipole of fixed
size that must operate on ALL HF bands?

I am not aware of any other method of feeding such an
antenna that is anywhere near as efficient as 450 ohm
TWINLEAD.

There is much that I do not know when it comes to radio, but
I am always willing to learn.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"Dan Richardson" <k6mhe@arrl.net> wrote in message
news:3aa59da8.22278469@news.mcn.org...
> I am surprised that Wes hasn't commented on this thread
thus far.
>
> He had done a study which was published in the ARRL
Antenna Compendium
> Vol. 6 on ladder line and gave measurement data that he
made comparing
> the changes encountered when the line was wet. I suggest
you check out
> his findings.
>
> Several years ago I attempted to measure the so called 450
Ohm ladder
> line. I used a 75 foot section of new clean line and
measured the line
> loss wet and dry. While my loss figures were different
that those Wes
> had measured I did ascertain that, in my case, the wet
line had double
> the amount of loss that when it was dry.
>
> In applications were there is a very high amount of
reactance on the
> line this additional loss can be substantial.
>
> Danny, K6MHE
>

>
>
> On Mon, 5 Mar 2001 21:59:11 -0500, "Bill Ogden"
<wogden@attglobal.net>
> wrote:
>
> >I have read that ladder line, when wet, has somewhat
altered
> >characteristics. I erected a 30m dipole recently, fed
with about 110' of
> >450-ohm ladder line, and I use it on 30 - 12 meters. (My
Dentron cannot
> >seem to load it on 10m.) When the line is wet (rain or
heavy condensation)
> >the antenna is almost dead. Are moisture effects on
ladder line usually
> >this drastic? Does "real" open line have the same
problem?
> >
> >Bill Ogden
> >W2WO
> >
>

4336. Re: Roof Radials on a Butternut HF6V Help??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:36:40 UTC
From: Jack Spencer <ajs@stargate.net>
Message-ID: <3AA5ACC8.ED4F4380@stargate.net>
Source record: 169109

I recall seeing some diagrams on compacting radials, they put them in a squared off
spiral. From above, looks like a swastika, reportedly, the length is much more critical than shape of radials. Hope this helps

mmorjoseph@socal.rr.com wrote:

> I have a real nice HF6V vertical antenna ready to put up on my town
> house rood problem is that I can not run all the ground radials in 360
> degrees pattern and I do not have like 33 ft on some sides for the
> 40meter ground I have like half a "Pie " shape to work with what do I
> do?? I really want to put the antenna up and have it work good.. I do
> see that there is a CPK Countpoise kit but not shure if I want to buy
> that and install it... how about the roof radial kit from Butternut is
> it work buying and waht do I do when I can not put some radials out
> using only half of my roof any help on this please...
> Mike KC6 RDJ.. new General in so cal..

4337. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:48:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA5AF71.F49A25CD@IEEE.org>
Source record: 169111

Doug Hall wrote:
>
> On Wed, 07 Mar 2001 02:28:13 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:
> >What is a "false resonance"?

> Perhaps he meant "self resonance."

I think he probably meant multiple match points. With a T-net tuner,
it is possible to find more than one match point setting. Some match
settings are more lossy than others. I don't think an L-net tuner
is capable of multiple match point settings.
--
http://www.mindspring.com/~w6rca

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-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4338. Re: And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:48:34 UTC
From: richardharrison@webtv.net
Message-ID: <19535-3AA5AF92-65@storefull-118.iap.bryant.webtv.net>
Source record: 169114

Dwight Stewart, W5NET wrote:
"---if you think turning one of your ears into a "black lump that resembled a piece of coal" was therapeutic, then working around "for years in the middle of an HF megawatt field" was certainly not that healthy (at least not when it comes to your mental health). :-)"

I was just in the vanguard of the body modification fad. It wasn`t very painful, just startling to hear a voice screaming at me in Polish from the plasma. The ear was quite red at first and then turned black hours later.

HF burns are superficial, but you get zapped quicker than by microwave. As a weapon, using r-f burns may be humane but likely ineffective. Like the stun gun, it would likely end up misused as a torture device.

Best regards, Richard Harrison, KB5WZI

4339. Re: Radio Shack AntennaQST Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 03:59:08 UTC
From: Gary Danaher <gdanaher@home.com>
Message-ID: <3AA5B208.570C6738@home.com>
Source record: 169112

Thanks to all. I have at least found the title of the article and the date of of the QST-- "A Five-Element, 2-Meter Yagi for $20 (Antennas and Transmission Lines)", July, 99. Now to dig around and get the specific model. As someone else mentioned, it can be done with almost any old TV antenna. I can get the dimensions from the one I built. It works great.

Charles Johnston wrote:

> >
> >On Wed, 07 Mar 2001 00:28:37 GMT, Gary Danaher <gdanaher@home.com>
> >wrote:
> >
> >>I'm looking for an article published in QST in what I thought was the
> >>summer of 1998 to use a specific Radio Shack TV antenna for 2 meters. I
> >>built the antenna and it works just great, but have been asked to do a
> >>presentation at the local club, and can't find the original article.
> >>I've searched the QST technical data base for a title but haven't
> >>located the article. Anybody happen to remember the article and could
> >>let me know the month and year? Certainly would be helpful.
> >>
> >>Gary
> >>AB5RM
> >>
>
> Gary,
> If you are an ARRL member you can email them or phone them with the
> request and they'll search the archives for you and (if found) provide
> you with a written hard copy of the article. I have gone this route
> myself before. They are quite accomodating......if you are a member.
>
> Charles T Johnston
> charles@ab7sl.com
>
> AB7SL Ham Radio Pages
> http://www.ab7sl.com

4340. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 04:02:08 UTC
From: k6mhe@arrl.net
Message-ID: <3aa5b221.27519753@news.mcn.org>
Source record: 169118

Have you considered using parallel open line? It has lower losses when wet than the plastic covered window line.

Due to the fact that I live in a wet area and based upon the measurements I had made I choose to use open line for my situation.

Danny

On Tue, 6 Mar 2001 22:36:10 -0500, "Ed Cregger" <nuke663jlm@vei.net> wrote:

>Perhaps the loss is substantial under such conditions, but
>what other feedline could one use with a dipole of fixed
>size that must operate on ALL HF bands?
>
>I am not aware of any other method of feeding such an
>antenna that is anywhere near as efficient as 450 ohm
>TWINLEAD.
>
>There is much that I do not know when it comes to radio, but
>I am always willing to learn.

4341. Re: HF Mobile Antenna Plans?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 04:09:44 UTC
From: n8blk@aol.com
Message-ID: <20010306230944.29750.00000288@nso-fa.aol.com>
Source record: 169113

In article <983addlgl1@flood.xnet.com>, "Steve Woodruff"
<sjwoodr.nospam@nospam.email.com> writes:

>Looking to save $$ and build some type of HF mobile antenna.
>Looking for 20/40/80m only, anything else is a bonus. I've seen
>hamsticks and the likes, (yes they are not expensive) but i'd prefer
>a single antenna rather than a collection sitting in my trunk. Screwdriver
>antennas looks interesting, but i don't want to spend the $$.... any
>good plans available? I'd prefer something that i can mag-mount
>for easy removal.
>

Don Johnson, the inventor of the screwdriver concept, used to sell the plans
for $5 postpaid. I suggest sending writing him, and asking how much. He
doesn't seem to mind folks building from his plans (in fact he encourages it
when they're not competing with his sales of the same antenna). That being
said, unless you're a real scrounger, look to spend about $35 -$50 to build one
properly and get it mounted cheaply.
-art clemons-

4342. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 04:16:44 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3aa5b752_2@news3.prserv.net>
Source record: 169116

No, you guys aren't the only ones. Those %^%##&* fan antennas and the intermod the ground currents cause in the hull from the URC-109 output when the Link - 1 and other channels are keyed are still dealing us misery. 39th IMD product indeed. Thanks a lot!
George

4343. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 04:22:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AA5B76E.31646856@eznec.com>
Source record: 169115

A more fair comparison would be to use radials that are 1/4 wavelength long at each height, rather than in free space. When radials get close to the ground, their resonant length becomes shorter. And you'll find that if you get them too long, the efficiency drops. To determine the resonant length for a radial at a given height, model a dipole at that height and adjust its length for resonance. A resonant radial will be half that length. Efficiency decreases if the radials are made much longer than this length.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Mark Keith wrote:
> > To find out the effects of height over ground, I
> > think modeling is better as you can specify the ground conditions etc.
>
> For what it's worth, I modeled a 1/4WL vertical with four 1/4WL
> horizontal radials using EZNEC. Here's the height of the radials,
> gain in dBi, and take-off angle. 10 -.09@22deg, 20 .06@18deg,
> 25 .08@17deg, 30 .06@16deg, 40 -.13@15deg Note that from one ft
> to 40ft the gain is maximum at 25ft for a 40m vertical.
>
> Drooping the radials down at 45deg from a height of 25ft yielded
> a gain of .23@20deg. Adding another identical array 1/4WL away
> and feeding it at 90deg gave the expected cardioid pattern with
> a gain of about 3dBi.
> --
> http://www.mindspring.com/~w6rca
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4344. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 04:31:01 UTC
From: richardharrison@webtv.net
Message-ID: <22629-3AA5B985-157@storefull-115.iap.bryant.webtv.net>
Source record: 169117

Dick Carroll wrote:
"First, all those police, firemen, sheriffs etc in the area are just as much victims of a big breeze like Andrew as the rest of the populace."

Yes, and they are running the show. Hurricanes don`t strike unannounced anymore. Weather satellites and other advanced warning systems notify the position and probabilities.

Evacuation of areas likely to flood is ordered. Some always stay, and some usually die in bad storms.

When the storm ends, the sheriff sets up roadblocks and restricts entry to avoid looting and injury from hazards left by the storm.

I`ve had to receive a group of injections before the sheriff would let me in to work on some of the storm caused problems. This was 40 years ago, but the same things happen today with access after a serious storm. Amateurs were only talking about the storm and the problems it left. Communications and alleviation were in professional hands.

Best regards, Richard Harrison, KB5WZI

4345. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 05:24:15 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <984glv$do0$3@bashir.peak.org>
Source record: 169020

Tom W8JI <2w8ji@akorn.net> wrote:

: What is a "false resonance"?

: Why is only having one setting so good?

There are generally several inductor/capacitor combinations that will
provide the desired match.

You want to minimize the inductance used - as that reduces resistive
losses in the tuner.

--
Bill Nelson (billn@peak.org)

4346. Re: Radio Shack AntennaQST Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 05:26:08 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <u9hbat0qbas1pqo0cgokvkhkp1od6s8epa@4ax.com>
Source record: 169019

The Radio Shack model shown in the July article is the 15-2163 FM
broadcast antenna. It's still listed in the latest catalog. Same
price.

Dick - W6CCD

On Wed, 07 Mar 2001 03:59:08 GMT, Gary Danaher <gdanaher@home.com>
wrote:

>Thanks to all. I have at least found the title of the article and the date of
>of the QST-- "A Five-Element, 2-Meter Yagi for $20 (Antennas and
>Transmission Lines)", July, 99. Now to dig around and get the specific model.
>As someone else mentioned, it can be done with almost any old TV antenna. I
>can get the dimensions from the one I built. It works great.

4347. Re: And they worry about cell phones and hams! - (mad human disease?)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 05:44:38 UTC
From: John Michael Williams <jwill@AstraGate.net>
Message-ID: <3AA5CAC6.4669077B@AstraGate.net>
Source record: 169021

Right.

For riot control, it isn't reasonable: Haven't any of the
Marines (or, whatever) who developed the idea seen a riot on TV?

The rioters pick up red-hot tear-gas bombs and throw them
back at the troops (Third-World substitutes for police).
So, pain has no obvious effect.

By the way, GOOGLE says this new idea in "weapons" belongs in the following groups:

alt.tv.x-files.creative, alt.religion.scientology,
alt.alien.visitors, or alt.paranet.ufo.

Who says filtering doesn't work!

--
John
jwill@AstraGate.net
John Michael Williams

Richard Harrison wrote:
>
> Dwight Stewart, W5NET wrote:
> "---if you think turning one of your ears into a "black lump that
> resembled a piece of coal" was therapeutic, then working around "for
> years in the middle of an HF megawatt field" was certainly not that
> healthy (at least not when it comes to your mental health). :-)"
>
> I was just in the vanguard of the body modification fad. It wasn`t very
> painful, just startling to hear a voice screaming at me in Polish from
> the plasma. The ear was quite red at first and then turned black hours
> later.
>
> HF burns are superficial, but you get zapped quicker than by microwave.
> As a weapon, using r-f burns may be humane but likely ineffective. Like
> the stun gun, it would likely end up misused as a torture device.
>
> Best regards, Richard Harrison, KB5WZI

4348. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 06:24:20 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <tabkuureeh4n04@corp.supernews.com>
Source record: 169022

"Dan Richardson" <k6mhe@arrl.net> wrote in message
news:3aa5b221.27519753@news.mcn.org...
> Have you considered using parallel open line? It has lower losses when
> wet than the plastic covered window line.
>
> Due to the fact that I live in a wet area and based upon the
> measurements I had made I choose to use open line for my situation.

I've heard that some folks periodically *wax* their window line
(so that it sheds the water). Living in the "high desert", I haven't
tried that. In a previous life in Washington State, I used real
open wire line, and weather had a negligible effect.

73,

John, K6QQ
Alturas, CA, at the corner of 299 & 395.

4349. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 06:44:15 UTC
From: Brenda Ann <brendaannd@uswest.net>
Message-ID: <984l63kjp1@news2-2.kornet.net>
Source record: 169023
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

11 on mine, too...

4350. A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 06:54:15 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA5DB17.47F4@wt.net>
Source record: 169024
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

A friend sent this to me today. Normally, I hate to clutter up the ham NG's with this type of thing, but being as it's a day old, the quicker the word gets out , the better. This is not a joke or a troll...This is a plum ugly new virus that will ruin your day if you open it. I'm just passing it on, so someone doesn't later say, well... why didn't you say something... MK

> Subject: NEW VIRUS!! READ IMMEDIATELY!!
>
> A new virus has just been discovered that has been classified by
> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
> most destructive ever! This virus was discovered yesterday afternoon
> by McAfee and no vaccine has yet been developed.
>
> This virus simply destroys Sector Zero from the hard disk, where
> vital information for its functioning are stored. This virus sends
> itself automatically to all contacts on your list with the title "A
> Virtual Card for You". When the supposed virtual card is opened, the
> computer freezes so that the user has to reboot. When the
> ctrl+alt+del keys or the reset button are pressed, the virus
> destroys Sector Zero, thus permanently destroying the hard disk.
>
> According to news broadcast by CNN (www.cnn.com). This VIRUS received
> by an employee of Microsoft itself. So don't open any mails with
> subject "A Virtual Card for You". As soon as you get the mail,
> delete it.
>
> Also: Intel announced that a new and very destructive virus was
> discovered recently. If you receive an email called "An Internet
> Flower For You", do not open it. Delete it right away! It removes all
> dynamic link libraries(.dll files) from your computer. Your
> computer will not be able to boot up.

--
http://web.wt.net/~nm5k

4351. Re: A plum ugly hoax..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 07:14:03 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AA5DFBB.B1499DEF@bwcc.com>
Source record: 169025
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

Mark Keith wrote:
> A friend sent this to me today.
ex-friend

> Normally, I hate to clutter up the ham
> NG's with this type of thing,
Liar.

> but being as it's a day old,
It's a hoax!

> This is not a joke or a troll...
Liar.

4352. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 07:44:13 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <3AA5E6CD.48229BAF@pacbell.net>
Source record: 169026

I have use an SGC auto tuner with a 40m hamstick and found it to obviously work great on 40 but down in performance on other bands, especially 10m. Other users have mentioned that center loaded whips like the Valor don't seem to radiate well out of band with an autotuner. Continuous loaded helical whips seem to do much better as multi band antennas with an autotuner. I found 9ft cb whips work great on 20m thru 10m but are very poor on 40m and lower. The dual wound SGC whip works well and is nearly as good as the Hustler and Valor mono band whips I compared to. The 12ft whip helps a little on 40 and 80m but the SGC whip is still noticeably better. I have logged many 160m contacts from So. Cal to as far as Nebraska with the SGC whip. When I mention the antenna is an 8ft loaded whip the response is usually " yea, right...". When parked or camping I throw up a 16 or 32ft military whip which is outstanding on the lower bands. Wish I could use that in motion. The SGC system is a bit ugly, but a higher performance multi-band antenna is going to be bigger and uglier. Overall I will gladly pay the small sacrifice in performance for the convenience of instant QSY with the SGC tuner/whip.

4353. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 08:08:24 UTC
From: Tony <tdowden@pacbell.net>
Message-ID: <4oqbatg18b33n6jpqpq31gfv7244gf41pq@4ax.com>
Source record: 169027
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

I'm sure your intention was good, but if you go to the mcafee site
(the one your message references) and look under hoaxes you'll find
this message, and it's represented as a hoax. The text is only
slightly different. So what your friend sent you was possibly in
error. I make no judgement of him or you. However, there are a lot
of hoaxes as well as real viruses going around. You might go there
and check it out. It's interesting.

Just thought you'd like to know.

Tony

On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith <nm5k@wt.net> wrote:

>A friend sent this to me today. Normally, I hate to clutter up the ham
>NG's with this type of thing, but being as it's a day old, the quicker
>the word gets out , the better. This is not a joke or a troll...This is
>a plum ugly new virus that will ruin your day if you open it. I'm just
>passing it on, so someone doesn't later say, well... why didn't you say
>something... MK
>
>> Subject: NEW VIRUS!! READ IMMEDIATELY!!
>>
>> A new virus has just been discovered that has been classified by
>> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
>> most destructive ever! This virus was discovered yesterday afternoon
>> by McAfee and no vaccine has yet been developed.
>>
>> This virus simply destroys Sector Zero from the hard disk, where
>> vital information for its functioning are stored. This virus sends
>> itself automatically to all contacts on your list with the title "A
>> Virtual Card for You". When the supposed virtual card is opened, the
>> computer freezes so that the user has to reboot. When the
>> ctrl+alt+del keys or the reset button are pressed, the virus
>> destroys Sector Zero, thus permanently destroying the hard disk.
>>
>> According to news broadcast by CNN (www.cnn.com). This VIRUS received
>> by an employee of Microsoft itself. So don't open any mails with
>> subject "A Virtual Card for You". As soon as you get the mail,
>> delete it.
>>
>> Also: Intel announced that a new and very destructive virus was
>> discovered recently. If you receive an email called "An Internet
>> Flower For You", do not open it. Delete it right away! It removes all

```
>> dynamic link libraries(.dll files) from your computer. Your
>> computer will not be able to boot up.
```

4354. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 10:55:02 UTC
From: Keith <kewyatt@apexmail.com>
Message-ID: <0p4cat8em2cf2ppqd927emog5nva9d07nu@N6JPA.OR.SALEM.NOAM>
Source record: 169028
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith
<3AA5DB17.47F4@wt.net> wrote:

>A friend sent this to me today. Normally, I hate to clutter up the ham
>NG's with this type of thing, but being as it's a day old,

Then don't plug up newsgroups unless the newsgroups name is *.virus.*

--
Best Regards,

Keith (Use Reply-to for email)

I've walked these streets in the mad house asylum they can be where a wild
eyed misfit prophet on a traffic island stopped and he raved of saving me,
have I been blind, have I been lost, inside my self and my own mind
hypnotized mesmerized by what my eyes have seen? ~N. Merchant, "Carnival"

4355. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 12:20:11 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3AA6277B.FAB2D253@bloomer.net>
Source record: 169029

The Outbacker. I regularly bust pileups running 100 Watts in the
mobile. A little inconvenient to change bands (you have to stop and get
out) but it works great!

Scott
N0EDV

W7TRX wrote:
>
> Greetings,
>
> I am considering installing an autotuner (AH-4) in my vehicle to allow
> multiband tuning of a fixed length whip. I realize there are other antenna
> solutions that are more efficient (screwdriver, bugcatcher, etc) but for my
> specific purposes, the positives of this configuration may out weigh the
> negatives. I am not going to detail my personal needs in this forum.
>
> I understand that an 102" stainless whip is likely the poorest antenna that
> can be tuned by the AH-4. SGC uses a dual, helically wound fiberglass whip
> that has two separate resonances . The Icom whip appears to be just a
> stainless whip, but it may have some base loading(not sure).
>
> I was trying to determine the best antenna to use with an autotuner. This is
> also helpful for me to have a better understanding of different antenna
> configurations. What is the best way to improve the efficiency of an
> autotuner configuration? (no flames or wise cracks needed).
>
> Here are my brainstorms...
>
> Idea #1)
> I am considering homebrewing a helically wound whip, with a top hat. I was
> considering stripping down a 7 foot fiberglass Firestick whip. Then
> rewinding with one or two lengths (ala SGC) of insulated copper wire for the
> antenna. The top of these Firestick's have a brass screw for tuning. This
> would make attachment of a top hat very simple.
>
> Should I just wind as much wire on the whip as possible?
>
> Is there advantage to wider spaced winding at the bottom, with closer spaced
> winding at the top?
>
> Is a top hat of any real benefit to this configuration.?
>
> Idea #2)
> Installing a hamstick style antenna, let the tuner do it's thing, and seeing

> how well it loads up on multiple bands. (Which band hamstick?). Since these
> are resonant antennas I was not sure how well they would load up on other
> bands. I was just brain storming and thought using an 80m whip (it has the
> most wire) and trying it on the higher bands. Maybe adding a longer stinger
> so it is no longer resonant in the ham bands?
>
> Idea #3)
> Adding a Hustler mast to the bottom of a hamstick for additional physical
> length? (approx 12 feet).
>
> Idea #4)
> I just picked up a 10m hamstick style antenna from Iron Horse. The base and
> stinger end both have 3/8x24 threads. This allows me to unscrew the stinger
> assembly from one antenna, then in it's place, install another full hamstick
> antenna. This provides additional overall length (12 feet) as well
> additional helical windings (2 hamstick base sections).
>
> Any other autotuner antennas?
>
> Your sincere input is very much appreciated.
>
> Tracy, W7TRX

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

4356. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 12:56:40 UTC
From: BadaBing <badabing@home.com>
Message-ID: <ceqp6.10483$H5.1902625@news1.rdc2.pa.home.com>
Source record: 169030
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Dwight you are sure an asshole. Now what did everyone make up that they saw it 11 times ... Go spank your monkey in the corner like a good boy ..

"Dwight Stewart" <stewartx@sccoast.net> wrote in message news:B6CB0538.4915%stewartx@sccoast.net...
> A Marzo wrote:
>
> > We can't comprehend why it was posted 11 times.
> > It seems a just a tad bit strange! ;-)
> >
> > Rudy Marcelletti wrote:
> >
> >> What did you not comprehend?
> >> A Marzo wrote in message <3AA52131.D5EAF9BD@evl.net>...
> >>> What did he say?
> >>>
> >>> Rudy Marcelletti wrote:
> >>>
> >>>> Ditto that--102" stainless whip [snip]
>
>
> Have you guys been drinking? It only showed up twice on my server (which
> probably means that I'm seeing double, but that is far better than being so
> bad off you're seeing it 11 times).
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

4357. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 13:38:38 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <taceavlfma0f68@corp.supernews.com>
Source record: 169031

There I go again, forgetting that the rest of the world does
not have my physical limitations.

Yes, true ladder line, or open wire feedline, is more
efficient and will perform in a superior manner to 450 ohm
twinlead and I know it. I just forgot about it because of
the labor involved and my lack of ability to perform said
labor. Thanks for setting the record straight.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"John Moriarity" <k6qq@hdo.net> wrote in message
news:tabkuureeh4n04@corp.supernews.com...
>
> "Dan Richardson" <k6mhe@arrl.net> wrote in message
> news:3aa5b221.27519753@news.mcn.org...
> > Have you considered using parallel open line? It has
lower losses when
> > wet than the plastic covered window line.
> >
> > Due to the fact that I live in a wet area and based upon
the
> > measurements I had made I choose to use open line for my
situation.
>
> I've heard that some folks periodically *wax* their window
line
> (so that it sheds the water). Living in the "high
desert", I haven't
> tried that. In a previous life in Washington State, I
used real
> open wire line, and weather had a negligible effect.
>
> 73,
>
> John, K6QQ
> Alturas, CA, at the corner of 299 & 395.
>
>

4358. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 14:28:49 UTC
From: Matt Deremo <mderemo@mpowernet.com>
Message-ID: <DBrp6.188$g14.95815@news.uswest.net>
Source record: 169032
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

```
Hmmm, must be their news server duplicating messages, only showed up once on
mine.

BadaBing <badabing@home.com> wrote in message
news:ceqp6.10483$H5.1902625@news1.rdc2.pa.home.com...
>
> Dwight you are sure an asshole. Now what did everyone make up that they
saw
> it 11 times ... Go spank your monkey in the corner like a good boy ..
>
> "Dwight Stewart" <stewartx@sccoast.net> wrote in message
> news:B6CB0538.4915%stewartx@sccoast.net...
> > A Marzo wrote:
> >
> > > We can't comprehend why it was posted 11 times.
> > > It seems a just a tad bit strange! ;-)
> > >
> > > Rudy Marcelletti wrote:
> > >
> > >> What did you not comprehend?
> > >> A Marzo wrote in message <3AA52131.D5EAF9BD@evl.net>...
> > >>> What did he say?
> > >>>
> > >>> Rudy Marcelletti wrote:
> > >>>
> > >>>> Ditto that--102" stainless whip [snip]
> > >
> > >
> > > Have you guys been drinking? It only showed up twice on my server
> (which
> > probably means that I'm seeing double, but that is far better than being
> so
> > bad off you're seeing it 11 times).
> > >
> > >
> > > Dwight Stewart (W5NET)
> > >
> > > http://www.qsl.net/w5net
> > >
> >
>
```

4359. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 14:44:23 UTC
From: Robert Peters <peters@ems.psu.edu>
Message-ID: <3AA64947.6E0547F6@ems.psu.edu>
Source record: 169033

I have a chart I made for tuner settings with the ladder line dry and when it was pouring rain. I have a 135 ft doublet fed with about 150Ft of window line. On 40 to 160, the tuning doesn't vary that much from dry to wet. On 20 to 10M, I notice that when it is dry there is a very sharp tuning peak and an increase in the background noise of the receiver when peaking the tuner. When it is wet, there is no sharp increase in noise and a very broad peak when tuning for lowest SWR. My conclusion is that there is noticable loss on the higher bands when the line is wet, but on the lower frequencies there doesn't seem to be any noticable loss.

Bob K3EZS

E

4360. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 14:45:15 UTC
From: Robert Peters <peters@ems.psu.edu>
Message-ID: <3AA6497B.D0D02C4C@ems.psu.edu>
Source record: 169034

I have a chart I made for tuner settings with the ladder line dry and when it was pouring rain. I have a 135 ft doublet fed with about 150Ft of window line. On 40 to 160, the tuning doesn't vary that much from dry to wet. On 20 to 10M, I notice that when it is dry there is a very sharp tuning peak and an increase in the background noise of the receiver when peaking the tuner. When it is wet, there is no sharp increase in noise and a very broad peak when tuning for lowest SWR. My conclusion is that there is noticable loss on the higher bands when the line is wet, but on the lower frequencies there doesn't seem to be any noticable loss.

Bob K3EZS

E

4361. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 14:54:31 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <985idu$5m$1@newpoisson.nosc.mil>
Source record: 169035

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA4F6AD.AC95AFC0@IEEE.org...
Jim Rodenkirch wrote:
How'd I do, Cecil?

I was born during the Great Depression. IMO, the cheapest antenna that will
get the job done is the best choice. That is almost never a store-
bought $350 vertical monstrosity.
<snip>

Cmon, Cecil. Don't forget that I'm on the side of people "rolling their
own" as well as you. Remember my $50 - $60 hombrew groundplane for 40
through 10? It's still cranking away.

You won't see me promoting commercial verticals, no way! Regards, Jim R.

4362. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 14:59:20 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <985in1$9b$1@newpoisson.nosc.mil>
Source record: 169038

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3aa5b752_2@news3.prserv.net...
No, you guys aren't the only ones. Those %^%##&* fan antennas and the
intermod the ground currents cause in the hull from the URC-109 output when
the Link - 1 and other channels are keyed are still dealing us misery. 39th
IMD product indeed. Thanks a lot!
George

George, George: you elicited instantaeneous recollections of that damn
ping-ponging throughout Combat and Radio Central - way to go!!!

Wow, I forgot all about that damn Link-11 (not Link-1) system. What a
freakin' night mare! Let's see if
Steve recollects any of that.

I have a friend back in San Diego that was the Link-11 ISEA for many years.
Hee, Hee! Talk about an system where esoterics reigned supreme! He has
little hair left on his head - wonder why?!?!?!

Later, Jim R.

4363. Re: wtb 108" fiberglass whip

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 15:08:02 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa64ece$0$70811$bbae4d71@news.net-link.net>
Source record: 169037
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

sorry guys--I did not know that was happening and I think it only happened
with that particular post!
W6RCecilA wrote in message <3AA55ABC.679D4C54@IEEE.org>...
>Rudy Marcelletti wrote:
>> What did you not comprehend?
>
>Why you posted the same message eleven times?
>--
>http://www.mindspring.com/~w6rca
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4364. Re: And they worry about cell phones and hams! - (mad human

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 15:09:01 UTC
From: k3bu@aol.com
Message-ID: <20010307100901.23594.00000183@ng-fd1.aol.com>
Source record: 169036

>
>HF burns are superficial, but you get zapped quicker than by microwave.
>As a weapon, using r-f burns may be humane but likely ineffective. Like
>the stun gun, it would likely end up misused as a torture device.
>
>Best regards, Richard Harrison, KB5WZI
>

Time to bring out wire mesh shirts and shields, or use reflectors to "return"
the aReFsky back at the pacifiers.

Yuri

4365. Cushcraft MA5B diagnosis

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 15:45:35 UTC
From: Thomas Beltran <tbeltran@earthlink.net>
Message-ID: <zlsp6.4284$x4.449908@newsread2.prod.itd.earthlink.net>
Source record: 169039

I have a Cushcraft MA5B, which I put up this past December. I've been very happy with the antenna, and then a problem developed on ten meters: the SWR is now high (in the 4:1 range). The other bands work fine, and in fact, according to the RF-1, I have a wider bandwidth than the antenna specifications.

I contacted Cushcraft, and was told that I needed to determine the resonant frequency of the traps. They opined that one of the traps was bad. The resonant frequency of the traps should be about 1 mhz below the band frequency (for ten, the freq. should be 27 mhz.) I'm not really sure how to go about checking the trap.

I have an Autek RF-1, but the instructions show that one must actually insert the RF-1 into the circuit to check the trap, which would destroy the trap. Also, I would hate to have to buy equipment to check the antenna.

Does anyone have an idea about how I can check the traps? Cushcraft has agreed to replace the traps, but they want to know which one's are bad. I would appreciate any assistance. Tom W6EIJ

4366. Re: Help with possible new antenna set-up

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 15:51:31 UTC
From: richardharrison@webtv.net
Message-ID: <11003-3AA65903-23@storefull-117.iap.bryant.webtv.net>
Source record: 169040

Tracy Brooks wrote:
"Where is the best place to find used ones (40 ft or more towers)?"

Local acquisition may be easier. Look in your yellow pages under "Towers-Communications". There are about two dozen listings in Houston.

Good towers are replaced when needs change and the new tower supplier often ends up with the old tower in his bone yard.

Many tower companies erect poles too, but if you are mounting a satellite dish, you need a guyed tower with either cross section or torque arms for stiffness to prevent twisting. I`m assuming you don`t want to spend a fortune for a really stiff self supporting tower.

But why put a satellite dish on a tower? Surely you can find an open space close to your house. Height means nothing to a satellite dish. Without a parabolic antenna, you can use a pole.

Best regards, Richard Harrison, KB5WZI

4367. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 16:40:57 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC807894420@www.premiersi.com>
Source record: 169041
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

Although this one is a hoax, there is a very nasty one that is NOT a hoax -
it has"nakedwife.exe" as an attachment. It does not seem to be spreading as
wildly as predicted. Perhaps everyone is beginning to learn not to open
mysterious mail messages.

"Mark Keith" <nm5k@wt.net> wrote in message news:3AA5DB17.47F4@wt.net...
> A friend sent this to me today. Normally, I hate to clutter up the ham
> NG's with this type of thing, but being as it's a day old, the quicker
> the word gets out , the better. This is not a joke or a troll...This is
> a plum ugly new virus that will ruin your day if you open it. I'm just
> passing it on, so someone doesn't later say, well... why didn't you say
> something... MK
>
> > Subject: NEW VIRUS!! READ IMMEDIATELY!!
> >
> > A new virus has just been discovered that has been classified by
> > Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
> > most destructive ever! This virus was discovered yesterday afternoon
> > by McAfee and no vaccine has yet been developed.
> >
> > This virus simply destroys Sector Zero from the hard disk, where
> > vital information for its functioning are stored. This virus sends
> > itself automatically to all contacts on your list with the title "A
> > Virtual Card for You". When the supposed virtual card is opened, the
> > computer freezes so that the user has to reboot. When the
> > ctrl+alt+del keys or the reset button are pressed, the virus
> > destroys Sector Zero, thus permanently destroying the hard disk.
> >
> > According to news broadcast by CNN (www.cnn.com). This VIRUS received
> > by an employee of Microsoft itself. So don't open any mails with
> > subject "A Virtual Card for You". As soon as you get the mail,
> > delete it.
> >
> > Also: Intel announced that a new and very destructive virus was
> > discovered recently. If you receive an email called "An Internet
> > Flower For You", do not open it. Delete it right away! It removes all
> > dynamic link libraries(.dll files) from your computer. Your
> > computer will not be able to boot up.
>
>
> --
> http://web.wt.net/~nm5k

4368. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 18:02:15 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn9actt7.4si.QSB@animas.frontier.net>
Source record: 169042
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Wed, 07 Mar 2001 10:55:02 GMT, Keith scribbled:
>On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith
> <3AA5DB17.47F4@wt.net> wrote:
>
>>A friend sent this to me today. Normally, I hate to clutter up the ham
>>NG's with this type of thing, but being as it's a day old,
>
>Then don't plug up newsgroups unless the newsgroups name is *.virus.*

And, *please* put "virus" in the !&$#^%# Subject: of these
pathetic postings so that those of us with the good sense *not*
to 'operate' micro$oft software can have our filters kill it.

tnx
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

4369. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 18:16:26 UTC
From: k6mhe@arrl.net
Message-ID: <3aa67a80.378240@news.mcn.org>
Source record: 169045

W7FG makes and sells 600 Ohm ladder line... While I have not used the product myself I have seen it advertised in several Ham publications.

You may wish to check it out at: http://www.w7fg.com/ant.htm

73
Danny, K6MHE

On Wed, 7 Mar 2001 08:38:38 -0500, "Ed Cregger" <nuke663jlm@vei.net> wrote:

>There I go again, forgetting that the rest of the world does
>not have my physical limitations.
>
>Yes, true ladder line, or open wire feedline, is more
>efficient and will perform in a superior manner to 450 ohm
>twinlead and I know it. I just forgot about it because of
>the labor involved and my lack of ability to perform said
>labor. Thanks for setting the record straight.

4370. Boom material for short yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 18:22:29 UTC
From: John <jh.lewis@worldnet.att.net>
Message-ID: <F%up6.6071$yv4.453951@bgtnsc07-news.ops.worldnet.att.net>
Source record: 169043

Hi all,

I'm interested in putting together a 3 element YAGI for 10 meters and one design I've found requires only a 12' boom length which would work nicely in my rather small lot.

Any suggestions for a good lightweight (and inexpensive) boom material that will stand up to the weather in the Midwest (ice storms, high winds, etc..)?

Email appreciated.

Thanks,

John

4371. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 18:37:38 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <985v5i$5od$0@208.207.71.157>
Source record: 169044
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

jimmy john wrote:
>
> Although this one is a hoax, there is a very nasty one that is NOT a hoax -
> it has"nakedwife.exe" as an attachment. It does not seem to be spreading as
> wildly as predicted. Perhaps everyone is beginning to learn not to open
> mysterious mail messages.

Another one I received a couple times is an email message with no address, no signature, no text, nothing except an attachment titled "Norton Antivirus Report". My Nortom antivirus program grabbed it, Id'ed it as a virus and quarantined it. It wouldn't be smart to open any attachments.

4372. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 20:00:40 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9863uh$4i6$1@plutonium.btinternet.com>
Source record: 169046

Robert Peters wrote
> My conclusion is that there is noticable loss
> on the higher bands when the line is wet, but on the lower
frequencies
> there doesn't seem to be any noticable loss.
==========

Conclusion about loss on higher freqs is not entirely valid. Clean water is a low-loss material at HF.

Water has a high dielectric constant which decreases velocity factor. With water running along the feeder its length in wavelengths increases. The effect increases proportional to frequency. It is 15 times greater at 30 MHz than at 2 MHz. When standing waves exist on the feedline at 30 MHz the tuner may need considerable re-adjustment. Q and selectivity of mismatched ladderline are high and detuning may be obvious even on receive.

A smaller effect is again due to the high dielectric constant of water. Capacitance between the wires increases and Zo decreases according to the squareroot of C. Line loss in dB is proportional to wire loss resistance divided by Zo and so line loss increases - but only slightly.

Has anyone ever seen steam rising from 450-ohm ladder line ?

Reg

4373. CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 20:06:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AA694D3.46F1FBE@eznec.com>
Source record: 169047

The following message was recently posted elsewhere by Jack Belrose, VE2CV. It was intended mainly for broadcasters, but I'm sure readers of this group will be interested. Jack was kind enough to give his permission to post it here.

Roy Lewallen, W7EL

CFA Up-date

You have not heard from me for some time on this subject. I have been awaiting something to report.

MF Broadcasters are still maintaining an interest in CFA Antennas, in spite of what has been said/or not said about this antenna.

But Proof of Performance measured results outside Egypt are yet to be publicly released.

The LB Broadcast CFA program on The Isle of Man has suffered a set-back, with the denial of permission to build (environmental concerns).

Robert Richer's, of CFA, Ltd (USA), CFA project in Shropshire, England, is still waiting for Fathi Kabbary to perform his magical touches necessary to tune and test the CFA. Ben Dawson will (it is reported) carry out proof of performance measurements on this CFA.

The CFA Project in Santos, Brazil has come to a standstill. The performance of the antenna (on the roof of a building with a view on the skyline), after completing many mechanically related modifications asked for by Kabbary, including the addition of third cone (??) on its top, is still performing poorly [Sylvio Damiani, reported in the March 2001 issue of AntenneX] --- but no measured results reported.

The San Remo CFA, we had heard earlier that it was performing as expected, is apparently producing less signal than the previously used tower antenna at that location --- a "problem" attributed by Kabbary to surrounding high objects on all sides and very high trees to the north --- but again no measured results reported.

The CFA in Sidney, Australia is for sale (or will be purchased (back) by Kabarry ??), but it is still in use, tuned as a conventional electrically short monopole.

Meanwhile the FCC has finally granted Lawrence Behr Associates a license (WC2XKX) to test the CFA in the USA. These tests are authorized on three frequencies in North Carolina.

Finally a success (??) story. Brian Stewart has reported that the CFA in Barnis, Egypt proves that CFA antennas work, since this ground mounted CFA shows a high degree of efficiency --- but it should be noted (my comment) that a microwave relay tower stands in the near field, having a height that is close to a quarter wave on the frequency used.

The CFA story continues.

But the purpose of this Technical Correspondence (TC) is tell you that the papers presented at the IEEE BTS Symposium, Vienna, VA 27-29 September, 2000 are finally posted for reading.

The WEB site is:

http://www.eriinc.com/IEEE/

Note: IEEE in caps.

Concerning our experimental measured results, we have (finally) learned how to tune the antenna, tuned as a CFA (feed currents in quadrature, and transmitter SWR = 1:1). This has been achieved by using a storage oscilloscope so both current in amplitudes and phase can be viewed simultaneously.

Have fun reading.

Regards, Jack, VE2CV

--

_____
John S. (Jack) Belrose, PhD Cantab, VE2CV
Radioscientist Emertis
Radio Sciences Branch
Communications Research Centre
PO Box 11490 Stn. H
OTTAWA ON K2H 8S2
CANADA

4374. Re: Support for capacitance hat

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 20:06:49 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AA694D9.2137B779@usa.alcatel.com>
Source record: 169048

I use a 1 inch copper pipe cap. I drill the sides and solder brass nuts inside for 40 inch Radio Shack stainless whips. A 3/8 inch hole in the end lets me mount it on short mobile mast sections like the Hustler 18 inch mast (or with an adapter to short steel whip sections - but that's not really rigid enough).

Cortland
ka5s@earthlink.net

jhsu-no-spam@cotse.com wrote:

> I understand I can attach any piece of metal to the top of a whip antenna to
> obtain a capacitance hat for my W6AAQ DK3 Screwdriver antenna.
>
> But what can I use to support the capacitance hat? Is there a particular kind
> of clamp I can buy? I would like to hear what you have tried.
>
> Jason Hsu, AG4DG
> jason_hsu@planetmail.com

4375. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 20:46:21 UTC
From: kb7qhc@home.com
Message-ID: <3aa69b9f.443133121@news.seanet.com>
Source record: 169049

On Wed, 07 Mar 2001 12:06:43 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>
>The San Remo CFA, we had heard earlier that it was performing as
>expected, is apparently producing less signal than the previously
>used tower antenna at that location --- a "problem" attributed by
>Kabbary to surrounding high objects on all sides and very high trees
>to the north --- but again no measured results reported.
>

Hi All,

Hmmm, it seems to me that the proponents of the CFA at one time
exclaimed that their "technology" employed the Earth's magnetic lines
of force to enable communication THROUGH obstacles such as mountains
and pyramids and so on.

And now to hear that some "very high trees" now obstruct a medium wave
signal evidences an extreme shortfall over the standard method. Trees
kill signal indeed! Obviously a greater challenge than mountains for
CFAs.... ... but then, there are no trees (to speak of) in Egypt and
no Pyramids (to speak of) in San Remo.

Well, as updates go - not so much up as lateral.

73's
Richard Clark, KB7QHC

4376. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:01:31 UTC
From: richardharrison@webtv.net
Message-ID: <29716-3AA6A1AB-52@storefull-112.iap.bryant.webtv.net>
Source record: 169051

Roy, W7EL wrote:
"When radials get close to ground, their resonant length becomes shorter."

Arnold Bailey says in "TV and Other Receiving Antennas" that ground plane antennas on the ground have a 3 db advantage over those high above ground. Those on the ground get a boost because their radiation is confined to only one hemisphere, but when the ground plane is elevated it behaves more as a dipole and loses the gain from its image in the ground.
All of this is a function of elevation angle and how good a reflector the ground is.

Bes regards, Richard Harrison, KB5WZI

4377. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:04:28 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <wq_p6.5$Y91.402@newsfeed.slurp.net>
Source record: 168929

Regarding using the lest inductance to acheive the lowest loss, what about the shorted turns? If you use the least inductance, with a tapped inductor, either switch tapped or roller inductor, you have the greatest number of shorted turns which are inductively coupled to the rest (active part) of the inductor. Seems to me this might be lossy too. For this reason those Collins coils which wind the unused part of the inductor onto a conductive drum are really neat. ...Also the "false resonances" may not all be inefficient tunings that couple less power to the antenna output side of the tuner, some of those tunings may be self resonant tunings of the tuner wherein all of the power is resistively consumed in the tuner and none gets to the antenna feedline at all.
Peter O. Brackett wrote in message <9893iluae1@slb6.atl.mindspring.net>...
>Thread:
>
>Hey, the T-tuner is basically a 3-element high pass filter [C1-L-C2] with
>two capacitors in the "hot" side and a single inductor to ground. Any
>filter with adjustable elements can be used as an impedance matcher. The
>Pi-Tuner is actually a low pass filter [C1-L-C2] with two grounded C's and
a
>floating L, and can effect impedance matching with the added benefit of
>harmonic suppression because of the low pass filtering effect.
>
>Not much harmonic supression in T-tuner, since it is a high pass filter,
and
>don't expect it.
>
>A properly configured L-tuner [L-C] can do as good a job at harmonic
>suppression.
>
>Of course, your transmitter should have it's harmonics suppressed far
enough
>to begin with. So don't depend upon the "tuner" for harmonic supression.
>
>The "tuner", whether T-Tuner, L-tuner, Pi-Tuner, or whatever, should be
>thought of simply as an adjustable impedance transformer. The T and Pi
>tuners have three independent adjustments, more adjustable variables than
>are necessary to match any given impedance ratio, and so....
>
>With three independent adjustments, the T-tuner and Pi-Tuner can have
>numerous different "settings" of the controls to effect the desired
>impedance transformation. Usually only one of those several settings is
the
>lowest loss setting. Beginners may have problems deteriming which of the
>various settings that result in 1:1 VSWR are the lowest loss. A good rule

>of thumb is that since the inductor is the lossiest element in the tuner,
>the setting that utilizes the smallest value of inductance is the lowest
>loss setting.
>
>With only two independent adjustments, the L-Tuner will have only one
>"setting" that effects the desired impedance transformation and results in
a
>1:1 VSWR. You simply have to settle for whatever "loss" results from that
>one setting.
>
>Depending upon conditions, that setting of the L-tuner may result in less
or
>more loss than a corresponding T-tuner or Pi-Tuner.
>
>Widespread practice and usage indicate that the "T-tuner" is the most
>versatile in terms of the impedance matching range for a given size of
>capacitors and inductors.
>
>-Peter
>
>
>"Robert Peters" <peters@ems.psu.edu> wrote in message
>news:3AA7B9E1.FCC7DFE4@ems.psu.edu...
>> I have used the L-tuner and T-tuner. Seems to me the main disadvantage
of
>> the L tuner is that it does not act as a tuned circuit and will radiate
>> harmonics. The T-tuner seems to function as a band pass filter. Just my
>> observation. The main difference could be the type of feed. I use the
>> MFJ-989C with window line to feed a doublet. I use the L-tuner
(homebrew)
>> to end feed a wire. The "false resonance seems to be a mecahnical short
>> to disable some of the turns on the variable inductor, when using smaller
>> inductances.
>>
>> Bob K3EZS
>
>

4378. Re: Boom material for short yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:04:55 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <3AA6A277.533897FA@qnet.com>
Source record: 169060

Hello John: I have built a few 20, 15, and 11/10 meter beams.

I like the use of the square aluminum tubing, around 1 1/2 to 2 inches in diameter, using thin walled 1/16 inch wall thickness, or if your bent on bullet proof, you can use the 1/8 inch wall thickness.

With the square tubing, boom to mast reinforcement plates, are a snap to make. The elements can go thru smaller square tubing, in the middle. Such as 3/4 inch round aluminum tubing, going thru 1 inch square tubing (about 12 " long), with a 1/8 inch wall thickness, this is bullet proof construction. With the 3/4" tubing 48 inches long and centered in the 1" square tubing, attached to the mast with a square U-bolt made from all thread (1/4" or 5/16"), hugging the mast, and going thru the 1" and 3/4" tubing, and being secured with lock washers and nuts, out be pretty good construction. The remaining parts of the elements can be made from 5/8" (36 inches long, with 3 inches inside the 3/4" tubing) and 1/2 inch round aluminum tubing, cut to 72 inches long will allow for almost 12 to 10 meter operation. With a wall thickness of .058 inches. Aluminum tubing material 6063-T8 is found all over, and is good stuff.

Use good marine grade stainless steel hose clamps.

Jay in the Mojave

John wrote:
>
> Hi all,
>
> I'm interested in putting together a 3 element YAGI for 10 meters and one
> design I've found requires only a 12' boom length which would work nicely in
> my rather small lot.
>
> Any suggestions for a good lightweight (and inexpensive) boom material that
> will stand up to the weather in the Midwest (ice storms, high winds, etc..)?
>
> Email appreciated.
>
> Thanks,
>
> John

4379. G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:12:50 UTC
From: Alan Watts <awatts@neo.rr.com>
Message-ID: <mvxp6.12697$a7.131492@typhoon.neo.rr.com>
Source record: 169050

Anybody have experience with one? How does a G5RV compare to, say, a 40M dipole on 40M -- at the same height? -- a 10M dipole on 10M?

Also, I'll have to run it through the near tops of some trees -- should I replace the bare copper horizontal wire part with insulated wire to keep from maybe starting a fire.

It's 102 feet long, and I can't run it completely free of tree limbs and foliage.

Alan

4380. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:18:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AA6A597.2AFC660C@eznec.com>
Source record: 169052

For the record, the quote is from my posting, but it was written by Jack Belrose, VE2CV.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Wed, 07 Mar 2001 12:06:43 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >
> > >The San Remo CFA, we had heard earlier that it was performing as
> > >expected, is apparently producing less signal than the previously
> > >used tower antenna at that location --- a "problem" attributed by
> > >Kabbary to surrounding high objects on all sides and very high trees
> > >to the north --- but again no measured results reported.
> > >
> > . . .

4381. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:31:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA6A8BC.58CE@wt.net>
Source record: 169053
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

Mark Keith wrote:

Note...I've had a couple of e-mails suggesting that this might be a hoax. Dunno. Could very well be. But I did get it from a fairly reliable source. I just passed it on as a note. If it's a hoax, so much the better. MK
--
http://web.wt.net/~nm5k

4382. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:40:50 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AA6AAE2.AFEBDB53@oio.net>
Source record: 169054

Roy,
Has anyone ~ever~ gotten one of these things to work yet? ...with
certifiable measurements/results?
'Doc

4383. Re: Support for capacitance hat

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 21:47:51 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AA6AC87.20150845@oio.net>
Source record: 169055

Jason,
A common way to mount a capacitive hat is between the
top of the coil and the whip. "Works fine... lasts a long
time". Another method is to use any support 'guys' as a
'cap-hat'. For example, using nylon cord as the 'guy',
just run a wire from the top of the coil down the cord
for whatever length you need. That assumes that your guyed
at the top of the coil...
'Doc

4384. Re: Helical whip with auto tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 22:01:42 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AA6AFC6.6E03A53D@usa.alcatel.com>
Source record: 169056

Whatever works, works. I worked 39 states and both coasts from Texas, mobile on 160 meters during a 160 meter contest some years back. The antenna was a Radio Shack fiberglass CB whip loaded with a hand wound -- with # 24 wire! -- 4 inch by about 14 inch PVC base loading coil. Beat it? Sure, a lot of things would beat that. But whatever works.... works!

I used an ICOM AH3 tuner and tried tuning mobile antennas on bands where they were not resonant. A Hustler 80 meter antenna presented too much impedance at the coil to work well on 40 (and the base insulator caught fire). The 4 feet of mast below the coil worked -- sort of -- on 10 through 20. I went to a longer mast with better luck, but really, it wasn't worth carrying 11 feet of antenna just to use six feet of it.

Cortland
ka5s@earthlink.net

Mike wrote:

> I have use an SGC auto tuner with a 40m hamstick and found it to
> obviously work great on 40 but down in performance on other bands,
> especially 10m. Other users have mentioned that center loaded whips like
> the Valor don't seem to radiate well out of band with an autotuner.
> Continuous loaded helical whips seem to do much better as multi band
> antennas with an autotuner. I found 9ft cb whips work great on 20m thru
> 10m but are very poor on 40m and lower. The dual wound SGC whip works
> well and is nearly as good as the Hustler and Valor mono band whips I
> compared to. The 12ft whip helps a little on 40 and 80m but the SGC
> whip is still noticeably better. I have logged many 160m contacts from
> So. Cal to as far as Nebraska with the SGC whip. When I mention the
> antenna is an 8ft loaded whip the response is usually " yea, right...".
> When parked or camping I throw up a 16 or 32ft military whip which is
> outstanding on the lower bands. Wish I could use that in motion. The SGC
> system is a bit ugly, but a higher performance multi-band antenna is
> going to be bigger and uglier. Overall I will gladly pay the small
> sacrifice in performance for the convenience of instant QSY with the SGC
> tuner/whip.

4385. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 22:36:00 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AA6B7D0.212325E1@bwcc.com>
Source record: 169057
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

Mark Keith wrote:
> Note...I've had a couple of e-mails suggesting that this might be a
> hoax.
I didn't suggest that it might be a hoax.
I flatly declared that it is undeniably a hoax.

> I did get it from a fairly reliable source.
Formerly reliable source.

> I just passed it on as a note.
You could easily have checked the facts on any of many websites which list this prevalent hoax.
Though it contained so many tale tell signs of being a hoax, that only a novice would be fooled by it.

4386. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 22:36:03 UTC
From: kb7qhc@home.com
Message-ID: <3aa6b36b.449225782@news.seanet.com>
Source record: 169058

On Wed, 07 Mar 2001 14:23:06 -0700, Charles Johnston
<charles@ab7sl.com> wrote:

>
> In your example question a resonant dipole will always outperform a
>non-resonant dipole (G5RV). The resonant dipole will have the classic
>figure-8 major lobes broadside to the wire's length. Non-resonant
>dipoles will have a irregular or daisy-petal pattern not favoring any
>particular direction. Moreover with resonant dipoles no antenna
>tuner is needed. Insulated wire helps protect the inner wire
>conductor from deterioration.

Hi Charles,

Resonance has nothing to do with lobe patterns except as a function of physical length vs. electrical length. What you describe (having more lobes than the standard figure 8) is simply a physically big antenna used at a correspondingly short wavelength. The smallest doublet (very small in relation to a long electrical length) will still give you a figure 8 - matched or otherwise. Neither instance is resonant and yet both are possible without regard for resonance. Thus, there is no direct correlation between resonance and lobe pattern outside of the lengths involved. (Or, in other words, to describe an antenna as resonant necessarily fulfills the length requirements by inference; but does not constitute a separate criteria for describing the lobe pattern.)

As for performance being judged by the criteria of resonance. This is only true insofar as the losses incurred through neglect of SWR. You can lose power as easily through neglect at resonance too. Neither of these conditions is part and parcel to resonance, but rather more attributable to the human factor, not design.

73's
Richard Clark, KB7QHC

4387. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-07 23:38:09 UTC
From: ccom2@socket.net
Message-ID: <3aa6c5c4.8341614@news.socket.net>
Source record: 169059
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

My brother got it yesterday was notified by his norton antivirus that
his boot sector was trying to be changed.
if it is a hoax why is it being detected by Norton antivirus

Mike

Mark Keith <nm5k@wt.net> wrote:

>A friend sent this to me today. Normally, I hate to clutter up the ham
>NG's with this type of thing, but being as it's a day old, the quicker
>the word gets out , the better. This is not a joke or a troll...This is
>a plum ugly new virus that will ruin your day if you open it. I'm just
>passing it on, so someone doesn't later say, well... why didn't you say
>something... MK
>
>> Subject: NEW VIRUS!! READ IMMEDIATELY!!
>>
>> A new virus has just been discovered that has been classified by
>> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
>> most destructive ever! This virus was discovered yesterday afternoon
>> by McAfee and no vaccine has yet been developed.
>>
>> This virus simply destroys Sector Zero from the hard disk, where
>> vital information for its functioning are stored. This virus sends
>> itself automatically to all contacts on your list with the title "A
>> Virtual Card for You". When the supposed virtual card is opened, the
>> computer freezes so that the user has to reboot. When the
>> ctrl+alt+del keys or the reset button are pressed, the virus
>> destroys Sector Zero, thus permanently destroying the hard disk.
>>
>> According to news broadcast by CNN (www.cnn.com). This VIRUS received
>> by an employee of Microsoft itself. So don't open any mails with
>> subject "A Virtual Card for You". As soon as you get the mail,
>> delete it.
>>
>> Also: Intel announced that a new and very destructive virus was
>> discovered recently. If you receive an email called "An Internet
>> Flower For You", do not open it. Delete it right away! It removes all
>> dynamic link libraries(.dll files) from your computer. Your
>> computer will not be able to boot up.
>
>
>--
>http://web.wt.net/~nm5k

4388. Re: Boom material for short yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 00:21:49 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <xgAp6.530$X73.101509@news7.onvoy.net>
Source record: 169062

If you don't have an aluminum supplier, I saw one using the yellow tv masting
sold by Radio Scrap. It is only 10 ft long but could be lengthend as it has one
end crimped smaller.

also check with your local trucking company, load locks wear out and sometimes
they throw them out, there is about 6 ft of useable aluminum there.

Rosco

4389. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 00:23:14 UTC
From: Alan Watts <awatts@neo.rr.com>
Message-ID: <ShAp6.12723$a7.134315@typhoon.neo.rr.com>
Source record: 169061

Sorry, if I'm slow -- it's not clear to me.

My primary band will be 40M. Will the G5RV perform as well as a 40M dipole? -- all other factors, (distance above ground, ground conductivity, trees that it is passing through/pressing hard against, etc.) being equal? Should I insulate the wire?

I don't do DX. I want the best signal for <1000 mile distances.

Thanks for any guidance.

Alan
WA8NSU

"Charles Johnston" <charles@ab7sl.com> wrote in message news:B8B94B8AB70DC9C5.3820BEE5B24135FF.22AEC8A8B46F42AC@lp.airnews.net..
.
> On Wed, 07 Mar 2001 22:36:03 GMT, kb7qhc@home.com (Richard Clark)
> wrote:
> <snip>
>
> >As for performance being judged by the criteria of resonance. This
is
> >only true insofar as the losses incurred through neglect of SWR. You
> >can lose power as easily through neglect at resonance too. Neither
of
> >these conditions is part and parcel to resonance, but rather more
> >attributable to the human factor, not design.
> >
> >73's
> >Richard Clark, KB7QHC
>
> Thanks Richard for clearing that up for me....73 / DX
>
> Charles T Johnston
> charles@ab7sl.com
>
> AB7SL Ham Radio Pages
> http://www.ab7sl.com

4390. Re: Cushcraft MA5B diagnosis

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 00:24:36 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <8jAp6.531$X73.101528@news7.onvoy.net>
Source record: 169063

Wonder if a grid dip meter would do the trick?
Ask around, one of the local hams might have one.

Thomas Beltran <tbeltran@earthlink.net> wrote in message
news:zIsp6.4284$x4.449908@newsread2.prod.itd.earthlink.net...
> I have a Cushcraft MA5B, which I put up this past December. I've been
very
> happy with the antenna, and then a problem developed on ten meters: the
SWR
> is now high (in the 4:1 range). The other bands work fine, and in fact,
> according to the RF-1, I have a wider bandwidth than the antenna
> specifications.
>
> I contacted Cushcraft, and was told that I needed to determine the
resonant
> frequency of the traps. They opined that one of the traps was bad. The
> resonant frequency of the traps should be about 1 mhz below the band
> frequency (for ten, the freq. should be 27 mhz.) I'm not really sure how
to
> go about checking the trap.
>
> I have an Autek RF-1, but the instructions show that one must actually
> insert the RF-1 into the circuit to check the trap, which would destroy
the
> trap. Also, I would hate to have to buy equipment to check the antenna.
>
> Does anyone have an idea about how I can check the traps? Cushcraft has
> agreed to replace the traps, but they want to know which one's are bad. I
> would appreciate any assistance. Tom W6EIJ
>
>

4391. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 00:41:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AA6D543.AA3402B0@eznec.com>
Source record: 169064

It kinda depends on what you consider "certifiable". A number of measurements have been made of the Egyptian installations, and these are often used as proof of claimed performance. But closer scrutiny has revealed poorly calibrated test equipment for some measurements and, as far as I can tell, no systematic system of measurements at various distances and directions. Other criticisms are that the transmitter buildings are metal-sheathed and are likely radiating more than the antenna. Finally, some of the fantastic claims seem to be based on ground conductivity which might be much lower than its actual value. Some measurements were made in Egypt by a respected and independent engineer which seem to show performance greater than one would think from such a small antenna, although it was less than claimed. I don't believe a full set of measurements were made, however, and don't believe any independent determination of ground conductivity was done. As I understand it, the Isle of Man or one of the other new installations was supposed to be professionally measured, putting all doubts to rest. But these professional measurements seem to always be just a little out of reach for some reason.

It's well known that the field strengh from a broadcast station varies quite a bit in different directions and distances for a variety of reasons. That's why the FCC proof of performance requires quite a number of measurements in different directions and distances. I'm not aware of any proof-like set of measurements being made on any CFA installation, although some have been in operation for over 10 years now. Several good sets of these measurements by an independent engineering firm at a few sites would be a sure-file sales tool for the CFA, so I can see only one reason they don't seem to exist. All we seem to have is spot measurements here and there.

I have to state I'm not a real expert on the CFA. I've kept somewhat aware of the developements, but to nowhere near the extent Jack Belrose and some others have. So there may well be measurements I'm not aware of. It does seem, though, that really solid evidence of consistent performance comparable with a much larger antenna continues to be lacking, despite the years the developers have had to produce it. Some people might wonder why, but I don't.

Roy Lewallen, W7EL

'Doc wrote:
>
> Roy,
> Has anyone ~ever~ gotten one of these things to work yet? ...with
> certifiable measurements/results?

> 'Doc

4392. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 00:43:06 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <uAAp6.14918$Ok4.1961444@news1.rdc1.ct.home.com>
Source record: 169065
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

You really sure, Tony?? This is direct cut-and-paste from the McAfee site:

W32/Naked@MM (NakedWife Virus) Help Center
W32/Naked@MM is a HIGH RISK virus that is spread using the Windows email program Outlook. The infected email can come from addresses that you recognize. Attached is a file named NakedWife.exe, which poses as a Flash movie. When run, it copies itself to a TEMP directory and displays a window entitled "Flash" which reads "JibJab loading".

Moral of story: Don't open .exe files attached to email.

Pete, K1ZJH

"Tony" <tdowden@pacbell.net> wrote in message
news:4oqbatg18b33n6jpqpq31gfv7244gf41pq@4ax.com...
>
>
> I'm sure your intention was good, but if you go to the mcafee site
> (the one your message references) and look under hoaxes you'll find
> this message, and it's represented as a hoax. The text is only
> slightly different. So what your friend sent you was possibly in
> error. I make no judgement of him or you. However, there are a lot
> of hoaxes as well as real viruses going around. You might go there
> and check it out. It's interesting.
>
> Just thought you'd like to know.
>
> Tony
>
>
> On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith <nm5k@wt.net> wrote:
>
> >A friend sent this to me today. Normally, I hate to clutter up the ham
> >NG's with this type of thing, but being as it's a day old, the quicker
> >the word gets out , the better. This is not a joke or a troll...This is
> >a plum ugly new virus that will ruin your day if you open it. I'm just
> >passing it on, so someone doesn't later say, well... why didn't you say
> >something... MK
> >
> >> Subject: NEW VIRUS!! READ IMMEDIATELY!!
> >>
> >> A new virus has just been discovered that has been classified by
> >> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
> >> most destructive ever! This virus was discovered yesterday afternoon

> >> by McAfee and no vaccine has yet been developed.
> >>
> >> This virus simply destroys Sector Zero from the hard disk, where
> >> vital information for its functioning are stored. This virus sends
> >> itself automatically to all contacts on your list with the title "A
> >> Virtual Card for You". When the supposed virtual card is opened, the
> >> computer freezes so that the user has to reboot. When the
> >> ctrl+alt+del keys or the reset button are pressed, the virus
> >> destroys Sector Zero, thus permanently destroying the hard disk.
> >>
> >> According to news broadcast by CNN (www.cnn.com). This VIRUS received
> >> by an employee of Microsoft itself. So don't open any mails with
> >> subject "A Virtual Card for You". As soon as you get the mail,
> >> delete it.
> >>
> >> Also: Intel announced that a new and very destructive virus was
> >> discovered recently. If you receive an email called "An Internet
> >> Flower For You", do not open it. Delete it right away! It removes all
> >> dynamic link libraries(.dll files) from your computer. Your
> >> computer will not be able to boot up.
>

4393. Re: Discone Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 00:46:34 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <KDAp6.533$X73.102005@news7.onvoy.net>
Source record: 169066

The cone radials are usually a 1/4 wave at the lowest freq and the top hat is usually
a 1/4 wave at the highest freq. They are designed to cover a decade of frequencies,
example 50-500 mhz. I would suspect that you could get by with only 3 or 4 of the
radials before you would see any difference in rx.

This is just an educated guess, don't quote me on this. I have seen discones with 3 radials
each.

Rosco

AlainMV <alainmv@aol.com> wrote in message
news:20010212154826.12352.00000561@ng-fs1.aol.com...
> I've got a RS discone 10' above the roof; it's been there for almost 2 yrs and
> has served me well. LAFD/PD are still received well from 160+ miles away.
> Recently, due to a few wind storms, two radials from the "cone" have been
> broken off, but scanner performance has not dinimished that I can tell.
>
> What function do the cone radials provide? At what point will signal strength
> suffer? Does missing adjoining radials (one next to the other) make the antenna
> more directional?
>
> Lastly, what should I be looking for as a replacement antenna? I monitor mostly
> 30-50 meg and 150.
>
> Many, many thanks!
>
> Alain @ Palomar Mtn.

4394. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:02:21 UTC
From: kb7qhc@home.com
Message-ID: <3aa6d54e.457900776@news.seanet.com>
Source record: 169068

On Thu, 08 Mar 2001 00:23:14 GMT, "Alan Watts" <awatts@neo.rr.com>
wrote:

>Sorry, if I'm slow -- it's not clear to me.
>
>My primary band will be 40M. Will the G5RV perform as well as a 40M
>dipole? -- all other factors, (distance above ground, ground
>conductivity, trees that it is passing through/pressing hard against,
>etc.) being equal? Should I insulate the wire?
>
>I don't do DX. I want the best signal for <1000 mile distances.
>
>Thanks for any guidance.
>
>Alan
>WA8NSU
>
>

Hi Alan,

Even at its worst, it will still perform more than adequately compared
to a dipole.

As Charles notes, for the shorter wavelength (40M), you will observe
different lobes (this is not a condition relating to resonance) and
here you may suffer in comparison to a simple dipole for 40M - IF your
old contact happens to fall into one of the new nulls of the G5RV.
Instead of the figure 8, you can expect a cloverleaf with the new
nulls falling on the broadside axis and the old nulls still oriented
along the axis of the wire.

Now, IF your G5RV does exhibit deep nulls, then you can rightfully
expect it is working very well indeed! (Otherwise the nulls would be
filled by other radiating portions of your system such as the
feedline.) IF you should be so lucky, then simply turn the rotator
;-)

IF, on the other hand, your system is located low to the ground or its
balance is upset, it is unlikely to exhibit these nulls very strongly
(and the simple 40M dipole would suffer in the same way). In this
sense, either will perform equivalently (within an S-Unit).

Go ahead and choose insulated wire. However, this is not an absolute
guarantee against accident or fire. On the other hand, I have used
wire in direct contact with trees for years (insulated, yes) and never

observed any smoke (but it does rain a lot here - or it used to). The trees have done more damage to my longwire rather than t'other way 'round.

73's
Richard Clark, KB7QHC

4395. Bad TVI--Thanks group!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:05:56 UTC
From: Frizz <kg4ivt@hotmail.spamsucks.goaway.leavemealone.com>
Message-ID: <986lm9$3hp$1@bob.news.rcn.net>
Source record: 169067

Thanks to all that replied to my TVI problem message. I now have a jumping off point in fixing all of this. One more thing though. People have mentioned common mode chokes and the ARRL Hints and Kinks book talks about them as well. Where is a good place to get the ferrite cores to wrap coax and other cables with? I am thinking about getting some of the snap on ones that AES sells for the smaller audio and power leads going to the effected equipment but those seem way to small for coax and larger power cables like the ones you might find on equipment with three prong grounded plugs. Any ideas? Thanks again!!!!

4396. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:15:39 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <H2Bp6.3169$l5.2796935@newsfeed1.thebiz.net>
Source record: 168969

I don't get the multi-lobed nonsense. His primary band is stated as 40M and a G5RV is NOT multi-lobed on 40M. I once did the calculation, and my dim memory is that it takes about a 150ft+ doublet on 40M to develop secondary lobes.

G5RV is a great antenna on 40M, especially if you can get it up 40-50ft or so.

Ciao,
Barry N1EU

Charles Johnston <charles@ab7sl.com> wrote in message news:E9F2B66AA12A6CF2.80313483F2B0333E.4BD59984AFA0FAD2@lp.airnews.net...
> On Wed, 07 Mar 2001 21:12:50 GMT, "Alan Watts" <awatts@neo.rr.com>
> wrote:
>
> >Anybody have experience with one? How does a G5RV compare to, say, a
> >40M dipole on 40M -- at the same height? -- a 10M dipole on 10M?
> >
> >Also, I'll have to run it through the near tops of some trees --
> >should I replace the bare copper horizontal wire part with insulated
> >wire to keep from maybe starting a fire.
> >
> >It's 102 feet long, and I can't run it completely free of tree limbs
> >and foliage.
> >
> >Alan
> >
>
> In your example question a resonant dipole will always outperform a
> non-resonant dipole (G5RV). The resonant dipole will have the classic
> figure-8 major lobes broadside to the wire's length. Non-resonant
> dipoles will have a irregular or daisy-petal pattern not favoring any
> particular direction. Moreover with resonant dipoles no antenna
> tuner is needed. Insulated wire helps protect the inner wire
> conductor from deterioration.
>
> My W9INN 5-band trapped resonant fan-dipole has black insulated
> wires and has been up for over 5 years now with no trouble at all. I
> have a link to W9INN antennas info on my site on the Ham Radio Links
> page.
>
> One can do quite well working DX with a dipole. I have DXCC #288 on
> the W9INN antenna.
>

> Charles T Johnston
> charles@ab7sl.com
>
> AB7SL Ham Radio Pages
> http://www.ab7sl.com

4397. Re: Mount for W6AAQ DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:20:13 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <N9ymOsi1syTy+J53l+qTjouv+hvA@4ax.com>
Source record: 168970

Jason Hsu <jhsu-no-spam@cotse.com> wrote:

>Has anyone here used a W6AAQ DK3 Screwdriver antenna for NONmobile use? I have
>the DK3, and I plan to use it in my apartment. (NO, mounting the antenna on my
>car and routing the coax to my apartment is NOT an option.)
>
>I realize I need to go to a junkyard. (I haven't been able to find an old
>brake drum at an auto repair shop.) But I would like to hear ideas that have
>worked for you.

Mount it on an upside-down waste paper basket. Use big washers, if needed, to
strenghen the mounting area. (Hell, guy the damn thing, if needed.)

Then run a counterpoise wire through your apartment for the ground side of the
system.

That oughtta do it, for fixed station use.

Bob
k5qwg
>
>-
>Jason Hsu, AG4DG
>jason_hsu@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/

4398. Thinking day on the air pictures from Worcester England

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:39:36 UTC
From: Bads <pete@g0wxj.freeserve.co.uk>
Message-ID: <986nfhveo1@newsg1.svr.pol.co.uk>
Source record: 168971

Hello everyone,

If you are interested, some of the pictures of the Worcester Thinking day on the air event are now on the website. There are still some more to come when the scanner has cooled down a little.

http://www.tdota.co.uk/2001-images/thumbs/index.htm

Hope you like them

Pete

G0WXJ

Thinking Day On The Air Special Event 2001
Organised by the Avon Valley ARA.
Peter Badham (Station Manager 2001)
Email: pete@tdota.co.uk
http://www.tdota.co.uk

4399. Re: A plum ugly virus hoax.. confusion!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:45:12 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AA6E428.262DC30C@bwcc.com>
Source record: 168972
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

"Peter J. Bertini" wrote:
> You really sure, Tony??
Yes.

> This is direct cut-and-paste from the McAfee site:

And if you read it, you will see that it has NOTHING to do with the hoax that was posted here which was about "A Virtual Card for You" and "An Internet Flower For You".

So when you get unmixed up, you will see that Tony was right and you were confused.

> > On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith <nm5k@wt.net> wrote:
> > >> This virus simply destroys Sector Zero from the hard disk, where
> > >> vital information for its functioning are stored. This virus sends
> > >> itself automatically to all contacts on your list with the title "A
> > >> Virtual Card for You". When the supposed virtual card is opened, the
> > >> computer freezes so that the user has to reboot. When the
> > >> ctrl+alt+del keys or the reset button are pressed, the virus
> > >> destroys Sector Zero, thus permanently destroying the hard disk.
> > >>
> > >> According to news broadcast by CNN (www.cnn.com). This VIRUS received
> > >> by an employee of Microsoft itself. So don't open any mails with
> > >> subject "A Virtual Card for You". As soon as you get the mail,
> > >> delete it.
> > >>
> > >> Also: Intel announced that a new and very destructive virus was
> > >> discovered recently. If you receive an email called "An Internet
> > >> Flower For You", do not open it. Delete it right away! It removes all
> > >> dynamic link libraries(.dll files) from your computer. Your
> > >> computer will not be able to boot up.

4400. Re: Boom material for short yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:45:50 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3AA6E435.DAB85E24@earthlink.net>
Source record: 168974

you might consider trying either chain link fence top rail or radio shack mast
both come in 10 foot lenghts and are tappered so they join together to make the
12 foot boom good luck

John wrote:

> Hi all,
>
> I'm interested in putting together a 3 element YAGI for 10 meters and one
> design I've found requires only a 12' boom length which would work nicely in
> my rather small lot.
>
> Any suggestions for a good lightweight (and inexpensive) boom material that
> will stand up to the weather in the Midwest (ice storms, high winds, etc..)?
>
> Email appreciated.
>
> Thanks,
>
> John

4401. Re: A plum ugly virus hoax..confusion!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 01:51:44 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AA6E5B0.9BCA242A@bwcc.com>
Source record: 168973
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

ccom2@socket.net wrote:
> My brother got it yesterday was notified by his norton antivirus that
> his boot sector was trying to be changed.
> if it is a hoax why is it being detected by Norton antivirus

Your brother is confused, mistaken, misunderstood, or non-existent.
"Virtual Card" is a hoax.

4402. Re: A plum ugly virus hoax..confusion!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 02:38:57 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA6F0C1.8D5E4092@IEEE.org>
Source record: 168975
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

```
Denver Braughler wrote:
>
> ccom2@socket.net wrote:
> > My brother got it yesterday was notified by his norton antivirus that
> > his boot sector was trying to be changed.
> > if it is a hoax why is it being detected by Norton antivirus
>
> Your brother is confused, mistaken, misunderstood, or non-existent.
> "Virtual Card" is a hoax.

Now that everyone knows it is a hoax, wouldn't that be a perfect
title for a real virus?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----
```

4403. Re: Support for capacitance hat

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 02:41:21 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA6F151.16C07947@IEEE.org>
Source record: 168976

jhsu-no-spam@cotse.com wrote:
>
> I understand I can attach any piece of metal to the top of a whip antenna to
> obtain a capacitance hat for my W6AAQ DK3 Screwdriver antenna.

Here's my self-supporting screwdriver top hat.

http://people.delphi.com/cecilmoore/mobnow.htm
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4404. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 02:50:14 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA6F366.4515FB77@IEEE.org>
Source record: 168977

Alan Watts wrote:
> Anybody have experience with one? How does a G5RV compare to, say, a
> 40M dipole on 40M -- at the same height? -- a 10M dipole on 10M?

The G5RV is a pretty good antenna for 75m, 40m, 20m, and 12m. Take
a look at my G5RV page at: http://www.geocities.com/CapeCanaveral/8476
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4405. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 02:54:31 UTC
From: richardharrison@webtv.net
Message-ID: <1049-3AA6F467-101@storefull-118.iap.bryant.webtv.net>
Source record: 168980

Dick Carroll wrote:
"He`s the guy who put up 300 foot towers so that he could have his dipole "UP" in the clear, without any question whatever about it. And guess what - his verticals beat the socks off all his high dipoles."

Well, maybe Tom, W8JI, didn`t rip out his ground radials under his new horizontal antennas, and the installation simulated that over sea water or salt marsh. Bad for low-angle dipole radiation, but good for higher-angle radiation to reach closer targets.

Just pure speculation. I have no idea what Tom`s antenna farm looks like.

Best regartds, Richard Harrison, KB5WZI

4406. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 02:57:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA6F504.5150947C@IEEE.org>
Source record: 168978

Charles Johnston wrote:
> In your example question a resonant dipole will always outperform a
> non-resonant dipole (G5RV).

That depends upon your definition of "outperform". The G5RV's
matching section (series section transformer) gives a pretty good
match for coax on 40m and the fact that the G5RV is 0.78WL on
40m gives it some gain over a 0.5WL dipole.

My non-resonant 40m EDZ outperforms a resonant 1/2WL dipole by
the predicted amount.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4407. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 02:59:47 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA6F5A3.B9F8DAF@IEEE.org>
Source record: 168979

Richard Clark wrote:
> Thus, there
> is no direct correlation between resonance and lobe pattern outside of
> the lengths involved.

Witness the multi-lobed patterns of resonant 1.5WL, 2.5WL, 3.5WL, ...
antennas.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4408. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:08:32 UTC
From: Dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.10103072207480.22803-100000@cluster2>
Source record: 168981
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

This virus doesn't screw up your boot sector, it messes up your outlook express.

On Wed, 7 Mar 2001 ccom2@socket.net wrote:

> Date: Wed, 07 Mar 2001 23:38:09 GMT
> From: ccom2@socket.net
> Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.equipment,
> rec.radio.amateur.policy
> Subject: Re: A plum ugly bug..Beware!!
>
> My brother got it yesterday was notified by his norton antivirus that
> his boot sector was trying to be changed.
> if it is a hoax why is it being detected by Norton antivirus
>
> Mike
>
>
> Mark Keith <nm5k@wt.net> wrote:
>
> >A friend sent this to me today. Normally, I hate to clutter up the ham
> >NG's with this type of thing, but being as it's a day old, the quicker
> >the word gets out , the better. This is not a joke or a troll...This is
> >a plum ugly new virus that will ruin your day if you open it. I'm just
> >passing it on, so someone doesn't later say, well... why didn't you say
> >something... MK
> >
> >> Subject: NEW VIRUS!! READ IMMEDIATELY!!
> >>
> >> A new virus has just been discovered that has been classified by
> >> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
> >> most destructive ever! This virus was discovered yesterday afternoon
> >> by McAfee and no vaccine has yet been developed.
> >>
> >> This virus simply destroys Sector Zero from the hard disk, where
> >> vital information for its functioning are stored. This virus sends
> >> itself automatically to all contacts on your list with the title "A
> >> Virtual Card for You". When the supposed virtual card is opened, the
> >> computer freezes so that the user has to reboot. When the
> >> ctrl+alt+del keys or the reset button are pressed, the virus
> >> destroys Sector Zero, thus permanently destroying the hard disk.
> >>
> >> According to news broadcast by CNN (www.cnn.com). This VIRUS received
> >> by an employee of Microsoft itself. So don't open any mails with

> >> subject "A Virtual Card for You". As soon as you get the mail,
> >> delete it.
> >>
> >> Also: Intel announced that a new and very destructive virus was
> >> discovered recently. If you receive an email called "An Internet
> >> Flower For You", do not open it. Delete it right away! It removes all
> >> dynamic link libraries(.dll files) from your computer. Your
> >> computer will not be able to boot up.
> >
> >
> >--
> >http://web.wt.net/~nm5k
>
>
>

4409. Re: A plum ugly bug..Beware!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:10:24 UTC
From: Dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.10103072209450.22803-100000@cluster2>
Source record: 168982
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

That is just what I said in my last post. I don't have to worry about
that, I am using linux.

On Thu, 8 Mar 2001, Peter J. Bertini wrote:

> Date: Thu, 08 Mar 2001 00:43:06 GMT
> From: Peter J. Bertini <commquart@home.com>
> Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.equipment,
> rec.radio.amateur.policy
> Subject: Re: A plum ugly bug..Beware!!
>
> You really sure, Tony?? This is direct cut-and-paste from the McAfee site:
>
> W32/Naked@MM (NakedWife Virus) Help Center
> W32/Naked@MM is a HIGH RISK virus that is spread using the Windows email
> program Outlook. The infected email can come from addresses that you
> recognize. Attached is a file named NakedWife.exe, which poses as a Flash
> movie. When run, it copies itself to a TEMP directory and displays a window
> entitled "Flash" which reads "JibJab loading".
>
> Moral of story: Don't open .exe files attached to email.
>
> Pete, K1ZJH
>
>
> "Tony" <tdowden@pacbell.net> wrote in message
> news:4oqbatg18b33n6jpqpq31gfv7244gf41pq@4ax.com...
> >
> >
> > I'm sure your intention was good, but if you go to the mcafee site
> > (the one your message references) and look under hoaxes you'll find
> > this message, and it's represented as a hoax. The text is only
> > slightly different. So what your friend sent you was possibly in
> > error. I make no judgement of him or you. However, there are a lot
> > of hoaxes as well as real viruses going around. You might go there
> > and check it out. It's interesting.
> >
> > Just thought you'd like to know.
> >
> > Tony
> >
> >
> > On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith <nm5k@wt.net> wrote:
> >

> > >A friend sent this to me today. Normally, I hate to clutter up the ham
> > >NG's with this type of thing, but being as it's a day old, the quicker
> > >the word gets out , the better. This is not a joke or a troll...This is
> > >a plum ugly new virus that will ruin your day if you open it. I'm just
> > >passing it on, so someone doesn't later say, well... why didn't you say
> > >something... MK
> > >
> > >> Subject: NEW VIRUS!! READ IMMEDIATELY!!
> > >>
> > >> A new virus has just been discovered that has been classified by
> > >> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
> > >> most destructive ever! This virus was discovered yesterday afternoon
> > >> by McAfee and no vaccine has yet been developed.
> > >>
> > >> This virus simply destroys Sector Zero from the hard disk, where
> > >> vital information for its functioning are stored. This virus sends
> > >> itself automatically to all contacts on your list with the title "A
> > >> Virtual Card for You". When the supposed virtual card is opened, the
> > >> computer freezes so that the user has to reboot. When the
> > >> ctrl+alt+del keys or the reset button are pressed, the virus
> > >> destroys Sector Zero, thus permanently destroying the hard disk.
> > >>
> > >> According to news broadcast by CNN (www.cnn.com). This VIRUS received
> > >> by an employee of Microsoft itself. So don't open any mails with
> > >> subject "A Virtual Card for You". As soon as you get the mail,
> > >> delete it.
> > >>
> > >> Also: Intel announced that a new and very destructive virus was
> > >> discovered recently. If you receive an email called "An Internet
> > >> Flower For You", do not open it. Delete it right away! It removes all
> > >> dynamic link libraries(.dll files) from your computer. Your
> > >> computer will not be able to boot up.
> > >
> >
> >
> >
> >

4410. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:33:22 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA6FD82.92C4B1A1@IEEE.org>
Source record: 168984

Alan Watts wrote:
> My primary band will be 40M. Will the G5RV perform as well as a 40M
> dipole?

It's hard to tell the performance of a G5RV from a dipole on
40m. It has slightly more gain and slightly less beamwidth.
Unless you trim it specifically for 40m, you will need an
antenna tuner.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4411. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:42:33 UTC
From: k6mhe@arrl.net
Message-ID: <3aa6ff3a.5344588@news.mcn.org>
Source record: 168987

Cecil,

There seems to be some thought that an antenna *must* be physically
resonate to perform well. It seems that myth will be with us for ever.

Danny, K6MHE

On Wed, 07 Mar 2001 20:57:08 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Charles Johnston wrote:
>> In your example question a resonant dipole will always outperform a
>> non-resonant dipole (G5RV).
>
>That depends upon your definition of "outperform". The G5RV's
>matching section (series section transformer) gives a pretty good
>match for coax on 40m and the fact that the G5RV is 0.78WL on
>40m gives it some gain over a 0.5WL dipole.
>
>My non-resonant 40m EDZ outperforms a resonant 1/2WL dipole by
>the predicted amount.

4412. Re: Discone Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:46:22 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AA7008E.1F84C686@dialpoint.net>
Source record: 168983

The length of the wires for the cone is usually 1/4 wavelength and the
disc at the top is about .7 of that 1/4 wavelenght in diameter. The
book design calls for the rods that make up the cone to be about .02
wavelength apart or less at the bottom for
best operation. That is not to say that you can not get by with less.

Rosco wrote:
>
> The cone radials are usually a 1/4 wave at the lowest freq and the top hat
> is usually
> a 1/4 wave at the highest freq. They are designed to cover a decade of
> frequencies,
> example 50-500 mhz. I would suspect that you could get by with only 3 or 4
> of the
> radials before you would see any difference in rx.
>
>

4413. Re: A plum ugly virus hoax..confusion!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:50:47 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AA70197.58AC3EEB@bwcc.com>
Source record: 168985
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

W6RCecilA wrote:
> Now that everyone knows it is a hoax, wouldn't that be a perfect
> title for a real virus?

Have at it.
I don't use MS Outlook or IE.
I don't run attachments.
Hoax or not, I am not susceptible.

4414. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 03:58:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98700crng0@208.207.71.155>
Source record: 168986

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "First, all those police, firemen, sheriffs etc in the area are just as
> much victims of a big breeze like Andrew as the rest of the populace."
>
> Yes, and they are running the show. Hurricanes don`t strike unannounced
> anymore. Weather satellites and other advanced warning systems notify
> the position and probabilities.
>
> Evacuation of areas likely to flood is ordered. Some always stay, and
> some usually die in bad storms.
>
> When the storm ends, the sheriff sets up roadblocks and restricts entry
> to avoid looting and injury from hazards left by the storm.

Un huh. Maybe you should learn to read about the real aftermath, like
what actually happened after the Homestead hurricane.We all know how
it's supposed to work, and does when the scope of the problem is small
enough that it doesn't overwhelm the locals. That usually doesn't take
too large an incident.
Clearly your theories depart from the realities of life by a bunch.
Maybe someone who experienced the Homestead hurricane can set you
straight. I doubt it.

>
> I`ve had to receive a group of injections before the sheriff would let
> me in to work on some of the storm caused problems. This was 40 years
> ago, but the same things happen today with access after a serious storm.
> Amateurs were only talking about the storm and the problems it left.
> Communications and alleviation were in professional hands.
>
> Best regards, Richard Harrison, KB5WZI

4415. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 04:13:07 UTC
From: richardharrison@webtv.net
Message-ID: <29720-3AA706D3-4@storefull-112.iap.bryant.webtv.net>
Source record: 168989

Cecil, W6RCA wrote:
"Somewhere I saw a chart of gain VS height of radials."

On page 3-13 of the 19th edition of the ARRL Antenna Book is Fig 16, "Vertical-plane radiation patterns of a groundplane antenna above flat ground. The height is that of the ground plane, which consists of four radials in a horizontal plane."

They show perfect-earth and average earth. They show heights from 1/8-wave up to one and one-half wavelengths. Gain figures can be extracted from the charts. Maybe this is what Cecil saw.

Best regards, Richard Harrison, KB5WZI

4416. Antenna noise canceller

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 04:42:10 UTC
From: af4z@palmnet.net
Message-ID: <C4Ep6.292$227.113000@nntp2.onemain.com>
Source record: 168988

About a year ago, there was a article in CQ or QST on how to build a antenna noise canceller. Now I have an interest and can't remember who published it. It was much like the ANC-4 unit. Does anyone remember which magizine had the article?
Don AF4Z

4417. Re: A plum ugly bug..Beware!! <OT - virus>

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 05:23:23 UTC
From: Tony <tdowden@pacbell.net>
Message-ID: <s95eat0c124gftkoikilb3rdsg4p8n45kj@4ax.com>
Source record: 168990
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.policy

I believe that the "NakedWife" virus that you refer to might well be
real, but I was referring to the "VirtualCard" one that he referenced.
I thought my message was pretty clear - maybe not. Notice what I had
in parenthesis.

But I agree totally with your moral. I even carry it a bit further, I
don't open *any* attachments without careful steps, and running a
virus protection program. And I still got hit once.

Tony

On Thu, 08 Mar 2001 00:43:06 GMT, "Peter J. Bertini"
<commquart@home.com> wrote:

>You really sure, Tony?? This is direct cut-and-paste from the McAfee site:
>
>W32/Naked@MM (NakedWife Virus) Help Center
>W32/Naked@MM is a HIGH RISK virus that is spread using the Windows email
>program Outlook. The infected email can come from addresses that you
>recognize. Attached is a file named NakedWife.exe, which poses as a Flash
>movie. When run, it copies itself to a TEMP directory and displays a window
>entitled "Flash" which reads "JibJab loading".
>
>Moral of story: Don't open .exe files attached to email.
>
>Pete, K1ZJH
>
>
>"Tony" <tdowden@pacbell.net> wrote in message
>news:4oqbatg18b33n6jpqpq31gfv7244gf41pq@4ax.com...
>>
>>
>> I'm sure your intention was good, but if you go to the mcafee site
>> (the one your message references) and look under hoaxes you'll find
>> this message, and it's represented as a hoax. The text is only
>> slightly different. So what your friend sent you was possibly in
>> error. I make no judgement of him or you. However, there are a lot
>> of hoaxes as well as real viruses going around. You might go there
>> and check it out. It's interesting.
>>
>> Just thought you'd like to know.
>>
>> Tony
>>

>>
>> On Wed, 07 Mar 2001 00:54:15 -0600, Mark Keith <nm5k@wt.net> wrote:
>>
>> >A friend sent this to me today. Normally, I hate to clutter up the ham
>> >NG's with this type of thing, but being as it's a day old, the quicker
>> >the word gets out , the better. This is not a joke or a troll...This is
>> >a plum ugly new virus that will ruin your day if you open it. I'm just
>> >passing it on, so someone doesn't later say, well... why didn't you say
>> >something... MK
>> >
>> >> Subject: NEW VIRUS!! READ IMMEDIATELY!!
>> >>
>> >> A new virus has just been discovered that has been classified by
>> >> Microsoft (www.microsoft.com) and by McAfee (www.mcafee.com) as the
>> >> most destructive ever! This virus was discovered yesterday afternoon
>> >> by McAfee and no vaccine has yet been developed.
>> >>
>> >> This virus simply destroys Sector Zero from the hard disk, where
>> >> vital information for its functioning are stored. This virus sends
>> >> itself automatically to all contacts on your list with the title "A
>> >> Virtual Card for You". When the supposed virtual card is opened, the
>> >> computer freezes so that the user has to reboot. When the
>> >> ctrl+alt+del keys or the reset button are pressed, the virus
>> >> destroys Sector Zero, thus permanently destroying the hard disk.
>> >>
>> >> According to news broadcast by CNN (www.cnn.com). This VIRUS received
>> >> by an employee of Microsoft itself. So don't open any mails with
>> >> subject "A Virtual Card for You". As soon as you get the mail,
>> >> delete it.
>> >>
>> >> Also: Intel announced that a new and very destructive virus was
>> >> discovered recently. If you receive an email called "An Internet
>> >> Flower For You", do not open it. Delete it right away! It removes all
>> >> dynamic link libraries(.dll files) from your computer. Your
>> >> computer will not be able to boot up.
>>
>

4418. Re: A plum ugly virus hoax.. confusion!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 05:26:39 UTC
From: Tony <tdowden@pacbell.net>
Message-ID: <mt5eat8aebpvtdo2v417knfs16jcq5g7va@4ax.com>
Source record: 168991

On Wed, 07 Mar 2001 20:45:12 -0500, Denver Braughler
<Braughler@bwcc.com> wrote:

>"Peter J. Bertini" wrote:
>> You really sure, Tony??
>Yes.
>
>> This is direct cut-and-paste from the McAfee site:
>
>And if you read it, you will see that it has NOTHING to do with the hoax that was posted here which was about "A Virtual Card for You" and "An Internet Flower For You".
>
>So when you get unmixed up, you will see that Tony was right and you were confused.
>
It's one of the few times, I assure you! :-)

SWMBO reminds me of this frequently.

Tony

4419. Re: none

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 05:57:25 UTC
From: "Loyd C. headrick" <kf4ugt@bellsouth.net>
Message-ID: <VaFp6.1799$887.81552@news3.atl>
Source record: 168992
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

try the Arrow antenna 2m/440 hand held beam good for fox hunting and working satellites
http://www.arrowantenna.com

Loyd
KF4UGT

Jason Hsu <jhsu-no-spam@cotse.com> wrote in message news:983994819.3aa691c34a7fd@webmail.cotse.com...
> I have a Yaesu FT-50R transceiver, an RD-98 17" flexible whip (substantial
> improvement over rubber duck; THE choice when on foot), and the SMA version of
> the Pocket-J antenna from Antennas & More (substantial improvement over RD-98).
>
> I just bought the coax and connectors I need to hook up an SO-239 antenna to
> the radio WITHOUT putting undue stress on the radio's connector.
>
> I'm looking for an antenna no more than a few feet long that will perform even
> better than the J-pole, and a directional antenna seems to be what I need. Fox
> hunt capability would be a nice added bonus.
>
> Any suggestions? Would the Cushcraft A270-6S fit the bill? Are there other
> products I should consider?
>
> -
> Jason Hsu, AG4DG
> jason_hsu@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/
>

4420. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 06:08:42 UTC
From: richardharrison@webtv.net
Message-ID: <10991-3AA721EA-100@storefull-111.iap.bryant.webtv.net>
Source record: 168993

Dick Carroll wrote:
"Maybe someone who experienced the Homestead hurricane can set you straight."

Dick Carroll has already told us there were people who sat and waited for a week to hear from any relief person so he must at least have hearsay information of developments following Andrew.

If there was something amateur radio could have done to alleviate the suffering of the people of Homestead, Florida caused by Hurricane Andrew, did amateur do it all? If not, why not?

Did Amateur radio win state and national commendation for meritorious service in the aftermath of Hurricane Andrew?

If so, this recognition should be saved in a perpetual hero file carefully kept and used to promote amateur radio. Is ARRL keeping a hero file? Yes, they have information from all back issues of QST. That is not the same as cultivating a hero file.

Best regards, Richard Harrison, KB5WZI

4421. opinions on Cliffdweller II?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 07:53:46 UTC
From: mrbill@mrbill.net
Message-ID: <slrn9aeeiv.l49.mrbill@ohno.mrbill.net>
Source record: 168994

Any opinions, positive or negative, about the
Cliffdweller II antenna (slinky dipole)?

Thanks.

Bill K5WCB

--
Bill Bradford
mrbill@mrbill.net
Austin, TX

4422. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 08:55:58 UTC
From: oh3nx.nospam@sral.fi
Message-ID: <yOHp6.71$dS4.2591@read2.inet.fi>
Source record: 168996

>Anybody have experience with one?

According to my experience, it's a surprisingly good antenna on 40m.
Yesterday worked BQ9P on 40m CW, and a couple of days earlier T32RD on the
same band, both in pile-ups and with 100W. The antenna is 50 ft up.

G5RV is a bit longer that lambda/2 dipole on 40m, which gives it some
additional gain over the dipole. The difference is not much though, but
gives at least some mental support. Those stations just happened to be in
the right direction.

I suggest you'll build one, I don't believe that you would be dissapointed.

Regards
Juha
OH3NX

4423. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 09:09:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AA74C2D.51B989EC@eznec.com>
Source record: 168995

Reg Edwards wrote:
>
> Conclusion about loss on higher freqs is not entirely valid. Clean
> water is a low-loss material at HF.
> . . .

It's well known that although pure water has low DC conductivity, its RF loss is significant due to energy expended as its molecular dipoles try to orient to the alternating field. _Reference Data For Radio Engineers_ shows distilled water to have a dissipation factor of 0.04 at 1 MHz. This is more than twice the loss of PVC plastic, and more than 200 times as lossy as a truly low loss material like polyethylene. So I don't think "low-loss" is an accurate characterization of water. Rain water falling on a dusty surface, or for that matter through dusty or polluted air, will be more conductive in addition. The combination of high dielectric constant and fairly high loss makes water something you don't want too close to your loading inductors or anywhere there's a high electric field, such as between feedline conductors.

I've made measurements on 300 ohm twinlead that shows very greatly increased loss when wet -- certainly not what you'd see if water were a "low-loss" material.

Roy Lewallen, W7EL

4424. Re: Boom material for short yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 09:18:55 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <987ina$q7k$1@uranium.btinternet.com>
Source record: 168997

If there's nothing else available try timber. Staple the antenna elements to it. Easy to readjust element spacing. Doesn't matter whether its wet or dry. No current flows in it. For durability soak in timber preservative before erection.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

John <jh.lewis@worldnet.att.net> wrote in message news:F%up6.6071$yv4.453951@bgtnsc07-news.ops.worldnet.att.net...
> Hi all,
>
> I'm interested in putting together a 3 element YAGI for 10 meters and one
> design I've found requires only a 12' boom length which would work nicely in
> my rather small lot.
>
> Any suggestions for a good lightweight (and inexpensive) boom material that
> will stand up to the weather in the Midwest (ice storms, high winds, etc..)?
>
> Email appreciated.
>
> Thanks,
>
> John
>
>
>
>
>

4425. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 09:29:18 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <987jaljng1@neptunium.btinternet.com>
Source record: 168998

Measurements not needed. Basic prediction methods indicate
performance in the same ball park as a magloop of the same overall
dimensions. Considering the lifetime cost of ownership, if a small
cheap antenna, needed for only a few years, is good enough for a
broadcaster then by all means he should have one. Whether Clerk
Maxwell would approve is of no consequence whatsoever.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

'Doc <w5lz@oio.net> wrote in message
news:3AA6AAE2.AFEBDB53@oio.net...
>
>
> Roy,
> Has anyone ~ever~ gotten one of these things to work yet?
...with
> certifiable measurements/results?
> 'Doc

4426. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 10:05:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <987ldp$6kd$1@plutonium.btinternet.com>
Source record: 168999

The G5RV is no better or worse than any other random length dipole
fed with random length high Zo twin feeder.

The predicted radiation patterns, taking all bands into account,
for practical purposes are omnidirectional - just like any other
random length dipole fed with a random length feeder. Just
superimpose patterns of all bands on top of each other.

And when erected in the average ham's back yard the actual
radiation patterns, in both vertical and horizontal planes, above a
vast range of ground conditions, don't bear much resemblance to
computer generated predictions in any case.

And if you incorporate a long length of coax in the system to
improve performance, you are fooling yourself.

To compare one dipole with another, one feedline with another,
download program VARNEY from website below. Takes only a few
seconds. Not zipped-up. Run immediately.

Then erect a random wire, roughly centre-fed, which fits
comfortably in your backyard. Tape measure not needed.

By the way - whatever you adopt - for all bands you will need a
tuner. Or follow Cecil's method of tuning by switching feeder
lengths. Program VARNEY allows feeder lengths and Zo to be varied
to find optimum lengths for each band. If you don't want to mess
about with feeder lengths the program will predict L and C
component values for a matching L-network.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Charles Johnston <charles@ab7sl.com> wrote in message
news:E9F2B66AA12A6CF2.80313483F2B0333E.4BD59984AFA0FAD2@lp.airnews.
net...
> On Wed, 07 Mar 2001 21:12:50 GMT, "Alan Watts"
<awatts@neo.rr.com>
> wrote:
>
> >Anybody have experience with one? How does a G5RV compare to,
say, a
> >40M dipole on 40M -- at the same height? -- a 10M dipole on 10M?

> >
> >Also, I'll have to run it through the near tops of some trees --
> >should I replace the bare copper horizontal wire part with
insulated
> >wire to keep from maybe starting a fire.
> >
> >It's 102 feet long, and I can't run it completely free of tree
limbs
> >and foliage.
> >
> >Alan
> >
>
> In your example question a resonant dipole will always
outperform a
> non-resonant dipole (G5RV). The resonant dipole will have the
classic
> figure-8 major lobes broadside to the wire's length. Non-resonant
> dipoles will have a irregular or daisy-petal pattern not favoring
any
> particular direction. Moreover with resonant dipoles no
antenna
> tuner is needed. Insulated wire helps protect the inner wire
> conductor from deterioration.
>
> My W9INN 5-band trapped resonant fan-dipole has black
insulated
> wires and has been up for over 5 years now with no trouble at
all. I
> have a link to W9INN antennas info on my site on the Ham Radio
Links
> page.
>
> One can do quite well working DX with a dipole. I have DXCC
#288 on
> the W9INN antenna.
>
> Charles T Johnston
> charles@ab7sl.com
>
> AB7SL Ham Radio Pages
> http://www.ab7sl.com

4427. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 10:59:42 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA7661E.6545@wt.net>
Source record: 169000

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "He`s the guy who put up 300 foot towers so that he could have his
> dipole "UP" in the clear, without any question whatever about it. And
> guess what - his verticals beat the socks off all his high dipoles."
>
> Well, maybe Tom, W8JI, didn`t rip out his ground radials under his new
> horizontal antennas, and the installation simulated that over sea water
> or salt marsh. Bad for low-angle dipole radiation, but good for
> higher-angle radiation to reach closer targets.
>
> Just pure speculation. I have no idea what Tom`s antenna farm looks
> like.
>
> Best regartds, Richard Harrison, KB5WZI

I ran this thru elnec to see the difference. I see very little difference between a 160m dipole at 300 ft with poor ground and no radials, and the same dipole with VG ground cdx and 120 radials. Both cases I plotted the dipole at 300 feet high. Just for kicks I also plotted two 1/4 wl verticals over average ground. One with 60 radials, and one with 120 radials. With modeling, I see no real advantage to using a vertical. You will see that the angle at which you show 1 dbi is about the same with either the dipole, or the vertical with 120 radials. But at the higher angles you will see much more gain with the dipole. In the 8 dbi range with the dipole at appx 25 degrees compared to the almost 3.5 dbi gain at appx 19 degrees with the vertical with 120 radials. So looking at that, you would think the dipole would be about the same to far off dx if using angles below say 10 degrees. But going from most peopls reports in the real world, the vertical is almost always better. This is why I say the pattern and polarization itself must be a factor rather than the gain itself. I know this is a self conflicting statement, but it seems to be the case to me. And this is why I say be leery of using modeling alone to try to decide which is better. If you did, you might never try a vertical. Myself, I believe vertical polarization is superior to horizontal for long haul dx on the low bands at least, the gain of the antennas being equal. I know that in the commercial world they prefer horizontal, but I think the reason for that is it's easier to build a high gain antenna that way, than a massive array of verticals. Can you imagine the number of phased verticals it would take to equal a rhombic? Might not even be possible with the diminished returns on doubling the amount of radiators again and again. Much easier to just buy a half zillion acres and plant

rhombics or whatever in every needed direction.
But I'm not so sure there is an advantage to horizontal. I kind of think otherwise. I think if you could build an array of verticals that equaled the horizontal antenna, the verticals would win to far off low band dx. Toms setup pretty much proves this I think. Or to me anyway. His dipole is over a 1/2 wave up, has bukoo gain at certain angles, and is losing to a vertical that in theory should be inferior. I can't think of any other way to explain it other than there is a definite advantage to a vertically polarized wave on the low bands for long haul. Either that or the modeling is flawed in this aspect. I noticed when I was running both on 40m, the propogation would sorta tumble back and forth. But the peaks on the vertical antenna were always stronger on anything over about 1000 miles. Always 2 s units stronger to the west coast. And my the reports back to me were always reciprocal. MK

To see the plots made using elnec demo: These are shrunk down jpgs for faster loading..

160 dipole at 300 ft, poor ground, no radials
http://web.wt.net/~nm5k/16dplg.jpg

160 dipole at 300 ft, very good ground, 120 radials
http://web.wt.net/~nm5k/16dpbg.jpg

160 1/4 wl vertical, average ground, 60 radials
http://web.wt.net/~nm5k/16va60.jpg

160 1/4 wl vertical, average ground, 120 radials
http://web.wt.net/~nm5k/16va12.jpg

--
http://web.wt.net/~nm5k

4428. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 13:16:48 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA7863F.6B13A29E@IEEE.org>
Source record: 169001

Dan Richardson wrote:
> There seems to be some thought that an antenna *must* be physically
> resonate to perform well. It seems that myth will be with us for ever.

On top of that, Danny, a frequency sweep of a G5RV will prove that
it *is* resonant on or near 40m. EZNEC sez, using the transmission
line feature to model the series section transformer, that a 102 ft
dipole with 30ft of 300 ohm ladder-line as the "matching section",
is resonant on 7.3MHz with a 50 ohm SWR of less than 2:1.

In fact, if one wants to optimize a 102ft G5RV for 40m, one should
make the "matching section" 31 ft long using 300 ohm ladder-line.
That will resonate the 102ft G5RV in the middle of the 40m band.

With a 102ft G5RV, using a 37ft 450 ohm ladder-line "matching section",
will result in a resonant antenna system with a 50ohm SWR very close
to perfect on 40m. All this information is easy to come by with
EZNEC using the transmission lines feature. EZNEC information available
at www.eznec.com
--
http://www.mindspring.com/~w6rca

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4429. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 13:29:23 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA78933.F21DEF0D@IEEE.org>
Source record: 169002

Reg Edwards wrote:
> The G5RV is no better or worse than any other random length dipole
> fed with random length high Zo twin feeder.

Well, it's a little better than random, Reg. 1/2WL of "matching section" on 20m is 1/4WL on 40m and 1/8WL on 80m. 1/4WL on 40m brings the system to near-resonance on 7.3MHz. 1/8WL on 80m brings the system to resonance on about 3.6MHz. The coax losses due to SWR on 80m, 40m, and 20m are pretty low. I know because, years ago, I set out to prove that the G5RV was a dog. I wound up proving it is a pretty good antenna for 80m, 40m, and 20m with 12m thrown in. As with any antenna, one needs to recognize the limitations. The G5RV *is* a dog on 30m.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4430. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 15:04:08 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <taf7qje6us3n92@corp.supernews.com>
Source record: 169003

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:97rjkq$36c$1@lure.pipex.net...
> Did you ever hear of a "Metrosil"?
> I very high resistance to a low voltage and a low resistance to a high
> voltage.

No. Any references on the WEB for more info?

> Diodes alone do not completely stop the ringing, some form of resistance
to
> dissipate the surplus energy seems to be a good idea.

The series resistance of the diode, and the relay coil serve the same
purpose.

> Actually a resistor in series with a capacitor across a relay coil can do
a
> good job.

Yes, that is commonly called an RC snubber, but now you have two components
instead of one. 8-))

> But you really need to use the old fashioned solid carbon rods for the
> function.

Never saw that done before.

> I have seen sparks jump out through the painted colour code on
> helical laser trimmed resistors used to damp Relay Back EMF.
> The air path
> broke down because the inductance of one turn permitted L di/dt to exceed
> the breakdown value for paint and air. Since L for a single turn is very
> small we conclude that di/dt is very large. As I is limited this make di
> very small indeed, or the frequency is very high.

Helical resistance film = coil = inductor with resistance = no surprise. I
always make sure that I use "non-inductive" resistors. One type uses a hair
pin of resistance wire wound on a form. Others are a flat film, no spirals,
like the tab types manufactured by Caddock. http://www.caddock.com/

> Presumably this is why they generate noise up into VHF/UHF

This is maybe due to the reverse recovery effect when the diode "snaps" off.
The results would be similar to what happens with a step recovery diode.

> By Far the best solution to damping the Back EMF of Relay coils is by
> fitting a REFER, these devices are a potted R and C in series especially
> developed for spark suppression.

We use a lot of those on AC relay coils. The relays are the "typical"
industrial control panel mount type.

--
Leland C. Scott
KC8LDO

4431. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 16:05:18 UTC
From: richardharrison@webtv.net
Message-ID: <1049-3AA7ADBE-153@storefull-118.iap.bryant.webtv.net>
Source record: 169005

Mark, NM5K wrote:
"But I`m not so sure there is an advantage to horizontal."

If there weren`t, their commercial use would not be almost universal.

There is a basic reason horizontal antennas don`t work well for long-distance propagation over sea water. Griffith explains effects of "ground" very well in "Radio-Electronic Transmission Fundamentals" as follows:

"Let us imagine that we have a horizontal dipole which is 1/2-wave long, such as the antenna at first resonance in Fig. 41-3. The complete radiation pattern of this antenna is doughnut-shaped, as we find by rotating the cross-sectional pattern from the figure about the axis of the dipole. Now let`s position the dipole at a distance of 1/4 wavelength above the earth, assuming for the moment that the earth forms a perfectly conducting surface. The portion of the energy which travels straight down to the earth is reflected straight up again, undergoing a reversal in phase of 180 degrees at the point of reflection, just as is true of an incident signal encountering a short-circuited end of a transmission line (Chap. 25). This energy arrives back in the vicinity of the dipole after traversing 180 electrical degrees of distance and being shifted another 180 degrees at reflection, so that it is in phase with the new energy leaving the antenna on its journey upward. The signal leaving the antenna and traveling directly upward is thus reinforced by the reflected signal, having twice the field intensity in this direction as would be produced by the free-space dipole carrying tjhe same current.

If we consider a point which is far away in the horizontal direction at right angles to the dipole, we can see that the direct signal and the ground-reflected signal will have traveled the same distance to the point; the reflected signal though, will have been reversed in phase at reflection, so that the two signals will be 180 degrees apart in phase opon arrival at the point and will therefore cancel each other. This condition holds true in all horizontal directions---."

From the above, you can see the problem with getting low-angle radiation from a horizontal dipole when the earth supplies a strong reflection. Solutions are sorry soil and really high horizontal wires. If you have a dandy radial system over sorry soil, you might get better dx from a dipole by ripping out the radials.

Best regards, Richard Harrison, KB5WZI

4432. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 16:06:34 UTC
From: jflanders2@home.com
Message-ID: <3aa7a675.156972624@news>
Source record: 169004

I laugh when I read a poster tell us how self-resonant dipoles are somehow superior to other dipoles. A 1.25 wavelength dipole is certainly not resonant, but gives superior performance broadside. Ever heard of the 5/8 wave vertical on VHF? Wonder why it is used? think about it.

If there is are any doubts about the accuracy of Cecil's comments below, the doubter should download the demo version of Roy's Windows EZNEC and then download the design file for Cecil's 130 foot LL fed dipole. Then by changing the length of the dipole and LL sections in EZNEC and running the frequency sweep feature of EZNEC he can easily see just where the antenna _system_ will be Resonant. He can then also observe the patterns to see what directionality the antenna will have on any frequency of interest. Change the antenna/feed lengths to that of Varney's original G5RV antenna and see exactly what it does.

Resonance in an antenna _system_ is what we are generally after. That antenna _system_ includes lots of circuit elements, not just the dipole itself. With the G5RV, or Cecil's derivation, the length of the LL feed is a critical element.

I used to have 5 separate conventional half-wave dipoles in my big back yard. I recently took them all down and replaced them with non-resonant dipoles using Cecil's design principles after doing the study I described above. Works for me.

Jerry W4UK

On Thu, 08 Mar 2001 07:16:48 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:

>Dan Richardson wrote:
>> There seems to be some thought that an antenna *must* be physically
>> resonate to perform well. It seems that myth will be with us for ever.
>
>On top of that, Danny, a frequency sweep of a G5RV will prove that
>it *is* resonant on or near 40m. EZNEC sez, using the transmission
>line feature to model the series section transformer, that a 102 ft
>dipole with 30ft of 300 ohm ladder-line as the "matching section",
>is resonant on 7.3MHz with a 50 ohm SWR of less than 2:1.
>
>In fact, if one wants to optimize a 102ft G5RV for 40m, one should
>make the "matching section" 31 ft long using 300 ohm ladder-line.
>That will resonate the 102ft G5RV in the middle of the 40m band.
>
>With a 102ft G5RV, using a 37ft 450 ohm ladder-line "matching section",

>will result in a resonant antenna system with a 50ohm SWR very close
>to perfect on 40m. All this information is easy to come by with
>EZNEC using the transmission lines feature. EZNEC information available
>at www.eznec.com
>--
>http://www.mindspring.com/~w6rca
>
>

4433. Re: Support for capacitance hat

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 16:16:23 UTC
From: jflanders2@home.com
Message-ID: <3aa7af69.159264861@news>
Source record: 169006

Those wishing for a more conventional looking "top hat" should
consider loading a bicycle or two up there on the roof.

Where I live, people drive around all the time with bicycles mounted
up there. No reason why you couldn't do it permanently.

No whip required, and the bike racks are available at your nearest
bike shop. Stealth mobile.

Jerry W4UK

On Wed, 07 Mar 2001 20:41:21 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>jhsu-no-spam@cotse.com wrote:
>>
>> I understand I can attach any piece of metal to the top of a whip antenna to
>> obtain a capacitance hat for my W6AAQ DK3 Screwdriver antenna.
>
>Here's my self-supporting screwdriver top hat.
>
>http://people.delphi.com/cecilmoore/mobnow.htm
>--
>http://www.mindspring.com/~w6rca
>
>

4434. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 16:33:10 UTC
From: richardharrison@webtv.net
Message-ID: <1051-3AA7B446-22@storefull-118.iap.bryant.webtv.net>
Source record: 169007

Dan Richardson wrote:
"There seems to be some thought that an antenna "must" be physically resonate to perform well. It seems that myth will be with us for ever."

If you have no other way to make a standing-wave antenna electrically resonant, you will improve its performance by physically adjusting its length to resonance. This is no myth! Any uncompensated reactance in the antenna circuit will impede current into the antenna and reduce its radiation.

Best regards, Richard Harrison, KB5WZI

4435. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 16:57:05 UTC
From: Robert Peters <peters@ems.psu.edu>
Message-ID: <3AA7B9E1.FCC7DFE4@ems.psu.edu>
Source record: 169008

I have used the L-tuner and T-tuner. Seems to me the main disadvantage of the L tuner is that it does not act as a tuned circuit and will radiate harmonics. The T-tuner seems to function as a band pass filter. Just my observation. The main difference could be the type of feed. I use the MFJ-989C with window line to feed a doublet. I use the L-tuner (homebrew) to end feed a wire. The "false resonance seems to be a mecahnical short to disable some of the turns on the variable inductor, when using smaller inductances.

Bob K3EZS

4436. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 17:03:30 UTC
From: kb7qhc@home.com
Message-ID: <3aa7b939.516247534@news.seanet.com>
Source record: 169009

On Wed, 07 Mar 2001 20:59:47 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> Thus, there
>> is no direct correlation between resonance and lobe pattern outside of
>> the lengths involved.
>
>Witness the multi-lobed patterns of resonant 1.5WL, 2.5WL, 3.5WL, ...
>antennas.

Hi Cecil,

Your statement underlines my point, you had to appeal to length to
obtain a change in pattern.

Resonance can be forced with lumped components such that a very small
physical antenna can be made to appear to be large electrically.
Contrariwise, a physically very large trapped antenna can appear to be
small electrically. Both can be described as being resonant.
However, resonance in and of itself has nothing to do with radiation
pattern.

73's
Richard Clark, KB7QHC

4437. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 17:10:53 UTC
From: W5GT <dave.routzon@mindspring.com>
Message-ID: <x2Pp6.373423$ge4.131011847@news2.rdc2.tx.home.com>
Source record: 169010

As for being a "dog" on 30, mine works just fine on 30...oh well so much for theory. I've only had fair luck on 40, however. It's only at 24', so I'm sure that contributes. .

W5GT
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA78933.F21DEF0D@IEEE.org...
> Reg Edwards wrote:
> > The G5RV is no better or worse than any other random length dipole
> > fed with random length high Zo twin feeder.
>
> Well, it's a little better than random, Reg. 1/2WL of "matching section"
> on 20m is 1/4WL on 40m and 1/8WL on 80m. 1/4WL on 40m brings the system
> to near-resonance on 7.3MHz. 1/8WL on 80m brings the system to resonance
> on about 3.6MHz. The coax losses due to SWR on 80m, 40m, and 20m are
> pretty low. I know because, years ago, I set out to prove that the G5RV
> was a dog. I wound up proving it is a pretty good antenna for 80m, 40m,
> and 20m with 12m thrown in. As with any antenna, one needs to recognize
> the limitations. The G5RV *is* a dog on 30m.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4438. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 17:33:20 UTC
From: kb7qhc@home.com
Message-ID: <3aa8c002.517984732@news.seanet.com>
Source record: 169011

On Thu, 8 Mar 2001 10:04:08 -0500, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

>> By Far the best solution to damping the Back EMF of Relay coils is by
>> fitting a REFER, these devices are a potted R and C in series especially
>> developed for spark suppression.
>
>We use a lot of those on AC relay coils. The relays are the "typical"
>industrial control panel mount type.
>
>
>--
>Leland C. Scott
>KC8LDO

Hi Leland,

When I designed telephone equipment, I learned a lot about inductive kick from the K1 relay the home phone connects to at the central office. For a short loop, this kick ran at something like 1 to 2 KV and you did not want to snub it too heavily. The reason why is that by snubbing (or even a perfect short) you keep the relay latched longer when you are actually trying to break the connection (and unlatch the relay). In fact, the relays that operate during dialing (boy that is ancient technology) are held latched by design even when the current is broken.

Then I got around to design for Steppers that I had to supply at 10 times their rated voltage to "quicken" their response.

73's
Richard Clark, KB7QHC

4439. 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 18:00:04 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AA7C8A3.A364FCA1@cybatek.fsnet.co.uk>
Source record: 169012

Anyone know where I can get a low noise, preferably filtered just for
160m,
25db gain preamp ???

I need it to go behind my Submarine RX antenna ...

Any URLs or telephone numbers please ??

Please reply to group and direct!

Cheers!

MikeT ...

4440. Re: BEST VERTICAL-NEED ADVICE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 19:08:42 UTC
From: richardharrison@webtv.net
Message-ID: <17231-3AA7D8BA-160@storefull-113.iap.bryant.webtv.net>
Source record: 169014

Mark Keith wrote:
"But I`m not so sure there is an advantage to horizontal."

Suppose 10 degrees is good for F2 propagation to a distant station you want to work. See Fig 23 in the new ARRL Antenna Book on page 23-24.

The angle a ray from your horizontal dipole makes with the earth is also 10 degrees to produce the desired reflection. That places the reflection point far from the dipole. That reflection point is the launch site for the out-of-phase debilitating signal. That is where you want a poor response. I already said, Tom`s radials are located I know not where.

Best regards, Richard Harrison, KB5WZI

4441. Re: CobWebb

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 19:31:10 UTC
From: "richard.cowles" <richard.cowles@ntlworld.com>
Message-ID: <f1Rp6.2233$t1.194617@news6-win.server.ntlworld.com>
Source record: 169015

Richard <2e0avf@talk21.com> wrote in message
news:967726$b4b$1@uranium.btinternet.com...
> Hello
>
> I am thinking about using a CobWebb antenna in my garden. Can anyone give
me
> some information about this antenna and its performance please.
>
> Thanks
>
> Richard
>
Hi

I have been using a cobweb for about 3 months now and find it works well
for it's size.
on 10 mtrs I prefer my 1/2 wave cb antenna as it has a higher bandwidth.
My cobweb is about 3 feet above my roof and I have worked vk several times
which is good from my qth.

A good buy if like me you are limited for space.

73 de dick m0clz

4442. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 19:43:37 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3aa7e2fc2vtanpl$mr2ice@news.uga.edu>
Source record: 169013

??????

The T tuner with one coil and 2 capacitors passes the harmonics just fine.
The L filter will attenuate them if the coil is the horizonatl part of L.
Ignacy, NO9E

In <3AA7B9E1.FCC7DFE4@ems.psu.edu>, on 03/08/01
at 01:43 PM, Robert Peters <peters@ems.psu.edu> said:

>I have used the L-tuner and T-tuner. Seems to me the main disadvantage
>of the L tuner is that it does not act as a tuned circuit and will
>radiate harmonics. The T-tuner seems to function as a band pass filter.
>Just my observation. The main difference could be the type of feed. I
>use the MFJ-989C with window line to feed a doublet. I use the L-tuner
>(homebrew) to end feed a wire. The "false resonance seems to be a
>mecahnical short to disable some of the turns on the variable inductor,
>when using smaller inductances.

>Bob K3EZS
Ignacy Misztal

Department of Animal and Dairy Science,
354 Animal Science Complex, University Of Georgia,
Athens, GA 30602, USA
e-mail: ignacy@uga.edu
tel. (706) 542-0951, fax: (706) 583-0274
anonymous ftp: num.ads.uga.edu, http://nce.ads.uga.edu/~ignacy

4443. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 20:16:01 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <988rjtrku1@lure.pipex.net>
Source record: 169017

"Leland C. Scott" wrote in message news:taf7qje6us3n92@corp.supernews.com...
> "Gary Peach" wrote ...
> > Did you ever hear of a "Metrosil"?
> > I very high resistance to a low voltage and a low resistance to a high
> > voltage.
>
> No. Any references on the WEB for more info?

They are an old device manufactured by Metropolitam Vickers, (GE will probably have them probably called transient suppressors), very popular on Radar set sduring and just after WWII. the last samples that I had from the manufacturers was in about 1975/6. Somewhere amongst my junk I have the spec sheets for the range. By today's component standards a bit Heath Robinson, but I see no reason why the material could not be mounted in a modern mount and used where high Voltage peaks at some power need to be controlled.

> > Diodes alone do not completely stop the ringing, some form of resistance
> to
> > dissipate the surplus energy seems to be a good idea.
>
> The series resistance of the diode, and the relay coil serve the same
> purpose.

Sometimes the forward resistance of a diode is too low and it sustains ringing for longer than better methods where a proper disipative resistanace of the correct value is engineered into whatever it is that you wish to supress. LR should be such that all of the energy is disipated before the second overswing, in other words critically damped instead of leaving it to pot luck that the diode forward resistance will do the job. Also if the excess energy exceeds the disipation capacity of the diode then you will blow a lot of diodes and either burn out a lot of points or blow up a lot of control transistors.
Of course the hardest thing to damp and control is a DC motor wher the stored mechanical energy and Lenz's Law produce a back EMF of the same polarity as the original supplied voltage, here a single diode does little good and a more complex arrangement is required. Where Hams might encounter this problem is with rotators

> > Actually a resistor in series with a capacitor across a relay coil can
do
> > a good job.
>
> Yes, that is commonly called an RC snubber, but now you have two
components
> instead of one. 8-))

>
> > But you really need to use the old fashioned solid carbon rods for the
> > function.
>
> Never saw that done before.

I suppose you never saw a solid carbon resistor filed to adjust it's value,
this was often done for meter multipliers and shunts when accurate
caliobration was required, Hams that built their own multimeters with
surplus moving coil meters became quite familiar and expert at this
practice. In those days being a good engineer was not sufficient you always
needed to have a few bodges up your sleeve. I got so good at it my friends
said that I would make the ideal prisoner of war :)

> > I have seen sparks jump out through the painted colour code on
> > helical laser trimmed resistors used to damp Relay Back EMF.
> > The air path
> > broke down because the inductance of one turn permitted L di/dt to
exceed
> > the breakdown value for paint and air. Since L for a single turn is very
> > small we conclude that di/dt is very large. As I is limited this make di
> > very small indeed, or the frequency is very high.
>
> Helical resistance film = coil = inductor with resistance = no surprise.

I take it that you have witnessed this for yourself. ;)

>I
> always make sure that I use "non-inductive" resistors.

Sadly not always easy to come by once you retire

>One type uses a hair
> pin of resistance wire wound on a form. Others are a flat film, no
spirals,
> like the tab types manufactured by Caddock. http://www.caddock.com/

Is this a bifilar winding similar to the resistance element used on a Post
Office Box?

> > Presumably this is why they generate noise up into VHF/UHF
>
> This is maybe due to the reverse recovery effect when the diode "snaps"
off.

That may supply the stimulus, but not the resonance, that will be determined
entirely by the passive elements in the circuit.

> The results would be similar to what happens with a step recovery diode.

Ah! the dreaded Hole storage effect.
Q = C1V1=C2V2
.: V2 = V1 x C1/ C2
As C1 is large and C2 small V2 >>>> V1

> > By Far the best solution to damping the Back EMF of Relay coils is by
> > fitting a REFER, these devices are a potted R and C in series especially
> > developed for spark suppression.
>
> We use a lot of those on AC relay coils. The relays are the "typical"
> industrial control panel mount type.

On Octal bases?
Used in Railway signalling a lot?

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4444. AH-4, stainless whip and 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 20:16:18 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aa8f50c$0$1630$bbae4d71@news.net-link.net>
Source record: 168943

My Icom AH-4 coupler, spring and whip, works pretty well (considering what it is) on all bands from 7 to 30 MHz, however, 6 meter performance is down with the long whip. The rig cuts back in power to about half, if the IC-706MKII meter is accurate at all, and the meter swr says under 1.5:1 or so, once in awhile, 1.7:1 and every now and then I will get almost 90% output.
According to Icom AH-4 coupler instructions, half wave antenna lengths and multiples should be avoided. Well, 6" spring and 102" whip is a half wave on 6 meters (52.000). So I added a foot to the base of the whip above the spring (total length now 124" well actually about 130 inches if you count the feed wire from the coupler to base of spring). Coupler now is matching a bit better, especially down where I want it (50.125), but still less than 75% output according to rig meter, and I do whack more overhead stuff. I have not put a "real" meter in line to see what the actual results are, but anyone have any ideas. System works great for what it is on HF and tunes a Hustler 75 coil on a short mast just fine. Other than swapping in a 54" whip (coupler loves it!) is there any point in trying anything else with this antenna/coupler setup? What about putting a small disc between the 12" bottom mast and 102" top whip, sort of a little cap hat? What about a small disc on the whip itself, say about 4 or 5 feet above the vehicle? It would still be fairly safe from hits here. Top hat is out of question where live, unless, I could make it out of springs or the like.

4445. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 20:18:21 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <988rjvrku2@lure.pipex.net>
Source record: 169018

"Richard Clark" wrote ...
> Leland C. Scott" wrote:
> >> By Far the best solution to damping the Back EMF of Relay coils is by
> >> fitting a REFER, these devices are a potted R and C in series
especially
> >> developed for spark suppression.
> >We use a lot of those on AC relay coils. The relays are the "typical"
> >industrial control panel mount type.
>
> When I designed telephone equipment, I learned a lot about inductive
> kick from the K1 relay the home phone connects to at the central
> office. For a short loop, this kick ran at something like 1 to 2 KV
> and you did not want to snub it too heavily. The reason why is that
> by snubbing (or even a perfect short) you keep the relay latched
> longer when you are actually trying to break the connection (and
> unlatch the relay). In fact, the relays that operate during dialing
> (boy that is ancient technology) are held latched by design even when
> the current is broken.
>
> Then I got around to design for Steppers that I had to supply at 10
> times their rated voltage to "quicken" their response.

Were you familiar with the Carpenter Relay Richard?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4446. Re:snap on Bad TVI--Thanks group!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 20:31:34 UTC
From: rory <rory_2_u_sir@rory.com>
Message-ID: <3AA7EC31.8AF1EA51@rory.com>
Source record: 169016

Hi OM

www.allcorp.com is one place, many sizes available.
palomar engineers is another place for high quality parts.

73

Frizz wrote:

> Thanks to all that replied to my TVI problem message. I now have a jumping
> off point in fixing all of this. One more thing though. People have
> mentioned common mode chokes and the ARRL Hints and Kinks book talks about
> them as well. Where is a good place to get the ferrite cores to wrap coax
> and other cables with? I am thinking about getting some of the snap on ones
> that AES sells for the smaller audio and power leads going to the effected
> equipment but those seem way to small for coax and larger power cables like
> the ones you might find on equipment with three prong grounded plugs. Any
> ideas? Thanks again!!!!

4447. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 20:51:29 UTC
From: richardharrison@webtv.net
Message-ID: <9411-3AA7F0D1-169@storefull-115.iap.bryant.webtv.net>
Source record: 168920

Mike Tatum wrote:
"Anyone know where I can get a low noise preferably filtered just for 160m, 25 db gain preamp?"

You might try a search for "radio preselector". It produced results for me.

Best regards, Richard Harrison, KB5WZI

4448. FS - VHF Mobile antennas & mounts

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 21:05:38 UTC
From: kk4tl@aol.com
Message-ID: <20010308160538.04277.00000845@ng-fi1.aol.com>
Source record: 168919

Diamond SG7500A duo-bander 2m / 440 mHz antenna with NMO mount and matching 5" dia. MFJ mag-mount. Antenna is new, still in original package, mount is used but excellent condition. Antenna info at http://www.rfparts.com/diamond/index.html $60.00 shipped CONUS.

Comet SB-15 Tri-Bander 6m / 2m / 440mhz antenna with UHF mount. Never used, still in original package. Antenna info at: http://www.cometantenna.com/mobile.html $65.00 shipped CONUS.

K400C lip mount with UHF Base, 6.5' Coax, C110 10 ft cable extender, all parts. Used but mount is complete and back in original package. Info at: http://www.rfparts.com/diamond/index.html $55.00 shipped CONUS. (Perfect match for Comet SB-15 antenna above.)

Diamond K400-3/8C - 3/8-24" lip mount w/ 6 ft. Cable with C110 10 ft cable extender. New / still in original package. Info at: http://www.rfparts.com/diamond/index.html $60.00 shipped.

4449. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 22:20:39 UTC
From: kb7qhc@home.com
Message-ID: <3aa80513.535665376@news.seanet.com>
Source record: 168922

On Thu, 8 Mar 2001 20:18:21 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>
>"Richard Clark" wrote ...
>> Leland C. Scott" wrote:
>> >> By Far the best solution to damping the Back EMF of Relay coils is by
>> >> fitting a REFER, these devices are a potted R and C in series
>especially
>> >> developed for spark suppression.
>> >We use a lot of those on AC relay coils. The relays are the "typical"
>> >industrial control panel mount type.
>>
>> When I designed telephone equipment, I learned a lot about inductive
>> kick from the K1 relay the home phone connects to at the central
>> office. For a short loop, this kick ran at something like 1 to 2 KV
>> and you did not want to snub it too heavily. The reason why is that
>> by snubbing (or even a perfect short) you keep the relay latched
>> longer when you are actually trying to break the connection (and
>> unlatch the relay). In fact, the relays that operate during dialing
>> (boy that is ancient technology) are held latched by design even when
>> the current is broken.
>>
>> Then I got around to design for Steppers that I had to supply at 10
>> times their rated voltage to "quicken" their response.
>
>Were you familiar with the Carpenter Relay Richard?

Hi Gary,

Perhaps by another name? Strowger perhaps (the stepping relay used to
translate the pulses of a dial based telephone into a cross-point
matrix)? This was invented by a moritician who found the live
telephone operator was directing his business to another mortician!

73's
Richard Clark, KB7QHC

4450. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-08 23:14:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9893iluae1@slb6.atl.mindspring.net>
Source record: 168923

Thread:

Hey, the T-tuner is basically a 3-element high pass filter [C1-L-C2] with two capacitors in the "hot" side and a single inductor to ground. Any filter with adjustable elements can be used as an impedance matcher. The Pi-Tuner is actually a low pass filter [C1-L-C2] with two grounded C's and a floating L, and can effect impedance matching with the added benefit of harmonic suppression because of the low pass filtering effect.

Not much harmonic supression in T-tuner, since it is a high pass filter, and don't expect it.

A properly configured L-tuner [L-C] can do as good a job at harmonic suppression.

Of course, your transmitter should have it's harmonics suppressed far enough to begin with. So don't depend upon the "tuner" for harmonic supression.

The "tuner", whether T-Tuner, L-tuner, Pi-Tuner, or whatever, should be thought of simply as an adjustable impedance transformer. The T and Pi tuners have three independent adjustments, more adjustable variables than are necessary to match any given impedance ratio, and so....

With three independent adjustments, the T-tuner and Pi-Tuner can have numerous different "settings" of the controls to effect the desired impedance transformation. Usually only one of those several settings is the lowest loss setting. Beginners may have problems deteriming which of the various settings that result in 1:1 VSWR are the lowest loss. A good rule of thumb is that since the inductor is the lossiest element in the tuner, the setting that utilizes the smallest value of inductance is the lowest loss setting.

With only two independent adjustments, the L-Tuner will have only one "setting" that effects the desired impedance transformation and results in a 1:1 VSWR. You simply have to settle for whatever "loss" results from that one setting.

Depending upon conditions, that setting of the L-tuner may result in less or more loss than a corresponding T-tuner or Pi-Tuner.

Widespread practice and usage indicate that the "T-tuner" is the most versatile in terms of the impedance matching range for a given size of capacitors and inductors.

-Peter

"Robert Peters" <peters@ems.psu.edu> wrote in message news:3AA7B9E1.FCC7DFE4@ems.psu.edu...

> I have used the L-tuner and T-tuner. Seems to me the main disadvantage of
> the L tuner is that it does not act as a tuned circuit and will radiate
> harmonics. The T-tuner seems to function as a band pass filter. Just my
> observation. The main difference could be the type of feed. I use the
> MFJ-989C with window line to feed a doublet. I use the L-tuner (homebrew)
> to end feed a wire. The "false resonance seems to be a mecahnical short
> to disable some of the turns on the variable inductor, when using smaller
> inductances.
>
> Bob K3EZS

4451. FS: MA-40 Tubular Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 00:45:45 UTC
From: Chad Johnson <cjohn@hitter.net>
Message-ID: <98995v$a2o$1@news.hitter.net>
Source record: 168927
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,alt.ham-radio.marketplace,rec.radio.amateur.antenna

MA-40 Tubular Tower: $300

This MA-40 Tubular Tower belonged to a friend who recently became a silent key. I am assisting his widow in disposing of his amateur radio equipment. The tower is at my home in Beverly Hills, Florida - Citrus County in West Central Florida. You must transport it.

Chad Johnson W4CJ
5050 North Amarillo Drive
Beverly Hills, FL 34465

E-mail: cjohn@hitter.net
Tel: 352-746-1299

4452. Re: Bad TVI--Thanks group!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 00:48:50 UTC
From: Gary Danaher <gdanaher@home.com>
Message-ID: <3AA82875.C8C3EEB9@home.com>
Source record: 168924

Radio Shack sells the same split ferrites.

Frizz wrote:

> Thanks to all that replied to my TVI problem message. I now have a jumping
> off point in fixing all of this. One more thing though. People have
> mentioned common mode chokes and the ARRL Hints and Kinks book talks about
> them as well. Where is a good place to get the ferrite cores to wrap coax
> and other cables with? I am thinking about getting some of the snap on ones
> that AES sells for the smaller audio and power leads going to the effected
> equipment but those seem way to small for coax and larger power cables like
> the ones you might find on equipment with three prong grounded plugs. Any
> ideas? Thanks again!!!!

4453. Re: Radial length "detuning"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 00:55:28 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <3Fwq6.250$CW1.3034@newsfeed.slurp.net>
Source record: 168832

Yes a better ground plane (more radials or longer radials if you've got too short ones) will reduce the resistive losses of a ground plane antenna, which without any other tuning will lower it's impedance down into the 30 to 40 ohm range, which will give you a worse SWR than a lossy antenna that has a 50 ohm impedance. The SWR bandwidth will also be narrower. The efficiency will be higher and you'll get out better. If it's a 5/8 wave vertical you need some kind of matching arrangement at the base anyway. Retune it and/or use another antenna tuner. If you t a real good SWR across all bands without the hassle of tuning is the most important thing to you then a 50 ohm noninductive resistor will work great. If you'd rather radiate some signal you'll have to put up with the inconveinience of matching the impedance of an efficient antenna.
Mogens wrote in message <98amsf$6ll$1@news.inet.tele.dk>...
>Would the right answeer be a 1/4 waveleght ? But a good groundpalne may
>detune the swr of the antenna.
>
>Mogens
>
>
>
>"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>news:3AA8D575.842B09D3@IEEE.org...
>> DL7JSK wrote:
>> > I use a 5/8 wl groundplane on 10m.The antenna was originally designed
>for
>> > CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told
>me
>> > to make them longer,it would improve performance.Now my question: How
>long
>> > should I make the radials,and what is improved then,rx or tx ?
>>
>> Somebody, a couple of years ago, said a good rule of thumb is to make
>> the radials the same length as the vertical element.
>> --
>> http://www.mindspring.com/~w6rca
>>
>>
>> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----
>
>

4454. Andrews LDF heliax bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 01:00:22 UTC
From: Tom <masthope@remove-yahoo.com>
Message-ID: <jkTp6.219$Xv.11414@eagle.america.net>
Source record: 168921

Does anyone know the minimum bend radius of LDF-50 or LDF-40 heliax.
TIA
Tom

4455. Re: Re:snap on Bad TVI--Thanks group!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 01:52:45 UTC
From: Frizz <kg4ivt@hotmail.spamsucks.goaway.leavemealone.com>
Message-ID: <989cpv$15d$1@bob.news.rcn.net>
Source record: 168925

Any, I guess for lack of a better term, "value" I should look for? Thanks

73

"rory" <rory_2_u_sir@rory.com> wrote in message
news:3AA7EC31.8AF1EA51@rory.com...
> Hi OM
>
> www.allcorp.com is one place, many sizes available.
> palomar engineers is another place for high quality parts.
>
> 73
>
> Frizz wrote:
>
> > Thanks to all that replied to my TVI problem message. I now have a
jumping
> > off point in fixing all of this. One more thing though. People have
> > mentioned common mode chokes and the ARRL Hints and Kinks book talks
about
> > them as well. Where is a good place to get the ferrite cores to wrap
coax
> > and other cables with? I am thinking about getting some of the snap on
ones
> > that AES sells for the smaller audio and power leads going to the
effected
> > equipment but those seem way to small for coax and larger power cables
like
> > the ones you might find on equipment with three prong grounded plugs.
Any
> > ideas? Thanks again!!!!
>

4456. Re: Naval HF FAN wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 03:14:36 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3aa84aa8_4@news3.prserv.net>
Source record: 168926

Jim:
Apparently I hit the 1 key twice too fast, and didn't proof read. But, you
obviously know the feeling.

--
Crazy George
Jim Rodenkirch <rodenkir@spawar.navy.mil> wrote in message
news:985in1$9b$1@newpoisson.nosc.mil...
>
> "Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
> news:3aa5b752_2@news3.prserv.net...
> No, you guys aren't the only ones. Those %^%#H&* fan antennas and the
> intermod the ground currents cause in the hull from the URC-109 output
when
> the Link - 1 and other channels are keyed are still dealing us misery.
39th
> IMD product indeed. Thanks a lot!
> George
>
> George, George: you elicited instantaeneous recollections of that damn
> ping-ponging throughout Combat and Radio Central - way to go!!!
>
> Wow, I forgot all about that damn Link-11 (not Link-1) system. What a
> freakin' night mare! Let's see if
> Steve recollects any of that.
>
> I have a friend back in San Diego that was the Link-11 ISEA for many
years.
> Hee, Hee! Talk about an system where esoterics reigned supreme! He has
> little hair left on his head - wonder why?!?!?!
>
> Later, Jim R.
>
>

4457. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 05:04:45 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA8646D.D4A8B76F@IEEE.org>
Source record: 168928

W5GT wrote:
> As for being a "dog" on 30, mine works just fine on 30...oh well so much for
> theory.

"Works just fine" is relative. How much coax do you use?
How do you manage the 40:1 SWR on the coax?
--
http://www.mindspring.com/~w6rca

4458. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 06:13:30 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3aa87487.13759094@news.aepnet.com>
Source record: 168930

On Wed, 07 Mar 2001 02:39:08 GMT, k6mhe@arrl.net (Dan Richardson) wrote:

>I am surprised that Wes hasn't commented on this thread thus far.

Unfortunately, my father-in-law died on the 1st and I have been away dealing
with that.
>
>He had done a study which was published in the ARRL Antenna Compendium
>Vol. 6 on ladder line and gave measurement data that he made comparing
>the changes encountered when the line was wet. I suggest you check out
>his findings.

Read all about it by following the ladder line link at:

www.triconet.org/~wesandlinda

Regards,

Wes N7WS

4459. Re: Andrews LDF heliax bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 06:27:55 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3aa8773f.14455883@news.aepnet.com>
Source record: 168931

On Thu, 8 Mar 2001 17:00:22 -0800, "Tom" <masthope@remove-yahoo.com> wrote:

>Does anyone know the minimum bend radius of LDF-50 or LDF-40 heliax.
>TIA
>Tom

Not enough data. However:

LDF4-50 5 in.
LDF5-50 10 in.
LDF6-50 15 in.

Wes N7WS
>
>

4460. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 07:09:23 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <989vjvqq1@slb2.atl.mindspring.net>
Source record: 168932

Ken and Mary:

Yup, shorted turns magnetically coupled to the rest of the coil are bad news!

They are definitely lossy! It's like putting a short circuit on the secondary side of a transformer...

Don't go there!

When designing or building tapped or roller inductors leave the extra turns "hanging free"... don't short them out!

Shorted turns on any kind of inductor are "bad news".

-Peter K1PO

"Ken & Mary" <kenmary@interpac.net> wrote in message news:wq_p6.5$Y91.402@newsfeed.slurp.net...
> Regarding using the lest inductance to acheive the lowest loss, what about
> the shorted turns? If you use the least inductance, with a tapped inductor,
> either switch tapped or roller inductor, you have the greatest number of
> shorted turns which are inductively coupled to the rest (active part) of the
> inductor. Seems to me this might be lossy too. For this reason those Collins
> coils which wind the unused part of the inductor onto a conductive drum are
> really neat. ...Also the "false resonances" may not all be inefficient
> tunings that couple less power to the antenna output side of the tuner, some
> of those tunings may be self resonant tunings of the tuner wherein all of
> the power is resistively consumed in the tuner and none gets to the antenna
> feedline at all.
> Peter O. Brackett wrote in message <9893iluae1@slb6.atl.mindspring.net>...
> >Thread:
> >
> >Hey, the T-tuner is basically a 3-element high pass filter [C1-L-C2] with
> >two capacitors in the "hot" side and a single inductor to ground. Any
> >filter with adjustable elements can be used as an impedance matcher. The
> >Pi-Tuner is actually a low pass filter [C1-L-C2] with two grounded C's and
> a

> >floating L, and can effect impedance matching with the added benefit of
> >harmonic suppression because of the low pass filtering effect.
> >
> >Not much harmonic supression in T-tuner, since it is a high pass filter,
> and
> >don't expect it.
> >
> >A properly configured L-tuner [L-C] can do as good a job at harmonic
> >suppression.
> >
> >Of course, your transmitter should have it's harmonics suppressed far
> enough
> >to begin with. So don't depend upon the "tuner" for harmonic supression.
> >
> >The "tuner", whether T-Tuner, L-tuner, Pi-Tuner, or whatever, should be
> >thought of simply as an adjustable impedance transformer. The T and Pi
> >tuners have three independent adjustments, more adjustable variables than
> >are necessary to match any given impedance ratio, and so....
> >
> >With three independent adjustments, the T-tuner and Pi-Tuner can have
> >numerous different "settings" of the controls to effect the desired
> >impedance transformation. Usually only one of those several settings is
> the
> >lowest loss setting. Beginners may have problems deteriming which of the
> >various settings that result in 1:1 VSWR are the lowest loss. A good
rule
> >of thumb is that since the inductor is the lossiest element in the tuner,
> >the setting that utilizes the smallest value of inductance is the lowest
> >loss setting.
> >
> >With only two independent adjustments, the L-Tuner will have only one
> >"setting" that effects the desired impedance transformation and results
in
> a
> >1:1 VSWR. You simply have to settle for whatever "loss" results from
that
> >one setting.
> >
> >Depending upon conditions, that setting of the L-tuner may result in less
> or
> >more loss than a corresponding T-tuner or Pi-Tuner.
> >
> >Widespread practice and usage indicate that the "T-tuner" is the most
> >versatile in terms of the impedance matching range for a given size of
> >capacitors and inductors.
> >
> >-Peter
> >
> >
> >"Robert Peters" <peters@ems.psu.edu> wrote in message

> >news:3AA7B9E1.FCC7DFE4@ems.psu.edu...
> >> I have used the L-tuner and T-tuner. Seems to me the main disadvantage
> of
> >> the L tuner is that it does not act as a tuned circuit and will radiate
> >> harmonics. The T-tuner seems to function as a band pass filter. Just
my
> >> observation. The main difference could be the type of feed. I use the
> >> MFJ-989C with window line to feed a doublet. I use the L-tuner
> (homebrew)
> >> to end feed a wire. The "false resonance seems to be a mecahnical
short
> >> to disable some of the turns on the variable inductor, when using
smaller
> >> inductances.
> >>
> >> Bob K3EZS
> >
> >
>
>

4461. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 10:28:06 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AA8B036.39FF2890@mwci.net>
Source record: 168933

Peter O. Brackett wrote:

> Yup, shorted turns magnetically coupled to the rest of the coil are bad
> news!
>
> They are definitely lossy! It's like putting a short circuit on the
> secondary side of a transformer...
>
> Don't go there!

Unshorted turns are much worse, because the Q of the self-resonant circuit formed by the unshorted turns and their self capacitance is high, large voltages are formed in these turns, and so-called "suckouts" are formed. In the shorted turn coil a small amount of power is lost in the shorting connection, but that is a lot better than letting the unused turns "float". Also, the coupling to the shorted turns is small.

The unused turns should always be shorted. I have had some bad experiences with unshorted-turn coils that went away when the short was reinstated. The trouble was that at certain frequencies, as I approached the desired inductance value, the tuning would suddenly go berserk and it was impossible to get tuned because of the interactions.

The shorted coil may become series self-resonant, but at a much higher frequency than the unshorted coil, where it usually causes no problem.

Bill W0IYH

4462. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 10:59:03 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98adqoktr1@lure.pipex.net>
Source record: 168934

"Richard Clark" wrote ...
> Gary Peach wrote:
> >"Richard Clark" wrote ...
> >> Leland C. Scott" wrote:
> >> >> By Far the best solution to damping the Back EMF of Relay coils is
by
...
> >> Then I got around to design for Steppers that I had to supply at 10
> >> times their rated voltage to "quicken" their response.
> >
> >Were you familiar with the Carpenter Relay Richard?
>
> Perhaps by another name? Strowger perhaps (the stepping relay used to
> translate the pulses of a dial based telephone into a cross-point
> matrix)? This was invented by a moritician who found the live
> telephone operator was directing his business to another mortician!

dead lucky, you might say.

No, you might know them by the generic name "Polar Relay".

Look in the RSGB Communications Handbook
10.5 The Polar Relay and Selector Magnets.
There is a diagram (10.8) of the mechanical and magnetic operation of this
type of relay and the wiring (10.9) for various modes of application.

"Polarized relays such as the Carpenter type are often encountered in
telegraph practice. Like the double-current magnet they are completely
balanced mechanically and side-stable. When current is removed entirely from
the coils, the contact remains switched according to the direction of the
current prior to removal. There is only one change over contact, the fixed
contacts being designated mark and space, and the moving contact as the
tongue. Generally there are two identical coils."

You might use the Carpenter Relay at the end of a long telegraph line where
the voltage and current to drive a teleprinter may be attenuated and a local
voltage and current source may be used to drive the TTY or you might use the
Carpenter relay to translate Double-Current signalling to 2-wire antiphase
signalling, or to Single-Current or vice versa etc.
Or to run several TTY off of a single line etc.

Relay logic "can" be fun :)
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4463. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 11:12:22 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98adqpktr2@lure.pipex.net>
Source record: 168935

"Richard Harrison" wrote
> Mike Tatum wrote:
> "Anyone know where I can get a low noise preferably filtered just for
> 160m, 25 db gain preamp?"
>
> You might try a search for "radio preselector". It produced results for
> me.

A preamp in front of a mixer on 160 m will do nothing for you.
In fact it will restrict your dynamic range and make the situation a good deal worse.
The noise figure of a mixer is 10 dB
this amounts to 2,500°K noise temperature.
The sky noise on 160 m at the best time of day is 9,000,000°K
changing the noise from 9,000,000 to 9,002,500 is only worth 0.0012 dB you would not be able to measure such a change.
Adding a 20 dB pre amplifier in front of the mixer will reduce the mixer noise contribution to 25°K (assuming that a low noise figure transistor is used for the input transistor to the amplifier and it is nearly an ideal amplifier.
However the Sky noise will now appear to be 100 x 9,000,000 = 900,000,000°K
This will overload the output transistors of you receiver and the AGC will shut down the IF gain by at least 20 dB.
So now you have lost dynamic range and also the ability of the AGC of the receiver to cope with the QSB and fading of the wanted signal.

The only way to get more S/N is an improved antenna or for the transmitter
power at the other end to be increased.

This is the one area where the linear transmitter amplifier does come into its own.
If you require further information I will rehearse the calculations for you.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4464. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 13:01:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA8D413.BA6EBEC0@IEEE.org>
Source record: 168937

"Peter O. Brackett" wrote:
> When designing or building tapped or roller inductors leave the extra turns
> "hanging free"... don't short them out!

That can be a problem also - thousands of volts on the floating end.
Why can't tuners take a lesson from screwdriver antennas and use
finger stock with a shorting sleeve?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4465. Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 13:05:03 UTC
From: DL7JSK <tansorg@cs.tu-berlin.de>
Message-ID: <98akeq$b05$04$1@news.t-online.com>
Source record: 168936

Hi NG
I use a 5/8 wl groundplane on 10m.The antenna was originally designed for CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told me to make them longer,it would improve performance.Now my question: How long should I make the radials,and what is improved then,rx or tx ?

73
Tom, DL7JSK

4466. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 13:07:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA8D575.842B09D3@IEEE.org>
Source record: 168938

DL7JSK wrote:
> I use a 5/8 wl groundplane on 10m.The antenna was originally designed for
> CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told me
> to make them longer,it would improve performance.Now my question: How long
> should I make the radials,and what is improved then,rx or tx ?

Somebody, a couple of years ago, said a good rule of thumb is to make
the radials the same length as the vertical element.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4467. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 13:39:14 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <98amusdjv1@nnrp1.phx.gblx.net>
Source record: 168940

> > Peter O. Brackett, K1PO, originally wrote:
> > Yup, shorted turns magnetically coupled to the rest of the coil are bad
> > news! They are definitely lossy! It's like putting a short circuit on the
> > secondary side of a transformer...

> Bill Sabin, W0IYH, responded:

> Unshorted turns are much worse, because the Q of the self-resonant circuit
> formed by the unshorted turns and their self capacitance is high...

> The unused turns should always be shorted. I have had some bad experiences with
> unshorted-turn coils that went away when the short was reinstated....

> The shorted coil may become series self-resonant, but at a much higher frequency
> than the unshorted coil, where it usually causes no problem.

This is from my Hints and Kinks Dept: I run a fairly large Texas Bugcatcher (tm) and find myself plagued with self-resonances in the unused (shorted) part of the coil on 20, 17 and 15 meters. This problem goes away if I leave the jumpers for the lower-frequency taps, those for 75 and 40 meters, in place along with the normal one for the higher bands. I suppose the ideal situation would be to short out every unused turn on the inductor, but multiple shorting taps seems to work fairly well also.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

4468. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 13:47:06 UTC
From: Mogens <petsen@lazy.dk>
Message-ID: <98amsf$6ll$1@news.inet.tele.dk>
Source record: 168939

Would the right answeer be a 1/4 waveleght ? But a good groundpalne may detune the swr of the antenna.

Mogens

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3AA8D575.842B09D3@IEEE.org...
> DL7JSK wrote:
> > I use a 5/8 wl groundplane on 10m.The antenna was originally designed for
> > CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told me
> > to make them longer,it would improve performance.Now my question: How long
> > should I make the radials,and what is improved then,rx or tx ?
>
> Somebody, a couple of years ago, said a good rule of thumb is to make
> the radials the same length as the vertical element.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4469. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 14:05:57 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA8E345.3E06744@IEEE.org>
Source record: 168941

Mogens wrote:
> Would the right answeer be a 1/4 waveleght ? But a good groundpalne may
> detune the swr of the antenna.

I forget who it was, but somebody made a good sounding argument that
the higher the current maximum point is on the vertical, the longer
the radials need to be.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4470. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 14:07:29 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA8E3A1.F653B062@IEEE.org>
Source record: 168942

"Jim Bromley, K7JEB" wrote:
> I suppose the ideal situation would be to short
> out every unused turn on the inductor, ...

Like a screwdriver does? :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4471. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 15:48:19 UTC
From: richardharrison@webtv.net
Message-ID: <2318-3AA8FB43-22@storefull-118.iap.bryant.webtv.net>
Source record: 168944

Mogens wrote:
"Would the right answer be 1/4 wavelength? But a good groundplane may detune the swr of the antenna."

That is about what one "expert", B. Whitfield Griffith, Jr., says. He says the vertical rod with its radials resonates much as a 1/2-wave dipoles does. The "dipole" can be off-center fed. That is the vertical rod can grow while the radials shrink, keeping the total length of rod and radials at near 1/2-wavelength. When 1/2-wavelength is reached, no radials at all are necessary for resonance.

Griffith says that another way is superior. He says the ground plane can be made very extensive as the surface of an automobile, plane or ship. If this is done, he says you can expect as much as 3 db gain over the usual groundplane antenna.

Best regards, Richard Harrison, KB5WZI

4472. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:12:19 UTC
From: richardharrison@webtv.net
Message-ID: <2318-3AA900E3-23@storefull-118.iap.bryant.webtv.net>
Source record: 168946

Dick Carroll wrote:
"-yes, hams operate a variety of emergency relief and assistance nets
when these things happen-"

Old bumper snicker: Trouble? Dial the police, or call a hippie?

New question: Trouble? Dial 911, or call a ham?

Best regards, Richard Harrison, KB5WZI

4473. ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:24:35 UTC
From: jeff wright <wright00@att.net>
Message-ID: <3AA90382.20AA8493@att.net>
Source record: 168945

i am having a problem with a new ft100d and the atas 100.

on 10 meters, i hit the tune button, and the antenna moves and the radio

shows the tune icon and the 'o' symbol. as soon as i key up, the high
swr symbol appears with the 'x'. what is going on?

i can move the antenna all the way up or down manually and tune using
the tune button. the receive audio comes up like it would for a tuned
antenna and the icon shows tuned ('o'), but as soon as i try to use the
mic, i get the high swr icon on 10 meters.

antenna tunes great on other bands.

i am using another antenna for 2/440 and have the radio set up that way.

your thoughts?

4474. Re: QEX, fractal antenna article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:31:51 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <98b0hn$c5q$1@nnrp2.phx.gblx.net>
Source record: 168953

Gilbert Mouget <gilbert.mouget@waika9.com> wrote:

: In article <jUsT.aNoTheR.mEsSaGe.iD.983817352194O7@opsyhopsy.com>,
: HUMINT@opsyhopsy.com says...

: > Has the article been published, or is it still in press?

: Publication due in next April's issue.

And it's NOT written by Nathan Cohen.

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4475. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:36:44 UTC
From: richardharrison@webtv.net
Message-ID: <2318-3AA9069C-24@storefull-118.iap.bryant.webtv.net>
Source record: 168947

Tom, DL7JSK asked about lengthening his groundplane radials for improved performance on 10 meters. I responded that some large surface like a car body would be better.

That is a faux pas for 10 meters because a car body is small at 10 meters. Sorry, I was thinking UKW.

Best regards, Richard Harrison, KB5WZI

4476. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:48:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98b1d6$bl1$1@plutonium.btinternet.com>
Source record: 168948

Gary, your analysis is reasonable if antenna sensitivity is a
normal sort of value. But the antenna in question is is an untuned
ferrite rod of great insensitivity. Any gain between it and the
noisy first mixer would be very welcome.

A better solution on 160m would be to tune the winding and match it
to the receiver input impedance via a link coupling.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Gary Peach <xcg34@dial.pipex.com> wrote in message
news:98adqpktr2@lure.pipex.net...
>
> "Richard Harrison" wrote
> > Mike Tatum wrote:
> > "Anyone know where I can get a low noise preferably filtered
just for
> > 160m, 25 db gain preamp?"
> >
> > You might try a search for "radio preselector". It produced
results for
> > me.
>
> A preamp in front of a mixer on 160 m will do nothing for you.
> In fact it will restrict your dynamic range and make the
situation a good
> deal worse.
> The noise figure of a mixer is 10 dB
> this amounts to 2,500°K noise temperature.
> The sky noise on 160 m at the best time of day is 9,000,000°K
> changing the noise from 9,000,000 to 9,002,500 is only worth
0.0012 dB you
> would not be able to measure such a change.
> Adding a 20 dB pre amplifier in front of the mixer will reduce
the mixer
> noise contribution to 25°K (assuming that a low noise figure
transistor is
> used for the input transistor to the amplifier and it is nearly
an ideal

> amplifier.
> However the Sky noise will now appear to be 100 x 9,000,000 = 900,000,000 K
> This will overload the output transistors of you receiver and the AGC will
> shut down the IF gain by at least 20 dB.
> So now you have lost dynamic range and also the ability of the AGC of the
> receiver to cope with the QSB and fading of the wanted signal.
>
> The only way to get more S/N is an improved antenna or for the transmitter
> power at the other end to be increased.
>
> This is the one area where the linear transmitter amplifier does come into
> its own.
> If you require further information I will rehearse the calculations for you.
> --
> Gary7SLL
> 51 23' 50" N 1 19' 58"W
> www.gary.peach.dial.pipex.com/
>
>

4477. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:52:17 UTC
From: kb7qhc@home.com
Message-ID: <3aa90a08.602470977@news.seanet.com>
Source record: 168949

On Fri, 09 Mar 2001 08:07:29 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>"Jim Bromley, K7JEB" wrote:
>> I suppose the ideal situation would be to short
>> out every unused turn on the inductor, ...
>
>Like a screwdriver does? :-)

Hi Cecil,

That came to mind for me too. But more a matter of a shielded
floating coil isn't it?

73's
Richard Clark, KB7QHC

4478. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 16:58:09 UTC
From: richardharrison@webtv.net
Message-ID: <2318-3AA90BA1-25@storefull-118.iap.bryant.webtv.net>
Source record: 168951

Gary Peach wrote:
"A preamp in front of a mixer on 160 m will do nothing for you."

Agreed. That is the usual case because the troublesome noise is external to the radio.

I didn`t endorse preamplification. I simply suggested searching for a "preselector" which often can help signal to noise ratio. Mike said he wanted selectivity. ("preferably filtered just for 160m").

Mike said he wanted 25 db gain and something about a submarine antenna. I assumed he had his reasons.

Best regards, Richard Harrison, KB5WZI

4479. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 17:00:30 UTC
From: kb7qhc@home.com
Message-ID: <3aab0b19.602743929@news.seanet.com>
Source record: 168950

On Fri, 9 Mar 2001 10:59:03 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>
>"Richard Clark" wrote ...
>> Gary Peach wrote:
>> >"Richard Clark" wrote ...
>> >> Leland C. Scott" wrote:
>> >> >> By Far the best solution to damping the Back EMF of Relay coils is
>by
>...
>> >> Then I got around to design for Steppers that I had to supply at 10
>> >> times their rated voltage to "quicken" their response.
>> >
>> >Were you familiar with the Carpenter Relay Richard?
>>
>> Perhaps by another name? Strowger perhaps (the stepping relay used to
>> translate the pulses of a dial based telephone into a cross-point
>> matrix)? This was invented by a moritician who found the live
>> telephone operator was directing his business to another mortician!
>
> dead lucky, you might say.
>
>No, you might know them by the generic name "Polar Relay".
>
>Look in the RSGB Communications Handbook
> 10.5 The Polar Relay and Selector Magnets.
>There is a diagram (10.8) of the mechanical and magnetic operation of this
>type of relay and the wiring (10.9) for various modes of application.
>
>"Polarized relays such as the Carpenter type are often encountered in
>telegraph practice. Like the double-current magnet they are completely
>balanced mechanically and side-stable. When current is removed entirely from
>the coils, the contact remains switched according to the direction of the
>current prior to removal. There is only one change over contact, the fixed
>contacts being designated mark and space, and the moving contact as the
>tongue. Generally there are two identical coils."
>
>You might use the Carpenter Relay at the end of a long telegraph line where
>the voltage and current to drive a teleprinter may be attenuated and a local
>voltage and current source may be used to drive the TTY or you might use the
>Carpenter relay to translate Double-Current signalling to 2-wire antiphase
>signalling, or to Single-Current or vice versa etc.
>Or to run several TTY off of a single line etc.

>
>Relay logic "can" be fun :)

Hi Gary,

I have worked with variants of your Carpenter Relay. They were small units from Arrowmat (sp?) and we investigated their use in home telephone equipment. We were concerned about the limitations enforced by Ma Bell (and the FCC) at the time with these "latching" relays. Those limits were the current necessary to trip the state and the holding current to maintain the state. The two were different by something like 10:1 making them very appealing.

73's
Richard Clark, KB7QHC

4480. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 17:43:45 UTC
From: Ken & Mary <kenmary@interpac.net>
Message-ID: <3oQq6.560$VG2.2424@newsfeed.slurp.net>
Source record: 168813
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Depending on what distance you want to work, either don't worry about height
of a horizontal antenna and work locals (within a few hundred miles) using
high angle radiation (presently popular is the buzzword NVIS=Near Vertical
Incident Skywave) OR if you want to work DX use a vertical, then only one
support is needed and the support is the radiating element. A full quarter
wavelength vertical can easily be mechanically sound without guying as low
(in frequency) as fourty meters. You just have to have good foundation (in
the ground or part of a building) to mount it to, AND a good radial system
if you want it to be efficient.
Richard Clark wrote in message
<0tinat8bf2n1g7ble5c3vmdpef10bd0pe7@4ax.com>...
>On Sun, 11 Mar 2001 12:10:16 -0500, "John (KB3CDF)"
><murphman@erols.com> wrote:
>
>>I have read all these great tales of excellent success with inverted V
>>and flat top antennas. The word spoken is "get them as high as you
>>can".
>>
>>Can anyone suggest ideas for "man-made" supports that would enable
>>such worthy antenna beasts?
>>
>>Thanks in advance,
>
>Hi John,
>
>There's a glut of military surplus field masts on the market. They
>come kitted up ready to deploy (no instructions provided) a 30 to 40
>foot tall mast guyed at two or three levels. You get the mast as
>stackable 5 foot tubes (heavy wall), guy plates, guy lines, stakes,
>and sledge hammer for stakes (no instructions provided).
>
>As a kit, not much bigger than my old seabag (same color, same
>material). $90 and 40 footer was mine.
>
>73's
>Richard Clark, KB7QHC

4481. Re: ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 18:08:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AA91C26.8A4D8758@oio.net>
Source record: 168952

jeff,
Contact Yaesu, they're aware of the problem and have
a 'fix' for it. I don't remember what the deal was, just
knew the early Atas-100's had problems...
'Doc

4482. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 18:18:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98b8pkibe1@uranium.btinternet.com>
Source record: 168954

Wes, I visited your easy to read website. I note your measurements to investigate difference in loss between wet and dry ladderline were made at 50 MHz. Presumably you had to go up to VHF to find differences great enough to measure reliably.

The formula you provide to translate the VHF data to lower frequencies I think is incorrect. Your formula (loss proportional to sqrt(F)) is applicable only when line loss is nearly all due to conductor resistance.

But the ADDITIONAL loss due to rainwater MUST be in the dielectric and dielectric loss increases directly proportional to frequency. So the extra dielectric loss due to rainwater on 450-ohm ladder line at, say, 2 MHz is 1/25 of the values you have reported at 50 MHz. It is less than the already-small conductor loss and would not be noticeable.

I think you said your measurements were worst case values obtained with a wetting agent added to the water. I wonder what the loss-factor of wetting agents are at 50 MHz.

With ladderline by far the greater proportion of the dielectric volume is air, with a small amount of plastic and very little water. I have sat in the shack with one eye on the Refl.coeff meter and the other looking out of the window watching great raindrops bounce off the ladder line. The only change observed on the meter has been synchronised with the antenna swinging in a gusty wind. But I understand rainfall can be heavier in the States.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Wes Stewart <nospam_n7ws@arrl.net> wrote in message news:3aa87487.13759094@news.aepnet.com...
> On Wed, 07 Mar 2001 02:39:08 GMT, k6mhe@arrl.net (Dan Richardson) wrote:
>
> >I am surprised that Wes hasn't commented on this thread thus far.
>
> Unfortunately, my father-in-law died on the 1st and I have been away dealing

> with that.
> >
> >He had done a study which was published in the ARRL Antenna
Compendium
> >Vol. 6 on ladder line and gave measurement data that he made
comparing
> >the changes encountered when the line was wet. I suggest you
check out
> >his findings.
>
> Read all about it by following the ladder line link at:
>
> www.triconet.org/~wesandlinda
>
> Regards,
>
> Wes N7WS
>
>
>

4483. Re: ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 19:05:32 UTC
From: jeff wright <wright00@att.net>
Message-ID: <3AA9293A.73FF0C5@att.net>
Source record: 168955

doc:

thanks for your reply--i sent a message to yaesu but haven't yet heard
back from them.

do you have the ft/atas/100 combo?

'Doc wrote:

> jeff,
> Contact Yaesu, they're aware of the problem and have
> a 'fix' for it. I don't remember what the deal was, just
> knew the early Atas-100's had problems...
> 'Doc

4484. RE: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 21:12:11 UTC
From: fractenna@aol.com
Message-ID: <20010309161211.00599.00000504@ng-cd1.aol.com>
Source record: 168956

Just as an update since others have brought this up, Dr. Cohen does not write articles for ham magazines anymore--after many from 1995-1998-- and declined to write one for QEX. Many others have written fractal antenna articles, including KF7BS's article in Octobet 1999, 73 Magazine.

The only valid fractal antenna source of info for hams on the internet is on www.n1ir.com, which will be up in coming weeks.

Incidentally Dr. Cohen has concerns about radio amateurs and others who are placing material in copyright violation on their web sites and in lieu of recent legal decisions on copyright violation on the web is pursuing legal efforts to stop such in 3 cases. The same concern for violation can and will extend to published articles.

Radio amateurs are also reminded that fractal antennas are protected by 3 US patents to date and covered in several other pending patents. Single use experimentation should not be interpreted as commercial permission under any circumstance.

This is a public notice and others are invited to transmit it elsewhere as appropriate.

73 to All,
Phil de N1ZKT

4485. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 21:20:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA94932.1DE0@wt.net>
Source record: 168957

DL7JSK wrote:
>
> Hi NG
> I use a 5/8 wl groundplane on 10m.The antenna was originally designed for
> CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told me
> to make them longer,it would improve performance.Now my question: How long
> should I make the radials,and what is improved then,rx or tx ?
>
> 73
> Tom, DL7JSK

This is what modeling had to say about them. MK

http://web.wt.net/~nm5k/acompari.htm
--

4486. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 21:26:55 UTC
From: kb7qhc@home.com
Message-ID: <3aa94a18.618870699@news.seanet.com>
Source record: 168958

On Fri, 9 Mar 2001 10:58:09 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>
>Mike said he wanted 25 db gain and something about a submarine antenna.
>I assumed he had his reasons.
>
>Best regards, Richard Harrison, KB5WZI
>

Hi Richard,

I didn't catch that last requirment about sub antennas :-)

Living near Jim Creek, I can attest to the monumental task of coming
up with an antenna that is suitable. Hope Mike lives in a valley with
mountain top neighbors who are friendly.

73's
Richard Clark, KB7QHC

4487. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 21:30:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA94B83.DFF0110B@IEEE.org>
Source record: 168959

Reg Edwards wrote:
> I think you said your measurements were worst case values obtained
> with a wetting agent added to the water. I wonder what the
> loss-factor of wetting agents are at 50 MHz.

Are you implying that his measurements are all wet? :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4488. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 21:37:30 UTC
From: Robert Peters <peters@ems.psu.edu>
Message-ID: <3AA94D1A.9B054DFF@ems.psu.edu>
Source record: 168960

I agree with the harmonics when only looking at the tuner. I use the T
tuner with a balun and window line. That combination seems to keep the
actual radiation of harmonics lower than with the long wire. I am mainly
talking about TVI to a weak TV channel 3 while running SSB with power on 7170.
This is not my own TV but down the street. The L-tuner with the end
fed wire is much worse. This is probably because there is no feed-line
mismatch on the other frequencies using the end fed wire. I am using older
equipment but also use a high power low pass filter that starts cutting off
at 30 MHz (in fact has about 3db loss on 10M) after the linear.

Bob K3EZS

"Peter O. Brackett" wrote:
>
> Thread:
>
> Hey, the T-tuner is basically a 3-element high pass filter [C1-L-C2] with
> two capacitors in the "hot" side and a single inductor to ground. Any
> filter with adjustable elements can be used as an impedance matcher. The
> Pi-Tuner is actually a low pass filter [C1-L-C2] with two grounded C's and a
> floating L, and can effect impedance matching with the added benefit of
> harmonic suppression because of the low pass filtering effect.
>
> Not much harmonic supression in T-tuner, since it is a high pass filter, and
> don't expect it.
>
> A properly configured L-tuner [L-C] can do as good a job at harmonic
> suppression.
>
> Of course, your transmitter should have it's harmonics suppressed far enough
> to begin with. So don't depend upon the "tuner" for harmonic supression.
>
> The "tuner", whether T-Tuner, L-tuner, Pi-Tuner, or whatever, should be
> thought of simply as an adjustable impedance transformer. The T and Pi
> tuners have three independent adjustments, more adjustable variables than
> are necessary to match any given impedance ratio, and so....
>

4489. Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 21:53:02 UTC
From: Brian Hemmis <K3USC@worldnet.att.net>
Message-ID: <2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168961

Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth condo use in FL. Figured I'd run out some wire and attach a ground clamp to a cold water pipe. Any other suggestions ? If I am on the right track are there any suggested wire lengths that you've had success with ? Appreciate any input from AH-4 users. Tnx, 73-Brian K3USC

4490. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 22:07:07 UTC
From: richardharrison@webtv.net
Message-ID: <29717-3AA9540B-92@storefull-112.iap.bryant.webtv.net>
Source record: 168962

Richard Clark wrote:
"Hope Mike lives in a Valley with mountain top neighbors who are
friendly."

I believe Mike lives in the British Isles. Not many mountains there.
That was one reason I suggested a web search. There are several sites on
this side of the Atlantic I could have suggested, but I thought he would
find one of those Dot co companies instead of a Dot com company that
might be easier for him to deal with.

Best regards, Richard Harrison, KB5WZI

4491. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 22:14:47 UTC
From: kb7qhc@home.com
Message-ID: <3aaa4ad6.619060832@news.seanet.com>
Source record: 168963

On 09 Mar 2001 21:12:11 GMT, fractenna@aol.com (Fractenna) wrote:

>Just as an update since others have brought this up, Dr. Cohen does not write
>articles for ham magazines anymore--after many from 1995-1998-- and declined to
>write one for QEX. Many others have written fractal antenna articles, including
>KF7BS's article in Octobet 1999, 73 Magazine.
>
>The only valid fractal antenna source of info for hams on the internet is on
>www.n1ir.com, which will be up in coming weeks.
>
>Incidentally Dr. Cohen has concerns about radio amateurs and others who are
>placing material in copyright violation on their web sites and in lieu of
>recent legal decisions on copyright violation on the web is pursuing legal
>efforts to stop such in 3 cases. The same concern for violation can and will
>extend to published articles.
>
>Radio amateurs are also reminded that fractal antennas are protected by 3 US
>patents to date and covered in several other pending patents. Single use
>experimentation should not be interpreted as commercial permission under any
>circumstance.
>
>This is a public notice and others are invited to transmit it elsewhere as
>appropriate.
>
>73 to All,
>Phil de N1ZKT

Hi All,

For the humor impaired, this is fair notice that you may consider the
following material offensive (or worse, boring). And now to ape the
style above:

This is public notice that the above statements have been lengthily
responded to and answered in every manner that is in fact actionable.

Further, such notice as to patent coverage has been revealed to have
been fraudulent statements in the past and that no activities in this
forum have even come close to those claims that have been allowed by
the patent office.

There are also other correspondents who have submitted papers that now
show considerable refutation for the general and unsupported claims
made about fractal antennas from the source responded to above, and
their references. At least one of these papers is going to a real,
professional based publication that is neither a vanity rag nor an

exotic, academic broadside of self aggrandizement.

Hams should be aware there are many outlets to information about fractals and one such example are my several hundred pages of design and modeling data available at
http://www.qsl.net/kb7qhc/antenna/fractal/index.htm
and at
http://www.seanet.com/~rwclark/antenna/fractal/index.htm
The visitor to each site should note that although identical in appearance, there is some variation in material included.

I should further note that these pages contain designs that are considered "offensive" by the source responded to above simply because they reveal the entire scope of several seriously flawed logic touted in this forum. Their rejection of scientific enquiry was palpable and defensively responded to with threats of "possible legal action" which of course means nothing. All things are "possible." What is more to the matter is that nothing has been "done legally" (in spite of statements made above) and such claims leave open the "possible" prospect of claims abandoned through the passivity and inaction of the source responded to above. This is the more "probable" status. ;-)

End of fair notice - send on the fractalawyers! :-)

73's
Richard Clark, KB7QHC

4492. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 22:28:11 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA958FB.E914DBBD@IEEE.org>
Source record: 168964

Richard Clark wrote:
> I should further note that these pages contain designs that are
> considered "offensive" by the source responded to above simply because
> they reveal the entire scope of several seriously flawed logic touted
> in this forum.

Richard, I've been wondering how to generate a fractal antenna without
any possible violation of fractal patents. Here's what I came up with:
Drive around until you find a two-color cat that has recently been run
over. You know, the kind that is dark on the top and white on the underside?

Skin the cat, flatten out the skin, and let it dry. Then take a #12
wire and bend the wire to match the pattern that separates the dark
part of the cat hair from the white part. Go round and round as many
times as necessary to get the dipole to resonate on the desired
frequency. The result is a perfectly unique fractal antenna without
possibility of a patentable mathematical description.

If I can find someone to hold my cat while I bend the wire, I'm going
to try it myself.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4493. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 23:13:04 UTC
From: kb7qhc@home.com
Message-ID: <3aa95ff0.624462339@news.seanet.com>
Source record: 168965

On Fri, 09 Mar 2001 16:28:11 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> I should further note that these pages contain designs that are
>> considered "offensive" by the source responded to above simply because
>> they reveal the entire scope of several seriously flawed logic touted
>> in this forum.
>
>Richard, I've been wondering how to generate a fractal antenna without
>any possible violation of fractal patents. Here's what I came up with:
>Drive around until you find a two-color cat that has recently been run
>over. You know, the kind that is dark on the top and white on the underside?
>
>Skin the cat, flatten out the skin, and let it dry. Then take a #12
>wire and bend the wire to match the pattern that separates the dark
>part of the cat hair from the white part. Go round and round as many
>times as necessary to get the dipole to resonate on the desired
>frequency. The result is a perfectly unique fractal antenna without
>possibility of a patentable mathematical description.
>
>If I can find someone to hold my cat while I bend the wire, I'm going
>to try it myself.

Hi Cecil,

Glad to see your offering in the spirit of humor....

Unfortunately, you "may be subject to legal action" given this "may be
covered by patents pending" referencing claim 3.b.2.ix. in an
abandoned fractal patent. (There seems to be a morose consistency in
what is sought and what is abandoned.)

Then again - you "may" not.

Hmmm, too bad you didn't submit this in the unregistered Lottery
offered here under the rubric of "Fractal Challenge." What would be
the FOM for this novel invention of yours? I wonder where the money
went for that one. I wonder if the state of Mass. is aware of this
violation of gaming laws. ;-)

Well, we can all sit back on our heels and wait to be described as the
Wakefield killer (no apologies heard in that debacle either). That
thread still has life, given recent entries, and certainly is one of
the more "successful" threads started by herr doktor and krew.

Ah, the light touch for a friday afternoon's pursuit. Thanx. :-)

73's
Richard Clark, KB7QHC

4494. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 23:50:36 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98bte2ghv1@lure.pipex.net>
Source record: 168967

"Reg Edwards" wrote ...
> Gary, your analysis is reasonable if antenna sensitivity is a
> normal sort of value. But the antenna in question is is an untuned
> ferrite rod of great insensitivity. Any gain between it and the
> noisy first mixer would be very welcome.

Thhis is the sort of problem That I was trying to get some discussion going about some time back for 136 kHz and Antennae over very small dimensions compaired to a wavelength that would fit into a typical suburban garden.

> A better solution on 160m would be to tune the winding and match it
> to the receiver input impedance via a link coupling.

I think you are scratching around here at what the guys did in the 30s with reactance tuned TRFs and frame Aerials.

This would of course improve AE efficiency far more than providing a high gain amplifier to a very poor Antenna.

At the receiving site it is never possible to get better Signal to Noise than that in the free space immediately adjacent to the receiving AE.
Because Ts = Ta + Tr

In the adjacent space the Signal to Noise is
S/ kTaB
At the point of listening the Signal to noise is
S/k(Ta+Tr)B
The degradation is
(S/kTaB)/(S/k(Ta+Tr)B)
=Ta/(Ta +Tr)

In the case that you cite.
Ta = Tsky AE% + To(1-AE%)
where AE% is the Aerial efficiency.

I think that you are suggesting the AE% is of the order of 1% or less.

T Sky is 9,000,000 K
So we have
Ta = 9,000,000 x 0.01 + 300(1-0.01)
= 90,000 + 300
= 90,000

Putting this into the mixer would give a Ts of
90,000 +2,500 = 92,500
Compare this to the 90,000
10 log (90000/92500) = 0.12 dB difference in S/N

A 20 dB preamplifier will not improve on this Ts by more than the 0.12 dB
that we have in hand.
The Signal to noise ratio will not be enhanced.
We will be passing a lot more noise through the Rx thus reducing the dynamic
range of the Rx and raising all sorts of other problems.

Hardly worth the trouble unless you are using something like PSK8 with
Forward Error Correcting.

If that is the case then communication margins can be enhanced more and
cheaper digitally by using better encoding methods.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4495. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 23:58:27 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA96E23.6E4B@wt.net>
Source record: 168966

W6RCecilA wrote:
>
>
> Skin the cat, flatten out the skin, and let it dry. Then take a #12
> wire and bend the wire to match the pattern that separates the dark
> part of the cat hair from the white part. Go round and round as many
> times as necessary to get the dipole to resonate on the desired
> frequency. The result is a perfectly unique fractal antenna without
> possibility of a patentable mathematical description.
>
> If I can find someone to hold my cat while I bend the wire, I'm going
> to try it myself.

How bout a fractel mobile rig. I've been asked to "wind" this car. Would I be in violation? The only way I see to flatten this thing is at a junk yard. But if I do that, I may lose some of the special properties I see in this design. MK http://web.wt.net/~nm5k/fracar.jpg
--

http://web.wt.net/~nm5k

4496. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-09 23:59:36 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98bte3ghv2@lure.pipex.net>
Source record: 168968

"Richard Harrison" wrote
> Gary Peach wrote:
> "A preamp in front of a mixer on 160 m will do nothing for you."
> Agreed. That is the usual case because the troublesome noise is external
> to the radio.

In nut shell quite so.

> I didn`t endorse preamplification. I simply suggested searching for a
> "preselector" which often can help signal to noise ratio. Mike said he
> wanted selectivity. ("preferably filtered just for 160m").

The passive preselector is a good idea.
At least three sections for a roll off of at least 18 dB / Octave

I was attempting to save his money, and anyone else that is reading this
thread caught up in the vane attempt to improve reception by adding more
gain.

Receiver gain should never be more than enough to amplifiy the front end
noise to the threshold of hearing or if a machine mode then the threshold of
the decoding equipment.

More gain only causes lots of other problems and reduces dynamic range.

Many of the problems with receiving on 160 m is because in most Ham cases
the receiver is designed for 28 MHz
A horse of quite a different colour.

> Mike said he wanted 25 db gain and something about a submarine antenna.
> I assumed he had his reasons.

I think that is the only difference between us;
I did not assume anything. :)

His submarine signals are a few octaves below 160 m, HI HI
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4497. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 01:23:58 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <Omfq6.919$g4.268750@dfiatx1-snr1.gtei.net>
Source record: 168871

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA958FB.E914DBBD@IEEE.org...
> Richard Clark wrote:
> > I should further note that these pages contain designs that are
> > considered "offensive" by the source responded to above simply because
> > they reveal the entire scope of several seriously flawed logic touted
> > in this forum.
>
> Richard, I've been wondering how to generate a fractal antenna without
> any possible violation of fractal patents. Here's what I came up with:
> Drive around until you find a two-color cat that has recently been run
> over. You know, the kind that is dark on the top and white on the
underside?
>
> Skin the cat, flatten out the skin, and let it dry. Then take a #12
> wire and bend the wire to match the pattern that separates the dark
> part of the cat hair from the white part. Go round and round as many
> times as necessary to get the dipole to resonate on the desired
> frequency. The result is a perfectly unique fractal antenna without
> possibility of a patentable mathematical description.
>
> If I can find someone to hold my cat while I bend the wire, I'm going
> to try it myself.
> --
> http://www.mindspring.com/~w6rca
>

Careful here, they will probably claim a patent on the cat...

73 de W6DKN

4498. Re: Need Antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 01:39:14 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <6Bfq6.4$io4.1092@news7.onvoy.net>
Source record: 168869

Jeff <younotme@superhappy.com> wrote in message
news:kcAl6.284166$j6.38912316@news1.rdc1.va.home.com...
> Hello All,
>
> I have two Cobra PR1000 2-way portables that I want to use in vehicles.
I'm
> looking for a magnetic mount antenna for a channel in the 462Mhz range.
> Know where I can get one?

Any commercial 2-way radio dealer should be able to get you a good quality
antenna.
Just tell them the frequency range and connector style.

The radio has SMA female connector on radio. Or
> do I have to make it? Should I just buy the $25 special at Radio Shack
and
> then try to cut (tune) it myself?

What frequency range is it designed for?

If you design a 1/4 wave antenna, it's approximate length will be 5.9 inches
from ground plane to tip.
if you use a 1/2 wave, you will need a special base, and also for a 5/8 wave
antenna. The longer the antenna, the more the gain (usually) matched
properly of course. You could also use a 5/8 over 5/8 or a 5/8 over 1/2 wave
phased aray for more gain. Look at some business vehicles and see what they
use.

And find a BNC to SMA female adapter?
> What should the length be?
>
> The Cobra literature mentions being able to attach a mobile antenna for
use
> in a car but, so far I can't find anything on finding one.
>
> Jeff
>
> --
>
> National Rifle Association, Endowment Member
> KeepandBearArms.com, Member
> North American Hunting Club, Member
> Society of the First Infantry Division, Life Member
> My Home Page is WorldNetDaily.com. For Real News.
>
> =Patriots are not revolutionaries trying to =

> =overthrow the government.=
> =Patriots are counter revolutionaries trying =
> =to prevent the government from overthrowing =
> =The Constitution.=
> by x ring
>
> VeriSign capable (digital sig a/o encryption), if need be. Just let me
> know.
> ------
>
>

4499. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 01:42:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98c0qs$nv3$1@plutonium.btinternet.com>
Source record: 168870

Roy, the topic of conversation is Ladder Line. With flimsy 300-ohm junk, where the line provides a gutter for rainwater, anything can happen.

But out of curiosity, at what frequency on the 300-ohm line were your measurements made ?

On what length (feet or metres) of 300-ohm line were the measurements made ?

What was the total measured dBs of the 300-ohm line ?

What was the percentage increase between dry and soaked ?

And, of vital importance, what measurement method was used ?

Finally, what is the estimated uncertainty in the measurement of dB differences ?

Were you able to determine the change in line impedance and propagation velocity between wet and dry from your measurements ? This would have been of use in distinguishing dielectric loss from copper loss.

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Roy Lewallen <w7el@eznec.com> wrote in message news:3AA74C2D.51B989EC@eznec.com...
> Reg Edwards wrote:
> >
> > Conclusion about loss on higher freqs is not entirely valid. Clean
> > water is a low-loss material at HF.
> > . . .
>
> It's well known that although pure water has low DC conductivity, its RF
> loss is significant due to energy expended as its molecular dipoles try
> to orient to the alternating field. _Reference Data For Radio Engineers_

> shows distilled water to have a dissipation factor of 0.04 at 1
MHz.
> This is more than twice the loss of PVC plastic, and more than
200 times
> as lossy as a truly low loss material like polyethylene. So I
don't
> think "low-loss" is an accurate characterization of water. Rain
water
> falling on a dusty surface, or for that matter through dusty or
polluted
> air, will be more conductive in addition. The combination of high
> dielectric constant and fairly high loss makes water something
you don't
> want too close to your loading inductors or anywhere there's a
high
> electric field, such as between feedline conductors.
>
> I've made measurements on 300 ohm twinlead that shows very
greatly
> increased loss when wet -- certainly not what you'd see if water
were a
> "low-loss" material.
>
> Roy Lewallen, W7EL

4500. Re: NMO connector ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 01:56:20 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <8Rfq6.5$io4.1286@news7.onvoy.net>
Source record: 168872

The other stud mount you refered to is probably the Larsen LM mount. The strength of the mount isn't quite as strong as the NMO because the top ring holding it down is plastic. Also, there is a square plate with 4 corners holding the LM onto the roof. They don't have as much surface area as the NMO mount does. The LM stud is not silver or gold anodized either, making it more susceptable to corrosion. There is usually a white powder on the connection when you unscrew it and look at the stud or in the antenna base. Another thing, i found where the coax solders to the under side of the LM mount breaks off easier.

I have seen both antennas preform over the last 10 yrs on the job, and both seem to get the same range and tune up the same. It is usually just personal prefrence.

I hope that I helped answer your question.

Drill the hole, it will work better.....

Rosco

T Man <tman427@hotmail.com> wrote in message
news:t9ao4t7mr3rg1d@corp.supernews.com...
> Hey guys,
> I'm re-designing my mobile setup and need some advice. I have 1 antenna
that
> is a Larsen Kulrod for 440 MHz. It is an NMO with the magnet mount. I am
> thinking of using something other than an NMO. I also want to move away
from
> a mag-mount and go to a permanently mounted antenna. I have seen another
> connector that is a direct "screw-on" type connector (Not BNC,SMA, or
NMO),
> it seemed like it would be more durable than the small contact in the NMO
> because it was just a stub with threads. Any suggestions will be
> appreciated. TIA
> 73! T Man
>
>
>
>

4501. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 01:59:57 UTC
From: mike P <mpelgen@netusa1.net>
Message-ID: <dQfq6.534$Y91.6514@newsfeed.slurp.net>
Source record: 168873

"Alan Watts" <awatts@neo.rr.com> wrote in message
news:mvxp6.12697$a7.131492@typhoon.neo.rr.com...
Anybody have experience with one? How does a G5RV compare
to, say, a
40M dipole on 40M -- at the same height? -- a 10M dipole on
10M?

Alan:

I used a G5RV for several years at home QTH . Center at 28
ft. and ends
at 18 feet. I used 450 ohm ladderline and had a section
added I could
switch in and out to get a good match on 40 and one of the
other bands
without a tuner. Other bands I used the MFJ 300W versa-tuner
on.

It did work, but I replaced the feedline with 450 ohm
ladderline all the
way to the tuner, and it made a tremendous difference in
effectiveness
with the antenna. I'm using a homemade 4:1 with the big
T-200 core
at the output of the tuner. I also tried W2DU suggestion of
balun at
input of tuner and made a homemade tuner with a roller
inductor,
but haven't experimented enough with it to tell any
improvement in
that regard.

I suggest you go with ladderline. I brought the ladderline
in by
splicing a short piece of good 300 ohm ribbon through the
window
frame.
If all you want to do is 20 meters, then go ahead and coax
it.
There is no good reason to use the coax if you can do it
with
balanced feeder. Besides, ladderline is cheaper than good
coax. Good Luck WM9D Mike in Kokomo IN

4502. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 02:39:04 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <ctgq6.1$9p4.119@news7.onvoy.net>
Source record: 168874

It looks like the takeoff angles are close.

I was under the impression that a 1/4 wave antenna using 1/4 wave radials had a higher angle of radiation than the 1/2 or 5/8 wave using 1/4 wave radials. Probably just a few degrees. Take off angle of a 1/4 wave is about 35 degrees, the 1/2 wave at about 32 degrees, and the 5/8 wave at about 28 degrees. I also under stand the antenna height above ground affected the take off angle as well. I am refering to antennas with no droop in the radials. I wonder what your modeling program would find out about all three antennas using 1/4 wave radials and elevated to 1 wavelength above ground. Does the gain really change alot or is the vertical pattern (takeoff angle) just lower on the higher gain antennas.

To answer Tom's question, the factory 5/8 wave antennas that i used had 105 inch long ground plane radials.

Rosco

Mark Keith <nm5k@wt.net> wrote in message news:3AA94932.1DE0@wt.net...
> DL7JSK wrote:
> >
> > Hi NG
> > I use a 5/8 wl groundplane on 10m.The antenna was originally designed
for
> > CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told
me
> > to make them longer,it would improve performance.Now my question: How
long
> > should I make the radials,and what is improved then,rx or tx ?
> >
> > 73
> > Tom, DL7JSK
>
> This is what modeling had to say about them. MK
>
> http://web.wt.net/~nm5k/acompari.htm
> --

4503. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:00:28 UTC
From: fractenna@aol.com
Message-ID: <20010309220028.24759.00000051@ng-fm1.aol.com>
Source record: 168875

>Subject: Re: QEX Fractal Antenna Article
>From: kb7qhc@home.com (Richard Clark)
>Date: 3/9/01 5:14 PM Eastern Standard Time
>Message-id: <3aaa4ad6.619060832@news.seanet.com>
>
>On 09 Mar 2001 21:12:11 GMT, fractenna@aol.com (Fractenna) wrote:
>
>>Just as an update since others have brought this up, Dr. Cohen does not
>write
>>articles for ham magazines anymore--after many from 1995-1998-- and declined
>to
>>write one for QEX. Many others have written fractal antenna articles,
>including
>>KF7BS's article in Octobet 1999, 73 Magazine.
>>
>>The only valid fractal antenna source of info for hams on the internet is on
>>www.n1ir.com, which will be up in coming weeks.
>>
>>Incidentally Dr. Cohen has concerns about radio amateurs and others who are
>>placing material in copyright violation on their web sites and in lieu of
>>recent legal decisions on copyright violation on the web is pursuing legal
>>efforts to stop such in 3 cases. The same concern for violation can and will
>>extend to published articles.
>>
>>Radio amateurs are also reminded that fractal antennas are protected by 3 US
>>patents to date and covered in several other pending patents. Single use
>>experimentation should not be interpreted as commercial permission under any
>>circumstance.
>>
>>This is a public notice and others are invited to transmit it elsewhere as
>>appropriate.
>>
>>73 to All,
>>Phil de N1ZKT
>
>
>Hi All,
>
>For the humor impaired, this is fair notice that you may consider the
>following material offensive (or worse, boring). And now to ape the
>style above:
>
>This is public notice that the above statements have been lengthily
>responded to and answered in every manner that is in fact actionable.

>
>Further, such notice as to patent coverage has been revealed to have
>been fraudulent statements in the past and that no activities in this
>forum have even come close to those claims that have been allowed by
>the patent office.
>
>There are also other correspondents who have submitted papers that now
>show considerable refutation for the general and unsupported claims
>made about fractal antennas from the source responded to above, and
>their references. At least one of these papers is going to a real,
>professional based publication that is neither a vanity rag nor an
>exotic, academic broadside of self aggrandizement.
>
>Hams should be aware there are many outlets to information about
>fractals and one such example are my several hundred pages of design
>and modeling data available at
>http://www.qsl.net/kb7qhc/antenna/fractal/index.htm
>and at
>http://www.seanet.com/~rwclark/antenna/fractal/index.htm
>The visitor to each site should note that although identical in
>appearance, there is some variation in material included.
>
>I should further note that these pages contain designs that are
>considered "offensive" by the source responded to above simply because
>they reveal the entire scope of several seriously flawed logic touted
>in this forum. Their rejection of scientific enquiry was palpable and
>defensively responded to with threats of "possible legal action" which
>of course means nothing. All things are "possible." What is more to
>the matter is that nothing has been "done legally" (in spite of
>statements made above) and such claims leave open the "possible"
>prospect of claims abandoned through the passivity and inaction of the
>source responded to above. This is the more "probable" status. ;-)
>
>End of fair notice - send on the fractalawyers! :-)
>
>73's
>Richard Clark, KB7QHC
>

Dr. Cohen confirms that Richard Clark is one of the individuals who will be served with a formal cease an desist notice for copyright violation on his web site . This is not "possible legal action". It is step one in the full legal proceedings as needed.

There can be no refutation of claims as there are none posed.No statements of Dr. Cohen lack validity. Mr. Clark is libeling Dr. Cohen.

Hope this helps. The rest happens, as they say 'off line'.

73
Phil N1ZKT

4504. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:00:49 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3aa998de.37301726@news.aepnet.com>
Source record: 168876

On Fri, 9 Mar 2001 18:18:38 -0000, "Reg Edwards" <g4fgq.regp@btinternet.com>
wrote:

>Wes, I visited your easy to read website. I note your measurements
>to investigate difference in loss between wet and dry ladderline
>were made at 50 MHz. Presumably you had to go up to VHF to find
>differences great enough to measure reliably.

No. The Hewlett-Packard 8510C Vector Network Analyzer has a lower frequency limit of 45 MHz. I figured 50 MHz was a 'rounder' number. As I stated, the physical length of the line sample was limited to 12 feet because the equipment was located in a 16 x 20 foot shielded room.

My original intent was not to measure the difference between dry and wet line. The wet measurements were almost an afterthought. I stipulate that the wet data are less accurate than the dry data but I included them to support anecdotal reports of increased loss/changes in tuning when installed lines are operated while wet.
>
>The formula you provide to translate the VHF data to lower
>frequencies I think is incorrect. Your formula (loss proportional
>to sqrt(F)) is applicable only when line loss is nearly all due to
>conductor resistance.

Good point. However, I state in the text just above the formula, that the loss at other frequencies can be *estimated* by using the formula and that it does neglect the dielectric contribution.
>
>But the ADDITIONAL loss due to rainwater MUST be in the dielectric
>and dielectric loss increases directly proportional to frequency.
>So the extra dielectric loss due to rainwater on 450-ohm ladder
>line at, say, 2 MHz is 1/25 of the values you have reported at 50
>MHz. It is less than the already-small conductor loss and would not
>be noticeable.
>
>I think you said your measurements were worst case values obtained
>with a wetting agent added to the water. I wonder what the
>loss-factor of wetting agents are at 50 MHz.

I wish I knew. I tried a couple of things, primarily just a detergent, e.g. dishwashing soap. The measurements were made using my (former) employer's equipment on a non-interference, personal-time basis. I wish that I could have more thoroughly investigated this aspect of the problem but it just wasn't possible.

I ran some of the numbers by others who thought that they were plausible. In hindsight perhaps I should have left some of this out until I could do more work. But... I'm retired now and no longer have access to the equipment so that is out of the question, unless the stock market keeps going as it is and I go looking for a job :((

>
>With ladderline by far the greater proportion of the dielectric
>volume is air, with a small amount of plastic and very little
>water. I have sat in the shack with one eye on the Refl.coeff
>meter and the other looking out of the window watching great
>raindrops bounce off the ladder line. The only change observed on
>the meter has been synchronised with the antenna swinging in a
>gusty wind. But I understand rainfall can be heavier in the States.

It would have been interesting to trap the water on the line by freezing it and not using a wetting agent, but I live in Arizona and that's a problem <g>.

73,

Wes N7WS

4505. Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:12:34 UTC
From: fractenna@aol.com
Message-ID: <20010309221234.02033.00000704@ng-cu1.aol.com>
Source record: 168877

I'd like to pass along this invitation for all interested hams to join us on the fractal antenna reflector. This is the primo forum on the web for the discussion of fractal antennas. Moderated, lively, and filtered for spam and off topic comments this is the home of fun feedback on a ham-grown technology.

Dr. Cohen participates in this forum and it is the only one he responds to on the web.

To join:

fractalantenna-subscribe@yahoogroups.com

73
Phil N1ZKT

4506. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:13:33 UTC
From: jflanders2@home.com
Message-ID: <3aa99b9d.26475512@news>
Source record: 168878

I used to have an AH-4. I think the manual mentions a 23 foot length
for use on 80 - up.

Jerry W4UK

On Fri, 09 Mar 2001 21:53:02 GMT, "Brian Hemmis"
<K3USC@worldnet.att.net> wrote:

>Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth condo use
>in FL. Figured I'd run out some wire and attach a ground clamp to a cold
>water pipe. Any other suggestions ? If I am on the right track are there any
>suggested wire lengths that you've had success with ? Appreciate any input
>from AH-4 users. Tnx, 73-Brian K3USC
>
>

4507. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:19:18 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <hl6jat02kdigi76ub1vjkjcgod1t6voko8@4ax.com>
Source record: 168879

On Fri, 9 Mar 2001 10:12:19 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Dick Carroll wrote:
>"-yes, hams operate a variety of emergency relief and assistance nets
>when these things happen-"
>
>Old bumper snicker: Trouble? Dial the police, or call a hippie?
>
>New question: Trouble? Dial 911, or call a ham?
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

The joke is old, old, old.

And it wasn't a joke when the temblor hit my office in the fill area
south of Seattle last week.

The first thing lost (literally) was telephone service (of all kinds).

Just think of the level of service if it had been "the big one."
Hint: it wouldn't have been any better. And this is for a region that
has been going through earthquake preparedness for 25 years and has a
local FEMA office. One of the Canadian stations noted that our
president had just cut funding for this preparation because "it wasn't
showing any payback." Compassionate conservatism - yeah, sure. My
heart bleeds for you, but I a'in't forkin' over a dime.

73's
Richard Clark, KB7QHC

4508. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:26:34 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <2f7jatgh4neisuem4l8g1531kohhib8oks@4ax.com>
Source record: 168880

On Thu, 08 Mar 2001 01:09:01 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Reg Edwards wrote:
>>
>> Conclusion about loss on higher freqs is not entirely valid. Clean
>> water is a low-loss material at HF.
>> . . .
>
>It's well known that although pure water has low DC conductivity, its RF
>loss is significant due to energy expended as its molecular dipoles try
>to orient to the alternating field. _Reference Data For Radio Engineers_
>shows distilled water to have a dissipation factor of 0.04 at 1 MHz.
>This is more than twice the loss of PVC plastic, and more than 200 times
>as lossy as a truly low loss material like polyethylene. So I don't
>think "low-loss" is an accurate characterization of water. Rain water
>falling on a dusty surface, or for that matter through dusty or polluted
>air, will be more conductive in addition. The combination of high
>dielectric constant and fairly high loss makes water something you don't
>want too close to your loading inductors or anywhere there's a high
>electric field, such as between feedline conductors.
>
>I've made measurements on 300 ohm twinlead that shows very greatly
>increased loss when wet -- certainly not what you'd see if water were a
>"low-loss" material.
>
>Roy Lewallen, W7EL

Hi Roy,

You are responding to one of those old wive's tales about the
non-conductivity of water. Yeah, in the laboratory (and still with
great effort, expense, and time).

Measure any rainfall and you are guaranteed to observe a pH other than
7.0 which means it contains free ions. And guess what, free ions make
wonderful charge transports and thus support current. Probably
another application of non-dissipative resistance. ;->

73's
Richard Clark, KB7QHC

4509. Re: Ringo vs. J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:34:05 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3AA9A0AD.DDB8D713@warwick.net>
Source record: 168881

You can also make an all copper version of the ARX2B, the 3dB ringo. I've been using one, the same one since 1994... fed with 450 ohm ladder line, a 300 ohm Q-section and a half wave balun inside the shack to the 50 ohm line. Or you can use a coaxial balun at the antenna and run coax all the way down.
Stan, WA2PUQ

RanHefner wrote:
>
> If you already have the Ringo, put it up. I would not buy the basic Ringo.
> The J-Pole may not perform quite as well, but not enough to matter. Now the
> more expensive models do perform much better.
>
> In article <20010305065116.16222.00000971@ng-md1.aol.com>, Keith733057843
> <keith733057843@aol.com> writes:
> >Side-by-side, same height (30 ft), and properly mounted, which is better for
> >local 2meter FM operation: Basic Ringo or a basic J-pole? I've got both of
> >them but only want to put up one of them.
> >
> >Thanks,
> >
> >Keith
>
> ----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
> http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
> NewsOne.Net prohibits users from posting spam. If this or other posts
> made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

4510. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:47:48 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <o58jatkbghntcl3ik8m2ffgefg923gee75@4ax.com>
Source record: 168882

On 10 Mar 2001 03:00:28 GMT, fractenna@aol.com (Fractenna) wrote:

>This is not "possible legal action". It is step one in the full legal
>proceedings as needed.

Hi All,

Note the carefully crafted statement above that actually says nothing.

>This is not "possible legal action".
Then it must be no action at all, possible or otherwise - entirely
within my low expectations.

>It is step one in the full legal
>proceedings as needed.
One full step - of how many? Was it a half step for the year before?
Or a quarter step? (I can imagine the implications of half full
though.)

Sounds like Zombie Love. ;->

Thanx for the comic relief. The winter of strictly honest technical
discussion was beginning to get dry of humor. Spring has arrived (in
fool blume)!

73's
Richard Clark, KB7QHC

4511. Re: Vertical (hidden if possible)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:54:13 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3AA9A565.706FCC4F@warwick.net>
Source record: 168885

The only problem with end feeding a half wave antenna is the gross mismatch.
You'll nee some sort of L-C configuration to make it work into your feedline.
The Ringo is a half wave device... they use a tapped loop and the associated
capacitance to make it look like a tapped parallel tank for Z matching.
The half wave over a G.P. will show a somewhat lower radiation angle and some
(abt. 2dBd) gain. Or so the books say...
Stan

Hans Kaper wrote:
>
> Hi Doc,
>
> 'Doc <w5lz@oio.net> schreef in berichtnieuws 3AA3F190.97AE2E67@oio.net...
> >
> >
> > Hans,
> > Sure, it will work. How well it will work is
> > another matter. It would be much better if it
> > were away from any near by objects.
> > Instead of 10 meters tall (1/2w), make it 5
> > meters tall (1/4w), same as the radials. If you
> > do try an antenna like this, I would be very
> > interested in how it works, let us know...
> > 'Doc
>
> Sure will do that.
> Rothammels Antennenbuch (my antenna-bible)
> says it should be 1/2w plus buried radials. You
> describe what we call a ground plane which is 1/4w,
> elevated and 3 radials under 45 degrees with
> horizon (or 135 degr. to vertical) I use a GP to
> talk on 2 meters via the repeater.
>
> Hans PA3HGM

4512. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:56:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98d27n$1ej$1@neptunium.btinternet.com>
Source record: 168905

Dear Cec,

In anticipation I was laughing at the contents of your posting
before I opened it. But I had in mind my independently rotating
eyeballs - just like a Madegascan chamelian !

Reg
==========
W6RCecilA wrote
> Reg Edwards wrote:
> > I think you said your measurements were worst case values
obtained
> > with a wetting agent added to the water. I wonder what the
> > loss-factor of wetting agents are at 50 MHz.
>
> Are you implying that his measurements are all wet? :-)

4513. Re: ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:56:53 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AA9A605.1C33E56A@oio.net>
Source record: 168884

Jeff,
No, I don't have a FT-110/Atas-100. Just remembered
hearing about the 'glitch'.
'Doc

4514. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 03:57:11 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <fb9jatgmmfibircmvp5shdd099fngkj10r@4ax.com>
Source record: 168883

On Sat, 10 Mar 2001 01:23:58 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>news:3AA958FB.E914DBBD@IEEE.org...
>> Richard Clark wrote:
>> > I should further note that these pages contain designs that are
>> > considered "offensive" by the source responded to above simply because
>> > they reveal the entire scope of several seriously flawed logic touted
>> > in this forum.
>>
>> Richard, I've been wondering how to generate a fractal antenna without
>> any possible violation of fractal patents. Here's what I came up with:
>> Drive around until you find a two-color cat that has recently been run
>> over. You know, the kind that is dark on the top and white on the
>underside?
>>
>> Skin the cat, flatten out the skin, and let it dry. Then take a #12
>> wire and bend the wire to match the pattern that separates the dark
>> part of the cat hair from the white part. Go round and round as many
>> times as necessary to get the dipole to resonate on the desired
>> frequency. The result is a perfectly unique fractal antenna without
>> possibility of a patentable mathematical description.
>>
>> If I can find someone to hold my cat while I bend the wire, I'm going
>> to try it myself.
>> --
>> http://www.mindspring.com/~w6rca
>>
>
>Careful here, they will probably claim a patent on the cat...
>
>73 de W6DKN
>

Hi OM,

I think Schrodinger got there first. Of course herr doktor could
apply anyway and charge you with violating their pending rights.

73's
Richard Clark, KB7QHC

4515. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 04:07:13 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <taja20roj1bmc2@corp.supernews.com>
Source record: 168886

Gosh, and it's been so nice and quiet around here for a while.

73,

John, K6QQ

4516. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 04:19:29 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3AA9AB51.361E254B@warwick.net>
Source record: 168887
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

Probably one of the best places to look is the Polyphaser website. Their book is well documented and tested.
Antenna cables should enter the building at the same point as does the electric company's line... and should be bonded to ground there (The Entrance Window). The antenna should be bonded to the tower at the top and (in your case) where the cable leaves at the bottom of the mast (assuming that you're using a tripod roof mount). Running a separate ground wire from the mast?.. naw, the cable's shield will probably be sufficient (assuming RG8, 213, LMR 400, etc.)
As regards dealing with the center lead of the coax, Polyphaser's capacitivly coupled gas tube would be the best way to go, but I don't know what the lowest frequency you'll be using is and that may preclude using one of them. Probably best to use a coax switch with a grounding position and leave it there whenever you're not using the radio. Take note, many antennas boast that they are "DC grounded" which would seem to mean that they are also lightning grounded... NOT SO! Polyphaser goes through the motions to explain why and I've seen that phenomenon take out a customer's VHF Hi-band base rig's front end... no smoke of fried chassis, just lots'o deafness.
BTW, two ground rods are better... just make sure that you space them twice their length apart... it has to do with energy saturation of the earth... more Polyphaser stuff.
Oh, leaving the cable unconnected during a storm... put in a camera focussed on the floating end... the light show will be spectacular... just make sure to get the camera out before the roof burns through or you won't have any pictures. :-<
Stan

Michael wrote:
>
> I've got a question for the group,
>
> What do you guys use for antenna lightening protection? I have a rooftop
> antenna. Is it necessary to intall lightening protection? I always
> disconnect my radio when the storm approaches. What's the worst that can
> happen(without lighten protection)? What kind of system do you recommend? Is
> it going to affect the antenna performance? Thanks

4517. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 04:24:22 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AA9AC76.D6C0FD0F@IEEE.org>
Source record: 168888

Wes Stewart wrote:
> ... unless the stock market keeps going as it is and I go
> looking for a job :((

Fortunes have been made on Amazon puts over the past year, Wes.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4518. Re: ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 04:54:11 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <Triq6.382787$ge4.134581547@news2.rdc2.tx.home.com>
Source record: 168889

This is usually traced to poor grounding within the radio (mine had this problem too), but also could be other causes (poor antenna grounding ect.). check out this site for a lot of good information..
http://members.home.net/k0lee/ft100faq.html#intermittent
If it is the rig Yaesu will fix this under warranty.
73 Cliff N0HC

"jeff wright" <wright00@att.net> wrote in message news:3AA90382.20AA8493@att.net...
> i am having a problem with a new ft100d and the atas 100.
>
> on 10 meters, i hit the tune button, and the antenna moves and the radio
>
> shows the tune icon and the 'o' symbol. as soon as i key up, the high
> swr symbol appears with the 'x'. what is going on?
>
> i can move the antenna all the way up or down manually and tune using
> the tune button. the receive audio comes up like it would for a tuned
> antenna and the icon shows tuned ('o'), but as soon as i try to use the
> mic, i get the high swr icon on 10 meters.
>
> antenna tunes great on other bands.
>
> i am using another antenna for 2/440 and have the radio set up that way.
>
> your thoughts?
>
>
>

4519. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 04:55:24 UTC
From: richardharrison@webtv.net
Message-ID: <24165-3AA9B3BC-223@storefull-117.iap.bryant.webtv.net>
Source record: 168890

Cecil, W6RCA wrote:
"Somewhere I saw a chart of gain VS height of radials.:"

Maybe it was in the August 1988 issue of QST.

Brown, Lewis, and Epstein found that placing radials on the surface of the earth was better than burying them, but it didn`t seem to impair results much to bury them and this was usually more practical, so they`ve been usually buried. In their well known and accepted study, the three pioneers tested, using 3 MHz.

Al Christman, KB8I used NEC-GSD to model a 1/4-wave vertical with 120 buried 1/4-wave radials at depths of 6,4, and 2 inches. (one depth at a time)
3.8 MHz was his test frequency. His results were almost the same for the three depths, improving slightly with shallower burial.

Al repeated the above modeling with 4 radials instead of the 120. It reduced his field strength from 33 to 25 mv/mtr. That doesn`t look like much, but it raised his feedpoint resistance from 40 ohms to 75 ohms.

Al concluded that much of the power radiated by the 120-radial system was wasted heating the soil in the 4-radial system.

Next, Al modeled the 1/4-wave vertical with 4 radials at 5, 10, 15, 20, 25, and 30 feet above the earth.

Al found that maximum radiation at 20 degrees above the horizon came from elevating the antenna and its radials to 10 feet. It declined at greater heights for the radials. But, the height of the radials had to be15 feet to equal the low-angle performance of the buried radial system.

Al has an extensive report in the August 1988 edition of QST where more accurate and detailed information can be found.

Best regards, Richard Harrison, KB5WZI

4520. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 05:12:29 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <t3dc89.02r.ln@mail.specsol.com>
Source record: 168891

Fractenna <fractenna@aol.com> wrote:

> Dr. Cohen participates in this forum and it is the only one he responds to on
> the web.

Good, keeps the noise down here.

Jim Pennino

4521. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 05:25:00 UTC
From: richardharrison@webtv.net
Message-ID: <24165-3AA9BAAC-227@storefull-117.iap.bryant.webtv.net>
Source record: 168892

Richard Clark wrote:
"One of the Canadian stations noted that our president had just cut funding for this preparation because "It wasn`t showing any payback."

You are correct. I wasn`t looking ahead. We may need to rely on volunteers for relief of disasters both acute and chronic.

Still think an ounce of prevention and paid professionals are cheaper and better in the long run. But, amateurs had better be ready and able to work as never before.

Best regards, Richard Harrison, KB5WZI

4522. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 05:51:55 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98cfdr$4ib$0@208.207.71.135>
Source record: 168893

"William E. Sabin" wrote:
>
> Peter O. Brackett wrote:
>
> > Yup, shorted turns magnetically coupled to the rest of the coil are bad
> > news!
> >
> > They are definitely lossy! It's like putting a short circuit on the
> > secondary side of a transformer...
> >
> > Don't go there!
>
> Unshorted turns are much worse, because the Q of the self-resonant circuit
> formed by the unshorted turns and their self capacitance is high, large voltages
> are formed in these turns, and so-called "suckouts" are formed. In the shorted
> turn coil a small amount of power is lost in the shorting connection, but that
> is a lot better than letting the unused turns "float". Also, the coupling to the
> shorted turns is small.
>
> The unused turns should always be shorted. I have had some bad experiences with
> unshorted-turn coils that went away when the short was reinstated. The trouble
> was that at certain frequencies, as I approached the desired inductance value,
> the tuning would suddenly go berserk and it was impossible to get tuned because
> of the interactions.
>
> The shorted coil may become series self-resonant, but at a much higher frequency
> than the unshorted coil, where it usually causes no problem.

This is a question I've pondered over the years, as I built amps. I
always wound up shorting the unused turns. There has to be a good reason
why every commercial bandswitching amp you see does it that way.
I just looked in my amplifier manual folder and of the five amplifier
manuals I have, three Heath, two Dentron and an Alpha, every one shorts.

Dick W0EX

4523. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 05:54:27 UTC
From: richardharrison@webtv.net
Message-ID: <22569-3AA9C193-25@storefull-112.iap.bryant.webtv.net>
Source record: 168895

Stan Labinski, Jr. wrote:
"Running separate ground wire from the mast?...naw, the cable`s shield will probably be sufficient---."

You probably should not rely on the coax shield unless it is big rigid stuff.

NEC requires connection of the antenna and electrical service grounds. I would advise a conductor separate from the coax shield for the required interconnection. It should be as direct and straight as possible. I would coil some of the coax into several turns outside the house to impede the lightning via the coax.

When lightning strikes there will be an enormous potential difference between the two ground points, the antenna support ground and the electrical ground. An enormous current will result. It should flow in the ground wire and not the coax.

Best regards, Richard Harrison, KB5WZI

4524. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 06:00:12 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98cftc$4ib$1@208.207.71.135>
Source record: 168894

Richard Harrison wrote:
>
> Dick Carroll wrote:
> "-yes, hams operate a variety of emergency relief and assistance nets
> when these things happen-"
>
> Old bumper snicker: Trouble? Dial the police, or call a hippie?
>
> New question: Trouble? Dial 911, or call a ham?

Answer: Simple. When 911 is working, you call 011. When 911 is in as
deep doo do as you, you use whatcha got.

4525. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 06:33:43 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AA9CAC7.4575CBC9@hiwaay.net>
Source record: 168896

Frac is bac !! It is very easy to see that "potty mouth" Phil did NOT
write the posts attributed to Fractenna, but signed Phil- the style is
not Phils- He tends to be very vulgar and S----y. On the other hand- the
wording of the threats to take appropriate legal language is exactly the
same as previous posts from The Chippy.

Many have wondered where Chip has been- I would like to know what shut
him up for the last few weeks. Who let him out this time?

Welcome to fairy land.

Bill-W4BSG

Fractenna wrote:
>
> >Subject: Re: QEX Fractal Antenna Article
> >From: kb7qhc@home.com (Richard Clark)
> >Date: 3/9/01 5:14 PM Eastern Standard Time
> >Message-id: <3aaa4ad6.619060832@news.seanet.com>
> >
> >On 09 Mar 2001 21:12:11 GMT, fractenna@aol.com (Fractenna) wrote:
> >
> >>Just as an update since others have brought this up, Dr. Cohen does not
> >write
> >>articles for ham magazines anymore--after many from 1995-1998-- and declined
> >to
> >>write one for QEX. Many others have written fractal antenna articles,
> >including
> >>KF7BS's article in Octobet 1999, 73 Magazine.
> >>
> >>The only valid fractal antenna source of info for hams on the internet is on
> >>www.n1ir.com, which will be up in coming weeks.
> >>
> >>Incidentally Dr. Cohen has concerns about radio amateurs and others who are
> >>placing material in copyright violation on their web sites and in lieu of
> >>recent legal decisions on copyright violation on the web is pursuing legal
> >>efforts to stop such in 3 cases. The same concern for violation can and will
> >>extend to published articles.
> >>
> >>Radio amateurs are also reminded that fractal antennas are protected by 3 US
> >>patents to date and covered in several other pending patents. Single use
> >>experimentation should not be interpreted as commercial permission under any
> >>circumstance.
> >>
> >>This is a public notice and others are invited to transmit it elsewhere as

> >>appropriate.
> >>
> >>73 to All,
> >>Phil de N1ZKT
> >
> >
> >Hi All,
> >
> >For the humor impaired, this is fair notice that you may consider the
> >following material offensive (or worse, boring). And now to ape the
> >style above:
> >
> >This is public notice that the above statements have been lengthily
> >responded to and answered in every manner that is in fact actionable.
> >
> >Further, such notice as to patent coverage has been revealed to have
> >been fraudulent statements in the past and that no activities in this
> >forum have even come close to those claims that have been allowed by
> >the patent office.
> >
> >There are also other correspondents who have submitted papers that now
> >show considerable refutation for the general and unsupported claims
> >made about fractal antennas from the source responded to above, and
> >their references. At least one of these papers is going to a real,
> >professional based publication that is neither a vanity rag nor an
> >exotic, academic broadside of self aggrandizement.
> >
> >Hams should be aware there are many outlets to information about
> >fractals and one such example are my several hundred pages of design
> >and modeling data available at
> >http://www.qsl.net/kb7qhc/antenna/fractal/index.htm
> >and at
> >http://www.seanet.com/~rwclark/antenna/fractal/index.htm
> >The visitor to each site should note that although identical in
> >appearance, there is some variation in material included.
> >
> >I should further note that these pages contain designs that are
> >considered "offensive" by the source responded to above simply because
> >they reveal the entire scope of several seriously flawed logic touted
> >in this forum. Their rejection of scientific enquiry was palpable and
> >defensively responded to with threats of "possible legal action" which
> >of course means nothing. All things are "possible." What is more to
> >the matter is that nothing has been "done legally" (in spite of
> >statements made above) and such claims leave open the "possible"
> >prospect of claims abandoned through the passivity and inaction of the
> >source responded to above. This is the more "probable" status. ;-)
> >
> >End of fair notice - send on the fractalawyers! :-)
> >
> >73's

> >Richard Clark, KB7QHC
> >
>
> Dr. Cohen confirms that Richard Clark is one of the individuals who will be
> served with a formal cease an desist notice for copyright violation on his web
> site . This is not "possible legal action". It is step one in the full legal
> proceedings as needed.
>
> There can be no refutation of claims as there are none posed.No statements of
> Dr. Cohen lack validity. Mr. Clark is libeling Dr. Cohen.
>
> Hope this helps. The rest happens, as they say 'off line'.
>
> 73
> Phil N1ZKT

4526. Re: ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 06:44:28 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <g3kq6.203$XL2.13011@dfiatx1-snr1.gtei.net>
Source record: 168897

"jeff wright" <wright00@att.net> wrote in message
news:3AA90382.20AA8493@att.net...
> i am having a problem with a new ft100d and the atas 100.
>
> on 10 meters, i hit the tune button, and the antenna moves and the radio
>
> shows the tune icon and the 'o' symbol. as soon as i key up, the high
> swr symbol appears with the 'x'. what is going on?
>
> i can move the antenna all the way up or down manually and tune using
> the tune button. the receive audio comes up like it would for a tuned
> antenna and the icon shows tuned ('o'), but as soon as i try to use the
> mic, i get the high swr icon on 10 meters.
>
> antenna tunes great on other bands.
>
> i am using another antenna for 2/440 and have the radio set up that way.
>
> your thoughts?

Poor grounding (radio and/or antenna). Also, check inside the rig and make sure that all of the coax connections are firmly and fully seated into the sockets on the pcb.

73 de W6DKN

4527. Fractal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 07:08:39 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AA9D2F7.49988F0E@hiwaay.net>
Source record: 168898

It just came to me- The Chipper is setting up an April Fools joke, and will progressively get wilder as March goes on, then some undisclosed climax in three weeks, or so. (probably near the next full moon).

Remember- you read it here first!

Bill-W4BSG

4528. Re: Andrews LDF heliax bends

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 07:19:13 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <3AA9D571.9F72E313@haertig.com>
Source record: 168899

But don't expect them to do it more than a couple of times. If working near the minimum bending radius, the bend needs to be formed around something, hand bending can easily result in kinks.

Gray

Wes Stewart wrote:
>
> On Thu, 8 Mar 2001 17:00:22 -0800, "Tom" <masthope@remove-yahoo.com> wrote:
>
> >Does anyone know the minimum bend radius of LDF-50 or LDF-40 heliax.
> >TIA
> >Tom
>
> Not enough data. However:
>
> LDF4-50 5 in.
> LDF5-50 10 in.
> LDF6-50 15 in.
>
> Wes N7WS
> >
> >

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX
gfh@haertig.com

4529. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 09:06:16 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98cu6j$t3l$1@lure.pipex.net>
Source record: 168903

"Richard Clark" wrote ...
> Gary Peach wrote ...
> >"Richard Clark" wrote ...
> >> Gary Peach wrote:
> >> >"Richard Clark" wrote ...
> >> >> Leland C. Scott" wrote:
> >> >> >> By Far the best solution to damping the Back EMF of Relay coils
is
...
> >> >Were you familiar with the Carpenter Relay Richard?
> >... you might know them by the generic name "Polar Relay".
...
> >Or to run several TTY off of a single line etc. ...
> I have worked with variants of your Carpenter Relay. They were small
> units from Arrowmat (sp?) and we investigated their use in home
> telephone equipment. We were concerned about the limitations enforced
> by Ma Bell (and the FCC) at the time with these "latching" relays.

Tri-stable!

> Those limits were the current necessary to trip the state and the
> holding current to maintain the state. The two were different by
> something like 10:1 making them very appealing.

The rest is "Hysteresis",
but in this case BH doesn't mean Big Head. ;)

I imagine the difference is down to the permeability of the material used
for the magnetic circuit.
Some of the modern alloys developed for these applications have become quite
clever.
A bit different from Mild Steel, Stalloy, Cast Iron or Tungsten Magnet Steel
of the early days.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4530. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 09:11:27 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98cu6k$t3l$2@lure.pipex.net>
Source record: 168904

"W6DKN" wrote
> "W6RCecilA" wrote ...
> > Richard Clark wrote:
> > > I should further ...
> > Richard, I've been wondering how to generate a fractal antenna ...
> > Skin the cat, flatten out the skin, and let it dry. ...
> > If I can find someone to hold my cat while I bend the wire, I'm going
> > to try it myself.
> Careful here, they will probably claim a patent on the cat...

More likely to get bombed by the greenies against animal experimentation.

Anyway if you are not making it for sale or trade, patent does not apply.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4531. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 09:16:22 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98cu6n$t3l$3@lure.pipex.net>
Source record: 168902

"Richard Clark" wrote ...
> >Careful here, they will probably claim a patent on the cat...
> I think Schrodinger got there first.

Great! my next cat will be called "Schrodinger"

Good thing I prefer British Blues,
it'll be safe from this little exercise.

From Cat's Whiskers to Cat Fractals in a Century! that's progress for you.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4532. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 09:20:01 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98cu6o$t3l$4@lure.pipex.net>
Source record: 168901

"Richard Clark" wrote
> Thanx for the comic relief. The winter of strictly honest technical
> discussion was beginning to get dry of humor. Spring has arrived (in
> fool blume)!

Time to shoot a Blumlein then.

Has anyone any information on this pioneer of electronics?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4533. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 09:49:15 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <98ctbc$g8s$04$1@news.t-online.com>
Source record: 168900

"Rosco" <rvaagen@nospam.hotmail.com> schrieb im Newsbeitrag
news:ctgq6.1$9p4.119@news7.onvoy.net...
> It looks like the takeoff angles are close.
>
> I was under the impression that a 1/4 wave antenna using 1/4 wave radials
> had a higher angle of radiation than the 1/2 or 5/8 wave using 1/4 wave
> radials. Probably just a few degrees. Take off angle of a 1/4 wave is
about
> 35 degrees, the 1/2 wave at about 32 degrees, and the 5/8 wave at about 28
> degrees. I also under stand the antenna height above ground affected the
> take off angle as well. I am refering to antennas with no droop in the
> radials. I wonder what your modeling program would find out about all
three
> antennas using 1/4 wave radials and elevated to 1 wavelength above
ground.
> Does the gain really change alot or is the vertical pattern (takeoff
angle)
> just lower on the higher gain antennas.
>
>
> To answer Tom's question, the factory 5/8 wave antennas that i used had
105
> inch long ground plane radials.
>
> Rosco

105" is,when I'm right,266 cm,and this is 1/4 wave.Which angle had your
radials,90ï¿½ or 45ï¿½ ?

Tom

4534. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 09:58:48 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AA9FAD8.1907@wt.net>
Source record: 168906

Rosco wrote:
>
> It looks like the takeoff angles are close.
>
> I was under the impression that a 1/4 wave antenna using 1/4 wave radials
> had a higher angle of radiation than the 1/2 or 5/8 wave using 1/4 wave
> radials. Probably just a few degrees. Take off angle of a 1/4 wave is about
> 35 degrees, the 1/2 wave at about 32 degrees, and the 5/8 wave at about 28
> degrees. I also under stand the antenna height above ground affected the
> take off angle as well. I am refering to antennas with no droop in the
> radials. I wonder what your modeling program would find out about all three
> antennas using 1/4 wave radials and elevated to 1 wavelength above ground.
> Does the gain really change alot or is the vertical pattern (takeoff angle)
> just lower on the higher gain antennas.

They were modeled at 40 ft, which is not too much higher than 1 wl.
There wouldn't be a drastic difference.
The height above ground makes a huge difference in the elevation pattern
and gain also. The max takeoff angle can be deceptive to the
performance. Say you have a 1/4 wl gp at 8ft. The max takeoff is at
about 14 degrees, and just a bit over 1 dbi at this angle. Raise to 32
ft, and the max takeoff is 30 degrees. Bad? Not always. There is also a
lobe at about 10 degrees that is over 2 dbi at that point. So this
antenna would smoke the first one even though the max takeoff angle is
higher. The lower lobe is still higher than the max lobe on the lower
antenna. Most all of these verticals have a very low max takeoff angle
if they are mounted very high in the air in terms of wavelength. A
common 2m 1/4 wl GP at appx 35 ft will have a max takeoff angle of about
3 degrees. This is very good, and explains why a simple 1/4 wl GP is a
good cheap 2m antenna if mounted high up. You might want to try the
eznec demo and try your antennas in that to see what happens. MK

--
http://web.wt.net/~nm5k

4535. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 12:02:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAA17C0.B7642F89@eznec.com>
Source record: 168907

Reg Edwards wrote:
>
> Roy, the topic of conversation is Ladder Line.

Hm. I'd swear you said something about the lossiness of water. I hope you're not saying this thread is closed.

> With flimsy 300-ohm
> junk, where the line provides a gutter for rainwater, anything can
> happen.

I suppose so. But the line I tested was Belden 8230, which has 20 AWG copper covered steel conductors. It's hardly flimsy junk. As it was strung for the test, with frequent twisting, the line didn't hold any appreciable quantity of water.

> But out of curiosity, at what frequency on the 300-ohm line were
> your measurements made ?

21 MHz

> On what length (feet or metres) of 300-ohm line were the
> measurements made ?

100 feet

> What was the total measured dBs of the 300-ohm line ?

Dry, 0.8 dB. After about two weeks of dry weather, a light rain fell, and the loss increased to 3.7 dB. Later, when hard rain fell, loss dropped to 2.4 dB, then slowly to 1.5. I attributed this to the line getting "washed" with clean water.

As a matter of interest, Belden specifies 1.1 dB/100 feet at 100 MHz, which would be 0.5 dB at 21 MHz assuming purely conductor loss.

> What was the percentage increase between dry and soaked ?

"Soaked" wasn't the worst case. Dry, the loss was 17%. Damp, it was 57%. So the loss when damp was 335% of the loss when dry. Or it was 40% greater. Take your pick.

> And, of vital importance, what measurement method was used ?

I connected the twinlead through two 4:1 transformers, the loss of which (0.2 dB each) was measured by putting them back-to-back. The line was running with a 1.5:1 SWR. I used a Bird wattmeter to measure the power into the line+transformer, and the same meter to measure the power out of the line+transformer. Reverse power was subtracted from forward power

to get the net.

The line was suspended by TV standoff insulators above my wooden deck, several feet off the ground and well away from the deck.

> Finally, what is the estimated uncertainty in the measurement of dB
> differences ?

I was operating at about mid-scale with the Bird, and using the same meter for both measurements, so I'd say measured differences were likely to be within a couple of watts. At a power level of about 50 watts, this is a couple of a tenths of a dB.

> Were you able to determine the change in line impedance and
> propagation velocity between wet and dry from your measurements ?
> This would have been of use in distinguishing dielectric loss from
> copper loss.

No, I didn't have the equipment to make those measurements and I didn't try. I had no reason to suspect that getting the line wet would change the conductivity of the copper, especially since it was coated. with polyethylene. Perhaps you can explain how this might happen.

The results of this experiment were published in "Technical Correspondence", QST, February 1982. It won't be long before you could say this phenomenon was known by the ancients!

I'd welcome seeing the results of any measurements you or anyone else has made using better methodology.

Roy Lewallen, W7EL

> Roy Lewallen <w7el@eznec.com> wrote in message
> news:3AA74C2D.51B989EC@eznec.com...
> > Reg Edwards wrote:
> > >
> > > Conclusion about loss on higher freqs is not entirely valid.
> Clean
> > > water is a low-loss material at HF.
> > > . . .
> > >
> > It's well known that although pure water has low DC conductivity,
> its RF
> > loss is significant due to energy expended as its molecular
> dipoles try
> > to orient to the alternating field. _Reference Data For Radio
> Engineers_
> > shows distilled water to have a dissipation factor of 0.04 at 1
> MHz.
> > This is more than twice the loss of PVC plastic, and more than
> 200 times
> > as lossy as a truly low loss material like polyethylene. So I
> don't

> > think "low-loss" is an accurate characterization of water. Rain
> water
> > falling on a dusty surface, or for that matter through dusty or
> polluted
> > air, will be more conductive in addition. The combination of high
> > dielectric constant and fairly high loss makes water something
> you don't
> > want too close to your loading inductors or anywhere there's a
> high
> > electric field, such as between feedline conductors.
> >
> > I've made measurements on 300 ohm twinlead that shows very
> greatly
> > increased loss when wet -- certainly not what you'd see if water
> were a
> > "low-loss" material.
> >
> > Roy Lewallen, W7EL

4536. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 12:04:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAA1846.46D6236C@eznec.com>
Source record: 168908

Richard Clark wrote:
>
> Hi Roy,
>
> You are responding to one of those old wive's tales about the
> non-conductivity of water. Yeah, in the laboratory (and still with
> great effort, expense, and time).
>
> Measure any rainfall and you are guaranteed to observe a pH other than
> 7.0 which means it contains free ions. And guess what, free ions make
> wonderful charge transports and thus support current. Probably
> another application of non-dissipative resistance. ;->
>
> 73's
> Richard Clark, KB7QHC

I believe you. But I'm claiming that even if you had wonderfully non-conductive, laboratory-quality, ion-free water, that it would still be lossy at HF.

Roy Lewallen, W7EL

4537. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 12:22:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAA1C79.779A32DC@eznec.com>
Source record: 168909

Gary Peach wrote:

> Anyway if you are not making it for sale or trade, patent does not apply.

This is a common misconception. A patent forbits others from "making, using, or selling" the patented item. You're in violation of a patent even if you make the patented item for your own use.

However, there's also a great deal of misunderstanding about just what a patent covers. Very briefly, it covers only exactly the combination of items in its claims, plus any variations that would be obvious to a person "skilled in the art". I've only seen two of the claimed three Fractenna patents, and you don't need to worry about stepping on them accidentally. One covers fractal patch antennas with certain characteristics, and the other deals mostly with a method for testing them.

Also, readers should note that, in the U.S. at least, a "pending patent" (really a patent application -- there's no guarantee that a patent will actually issue as a result of an application) doesn't "cover" anything, and doesn't prevent anyone from making, using, or selling anything. (I think it's bizarre that Chip/Phil/Fractenna keep waving this claim about. Any patent attorney or even basic book on patent law explains this.) There's no way to find out what an applicant is even trying to patent, since the application isn't public. And even if you could, the chances of the actual patent being for exactly the same combination of characteristics as the application is really fairly slim. If a patent is issued at all.

Roy Lewallen, W7EL

DISCLAIMER: I'm not an attorney, and the information above isn't legal advice. If you want or need factual legal advice, see an attorney. If any of the above information is incorrect, I welcome any postings pointing out the errors and giving the correct information.

4538. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 12:41:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAA20E9.AD52AB96@eznec.com>
Source record: 168910

I can't locate that issue of QST. But I know that the measurements Al did for his doctoral thesis were at 8 MHz, not 3.8. They were also published in a Lawrence Livermore report, and I thought they were the basis for his QST article. I'd appreciate it very much if you'd double check to see if he really reports measurements at 3.8.

There's some evidence that models of elevated radials might not do as well at low frequencies as at higher ones. If that's true, a possible cause might be the programs' assumption of homogeneous ground. If ground is stratified, there's more chance of deviation between reality and model as the frequency lowers and skin depth increases. So good measurements at a lower frequency than 8 MHz would be welcome.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "Somewhere I saw a chart of gain VS height of radials.:"
>
> Maybe it was in the August 1988 issue of QST.
>
> Brown, Lewis, and Epstein found that placing radials on the surface of
> the earth was better than burying them, but it didn`t seem to impair
> results much to bury them and this was usually more practical, so
> they`ve been usually buried. In their well known and accepted study, the
> three pioneers tested, using 3 MHz.
>
> Al Christman, KB8I used NEC-GSD to model a 1/4-wave vertical with 120
> buried 1/4-wave radials at depths of 6,4, and 2 inches. (one depth at a
> time)
> 3.8 MHz was his test frequency. His results were almost the same for
> the three depths, improving slightly with shallower burial.
>
> Al repeated the above modeling with 4 radials instead of the 120. It
> reduced his field strength from 33 to 25 mv/mtr. That doesn`t look like
> much, but it raised his feedpoint resistance from 40 ohms to 75 ohms.
>
> Al concluded that much of the power radiated by the 120-radial system
> was wasted heating the soil in the 4-radial system.
>
> Next, Al modeled the 1/4-wave vertical with 4 radials at 5, 10, 15, 20,
> 25, and 30 feet above the earth.
>
> Al found that maximum radiation at 20 degrees above the horizon came

> from elevating the antenna and its radials to 10 feet. It declined at
> greater heights for the radials. But, the height of the radials had to
> be15 feet to equal the low-angle performance of the buried radial
> system.
>
> Al has an extensive report in the August 1988 edition of QST where more
> accurate and detailed information can be found.
>
> Best regards, Richard Harrison, KB5WZI

4539. Re: ft100d and atas 100 problem...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 13:09:14 UTC
From: jeff wright <wright00@att.net>
Message-ID: <3AAA2738.1F0F5DB0@att.net>
Source record: 168911

added a grounding strap to the base of the antenna/mount junction to the hatch on the truck...will test this today. the radio is connected directly to the battery with yaesu's remote connect kit...

thanks to everyone for their help!

Cliff Holloway wrote:

> This is usually traced to poor grounding within the radio (mine had this
> problem too), but also could be other causes (poor antenna grounding ect.).
> check out this site for a lot of good information..
> http://members.home.net/k0lee/ft100faq.html#intermittent
> If it is the rig Yaesu will fix this under warranty.
> 73 Cliff N0HC
>
> "jeff wright" <wright00@att.net> wrote in message
> news:3AA90382.20AA8493@att.net...
> > i am having a problem with a new ft100d and the atas 100.
> >
> > on 10 meters, i hit the tune button, and the antenna moves and the radio
> >
> > shows the tune icon and the 'o' symbol. as soon as i key up, the high
> > swr symbol appears with the 'x'. what is going on?
> >
> > i can move the antenna all the way up or down manually and tune using
> > the tune button. the receive audio comes up like it would for a tuned
> > antenna and the icon shows tuned ('o'), but as soon as i try to use the
> > mic, i get the high swr icon on 10 meters.
> >
> > antenna tunes great on other bands.
> >
> > i am using another antenna for 2/440 and have the radio set up that way.
> >
> > your thoughts?
> >
> >
> >

4540. Frackysssss Baaaaccccckkkk!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 13:20:09 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98d9liami1@slb0.atl.mindspring.net>
Source record: 168912

No, no, no....!!!! God Help Us.... First Freddy Kruger, now....

Frackyesssssss.... Baaaaaccccckkkkkk!!!!!

With his twisted and bent wires and assorted gadgets threatening mayhem....

Clearly the "snowbirds" have returned from Fort Lauderdale, where.... they not only don't know how push "chad" out of a voting card, they also can't get their computers to log on to the Internet NG's.

Once back in New England, where some smart UB students are available to help set up Outlook Express again, well.... watch out.

We need help... or else we'll all be sued into oblivion!

Clearly poor Cecil with his magic cat is no match for this.... Maybe that nice youn man Edward Sissor Hands can help to defend us against the evil machinations of the bent wire freak, Edward seemed like a nice young man and he could easily dissmember those twisted wire abominations....

As to the "imaginary" lawyers... well.... with all the lawyers involved in the election debacle from Florida to Washington now free and ready for new action, it seems that Fracky can have access to all he needs.

Enjoy!

-Peter K1PO

4541. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 13:41:53 UTC
From: fractenna@aol.com
Message-ID: <20010310084153.07017.00000100@ng-mj1.aol.com>
Source record: 168913

>
>Gary Peach wrote:
>
>> Anyway if you are not making it for sale or trade, patent does not apply.
>
>This is a common misconception. A patent forbits others from "making,
>using, or selling" the patented item. You're in violation of a patent
>even if you make the patented item for your own use.
>
>However, there's also a great deal of misunderstanding about just what a
>patent covers. Very briefly, it covers only exactly the combination of
>items in its claims, plus any variations that would be obvious to a
>person "skilled in the art". I've only seen two of the claimed three
>Fractenna patents, and you don't need to worry about stepping on them
>accidentally. One covers fractal patch antennas with certain
>characteristics, and the other deals mostly with a method for testing
>them.
>
>Also, readers should note that, in the U.S. at least, a "pending patent"
>(really a patent application -- there's no guarantee that a patent will
>actually issue as a result of an application) doesn't "cover" anything,
>and doesn't prevent anyone from making, using, or selling anything. (I
>think it's bizarre that Chip/Phil/Fractenna keep waving this claim
>about. Any patent attorney or even basic book on patent law explains
>this.) There's no way to find out what an applicant is even trying to
>patent, since the application isn't public. And even if you could, the
>chances of the actual patent being for exactly the same combination of
>characteristics as the application is really fairly slim. If a patent is
>issued at all.
>
>Roy Lewallen, W7EL
>
>DISCLAIMER: I'm not an attorney, and the information above isn't legal
>advice. If you want or need factual legal advice, see an attorney. If
>any of the above information is incorrect, I welcome any postings
>pointing out the errors and giving the correct information.
>

Dr. Cohen also confirms that Roy Lewallen is one of the three individuals who is in copyright violation and will be receiving a cease and desist order shortly. The remainder of his above comments are incorrect or not relevant and are misinformed.

Radio amateurs would do well to assume that if something is not theres they should n't use it freely and without permission. If you have questions seek a

good attorney on IP before incorrect and misleading info of others is used and gets you into trouble. There was a lot to learn from the napster debacle.

73
Phil N1ZKT

4542. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 13:46:46 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98f5gm$5qk$1@lure.pipex.net>
Source record: 168856

"Roy Lewallen" wrote ...
> Gary Peach wrote:
> > Anyway if you are not making it for sale or trade, patent does not apply.
>
> This is a common misconception. A patent forbits others from "making,
> using, or selling" the patented item. You're in violation of a patent
> even if you make the patented item for your own use.

Ah! does this apply to civilised countries too :?o

A patent is a sure route to plagiarism, the first thing to do if you want to make something in competition with your major rivals in the market is to go and buy the patent specification. Some companies maintain whole departments that do little else than take all newly issued patents in the fields of interest and catalogues them and advises their various researchers of the existence of innovations.

In most cases varying your own companies technological product to perform a similar function and capitalise on a market already opened by the competition is not a difficult matter, certainly the probability of ending up with a marketable product free of legal entanglement is higher than inventing something useful from scratch.

As for the private individual, when did you last have a visit from any authority that wanted to see the patent numbers on any device that you might be using. I suggest that with the present level of investment in policing patents there is no chance of a protective patent ever being worth the paper and time taken to write it.
The best thing that one can do with a new invention is to get it onto the market as quickly as possible before the competition has the chance to catch up. Then be in a position to lead with the next innovation. This requires hiring the right people and treating them properly.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4543. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 13:49:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98dbcr$ks4$1@slb5.atl.mindspring.net>
Source record: 168914

Bill:

[snip]
> Peter O. Brackett wrote:
>
> > Yup, shorted turns magnetically coupled to the rest of the coil are bad
> > news!
> >
> > They are definitely lossy! It's like putting a short circuit on the
> > secondary side of a transformer...
> >
> > Don't go there!
>
> Unshorted turns are much worse, because the Q of the self-resonant circuit
> formed by the unshorted turns and their self capacitance is high, large
voltages
> are formed in these turns, and so-called "suckouts" are formed. In the
shorted
> turn coil a small amount of power is lost in the shorting connection, but
that
> is a lot better than letting the unused turns "float". Also, the coupling
to the
> shorted turns is small.
[snip]

Bill, thanks for that feedback. For a manufacturer of "store bought" tuners, I agree with your assertion, it's the "best" thing to do for the potentially "careless" operator.

However, I only partially agree since... especially with a roller or continuously variable inductor, one does not know exactly where those self-resonant -suckout- frequencies are lilely to occur in advance, and when adjusting to "tune" arbitrary unknown impedance transformations, one does not know where the roller will be set.

This then is exactly what manufacturers of "store bought" roller inductor tuners assume and so they simply "short the unused turns". It's safer for them to do that... than to attempt to give the "operators" who buy their widely adjustable equipment instructions sufficient to enable the operators to avoid potentially destructive self-resonances. I believe some manufacturers even describe this technique as "self-resonance killer" or some such terminology.

And so you are correct in your assertion, for most applications of the roller inductor it is simpler for the manufacturer to short the turns and force the operator to take the losses in the shorted turns rather than

taking the chance on a sporadic resonance in unterminated turns causing other kinds of "havoc" such as resonant arcing, burning of contacts, and perhaps destruction of some delicated components, etc.....

However with the situation of a fixed known antenna used on multiple bands which can be set up a priori with a tapped inductor or set of plug in coils with adjustable taps, or at lower freqencies where self resonance is not likely a problem, or with knowledgeable home designers/builders, it's certainly less lossy to leave the unused turns open.

If you know where the self-resonances are, then just... don't go there! If you don't, then be careful.

And... at even lower frequencies one should never short unused turns, for instance on a 60Hz autotransformer. Variac does not short the unused turns on their variable transformers. Short out those turns and see what happens. The stored up smoke will escape from the Variac ruining it forever!

Again, you are correct about shorting the turns and taking the losses in the arbitrary case with a store bought tuner intended to operate on an arbitrary set of unknown impedance transformations. It is simply a waste of power to short turns if you know what you are doing and know how to avoid self-resonances.

-Peter K1PO

4544. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 13:57:27 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98dbrs$466$1@slb7.atl.mindspring.net>
Source record: 168915

Reg: I too read Wes's, write up on wet lines and I congratulate and thank him for his efforts. I believe that his specific measurements were probably accurate and quite adequate for an amateur set up. But I can't really support all of his assertions and conclusions about wet lines as drawn from those specific sets of measurements. I also noted some discussions in his short paper about "conjugate match" which I felt were inappropriate to the point at hand, i.e. another example of using a load theorem for a source problem, etc.... I wonder what "conjugate matching" has to do with wet lines? Wes? -Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:98b8pkibe1@uranium.btinternet.com...
> Wes, I visited your easy to read website. I note your measurements
> to investigate difference in loss between wet and dry ladderline
> were made at 50 MHz. Presumably you had to go up to VHF to find
> differences great enough to measure reliably.
>
> The formula you provide to translate the VHF data to lower
> frequencies I think is incorrect. Your formula (loss proportional
> to sqrt(F)) is applicable only when line loss is nearly all due to
> conductor resistance.
>
> But the ADDITIONAL loss due to rainwater MUST be in the dielectric
> and dielectric loss increases directly proportional to frequency.
> So the extra dielectric loss due to rainwater on 450-ohm ladder
> line at, say, 2 MHz is 1/25 of the values you have reported at 50
> MHz. It is less than the already-small conductor loss and would not
> be noticeable.
>
> I think you said your measurements were worst case values obtained
> with a wetting agent added to the water. I wonder what the
> loss-factor of wetting agents are at 50 MHz.
>
> With ladderline by far the greater proportion of the dielectric
> volume is air, with a small amount of plastic and very little
> water. I have sat in the shack with one eye on the Refl.coeff
> meter and the other looking out of the window watching great
> raindrops bounce off the ladder line. The only change observed on
> the meter has been synchronised with the antenna swinging in a
> gusty wind. But I understand rainfall can be heavier in the States.
> ---
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software

> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
> Wes Stewart <nospam_n7ws@arrl.net> wrote in message
> news:3aa87487.13759094@news.aepnet.com...
> > On Wed, 07 Mar 2001 02:39:08 GMT, k6mhe@arrl.net (Dan Richardson)
> wrote:
> >
> > >I am surprised that Wes hasn't commented on this thread thus
> far.
> > >
> > > Unfortunately, my father-in-law died on the 1st and I have been
> away dealing
> > > with that.
> > > >
> > > >He had done a study which was published in the ARRL Antenna
> Compendium
> > > >Vol. 6 on ladder line and gave measurement data that he made
> comparing
> > > >the changes encountered when the line was wet. I suggest you
> check out
> > > >his findings.
> > >
> > > Read all about it by following the ladder line link at:
> > >
> > > www.triconet.org/~wesandlinda
> > >
> > > Regards,
> > >
> > > Wes N7WS
> > >
> > >
> > >
>
>

4545. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 14:00:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98dc2a$r67$1@slb2.atl.mindspring.net>
Source record: 168916

Cecil: Puts??? All I had was Calls!!! What? -Peter K1PO

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AA9AC76.D6C0FD0F@IEEE.org...
> Wes Stewart wrote:
> > ... unless the stock market keeps going as it is and I go
> > looking for a job :((
>
> Fortunes have been made on Amazon puts over the past year, Wes.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4546. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 14:02:07 UTC
From: dmartin560@aol.com
Message-ID: <20010310090207.24224.00000604@ng-fx1.aol.com>
Source record: 168917

>NEC requires connection of the antenna and electrical service grounds.

Hi Richard,
Can you give me the section of the NEC that deals with this? And possibly where to find it on the net? I know this is the way it is done, but I am having to convince an electrican that I'm working with at a new 911 center that we must tie all grounds together.
Thanks,
Dwayne

4547. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 14:44:07 UTC
From: Jack <kc8pkn@arrl.net>
Message-ID: <98deei$301$1@slb6.atl.mindspring.net>
Source record: 168918

Try to cut the wire in non resonant lengths, I am getting one for my IC-718 next week and the dealer has a cutting chart.

Jack

"Brian Hemmis" <K3USC@worldnet.att.net> wrote in message news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
> Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth condo use
> in FL. Figured I'd run out some wire and attach a ground clamp to a cold
> water pipe. Any other suggestions ? If I am on the right track are there any
> suggested wire lengths that you've had success with ? Appreciate any input
> from AH-4 users. Tnx, 73-Brian K3USC
>
>

4548. Re: TenTec two-element antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 16:01:34 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AAA4FDE.214F7B63@mwci.net>
Source record: 168819

Peter O. Brackett wrote:

> Bill, thanks for that feedback. For a manufacturer of "store bought"
> tuners, I agree with your assertion, it's the "best" thing to do for the
> potentially "careless" operator.

This is a difficult problem to analyze. I think the best answer is that in practice, shorting the unused turns has historically been an approach that does a good job of avoiding suckouts. Also, the coupling to the shorted turns is much less than in a power transformer, so the impedance (mostly reactance) that is reflected from the shorted turns is small (but not zero). The geometry of the coil is a factor. I would think that a long solenoid with well-spaced turns would be the best approach. The small reactance that is reflected into the main coil seems to be "well-behaved" and "tends" to be free of suckouts. There are probably some special cases where the shorting approach runs into trouble, but it seems to be the preferred method, and apparently for good reason (it works in most cases).

At high frequency we would be using only a few turns and the many shorted turns would have a very large reactance and would therefore be a small problem.

At low frequency only a couple of turns would be shorted and their coupling to the many used turns would be very small, therefore also not much of a problem.

At midfrequency it could be more difficult to predict.

Bill W0IYH

4549. Need BALUN Info: 1991 ARRL Handbook

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 16:02:04 UTC
From: k9sqg@aol.com
Message-ID: <20010310110204.04552.00000666@ng-bh1.aol.com>
Source record: 168820

Wonder what the Handbook, page 16-9, reports about number of turns, diameter, and type of coax versus frequency for a choke style balun.

Thanks for reading the posting.

73s,

Evan

4550. Re: Antenna lightening protection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 16:07:36 UTC
From: richardharrison@webtv.net
Message-ID: <22570-3AAA5148-15@storefull-112.iap.bryant.webtv.net>
Source record: 168821

Dwayne wrote:
"Can you give me the section of the NEC that deals with this?"

If I had a copy of the NEC at hand I would look it up. Perhaps some other reader will supply the chapter and verse. I am relying on memory.

As large transients produce large voltage drops ranging in frequency from d-c to daylight, it is most unlikely that the requirement to interconnect antenna and a-c grounds has been eliminated from the NEC. Even if it were not in the code, you should do it to avoid electrocution and fires on your property.

Best regards, Richard Harrison, KB5WZI

4551. Re: Frackysssss Baaaacccckkkk!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 16:39:45 UTC
From: k1bqt@aol.com
Message-ID: <20010310113945.07017.00000129@ng-mj1.aol.com>
Source record: 168822

Hi Peter--

The E-mail address you cite has a long history of issuing NG posts under a variety of signatures. This irregularity suggests AOL's password normal guidelines have been intentionally compromised. As a result, the individual who funds, maintains, and issues passwords for the account is soley responsible and fully accountalbe for its total content, regardless of signature.

Rick K1BQT

4552. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 16:53:55 UTC
From: richardharrison@webtv.net
Message-ID: <8341-3AAA5C23-7@storefull-116.iap.bryant.webtv.net>
Source record: 168823

Row Lewallen, W7EL wrote:
"I`d appreciate it very much if you`d double check to see if he really reports measurements at 3.8 (MHz).

There was a radio comedian back in the 1930`s who resopnd to a an outrageous story of the week with always the same response: "Vas you dere Charlie?"

OK, I vasn`t dere, but on page 35 of the August 1988 issue of QST is printed:
"The frequency of operation for my analysis was 3.8 MHz, and I used ground constants, conductivity and relative permittivity, that simulate average-soil electrical parameters.''

As a bonus, I`ll add his conclusions from the next paragraph:
"In agreement with the findings of Arch Doty, K8CFU, I believe that the use of elevated, rather than buried, radials provides superior performance, because it allows the collection of electromagnetic energy in the form of displacement currents, rather than forcing conduction currents to flow through lossy earth."
Best regards, Richard Harrison, KBWZI

4553. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 17:20:03 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <seokatgv20gqfdqk42ot8ga2kaghoul53s@4ax.com>
Source record: 168824

On Sat, 10 Mar 2001 04:02:08 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Reg Edwards wrote:
>>
>> Roy, the topic of conversation is Ladder Line.
>
>Hm. I'd swear you said something about the lossiness of water. I hope
>you're not saying this thread is closed.
>
>> With flimsy 300-ohm
>> junk, where the line provides a gutter for rainwater, anything can
>> happen.
>
>I suppose so. But the line I tested was Belden 8230, which has 20 AWG
>copper covered steel conductors. It's hardly flimsy junk. As it was
>strung for the test, with frequent twisting, the line didn't hold any
>appreciable quantity of water.
>
>> But out of curiosity, at what frequency on the 300-ohm line were
>> your measurements made ?
>
>21 MHz
>
>> On what length (feet or metres) of 300-ohm line were the
>> measurements made ?
>
>100 feet
>
>> What was the total measured dBs of the 300-ohm line ?
>
>Dry, 0.8 dB. After about two weeks of dry weather, a light rain fell,
>and the loss increased to 3.7 dB. Later, when hard rain fell, loss
>dropped to 2.4 dB, then slowly to 1.5. I attributed this to the line
>getting "washed" with clean water.
>
>As a matter of interest, Belden specifies 1.1 dB/100 feet at 100 MHz,
>which would be 0.5 dB at 21 MHz assuming purely conductor loss.
>
>> What was the percentage increase between dry and soaked ?
>
>"Soaked" wasn't the worst case. Dry, the loss was 17%. Damp, it was 57%.
>So the loss when damp was 335% of the loss when dry. Or it was 40%
>greater. Take your pick.

>
>> And, of vital importance, what measurement method was used ?
>
>I connected the twinlead through two 4:1 transformers, the loss of which
>(0.2 dB each) was measured by putting them back-to-back. The line was
>running with a 1.5:1 SWR. I used a Bird wattmeter to measure the power
>into the line+transformer, and the same meter to measure the power out
>of the line+transformer. Reverse power was subtracted from forward power
>to get the net.
>
>The line was suspended by TV standoff insulators above my wooden deck,
>several feet off the ground and well away from the deck.
>
>> Finally, what is the estimated uncertainty in the measurement of dB
>> differences ?
>
>I was operating at about mid-scale with the Bird, and using the same
>meter for both measurements, so I'd say measured differences were likely
>to be within a couple of watts. At a power level of about 50 watts, this
>is a couple of a tenths of a dB.
>
>> Were you able to determine the change in line impedance and
>> propagation velocity between wet and dry from your measurements ?
>> This would have been of use in distinguishing dielectric loss from
>> copper loss.
>
>No, I didn't have the equipment to make those measurements and I didn't
>try. I had no reason to suspect that getting the line wet would change
>the conductivity of the copper, especially since it was coated. with
>polyethylene. Perhaps you can explain how this might happen.
>
>The results of this experiment were published in "Technical
>Correspondence", QST, February 1982. It won't be long before you could
>say this phenomenon was known by the ancients!
>
>I'd welcome seeing the results of any measurements you or anyone else
>has made using better methodology.
>
>Roy Lewallen, W7EL

Hi Roy,

An excellant report.

73's
Richard Clark, KB7QHC

4554. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 17:46:08 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <3lpkatgatnki33dbneb9u0hdf3u84dpnui@4ax.com>
Source record: 168825

On Fri, 09 Mar 2001 15:20:50 -0600, Mark Keith <nm5k@wt.net> wrote:

>DL7JSK wrote:
>>
>> Hi NG
>> I use a 5/8 wl groundplane on 10m.The antenna was originally designed for
>> CB,but works well on 10m.this gp has 4 radials,60 cm long.A friend told me
>> to make them longer,it would improve performance.Now my question: How long
>> should I make the radials,and what is improved then,rx or tx ?
>>
>> 73
>> Tom, DL7JSK
>
>This is what modeling had to say about them. MK
>
>http://web.wt.net/~nm5k/acompari.htm

Hi Mark,

An excellant page. One observation I would have is there is little
said about the match for these separate designs.

I would offer my own discussion on discones bears on geometry and
matching considerations:
http://www.qsl.net/kb7qhc/antenna/Discone/discone.htm

73's
Richard Clark, KB7QHC

4555. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 18:01:19 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <qcqkato2362tad4mqdohvfs402ubga0sop@4ax.com>
Source record: 168826

On Sat, 10 Mar 2001 09:20:01 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Richard Clark" wrote
>> Thanx for the comic relief. The winter of strictly honest technical
>> discussion was beginning to get dry of humor. Spring has arrived (in
>> fool blume)!
>
>Time to shoot a Blumlein then.
>
>Has anyone any information on this pioneer of electronics?

Hi Gary,

Try:

http://www.amazon.com/exec/obidos/ASIN/085296773X/t/105-4933798-3550347

73's
Richard Clark, KB7QHC

4556. UltraWide Band Antenna for 3G Mobile Cells.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 18:06:23 UTC
From: tiziano.sala@libero.it
Message-ID: <3aaa6cab.2552509@news.libero.it>
Source record: 168827

Hi, I have to design an antenna working in the 100-900 MHz band, for receiving digital tv (DVB-T)using a cell. phone. it has to be very small (limited by the size of a cell phone). My main problem is the bandwidth (large lambda values for freq=100MHz), does someone of you know some studies,ideas, or links that can help? Is there a way to get ultra wideband and small dimensions by bending the wires? Thanks!
t.sala@tiscalinet.it

4557. Re: Fractal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 18:14:18 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <c6rkatg0i2u55ic6aomoi3c4nd2mgg9j7j@4ax.com>
Source record: 168828

On Sat, 10 Mar 2001 01:08:39 -0600, Bill Aycock <baycock@hiwaay.net>
wrote:

>It just came to me- The Chipper is setting up an April Fools joke, and
>will progressively get wilder as March goes on, then some undisclosed
>climax in three weeks, or so. (probably near the next full moon).
>
>Remember- you read it here first!
>
>Bill-W4BSG

Please Bill,

Your manners. This is a technical forum. The correct expression
would be
3 weeks +/- 3dB
where weeks are understood to be
the 4th iterative fractal of the second.

Hopefully the 3dB figure does not come from dissipation.
or for the purists:
Hopefully the 3dB figure does come from non-dissipation.

I suppose I should dust off my fractal foolish filosopher tale for the
April first observation. ;->

73's
Richard Clark, KB7QHC

4558. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 19:51:43 UTC
From: Brian Hemmis <K3USC@worldnet.att.net>
Message-ID: <jBvq6.3878$fw6.270654@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168829

Would you be so kind as to pass on the lengths...thanks ! BH

"Jack" <kc8pkn@arrl.net> wrote in message
news:98deei$301$1@slb6.atl.mindspring.net...
> Try to cut the wire in non resonant lengths, I am getting one for my
IC-718
> next week and the dealer has a cutting chart.
>
> Jack
>
>
> "Brian Hemmis" <K3USC@worldnet.att.net> wrote in message
> news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
> > Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth condo
> use
> > in FL. Figured I'd run out some wire and attach a ground clamp to a cold
> > water pipe. Any other suggestions ? If I am on the right track are there
> any
> > suggested wire lengths that you've had success with ? Appreciate any
input
> > from AH-4 users. Tnx, 73-Brian K3USC
> >
> >
>
>

4559. Re: Fractal Farce

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 20:04:49 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AAA88E1.177ED4DD@hiwaay.net>
Source record: 168830

Richard- you are correct, as usuall, except for one small error, ito
which you were drawn, inadvertently, ny my larger error in time
estimation. I should have said "FOUR WEEKS", with, as you say, the
tolerance factor of +/- x dB. The other error was in the direction of
the iteration- the second is fourth iteration of the week, not the other
way (goes from larger[less detail] to smaller [more detail]).
My error was silly, because this week contained the full moon, with the
additional note that Chips greatest uproars coincide with the full moon.
(This correlation has been noted by several). I should have noted the
current full moon, which was bright enough for me to read my monitor
with no additional illumination.

Bill-W4BSG

Richard Clark wrote:
>
> On Sat, 10 Mar 2001 01:08:39 -0600, Bill Aycock <baycock@hiwaay.net>
> wrote:
>
> >It just came to me- The Chipper is setting up an April Fools joke, and
> >will progressively get wilder as March goes on, then some undisclosed
> >climax in three weeks, or so. (probably near the next full moon).
> >
> >Remember- you read it here first!
> >
> >Bill-W4BSG
>
> Please Bill,
>
> Your manners. This is a technical forum. The correct expression
> would be
> 3 weeks +/- 3dB
> where weeks are understood to be
> the 4th iterative fractal of the second.
>
> Hopefully the 3dB figure does not come from dissipation.
> or for the purists:
> Hopefully the 3dB figure does come from non-dissipation.
>
> I suppose I should dust off my fractal foolish filosopher tale for the
> April first observation. ;->
>
> 73's
> Richard Clark, KB7QHC

4560. Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 20:30:31 UTC
From: DL7JSK <tansorg@cs.tu-berlin.de>
Message-ID: <98e2tn$sd8$06$1@news.t-online.com>
Source record: 168831

Does anybody know how to calculate the diameter of a loop antenna (For 160/80/40 m) ?

73
Tom, DL7JSK

4561. WTB UHF Bandpass Cavity

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 20:42:59 UTC
From: Larry Anderson <w6lar@cybertime.net>
Message-ID: <3AAA91D3.BC6D75D0@cybertime.net>
Source record: 168834

Need something like the WACOM WP-470-1 Bandpass Cavity filter.
What have you got? Must cover 440 to 450 Mhz.
Thanks Larry W6LAR

4562. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 21:34:24 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAA9DE0.6ACF@wt.net>
Source record: 168833

Richard Clark wrote:

>
> Hi Mark,
>
> An excellant page. One observation I would have is there is little
> said about the match for these separate designs.

Yep, I've thought about that. I could add the info for that but have been lazy. I figure if anyone really wants to try to make one of those, they will ask me. Maybe I'll add some info for that and also the data for each type as far as impedance etc. I'm fixing to try the dual 5/8 on 6m I think. I'm presently using a base fed 1/2 wave I've had up a couple of weeks. I'm going to convert it over to a 5/8 with 5/8 radials and see what it will do. The small sizes on 6m will make things pretty easy to work with. So far I plan to use small loading coils for the matching and see how that does. That type of antenna would be matched about the same way as an isopole. Coil + cap if needed. MK
--
http://web.wt.net/~nm5k

4563. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 22:04:33 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAAA4F1.9D185A45@IEEE.org>
Source record: 168837

Roy Lewallen wrote:
> But to my knowledge there are no published
> comparative measurements between elevated and buried radial systems at a
> frequency below 8 MHz. If anyone does know of any, I'd really appreciate
> your letting me know where they're published.

I'm going to put up a 40m vertical with elevated radials. It would be
easy for me to make comparative field strength measurements at different
radial heights while I'm at it. That will give me a spring ham project.
Would a mobile 40m Hamstick be OK for making such measurements?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4564. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 22:07:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAAA584.30B433F0@eznec.com>
Source record: 168835

Richard Harrison wrote:
>
> Row Lewallen, W7EL wrote:
> "I`d appreciate it very much if you`d double check to see if he really
> reports measurements at 3.8 (MHz).
>
> There was a radio comedian back in the 1930`s who resopnd to a an
> outrageous story of the week with always the same response: "Vas you
> dere Charlie?"
>
> OK, I vasn`t dere, but on page 35 of the August 1988 issue of QST is
> printed:
> "The frequency of operation for my analysis was 3.8 MHz, and I used
> ground constants, conductivity and relative permittivity, that simulate
> average-soil electrical parameters.''

Yes, he has done modeling on many frequencies. But as far as I know the only measurements he's done are at 8 MHz. The two shouldn't be confused.

> As a bonus, I`ll add his conclusions from the next paragraph:
> "In agreement with the findings of Arch Doty, K8CFU, I believe that the
> use of elevated, rather than buried, radials provides superior
> performance, because it allows the collection of electromagnetic energy
> in the form of displacement currents, rather than forcing conduction
> currents to flow through lossy earth."
> Best regards, Richard Harrison, KBWZI

I have complete confidence in Al's honesty and integrity. And I agree in general with his conclusions. But to my knowledge there are no published comparative measurements between elevated and buried radial systems at a frequency below 8 MHz. If anyone does know of any, I'd really appreciate your letting me know where they're published.

Roy Lewallen, W7EL

4565. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 22:09:59 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AAAA63B.8FA09F3B@cybatek.fsnet.co.uk>
Source record: 168836

Hi Group!

Well I'm surprised how many replies I've received, better than the rediculous comments in the
UK amateir radio group :)

Anyways, let me explain a little more!

The antenna is an ex German submarine antenna, designed for use from 30khz to 30mhz.
It consists of 4 2ft long, very heavey, ferrite rods which are arraged in a square, that is two side by side,
on top of the other two which are also side by side.

Around the 4 ferrite rods there is 11 turns of very think wire.
In the middle of these 11 turns I have a single turn of wire which is connected to a length of
RG58 50 ohm coax cable which comes back to the shack.

Across the two ends of the 11 turns of wire I have a 120pf capacitor which resonates the antenna exactly
on 1840khz, presenting around 48 ohms impedance as measured with my MFJ VSWR Analyser.

This antenna is mounted on a small lightweight rotator.
Since the antenna has a very deep null off of either end, approx 60db, it gives me a very steerable
null which I use to null out noise or other stations on 160m.

In this arrangement the antenna is approx. 15db down on my homebrew 160m shuntfed vertical which I use on TX.
I have managed to load a small C&S preamplifier for 160m from Bob, G4VGO and connected it inline with the
submarine antenna.

The subantenna now gives me receive signal strengths that are either the same or better than the vertical
but without the noise, thus making a huge overall improvement!

The reason I have had to go for this type of antenna is because my garden is only 4ft square!

So as you can see, I have very limited space, but am meaeting the challenge of getting a good signal
out and not being an aliigator by improving the receive side as well as the transmit side of things.

I have managed to get across to the USA this winter on 160m which is a first for me, indeed I have a 6hr
QSO with Ralph, N4CQC on 160m, certainly a record for me!

Anyways, I hope you all can now see what I am hoping to achieve and understand where I am coming from
on this.

BTW, I do have some 300m of copper burried under the front and rear gardens which I tuned the vertical
against.

Many thanks to all who have replied, especially those who have toaken the time to reply directly to
me with information on suppliers of preamps.

For reference, the best two suppliers I have found so far are:

http://www.arraysolutions.com/Products/icemain111.htm
http://www.advancedreceiver.com/page12.html

Both of whom I have emailed describing what I am trying to do and looking for confirmation
that their products will suite.

Cheers!

Mike Tatum.
(M0AWS)
Ipswich
Suffolk
UK.

Gary Peach wrote:

> "Richard Harrison" wrote
> > Gary Peach wrote:
> > "A preamp in front of a mixer on 160 m will do nothing for you."
> > Agreed. That is the usual case because the troublesome noise is external
> > to the radio.
>
> In nut shell quite so.
>
> > I didn`t endorse preamplification. I simply suggested searching for a
> > "preselector" which often can help signal to noise ratio. Mike said he
> > wanted selectivity. ("preferably filtered just for 160m").
>
> The passive preselector is a good idea.
> At least three sections for a roll off of at least 18 dB / Octave
>
> I was attempting to save his money, and anyone else that is reading this
> thread caught up in the vane attempt to improve reception by adding more
> gain.
>

> Receiver gain should never be more than enough to amplifiy the front end
> noise to the threshold of hearing or if a machine mode then the threshold of
> the decoding equipment.
>
> More gain only causes lots of other problems and reduces dynamic range.
>
> Many of the problems with receiving on 160 m is because in most Ham cases
> the receiver is designed for 28 MHz
> A horse of quite a different colour.
>
> > Mike said he wanted 25 db gain and something about a submarine antenna.
> > I assumed he had his reasons.
>
> I think that is the only difference between us;
> I did not assume anything. :)
>
> His submarine signals are a few octaves below 160 m, HI HI
> --
> Gary7SLL
> 51ï¿½ 23' 50" N 1ï¿½ 19' 58"W
> www.gary.peach.dial.pipex.com/

4566. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 22:28:53 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAAAAA5.35323DC5@IEEE.org>
Source record: 168838

W6RCecilA wrote:
> I'm going to put up a 40m vertical with elevated radials. It would be
> easy for me to make comparative field strength measurements at different
> radial heights while I'm at it. That will give me a spring ham project.
> Would a mobile 40m Hamstick be OK for making such measurements?

I know it's not clear from the above but the mobile 40m Hamstick is on
the receiving end a few wavelengths away mounted on my truck. It is tied
into a Palomar PFS-1. In other words, would ground wave measurements
yield the desired information?
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4567. Isloop antenna in attic - advice??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 22:50:59 UTC
From: "Tom G." <tegwilym@wolfenet.com>
Message-ID: <wdyq6.294$x81.157211677@den-news1.rmi.net>
Source record: 168839

Hello,
I live in a condo/townhouse and just got an Isoloop atenna that I bought from a guy on the internet. My next task is to mount the thing someplace. I do have a patio area next to my unit with a 6 foot tall fence (keeps the neighbors from peeking in!). I'm thinking of 2 options for mounting this thing. 1) On the patio on a short pole around 6 foot tall 2) in my attic which has about 30 inches clearance at the peak (See photo here: http://www.geocities.com/tegwilym/station/setup.html). I figure I could just hang it from one of the beams in the attic someplace away from the other antenna in the picture (this is a QFH antenna for satellite reception). I have had excellent results with the satellite antenna, so I know that RF is getting into the radio ok through the roof. I'm just wondering if the Isoloop would radiate ok from up in the attic also? I have read that it works pretty well without too much TVI, but I'll probably keep it down to about 50 watts at the most - reduce the chance of my neighbors catching me!

Any ideas?

Thanks in advance!

Feel free to mail me direct if you like, I'm already on every spam list anyway so there isn't much good in hiding my email address! :-)

tegwilym@wolfenet.com

Tom KA7VIK -- Seattle

4568. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 22:51:23 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <98eb5tvpe1@slb5.atl.mindspring.net>
Source record: 168840

Posts to fractalantenna in recent months:

November - 1
December - 10
January - 7
February - 1
March (to date) - 0

Tom - N1MM

Fractenna <fractenna@aol.com> wrote in message
news:20010309221234.02033.00000704@ng-cu1.aol.com...
> I'd like to pass along this invitation for all interested hams to join us
on
> the fractal antenna reflector. This is the primo forum on the web for the
> discussion of fractal antennas. Moderated, lively, and filtered for spam
and
> off topic comments this is the home of fun feedback on a ham-grown
technology.
>
> Dr. Cohen participates in this forum and it is the only one he responds to
on
> the web.
>
> To join:
>
> fractalantenna-subscribe@yahoogroups.com
>
> 73
> Phil N1ZKT

4569. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 23:07:01 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <psyq6.4559$Vg3.279749@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168841

Hi Tom,

Try: 1005/freq(MHz)

This is your basic loop diameter equation.

For directive antennas:

Reflector = 1030/f(MHz)
Director = 975/f(MHz)

Source: ARRL antenna book c 1988 pp 5-17, 12-1.

Gary WG7X

DL7JSK <tansorg@cs.tu-berlin.de> wrote in message
news:98e2tn$sd8$06$1@news.t-online.com...
> Does anybody know how to calculate the diameter of a loop
antenna (For
> 160/80/40 m) ?
>
> 73
> Tom, DL7JSK
>
>
>

4570. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-10 23:15:25 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3aaab58c_1@news.cybertours.com>
Source record: 168842

"DL7JSK" <tansorg@cs.tu-berlin.de> wrote in message
news:98e2tn$sd8$06$1@news.t-online.com...
> Does anybody know how to calculate the diameter of a loop antenna (For
> 160/80/40 m) ?
>
> 73
> Tom, DL7JSK
HI Tom,

Are you Talking about a full wave or a small loop
For full wave the normal formula to start with is 1005/f (mhz)= Feet
73 dave

4571. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 00:05:48 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <98efh8$k34$00$1@news.t-online.com>
Source record: 168843

"KC1DI" <elbc@pivot.net> schrieb im Newsbeitrag
news:3aaab58c_1@news.cybertours.com...
>
> "DL7JSK" <tansorg@cs.tu-berlin.de> wrote in message
> news:98e2tn$sd8$06$1@news.t-online.com...
> > Does anybody know how to calculate the diameter of a loop antenna (For
> > 160/80/40 m) ?
> >
> > 73
> > Tom, DL7JSK
> HI Tom,
>
> Are you Talking about a full wave or a small loop
> For full wave the normal formula to start with is 1005/f (mhz)= Feet
> 73 dave

Then I'm probably talking about a small loop.1005/1.8= 558 ft = 186 m.A
little large...

>
>
>

4572. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 00:12:42 UTC
From: Rory Davis <n7cr@bellsouth.net>
Message-ID: <aqzq6.9788$642.128255@news2.atl>
Source record: 168844

Gary, that's the loop CIRCUMFERENCE... assuming a perfect circle divide it
by PI to get the diameter.

Rory N7CR

"Gary McAdams" <g.m.mcadams@worldnet.att.net> wrote in message
news:psyq6.4559$Vg3.279749@bgtnsc06-news.ops.worldnet.att.net...
> Hi Tom,
>
> Try: 1005/freq(MHz)
>
> This is your basic loop diameter equation.
>
> For directive antennas:
>
> Reflector = 1030/f(MHz)
> Director = 975/f(MHz)
>
> Source: ARRL antenna book c 1988 pp 5-17, 12-1.
>
> Gary WG7X
>
>
> DL7JSK <tansorg@cs.tu-berlin.de> wrote in message
> news:98e2tn$sd8$06$1@news.t-online.com...
> > Does anybody know how to calculate the diameter of a loop
> antenna (For
> > 160/80/40 m) ?
> >
> > 73
> > Tom, DL7JSK
> >
> >
> >
>
>

4573. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 00:19:44 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaabbdc.458293681@news.accessunited.com>
Source record: 168845

On Fri, 9 Mar 2001 23:59:36 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

>In nut shell quite so.

Not so.

Factually, a preamplifier often is needed on 160 meters with many
receiving antennas. There obviously are many things being ignored in
some of the answers given.

At my location, even arrays of 880 foot long Beverages require
amplification before going to the receivers. My small verticals, and
certainly any small loops (if I had them), would require
amplification.

For a working MEASURED example, noise floor to the NE on an array of
880 foot long Beverages on a quiet winter night, using 3.5 kHz
bandwidth, is -123 dBm with no feedline loss. That's 194 nanovolts (I
have a 75 ohm system) with a very wide 3.5kHz bandwidth.

My FT-1000D barely makes that level with 10 dB internal S/N ratio
preamp on, and that is for wider-than-SSB bandwidths! On CW, forget
it. The receiver sounds stone dead and I would loose many weak signals
that would otherwise be workable without external amplification!

With 350 Hz selectivity, the noise floor is -133 dBm. The weakest
workable signals are at or below that noise floor, so it is very
important to have a bit of headroom. There is no way the FT-1000D, or
any other common receiver, would get into external noise floor
especially if there are any additional significant losses in the
system.

Another factor is AGC. You normally want the receiver into some amount
of AGC on weak signals, so that you are not being "blasted" when a
strong signal appears. If the receiver is somewhat low on IF gain, or
has an AGC system that has a high threshold, you may want some
additional gain.

My array of eight 22 foot tall verticals in a 350 foot diameter
circle, top loaded with wire hats and resonanted with a 33 uH loading
coil and swamped with 70 ohms of loss resistance delivers about the
same signal as the Beverages, and it also requires at least 10 dB of
net gain.

A small loop or array of loops would be even worse.

During times when less gain is needed, you can get away without amplifying signals with SOME receiving arrays, but the general statements offer so far have benn far off base for many situations.

The real answer is "it depends on many things". Site noise, propagated noise, antenna directivity, receiver bandwidth, and antenna efficiency are the major players that spoil cookie-cutter answers.

Many times amplifiers ARE needed.

73 Tom

4574. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 00:26:18 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaac475.460494851@news.accessunited.com>
Source record: 168846

On Sat, 10 Mar 2001 22:09:59 +0000, Mike Tatum
<miket@cybatek.fsnet.co.uk> wrote:

>Hi Group!
<SNIP>

>In this arrangement the antenna is approx. 15db down on my homebrew 160m
>shuntfed vertical which I use on TX.
>I have managed to load a small C&S preamplifier for 160m from Bob, G4VGO and
>connected it inline with the
>submarine antenna.
>
>The subantenna now gives me receive signal strengths that are either the same
>or better than the vertical
>but without the noise, thus making a huge overall improvement!

What you find is true, and what I would suspect with the antenna you
described.

As you have learned from actual experience, you DO need some
amplification despite advice to the contrary.

On small antennas in quiet locations, especially when antennas are
directional wioth close spacing, sometimes a fairly large amount of
gain is required.

73 Tom W8JI

4575. Re: Radial length

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 00:59:43 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <36Aq6.3$vz4.786@news7.onvoy.net>
Source record: 168847

Mine were straight out, no downward angle.
Hi-Gain Golden Penetrator 5/8 wave
TruckDrivingMan <truckdrivingman@hotmail.com> wrote in message
news:98ctbc$g8s$04$1@news.t-online.com...
>
> 105" is,when I'm right,266 cm,and this is 1/4 wave.Which angle had your
> radials,90° or 45° ?
>
> Tom
>
>
>
>

4576. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 01:06:09 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98ej21$81$1@208.207.71.169>
Source record: 168848

Fractenna wrote:
>
The rest happens, as they say 'off line'.

Yeah. Right!

4577. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 01:13:24 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAAD134.7763@wt.net>
Source record: 168849

W6RCecilA wrote:
>
> W6RCecilA wrote:
> > I'm going to put up a 40m vertical with elevated radials. It would be
> > easy for me to make comparative field strength measurements at different
> > radial heights while I'm at it. That will give me a spring ham project.
> > Would a mobile 40m Hamstick be OK for making such measurements?
>
> I know it's not clear from the above but the mobile 40m Hamstick is on
> the receiving end a few wavelengths away mounted on my truck. It is tied
> into a Palomar PFS-1. In other words, would ground wave measurements
> yield the desired information?

I think it would be pretty useful. But I'd still get on the air reports against other dipoles etc. But you can easily do that without even transmitting if you use a switch. I don't think I remember a case where the results were not reciprocal between transmit and receive. But I've got a hunch your "FS" type measurements would give a good idea of the overall efficiency as far as the ground losses at certain heights etc. I oughta put mine back up and let people hear the difference between the two at long distances. One thing, I still insist if you use only 4 radials, you want it at least 30-35 ft high to really play. If you run it lower than that, I'd add more radials to make a fair test. Even at 36 ft, 4 radials is not optimum compared to 120 on the ground. You really need about 8-10 to do this. I came to the conclusion at 36 ft up, 4 radials were appx equal to 50 or 60 on the ground. Still pretty good, but can be improved a bit. So if you drop lower than 30 ft, expect the ground losses to skyrocket as you near the ground. According to the "average textbook" numbers, At 1/8 wl up you will need 60 radials to equal the 120 on the ground. I kinda think your stick will be useful in seeing the effects of this loss as you drop near the ground. I never did any real tests at all when I used mine. I just used it and noted the received results against other antennas with fast antenna switching. My reports back always matched, so transmitting a waste of time for long haul tests I think unless you just want to prove it. MK
--
http://web.wt.net/~nm5k

4578. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 01:19:29 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AAAD2A1.BB233C9B@cybatek.fsnet.co.uk>
Source record: 168850

Tom W8JI wrote:

> On Sat, 10 Mar 2001 22:09:59 +0000, Mike Tatum
> <miket@cybatek.fsnet.co.uk> wrote:
>
> >Hi Group!
> <SNIP>
>
> >In this arrangement the antenna is approx. 15db down on my homebrew 160m
> >shuntfed vertical which I use on TX.
> >I have managed to load a small C&S preamplifier for 160m from Bob, G4VGO and
> >connected it inline with the
> >submarine antenna.
> >
> >The subantenna now gives me receive signal strengths that are either the same
> >or better than the vertical
> >but without the noise, thus making a huge overall improvement!
>
> What you find is true, and what I would suspect with the antenna you
> described.
>
> As you have learned from actual experience, you DO need some
> amplification despite advice to the contrary.
>
> On small antennas in quiet locations, especially when antennas are
> directional wioth close spacing, sometimes a fairly large amount of
> gain is required.
>
> 73 Tom W8JI

Hi Tom!

Thanks for the reply!
I checked the log and found you in there too :)

I have learned a lot from experience!
I remember when I first started working on my short, just 13m, linear loaded vertical for 160m.
I asked a question and got about 100 replies telling me I was wasting my time and here's the maths to prove it!

3 months later I was working US stations on the very same antenna!

I typed the message earlier in a hurry as my portable MAC was about to die due to

lack of battery power, I meant to type 40ft square garden not 4ft square, that indeed would
be challenging :)

Cheers and hope to catch you again on 160m !

73.

MikeT ...
M0AWS.

4579. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 01:38:57 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98ekvh$5v3$0@208.207.71.169>
Source record: 168851

Fractenna wrote:
>
> >
> >Gary Peach wrote:
> >
> >> Anyway if you are not making it for sale or trade, patent does not apply.
> >
> >This is a common misconception. A patent forbits others from "making,
> >using, or selling" the patented item. You're in violation of a patent
> >even if you make the patented item for your own use.
> >
> >However, there's also a great deal of misunderstanding about just what a
> >patent covers. Very briefly, it covers only exactly the combination of
> >items in its claims, plus any variations that would be obvious to a
> >person "skilled in the art". I've only seen two of the claimed three
> >Fractenna patents, and you don't need to worry about stepping on them
> >accidentally. One covers fractal patch antennas with certain
> >characteristics, and the other deals mostly with a method for testing
> >them.
> >
> >Also, readers should note that, in the U.S. at least, a "pending patent"
> >(really a patent application -- there's no guarantee that a patent will
> >actually issue as a result of an application) doesn't "cover" anything,
> >and doesn't prevent anyone from making, using, or selling anything. (I
> >think it's bizarre that Chip/Phil/Fractenna keep waving this claim
> >about. Any patent attorney or even basic book on patent law explains
> >this.) There's no way to find out what an applicant is even trying to
> >patent, since the application isn't public. And even if you could, the
> >chances of the actual patent being for exactly the same combination of
> >characteristics as the application is really fairly slim. If a patent is
> >issued at all.
> >
> >Roy Lewallen, W7EL
> >
> >DISCLAIMER: I'm not an attorney, and the information above isn't legal
> >advice. If you want or need factual legal advice, see an attorney. If
> >any of the above information is incorrect, I welcome any postings
> >pointing out the errors and giving the correct information.
> >
>
> Dr. Cohen also confirms that Roy Lewallen is one of the three individuals who
> is in copyright violation and will be receiving a cease and desist order
> shortly. The remainder of his above comments are incorrect or not relevant and
> are misinformed.

>
> Radio amateurs would do well to assume that if something is not theres they
> should n't use it freely and without permission. If you have questions seek a
> good attorney on IP before incorrect and misleading info of others is used and
> gets you into trouble. There was a lot to learn from the napster debacle.
>
> 73
> Phil N1ZKT

HAW HAW HAW!

4580. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 01:50:31 UTC
From: fractenna@aol.com
Message-ID: <20010310205031.12908.00000051@ng-fm1.aol.com>
Source record: 168852

>
>Posts to fractalantenna in recent months:
>
>November - 1
>December - 10
>January - 7
>February - 1
>March (to date) - 0
>

Yep; only the good stuff. Why not post a question Tom. We can't all be listeners:-)

Dr. Cohen says the latest sub base is 289.

>Tom - N1MM
>
>Fractenna <fractenna@aol.com> wrote in message
>news:20010309221234.02033.00000704@ng-cu1.aol.com...
>> I'd like to pass along this invitation for all interested hams to join us
>on
>> the fractal antenna reflector. This is the primo forum on the web for the
>> discussion of fractal antennas. Moderated, lively, and filtered for spam
>and
>> off topic comments this is the home of fun feedback on a ham-grown
>technology.
>>
>> Dr. Cohen participates in this forum and it is the only one he responds to
>on
>> the web.
>>
>> To join:
>>
>> fractalantenna-subscribe@yahoogroups.com
>>
>> 73
>> Phil N1ZKT
>

Hi Tom--

Didn't Dr. Cohen beat the pants off you in the 10M Contest with the 10M Fractal Quad Yagi?

What was your score?

73
Phil N1ZKT

4581. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 01:52:51 UTC
From: fractenna@aol.com
Message-ID: <20010310205251.12908.00000054@ng-fm1.aol.com>
Source record: 168853

>
>
>Fractenna wrote:
>>
> The rest happens, as they say 'off line'.
>
>
>
> Yeah. Right!
>

Hi Dick

Do you know a way to do litigation 'on line'?

73
Phil N1ZKT

4582. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 03:21:01 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <xaCq6.54903$Aj2.965656@typhoon.columbus.rr.com>
Source record: 168854

"Fractenna" <fractenna@aol.com> wrote in message
news:20010310205031.12908.00000051@ng-fm1.aol.com...
> >
> >Posts to fractalantenna in recent months:
> >
> >November - 1
> >December - 10
> >January - 7
> >February - 1
> >March (to date) - 0
> >
>
> Yep; only the good stuff. Why not post a question Tom. We can't all be
> listeners:-)
>
> Dr. Cohen says the latest sub base is 289.

So, 289 people realize there's *nothing* worth posting about on
that mailing list.

Sounds about right.

--
Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
USPSA # L-1192 NROI/CRO Amateur Radio K8ND
Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass

4583. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 03:50:22 UTC
From: richardharrison@webtv.net
Message-ID: <3333-3AAAF5FE-152@storefull-114.iap.bryant.webtv.net>
Source record: 168855

Roy Lewallen, W7EL wrote:
"Yes, he (Al Christman, KB8I) has done modeling on many frequencies. But as far as I knpw the only measurements he`s done are at 8 MHz. The two shouldn`t be confused."

Very true, but physical modeling was practiced long before computers were available for modeling. Scale models are still constructed by some even though those great computer programs are at our service. But the physical model buisness has surely declined in the antenna business thanks to the computer and the bright guys who program them.

All our h-f curtain arrays were first built at about 1% full size for testing at 100x the frequency before being built full-size.

Brown, Lewis, and Epstein when testing at 3 MHz were really doing 1/2 or 1/3 or 1/4-scale modeling because their true interest was mainly in the medium-wave band.

Though Al Christman used 8MHz, it is likely that his test results are applicable to 4 MHz and other frequencies if the right precautions are used.

There likely are some failures in modeling with small-scale antenna models. I never heard of any. I only know of any number of successes.

Best regards, Richard Harrison, KB5WZI

4584. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 07:40:09 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <98fa4pifv1@bashir.peak.org>
Source record: 168858

"Roy Lewallen" wrote ...
> Gary Peach wrote:
> > Anyway if you are not making it for sale or trade, patent does not apply.
>
> This is a common misconception. A patent forbits others from "making,
> using, or selling" the patented item. You're in violation of a patent
> even if you make the patented item for your own use.

Document this please - for the US. From what I learned, making a patented item for your own use is not violating the patent - as stated by Gary.

--
Bill Nelson (billn@peak.org)

4585. Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 07:40:46 UTC
From: Funny-0RG@arrl.org
Message-ID: <BackTo11meters@CB.ARRL.ORG>
Source record: 168857
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I left CB radio 19 years ago when I got my novice ticket. It felt good communicating with people that knew what they were doing and were proud of their accomplishments in getting licensed. Over the past year things have gotten shitty on the bands and operators are stupid. It sounds just like the CB I left 20 years ago except that the rig's readout is showing a ham frequency. To bad there isn't a better radio service I can go to now that the bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters in the middle of a ham band.

4586. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 08:12:47 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAB337F.24C4@wt.net>
Source record: 168868

Fractenna wrote:
>
> >
> >
> >Fractenna wrote:
> >>
> > The rest happens, as they say 'off line'.
> >
> >
> >
> > Yeah. Right!
> >
>
> Hi Dick
>
> Do you know a way to do litigation 'on line'?
>
> 73
> Phil N1ZKT

I know just the people for the job. Give them a call. They can handle
all of your online litigation needs. MK

http://web.wt.net/~nm5k/perry2.htm

--
http://web.wt.net/~nm5k

4587. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 08:13:27 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98fclh$8ad$1@lure.pipex.net>
Source record: 168860

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >In nut shell quite so.
>
> Not so.

I think that you have not been quite honest in witholding some of the data.
My calculations are correct.

> Factually, a preamplifier often is needed on 160 meters with many
> receiving antennas. There obviously are many things being ignored in
> some of the answers given.

Not ignored, but unstated in your original query.
I suspected deliberately as a troll, but it would be unfair of me to sling
such accusations about; though one could hardly be blamed when you see the
amount of set ups that go on in these groups.

> At my location, even arrays of 880 foot long Beverages require
> amplification before going to the receivers. My small verticals, and
> certainly any small loops (if I had them), would require
> amplification.

I thought that you had a 40 foot square yard! ?

> For a working MEASURED example, noise floor to the NE on an array of
> 880 foot long Beverages on a quiet winter night, using 3.5 kHz
> bandwidth, is -123 dBm with no feedline loss. That's 194 nanovolts (I
> have a 75 ohm system) with a very wide 3.5kHz bandwidth.

That is interesting, (obviously not your back yard), and indicates a loss of
approximately 29 dB for that antenna.

-198.6 - (-123) = 75.6
3,500 Hz = 35.4 dB

75.6 - 35.4 = 40.2dB = 10,471°K

Which is approximately in accord with the 9,000,000°K that I proposed for
the Sky Temperature (Tsky) on 160 m during the quite times.

10 log(9,000,00/ 10,500) = 29.3 dB loss.
or 0.1% efficiency whichever way you like to look at it.

> Under such conditions a pre-amplifier is compensating for the AE loss.

Granted, that is correct.
However the S/N ratio is still less than that at the I/P from free space to

the antenna.

Putting 9,000°K directly into a mixer gives

Ts = Ta + Tr
= 9,000 + 2,500 = 11,500°K

S/N in is S/ kBTsky

The signal is 29 dB down too so S/N out is

(eff x S)/(eff x Nsky + Nr)

0.001S/ kB(0.001 x 9,000,000 +2,500)

(Si/Ni)/(So/No) becomes

(eff Tsky + Tr)/eff TSky

(0.001 x 9,000,000 + 2,500)/ (0.001 x 9,000,000)

= 11,500/ 9,000 = 1.28
or approximate 1 dB loss of signal to noise ratio.

Where
Si and Ni are signal and noise in respectively
So and No are signal and noise out respectively

Now with the amplifier gain G;
say for example 30 dB (makes the numbers easier to follow)

S/N = (G eff S)/(G eff (Na + Namp) + Nr)

(Si/Ni)/(So/No)
= (G eff(Tsky + Tamp) +Tr)/ G eff Tsky

= (1,000 x 0.001(9,000,000 + 300) +2,500)/ 1,000 x 0.001x9,000,000

= 9,002,800/ 9,000,000
= 1.0003
or 0.0014 dB

= (1,000 x 0.001x S)/ kB (1,000 x 0.001x(9,000,000 + 300) +2,500)

Thus an amplifier can win you about a dB of signal to noise however you have reduced the dynamic range of the receiver by 30 dB in the example.
It would help if you could provide some AGC to the preamplifier.
If that is not possible it would help to use an amplifier of less gain than my example. We could calculate the break even point, if you want I'll set up the spread sheet to calculate a table for you and you can make your choice to suite your conditions.

If you are working machine modes the fraction of a db signal to noise will be very helpful with rare DX but for 10 dB S/N SSB not much use to you at all.

Presumably on transmit you feed your other antenna which you say is of
comparable gain with 400 kW for full ERP ;)

> My FT-1000D barely makes that level with 10 dB internal S/N ratio
> preamp on, and that is for wider-than-SSB bandwidths! On CW, forget
> it. The receiver sounds stone dead and I would loose many weak signals
> that would otherwise be workable without external amplification!

Of course it sounds stone dead but the S/N ratio of any CW signals that you
receive will be great. once again if you work PSK31 you will not be able to
hear the signals but they are there none the less and if you can tune to
them they will decode without error. HamScope is a great application for
this purpose.

> With 350 Hz selectivity, the noise floor is -133 dBm. The weakest
> workable signals are at or below that noise floor, so it is very
> important to have a bit of headroom.

Let us assume a 3 dB S/N for a CW signal.
(Good Morse ops seem to indicate that they can work at well below that S/N)
lets assume 350 Hz Bandwidth the the threshild in space around the AE is

-198.6 + 10 log 9,000,000 + 10 log 350 + 3
= -198.6 + 69.5 + 25.4 + 3
= -100 dBm Threshold

With an antenna efficiency of -29 dB
you will be able to deliver -129 dBm of signal to the input of the receiver
at a signal to noise ratio of a little under 3 dB
This does not require an amplifier and you do not run into dynamic range
problems in a well designed receiver.

>There is no way the FT-1000D, or
> any other common receiver, would get into external noise floor
> especially if there are any additional significant losses in the
> system.

Would you clarify that please, I don't quite understand what you are saying
here?

> Another factor is AGC. You normally want the receiver into some amount
> of AGC on weak signals, so that you are not being "blasted" when a
> strong signal appears.

The R-5000 is rather good from this point of view; the RF gain can be used
to shut the noise down to the threshold of hearing thus on CW signals the
signal to noise ratio of the tone is almost a quite room effect.

>If the receiver is somewhat low on IF gain, or
> has an AGC system that has a high threshold, you may want some
> additional gain.

I have designed a few sets and I have come to the conclusion that more than
a few dB of gain to cover production spread is a damn nusience. It is prone
to spurious oscillation and intermodulation modulation, clipping and loss of

dynamic range due to saturation of the later stages of the set. Filters
become overloaded and cannot perform correctly. Gain can be a real hazard.

> My array of eight 22 foot tall verticals in a 350 foot diameter

in a 40 foot square back yard?

> circle, top loaded with wire hats and resonanted with a 33 uH loading
> coil and swamped with 70 ohms of loss resistance delivers about the
> same signal as the Beverages, and it also requires at least 10 dB of
> net gain.

I suppose that if you are that serious to construct such an antenna, it
would pay you to build an efficient AE that can also be used for
transmitting and have a respectable efficiency.

> A small loop or array of loops would be even worse.

Surely this would be a compromise AE forced upon the Ham by space or
p[lanning restrictions. Top band is definitely for the landed rich, (I won't
say gentry, there aren't many gents about these days :)

> During times when less gain is needed, you can get away without
> amplifying signals with SOME receiving arrays, but the general
> statements offer so far have benn far off base for many situations.

I think that is down to the fact that you witheld some of the information
thus wasting peoples time in giving a difinative answer when a single line
would have been sufficient to dismiss your query, (I'll know next time).

> The real answer is "it depends on many things". Site noise, propagated
> noise, antenna directivity, receiver bandwidth, and antenna efficiency
> are the major players that spoil cookie-cutter answers.

I considered all of the data required to cover a normal situation the fact
that you had undeclared restrictions was unhelpful.

> Many times amplifiers ARE needed.

I'm afraid that you have demonstrated a straw man.

And it looks very much like a scarecrow from where I'm standing :)

Never mind; that's what this hobby seems to be all about.

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4588. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 08:20:28 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98fclk$8ad$2@lure.pipex.net>
Source record: 168859

"Fractenna" wrote
> >Fractenna wrote:
> > The rest happens, as they say 'off line'.
> > Yeah. Right!
> Hi Dick
>
> Do you know a way to do litigation 'on line'?

Sounds possible,
however copulation_on_line might present some unresolveable problems.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4589. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 08:34:54 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98fodf$e97$1@lure.pipex.net>
Source record: 168867

"Richard Clark" wrote ...
> Gary Peach wrote:
> >"Richard Clark" wrote
> >> Thanx for the comic relief. The winter of strictly honest technical
> >> discussion was beginning to get dry of humor. Spring has arrived (in
> >> fool blume)!
> >Time to shoot a Blumlein then.
> >
> >Has anyone any information on this pioneer of electronics?
> Try:
> http://www.amazon.com/exec/obidos/ASIN/085296773X/t/105-4933798-3550347

Thanks Richard, second attempt worked OK
$95 is a bit more than I can afford so I'll see if I can get the book
through the library.

The interesting comment in the summary for the book about his company discouraging publication I can confirm.
When I worked at "The Gram" I was actually in the lab that Blumlein had been using just before his tragic death and one of the people that had known him personally was still working there. I did have a few conversations with him about Blumlein, but never managed to get anything on paper about this unrecognised giant.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4590. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 09:11:32 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <8jHq6.4880$1x.466785@paloalto-snr1.gtei.net>
Source record: 168861
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.swap

Troll, troll, troll your post... And what do you mean "back to 11 meters",
you probably never left... :>)

<<< Dan >>>

"ARRL" <Funny-0RG@arrl.org> wrote in message
news:BackTo11meters@CB.ARRL.ORG...
> I left CB radio 19 years ago when I got my novice ticket. It felt good
> communicating with people that knew what they were doing and were proud
of
> their accomplishments in getting licensed. Over the past year things
have
> gotten shitty on the bands and operators are stupid. It sounds just like
the
> CB I left 20 years ago except that the rig's readout is showing a ham
> frequency. To bad there isn't a better radio service I can go to now
that the
> bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters
in
> the middle of a ham band.
>
>
>

4591. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 09:36:12 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98fgtmdam1@nntp9.atl.mindspring.net>
Source record: 168862

Bill:

I concur, to the best of my knowledge, in the USA, it is perfectly legal to build personal use instances of any US patent. You just can't use these personal renditions for any commercial purpose. Building instances of patented inventions for personal use and study is completely legal.

There are two main parts to every patent, the first is the tutorial or "teaching" part, and the second is the listing of the "claims" of the invention.

As explained to me by several patent attorneys and patent agents over the years, it is my understanding that the whole reason for having the tutorial or teaching part of the patent is to teach others how to build personal use instances of the invention. In fact, I have been told that, if it can be proved that the information in a patent document is not sufficient to produce a personal use working instance of the invention, the patent can be declared invalid.

The whole structure of the US, and most English common law style patent systems, is set up so that, in return for teaching the rest of the populace how to build the invention and letting them do so for personal purposes, the government grants the inventor an [17 year?] exclusive right period to its' commercial exploitation. At the end of the [17 year>] exclusive rights period, anyone can take the patent and the "teaching" and exploit it for either commercial or personal purposes. Until the exclusive right period has passed, only personal use is allowed.

Without the "teaching" part of a patent, the claims alone would be sufficient to document and protect the invention. And so... I presume that's why the patent law requires the inventor to "teach" in the body of the patent before the "claims" are listed so that anyone can build an instance of the patent for personal use. Just do it!

Claims are not required to "teach" but simply to exactly document the salient recognizable characteristics of the "invention" so that commercial violations can be tested for infringement in a court of law.

I don't believe that any ham is forbidden from building or having built for him or her at no charge, a "patented" antenna for his or her own use. Just don't try selling or giving away those personal use implemenations of the patented antenna within the exclusive rights period of the inventor.

And so I believe that hams can build so-called patented fractal antennas for their personal use without fear of reprisal from the "inventor":. All that being said, if one reads the patent claims of the recent patent assigned to Fractal Antenna Systems closely, I believe that the reader will come to the

conclusion that the claims are narrowly stated, and very weak, and do not have the generality of a "concept" patent. Those claims for the fractal antenna seem, at least to me, to constitute what is usually described as a narrow or specific "design" patent and not a "concept" patent. Sort of like a copyright, the specific detailed designs of particular "bent wire" antennas are claimed, but not the general techniques.

So, I say... have at it... build patented fractals for personal use and enjoy!

And... don't be afraid to create and try to patent your own bent wire antennas, for, as far as I know, there are no generic patents that prevent the development of bent wire antennas no matter how the places in the wire and the directions of the bends are arrived at. I like Cecil's Dead Cat technique myself.

Please be advised that I am not an attorney and that the above information and advice is passed on in the interest of sharing my beliefs with my fellow amateur radio hobbyists. Caveat Emptor.

Are there any patent agents or lawyers out there reading this NG posting who can confirm my understanding of these matters?

-Peter K1PO

"Bill Nelson" <billn@spock.peak.org> wrote in message news:98fa4pifv1@bashir.peak.org...
>
> "Roy Lewallen" wrote ...
> > Gary Peach wrote:
> > > Anyway if you are not making it for sale or trade, patent does not
> apply.
> >
> > This is a common misconception. A patent forbits others from "making,
> > using, or selling" the patented item. You're in violation of a patent
> > even if you make the patented item for your own use.
>
> Document this please - for the US. From what I learned, making a patented
> item for your own use is not violating the patent - as stated by Gary.
>
> --
> Bill Nelson (billn@peak.org)
>

4592. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 09:38:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98fh38oea1@slb5.atl.mindspring.net>
Source record: 168863

Phil:

Litigation on line, heh, heh... How about in Judge Judy's court? Or perhaps Judge Wapner's court? Or even better, the Jerry Springer court of public spectacle! Seems appropriate given the public spectacle the fractal antenna promoters have made of themselves here on this NG.

-Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message news:20010310205251.12908.00000054@ng-fm1.aol.com...
> >
> >
> >Fractenna wrote:
> >>
> > The rest happens, as they say 'off line'.
> >
> >
> >
> > Yeah. Right!
> >
>
> Hi Dick
>
> Do you know a way to do litigation 'on line'?
>
> 73
> Phil N1ZKT

4593. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 10:40:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3aab48a0.494335123@news.accessunited.com>
Source record: 168864

On Sun, 11 Mar 2001 08:13:27 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>I think that you have not been quite honest in witholding some of the data.
>My calculations are correct.

It seems like you are saying:

1.) I measured noise floor in a working system with accurate
instruments, and presented the data.

2.) Since measured results disagree with your "calculations", which
you consider flawless, I must have "withheld data".

What about the hundreds of other people who's emperical results fly in
the face of your "calculations"?

>> Factually, a preamplifier often is needed on 160 meters with many
>> receiving antennas. There obviously are many things being ignored in
>> some of the answers given.
>
>Not ignored, but unstated in your original query.

What query? I made no query. I offered real-world data, since I have
it available.

>> At my location, even arrays of 880 foot long Beverages require
>> amplification before going to the receivers. My small verticals, and
>> certainly any small loops (if I had them), would require
>> amplification.
>
>I thought that you had a 40 foot square yard! ?

I never said how big my "yard" was.

>> For a working MEASURED example, noise floor to the NE on an array of
>> 880 foot long Beverages on a quiet winter night, using 3.5 kHz
>> bandwidth, is -123 dBm with no feedline loss. That's 194 nanovolts (I
>> have a 75 ohm system) with a very wide 3.5kHz bandwidth.
>
>That is interesting, (obviously not your back yard), and indicates a loss of
>approximately 29 dB for that antenna.

Simple enough to check.

That array, after feedline losses are deducted, is typically slightly
less than 20 dB down from a 200 foot tall single element vertical with
100 200 foot long radials and a vacuum variable and large edge wound

inductor for matching, when signal levels from distant stations in the
direction where the Beverages point are compared.

It might be as much lower as 12-20 dB (QSB, sorry), but it very
obviously is much less than 29 dB down.

>-198.6 - (-123) = 75.6
>3,500 Hz = 35.4 dB
>
>75.6 - 35.4 = 40.2dB = 10,471°K
>
>Which is approximately in accord with the 9,000,000°K that I proposed for
>the Sky Temperature (Tsky) on 160 m during the quite times.

And your numbers come from what stone tablet???

>10 log(9,000,00/ 10,500) = 29.3 dB loss.
>or 0.1% efficiency whichever way you like to look at it.

Maybe you, not me. I have to trust my Sierra 303B and various signal
sources.

>However the S/N ratio is still less than that at the I/P from free space to
>the antenna.

How do you know that?

>Putting 9,000°K directly into a mixer gives
>Ts = Ta + Tr
>= 9,000 + 2,500 = 11,500°K
>S/N in is S/ kBTsky
>The signal is 29 dB down too so S/N out is
>(eff x S)/(eff x Nsky + Nr)
>0.001S/ kB(0.001 x 9,000,000 +2,500)
>(Si/Ni)/(So/No) becomes
>(eff Tsky + Tr)/eff TSky
>(0.001 x 9,000,000 + 2,500)/ (0.001 x 9,000,000)
>= 11,500/ 9,000 = 1.28
>or approximate 1 dB loss of signal to noise ratio.
>
>Where
>Si and Ni are signal and noise in respectively
>So and No are signal and noise out respectively
>
>Now with the amplifier gain G;
>say for example 30 dB (makes the numbers easier to follow)
>S/N = (G eff S)/(G eff (Na + Namp) + Nr)
>(Si/Ni)/(So/No)
>= (G eff(Tsky + Tamp) +Tr)/ G eff Tsky
>= (1,000 x 0.001(9,000,000 + 300) +2,500)/ 1,000 x 0.001x9,000,000
>= 9,002,800/ 9,000,000
>= 1.0003

>or 0.0014 dB
>= (1,000 x 0.001x S)/ kB (1,000 x 0.001x(9,000,000 + 300) +2,500)
>Thus an amplifier can win you about a dB of signal to noise however you have
>reduced the dynamic range of the receiver by 30 dB in the example.

You are pulling numbers from the thin air instead of staying with a working example. That's often a problem when people ask a simple question, and get an answer from a textbook.

1.) The FT-1000D, which has a fairly good receiver by amateur standards, has about 10dB S/N with a .2 uV input signal and 2.5 KHz selectivity. That's a NF of 20 dB, or a temperature of almost 29,000 k.

2.) The sky-noise you are using is not accurate at every location, every season, and every time of day. It is also most likely for a non-directional antenna.

Ignoring the above is NOT a good idea, when answering a question.

>It would help if you could provide some AGC to the preamplifier.
>If that is not possible it would help to use an amplifier of less gain than
>my example. We could calculate the break even point, if you want I'll set up
>the spread sheet to calculate a table for you and you can make your choice
>to suite your conditions.

No, that is NOT true at all. AGC to the preamplifier would only work when the desired signal was into the AGC response. As a rule, overload and IMD comes from signals outside the passband of the receiver.

AGC would have no effect on the systems IMD performance on weak signals...where it is most problematic.

More important than this, you are dictating my system works differently than it actually does.

>If you are working machine modes the fraction of a db signal to noise will
>be very helpful with rare DX but for 10 dB S/N SSB not much use to you at
>all.

Nonsense.

>Presumably on transmit you feed your other antenna which you say is of
>comparable gain with 400 kW for full ERP ;)

?? Did I say that? Or did you imagine it?

>> My FT-1000D barely makes that level with 10 dB internal S/N ratio
>> preamp on, and that is for wider-than-SSB bandwidths! On CW, forget
>> it. The receiver sounds stone dead and I would loose many weak signals
>> that would otherwise be workable without external amplification!
>
>Of course it sounds stone dead but the S/N ratio of any CW signals that you
>receive will be great. once again if you work PSK31 you will not be able to

>hear the signals but they are there none the less and if you can tune to
>them they will decode without error. HamScope is a great application for
>this purpose.

Nonsense.

PSK is not as effective as the human ear on CW (assuming you know
morse code, and have normal CW skills) for digging signals out of the
noise.

Readability is far better on CW than on PSK, when all things (gain,
receiver bandwidth) are equal.

It's better get back to consider there things by fact, not hearsay.

73 Tom

4594. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 11:09:16 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D0C709.4EAE%stewartx@sccoast.net>
Source record: 168865
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

ARRL wrote:

> I left CB radio [snip]

Sure you did. The fact that you posted this message to nine newsgroups, used a fake identification, and made numerious false statements about ham radio, clearly shows this as an attempt to stir up trouble instead of voicing an honest complaint. If you want to stir up trouble, try not being so transparent next time. Until then, you rate less than a one on the old troll-o-meter.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4595. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 11:20:17 UTC
From: JRW <johnrwells@hotmail.com>
Message-ID: <VVQq6.20432$Cq.510129@news2-hme0>
Source record: 168818

What about the distance between the refelctor and director elements?

John
"Gary McAdams" <g.m.mcadams@worldnet.att.net> wrote in message
news:psyq6.4559$Vg3.279749@bgtnsc06-news.ops.worldnet.att.net...
> Hi Tom,
>
> Try: 1005/freq(MHz)
>
> This is your basic loop diameter equation.
>
> For directive antennas:
>
> Reflector = 1030/f(MHz)
> Director = 975/f(MHz)
>
> Source: ARRL antenna book c 1988 pp 5-17, 12-1.
>
> Gary WG7X
>
>
> DL7JSK <tansorg@cs.tu-berlin.de> wrote in message
> news:98e2tn$sd8$06$1@news.t-online.com...
> > Does anybody know how to calculate the diameter of a loop
> antenna (For
> > 160/80/40 m) ?
> >
> > 73
> > Tom, DL7JSK
> >
> >
> >
>
>

4596. CU-421/SRA-15

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 11:29:49 UTC
From: gcampana@telemar.it
Message-ID: <01ae01c0aa1e58354200a7177a3e@aaa>
Source record: 168866

Hi hall

I have found a coupler antenna type CU-421/SRA-15.
It is in very good conditions but i have not specifications for use.

Anyone know it ? Can help me ?

Thanks

IK3VIG - Beppe
gcampana@telemar.it

--
Posted from mail6.galactica.it [212.41.208.23] (may be forged)
via Mailgate.ORG Server - http://www.Mailgate.ORG

4597. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 12:04:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98fphn$5nn$1@plutonium.btinternet.com>
Source record: 168769

Gary said -
> I suggest that with the present level of investment in policing
> patents there is no chance of a protective patent ever being
worth the paper
> and time taken to write it.
> The best thing that one can do with a new invention is to get it
onto the
> market as quickly as possible before the competition has the
chance to catch
> up.
==========
Agreed. So the only value of a patent to non-lawyers lies in its properties as an advertisement of the novelty of what has been patented.

And for last 12 months or so, one particular patent has made a name for itself on this newsgroup as the greatest timewaster ever.

Reg

4598. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 12:11:09 UTC
From: TR@sky.net
Message-ID: <3aab6b46.72270537@news.idsi.net>
Source record: 168770
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Sun, 11 Mar 2001 07:40:46 GMT, Funny-0RG@arrl.org (ARRL) wrote:

>I left CB radio 19 years ago when I got my novice ticket. It felt good
>communicating with people that knew what they were doing and were proud of
>their accomplishments in getting licensed. Over the past year things have
>gotten shitty on the bands and operators are stupid. It sounds just like the
>CB I left 20 years ago except that the rig's readout is showing a ham
>frequency. To bad there isn't a better radio service I can go to now that the
>bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters in
>the middle of a ham band.

0 2 4 6 8 10
/
/
/
/
/
/
/
/
TROLL-O-METER

4599. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 12:28:38 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D0D9A5.4ED1%stewartx@sccoast.net>
Source record: 168771
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

TR@sky.net wrote:

> Funny-0RG@arrl.org wrote:
>
>> I left CB radio [snip]
>
> 0 2 4 6 8 10
> /
> /
> /
> /
> /
> /
> /
> /
> TROLL-O-METER

You need to get your meter checked, TR. This message was way too transparent to rate a ten. It also lacked the style and sophistication to be a highly rated troll. My meter still shows it as less than a one (and its a generious meter).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4600. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 12:32:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98ft3a$d9f$1@plutonium.btinternet.com>
Source record: 168772

Cec sed -
> I know it's not clear from the above but the mobile 40m Hamstick
is on
> the receiving end a few wavelengths away mounted on my truck. It
is tied
> into a Palomar PFS-1. In other words, would ground wave
measurements
> yield the desired information?
==========
Not very likely !

But they would result in a vast anount of haggling on this
newsgroup about minute fractions of an S-unit even using Roy's
S-meter. ;o)

Reg

4601. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 13:25:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAB7CDF.9FE92EA@eznec.com>
Source record: 168773

From the U.S. Patent and Trademark Office FAQ
http://www.uspto.gov/web/offices/pac/doc/general/whatis.htm:

"The right conferred by the patent grant is, in the language of the statute and of the grant itself, 'the right to exclude others from making, using, offering for sale, or selling' the invention in the United States or 'importing' the invention into the United States. What is granted is not the right to make, use, offer for sale, sell or import, but the right to exclude others from making, using, offering for sale, selling or importing the invention."

There's a lot of good and accurate information about patents at the USPTO site.

Roy Lewallen, W7EL

Bill Nelson wrote:
>
> "Roy Lewallen" wrote ...
> > Gary Peach wrote:
> > > Anyway if you are not making it for sale or trade, patent does not
> apply.
> >
> > This is a common misconception. A patent forbits others from "making,
> > using, or selling" the patented item. You're in violation of a patent
> > even if you make the patented item for your own use.
>
> Document this please - for the US. From what I learned, making a patented
> item for your own use is not violating the patent - as stated by Gary.
>
> --
> Bill Nelson (billn@peak.org)

4602. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 14:05:03 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <fm0g89.4am.ln@mail.specsol.com>
Source record: 168778

Tom W8JI <2w8ji@akorn.net> wrote:

<bunch of stuff snipped>

> PSK is not as effective as the human ear on CW (assuming you know
> morse code, and have normal CW skills) for digging signals out of the
> noise.

> Readability is far better on CW than on PSK, when all things (gain,
> receiver bandwidth) are equal.

> It's better get back to consider there things by fact, not hearsay.

> 73 Tom

Have to disagree with that one based on empirical experience. I've worked
PSK stations I couln't hear at all.

Jim Pennino

4603. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 14:05:49 UTC
From: wf3h@ptd.net
Message-ID: <3aab83f8.44025739@news.ptdprolog.net>
Source record: 168774
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Sun, 11 Mar 2001 07:40:46 GMT, Funny-0RG@arrl.org (ARRL) wrote:

>I left CB radio 19 years ago when I got my novice ticket. It felt good
>communicating with people that knew what they were doing and were proud of
>their accomplishments in getting licensed. Over the past year things have
>gotten shitty on the bands and operators are stupid. It sounds just like the
>CB I left 20 years ago except that the rig's readout is showing a ham
>frequency. To bad there isn't a better radio service I can go to now that the
>bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters in
>the middle of a ham band.
>
>
>
oh, brother, what an hysterical over reaction. on the maritime net
late last year, hams saved the life of a boy who'd been shot by
pirates off the coast of honduras. i myself contacted the coast guard
to help save the life of a heart attack victim off the bahamas...

if thats your view of ham radio, good riddance to you. get a life.

4604. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 14:10:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAB8756.BC9218AC@IEEE.org>
Source record: 168775

Reg Edwards wrote:
>
> Cec sed -
> > I know it's not clear from the above but the mobile 40m Hamstick is on
> > the receiving end a few wavelengths away mounted on my truck. It is tied
> > into a Palomar PFS-1. In other words, would ground wave measurements
> > yield the desired information?
> ==========
> Not very likely !

We measure ground wave strength for our 75m mobile antenna shootouts.
Why wouldn't those techniques work for vertical antennas? Seems
stronger ground waves would correspond to lower angles of radiation.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4605. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 14:25:43 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <nYqrOs17DUlNGxTBjN++Sw1vePJ7@4ax.com>
Source record: 168776

"Brian Hemmis" <K3USC@worldnet.att.net> wrote:

>Would you be so kind as to pass on the lengths...thanks ! BH

Curious, doesn't the owner's manual that came with the tuner give any guidance
for wire lengths? Icom is usually pretty good with their documentation.

Bob
k5qwg
>
>
>"Jack" <kc8pkn@arrl.net> wrote in message
>news:98deei$301$1@slb6.atl.mindspring.net...
>> Try to cut the wire in non resonant lengths, I am getting one for my
>IC-718
>> next week and the dealer has a cutting chart.
>>
>> Jack
>>
>>
>> "Brian Hemmis" <K3USC@worldnet.att.net> wrote in message
>> news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
>> > Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth condo
>> use
>> > in FL. Figured I'd run out some wire and attach a ground clamp to a cold
>> > water pipe. Any other suggestions ? If I am on the right track are there
>> any
>> > suggested wire lengths that you've had success with ? Appreciate any
>input
>> > from AH-4 users. Tnx, 73-Brian K3USC
>> >
>> >
>>
>>
>

4606. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 14:28:46 UTC
From: Tom Wagner - N1MM <tomwagner@mindspring.com>
Message-ID: <98g241$ij1$1@slb5.atl.mindspring.net>
Source record: 168777

There was a story on one of the 60 minutes type programs
recently that drug companies are able to patent genes. The
story used as an example the patenting of a gene that seems
to prevent aids.

So if you can't make patented items, who's going to tell the
poor people whose genes have to be ripped out?

:-)

73,
Tom

Roy Lewallen <w7el@eznec.com> wrote in message
news:3AAB7CDF.9FE92EA@eznec.com...
> From the U.S. Patent and Trademark Office FAQ
> http://www.uspto.gov/web/offices/pac/doc/general/whatis.htm:
>
> "The right conferred by the patent grant is, in the language of the
> statute and of the grant itself, 'the right to exclude others from
> making, using, offering for sale, or selling' the invention in the
> United States or 'importing' the invention into the United States. What
> is granted is not the right to make, use, offer for sale, sell or
> import, but the right to exclude others from making, using, offering for
> sale, selling or importing the invention."
>
> There's a lot of good and accurate information about patents at the
> USPTO site.
>
> Roy Lewallen, W7EL
>
>
> Bill Nelson wrote:
> >
> > "Roy Lewallen" wrote ...
> > > Gary Peach wrote:
> > > > Anyway if you are not making it for sale or trade, patent does not
> > apply.
> > >
> > > This is a common misconception. A patent forbits others from "making,
> > > using, or selling" the patented item. You're in violation of a patent
> > > even if you make the patented item for your own use.
> >
> > Document this please - for the US. From what I learned, making a
patented

> > item for your own use is not violating the patent - as stated by Gary.
> >
> > --
> > Bill Nelson (billn@peak.org)

4607. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 15:04:49 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <luMq6.5296$Vg3.354798@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168779

Yikes!!

I meant loop dimension. Sorry!

I'll go back to lurking now.

BTW, I'm sure that my answer contained the correct
information, hopefully the original fellow figured it
out?

Gary, WG7X

Rory Davis <n7cr@bellsouth.net> wrote in message
news:aqzq6.9788$642.128255@news2.atl...
> Gary, that's the loop CIRCUMFERENCE... assuming a perfect
circle divide it
> by PI to get the diameter.
>
> Rory N7CR
>
>
>
>

4608. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 15:27:42 UTC
From: 2w8ji@akorn.net
Message-ID: <3aab93b5.513558671@news.accessunited.com>
Source record: 168780

On Sun, 11 Mar 2001 06:05:03 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:

>Have to disagree with that one based on empirical experience. I've worked
>PSK stations I couln't hear at all.
>
>Jim Pennino

Hi Jim,

I heard the same thing from K1BQT, and figured out why he thought it
was true. There certainly is no technical reason why PSK would be more
reliable than CW...as a matter of fact the opposite is true.

Because PSK looks for a carrier drop and an abrupt reversal in
phase...it has to be above the noise to be decoded.

CW, on the other hand, can easily be copied with a zero dB S/N ratio.
Many or most skilled CW people can copy CW with negative S/N ratios.

The reason the myth that PSK allows us to work stations we "can't
hear" exists is because most PSK ops use a wide bandwidth on the
receiver, and move all the selectivity to the computer.

By ear they are listening to a bandwidth of maybe 3 kHz, while the
audio filter is set at perhaps 70 Hz. In this case the computer sees a
16 dB reduction in broadband noise compared to what the "ear" hears.

If we use 250Hz selectivity on the receiver, we'll find we can plainly
copy CW signals at level that produce very poor print on PSK.

Now I certainly agree that there might be a "woooden eared" CW op who
might not copy signals that a PSK system will decode, but that would
be the exception rather than the rule.

Because I can copy CW signals with a negative S/N ratio, as can many
other CW ops can, the difference to me is startling. It has to be an
absolutely solid CW signal to get any print at all on the guy on PSK.

Try setting your bandwidth to 250 Hz, and see if you don't notice the
"PSK advantage" going away. I can work DX stations perfectly solid on
CW that I have no hope of decoding on PSK.

PSK not only requires higher S/N ratio to decode, it also requires
much higher average power than CW to deliver the same information.
It also has exceptionally poor dynamic range. That's why PSK operators
whine constantly about QRO operators.

73 Tom

4609. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 15:37:26 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <98g64d$q8h$1@iac5.navix.net>
Source record: 168781

He has probably been busy job hunting, as his last employer apparently had doubts about his mental stability after reading his posts to the various newsgroups. This may simply be a ploy to rid himself of his present employment do to job dissatisfaction.

I hope he doesn't find out about my sales of 11 meter fractal antennas. Seems the CBers love them and I haven't been able to build them fast enough. I spec them at 27 dB gain and simply point the prospective users to the freaktenna web site. They come away so confused that any gain figure seems supported.

I knew as soon as I logged into the newsgroup who was back, haven't seen this many messages since the great new England ham misidentification debacle...

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:3AA9CAC7.4575CBC9@hiwaay.net...
> Frac is bac !! It is very easy to see that

4610. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 15:41:09 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <98g6bc$qh5$1@iac5.navix.net>
Source record: 168782

Don't even start this crap again Phil! You and your alter-ego are a complete waste of bandwidth. As my daddy use to say, "Sue or get off the pot". You guys ain't suing anybody over any freaktenna, so shut the #$%^ up until you do!

Regards
Fred W4JLE

"Fractenna" <fractenna@aol.com> wrote in message
news:20010310205251.12908.00000054@ng-fm1.aol.com...
> >
> >
> >Fractenna wrote:
> >>
> > The rest happens, as they say 'off line'.
> >
> >
> >
> > Yeah. Right!
> >
>
> Hi Dick
>
> Do you know a way to do litigation 'on line'?
>
> 73
> Phil N1ZKT

4611. Yaesu ATAS-100 ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 15:41:57 UTC
From: Julian <KB9YXM@arrl.net>
Message-ID: <98g69o$ll0$1@ousrvr3.oulu.fi>
Source record: 168783

Hello everyone.
Julian KB9YXM
I have 2 questions for you old timers around.
The first is a 6 meter yagi that can be used as a portable yagi for operation out and about in the forest and mountains.
So my question is, "Can anyone tell me how to build a 6 meter yagi that would fit the bill?"
My second question is, I have a Yaesu ATAS-100 antenna that I would like to use as a portable Base Station antenna again out in teh forrest or it the mountains. Can anyone here help me to build a a ground plane kit that would work well out in the bush. Drawings of some sort, I could fugure out the numbers myself but I need the basic idea and a drawing of some sort would be great.
Thanks everyone and 73's
Julian White
OH/KB9YXM

4612. Re: UltraWide Band Antenna for 3G Mobile Cells.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 16:04:40 UTC
From: NCS <palitz@attglobal.net>
Message-ID: <tan8hguhbmhbe@corp.supernews.com>
Source record: 168784

What are you talking about?

The subject of your message refers to 3G Mobile Cells, but your text says DVB-T and 100-900 MHz. They are all completely different things. What exactly do you intend to do?

Bob

"Tiziano" <tiziano.sala@libero.it> wrote in message news:3aaa6cab.2552509@news.libero.it...
> Hi, I have to design an antenna working in the 100-900 MHz band, for
> receiving digital tv (DVB-T)using a cell. phone. it has to be very
> small (limited by the size of a cell phone). My main problem is the
> bandwidth (large lambda values for freq=100MHz), does someone of you
> know some studies,ideas, or links that can help? Is there a way to get
> ultra wideband and small dimensions by bending the wires? Thanks!
> t.sala@tiscalinet.it
>
>

4613. Diagram Needed Singer FM 10 Service Monitor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 16:58:51 UTC
From: Heath <radiovintage@hotmail.com>
Message-ID: <14Oq6.123$7R3.148340@nntp3.onemain.com>
Source record: 168785
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi,

I am in need of a schematic for a Singer model FM 10 Service Monitor.Will
pay reasonable cost for copy.
THANKS,
...Charlie...KC0EH...

4614. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:02:17 UTC
From: price police <"price police"@ham.net>
Message-ID: <3AABD9D9.5DE2483C@ham.net>
Source record: 168786
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

don t let the freq hit you in the ass get the hell out

ARRL wrote:
>
> I left CB radio 19 years ago when I got my novice ticket. It felt good
> communicating with people that knew what they were doing and were proud of
> their accomplishments in getting licensed. Over the past year things have
> gotten shitty on the bands and operators are stupid. It sounds just like the
> CB I left 20 years ago except that the rig's readout is showing a ham
> frequency. To bad there isn't a better radio service I can go to now that the
> bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters in
> the middle of a ham band.

4615. Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:10:16 UTC
From: "John (KB3CDF)" <murphman@erols.com>
Message-ID: <98gbi0$14f$1@bob.news.rcn.net>
Source record: 168787
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have read all these great tales of excellent success with inverted V and flat top antennas. The word spoken is "get them as high as you can".

Can anyone suggest ideas for "man-made" supports that would enable such worthy antenna beasts?

Thanks in advance,
--
~~~
John
73's de KB3CDF
~~~

4616. Re: Frackysssss Baaaacccckkkk!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:11:03 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98gbj8$m76$1@nntp9.atl.mindspring.net>
Source record: 168788

Hello Rick:

Thanks for that information on AOL mail account "ownership:" Heh, heh.

Seems sort of like a ham radio "pirate". The call you hear on the air may not be the "real McCoy" it could be someone else using ventriloqy. Could it be that Phil is really the voice of Edgar Bergen or Senor Wencelas?

BTW... what is AOL? Being an "old time" Internaut, and active USENET NG user since the days of UUCP ubiquity on PDP-11 dial up networking, I'm not familiar with AOL... is that one of those On Line Services like CompuServ? [I hope Steve Case is lurking, I can hear him choking now!]

I suppose that, having been around the Internet to experience UUCP dial up networking, is sort of like having been around ham radio when "Spark" was in use.

I really liked your latest article in QST, keep it up, we need more...

Best,

-Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20010310113945.07017.00000129@ng-mj1.aol.com...
> Hi Peter--
>
> The E-mail address you cite has a long history of issuing NG posts under a
> variety of signatures. This irregularity suggests AOL's password normal
> guidelines have been intentionally compromised. As a result, the
individual who
> funds, maintains, and issues passwords for the account is soley
responsible and
> fully accountalbe for its total content, regardless of signature.
>
> Rick K1BQT

4617. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:18:48 UTC
From: Brian Hemmis <K3USC@worldnet.att.net>
Message-ID: <YrOq6.5553$Vg3.367796@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168789

Nothing specific, only in the specs does it say will tune 3.5-54 mhz with an antenna longer than 23 feet...that's it, couple of drawings showing a whip and a long wire and formula to calculate undesirable lengths...I mistakenly figured I might find someone here who had actually used one of these in the fashion I'm considering- you know a helpful tip or two !!
Oh well...
73, BH
"Bob Miller" <bamiller@texas.net> wrote in message
news:nYqrOs17DUlNGxTBjN++Sw1vePJ7@4ax.com...
> "Brian Hemmis" <K3USC@worldnet.att.net> wrote:
>
> >Would you be so kind as to pass on the lengths...thanks ! BH
>
> Curious, doesn't the owner's manual that came with the tuner give any guidance
> for wire lengths? Icom is usually pretty good with their documentation.
>
> Bob
> k5qwg
> >
> >
> >"Jack" <kc8pkn@arrl.net> wrote in message
> >news:98deei$301$1@slb6.atl.mindspring.net...
> >> Try to cut the wire in non resonant lengths, I am getting one for my
> >IC-718
> >> next week and the dealer has a cutting chart.
> >>
> >> Jack
> >>
> >>
> >> "Brian Hemmis" <K3USC@worldnet.att.net> wrote in message
> >> news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
> >> > Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth condo
> >> use
> >> > in FL. Figured I'd run out some wire and attach a ground clamp to a cold
> >> > water pipe. Any other suggestions ? If I am on the right track are there
> >> any
> >> > suggested wire lengths that you've had success with ? Appreciate any
> >input
> >> > from AH-4 users. Tnx, 73-Brian K3USC
> >> >

> >> >
> >>
> >>
> >
>

4618. Re: Loop diameter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:20:17 UTC
From: TruckDrivingMan <truckdrivingman@hotmail.com>
Message-ID: <98gc6c$1sp$01$1@news.t-online.com>
Source record: 168790

Yes,I did.I already thought that the diameter would be a little VERY large
;-)

Tom

"Gary McAdams" <g.m.mcadams@worldnet.att.net> schrieb im Newsbeitrag
news:luMq6.5296$Vg3.354798@bgtnsc06-news.ops.worldnet.att.net...
>
> Yikes!!
>
>
> I meant loop dimension. Sorry!
>
> I'll go back to lurking now.
>
> BTW, I'm sure that my answer contained the correct
> information, hopefully the original fellow figured it
> out?
>
> Gary, WG7X
>
>
> Rory Davis <n7cr@bellsouth.net> wrote in message
> news:aqzq6.9788$642.128255@news2.atl...
> > Gary, that's the loop CIRCUMFERENCE... assuming a perfect
> circle divide it
> > by PI to get the diameter.
> >
> > Rory N7CR
> >
> >
> >
> >
>
>

4619. Re: Diagram Needed Singer FM 10 Service Monitor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:28:22 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <WAOq6.24432$Ok4.2597399@news1.rdc1.ct.home.com>
Source record: 168791
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

try rec.radio.swap
lots of two-way types there.

"Heath" <radiovintage@hotmail.com> wrote in message
news:14Oq6.123$7R3.148340@nntp3.onemain.com...
> Hi,
>
> I am in need of a schematic for a Singer model FM 10 Service
Monitor.Will
> pay reasonable cost for copy.
> THANKS,
> ...Charlie...KC0EH...
>
>

4620. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:47:24 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AABBA2C.75C5FC8B@bctv.com>
Source record: 168793

Roy Lewallen wrote:
>
> Gary Peach wrote:
>
> > Anyway if you are not making it for sale or trade, patent does not apply.
>
> This is a common misconception. A patent forbits others from "making,
> using, or selling" the patented item. You're in violation of a patent
> even if you make the patented item for your own use.

No. You may make an absolutely identical item for your own use, so long as you do not reverse-engineer an original to do so, use original design documentation, or ever transfer it or offer to transfer it to another person without getting a license from the rights holder.

Or, in other words, if you come up with the same idea, you can only get sued if you try to profict from it.

4621. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:50:44 UTC
From: dennis@wawa.juniper.net
Message-ID: <98gdtk$3e$1@heap.juniper.net>
Source record: 168795

Bill Nelson <billn@spock.peak.org> wrote:
> "Roy Lewallen" wrote ...
>> Gary Peach wrote:
>> > Anyway if you are not making it for sale or trade, patent does not
> apply.
>>
>> This is a common misconception. A patent forbits others from "making,
>> using, or selling" the patented item. You're in violation of a patent
>> even if you make the patented item for your own use.
>
>Document this please - for the US. From what I learned, making a patented
>item for your own use is not violating the patent - as stated by Gary.

This is from U.S.C. Title 35 Chapter 28 Section 271:

(a) Except as otherwise provided in this title, whoever without authority
makes, uses, offers to sell, or sells any patented invention, within the
United States or imports into the United States any patented invention
during the term of the patent therefor, infringes the patent.

There are exceptions in the title, but there is no exception for personal use.

Dennis Ferguson

4622. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:53:28 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AABBB98.E562CF63@bctv.com>
Source record: 168794

Roy Lewallen wrote:
>
> From the U.S. Patent and Trademark Office FAQ
> http://www.uspto.gov/web/offices/pac/doc/general/whatis.htm:
>
> "The right conferred by the patent grant is, in the language of the
> statute and of the grant itself, 'the right to exclude others from
> making, using, offering for sale, or selling' the invention in the
> United States or 'importing' the invention into the United States. What
> is granted is not the right to make, use, offer for sale, sell or
> import, but the right to exclude others from making, using, offering for
> sale, selling or importing the invention."
>
> There's a lot of good and accurate information about patents at the
> USPTO site.

Case law goes way beyond the FAQ, which, as written, would give the
rights holder the legal right to prohibit specific individuals the use
of an item purchased through the authorized channel.

The FAQ would also give the rights holder the power to prevent sales of
the item used, and you KNOW that there are plenty of companies who would
use that power if they had it.

Patent and copyright laws are significantly different. A copyright DOES
grant those powers (ask anyone who has bought a Motorola RSS), but a
patent does NOT.

4623. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:55:34 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AABBC16.5C69@pacbell.net>
Source record: 168804

Keith Wood wrote:
>
> Richard Clark wrote:
>
> > Just think of the level of service if it had been "the big one."
> > Hint: it wouldn't have been any better. And this is for a region that
> > has been going through earthquake preparedness for 25 years and has a
> > local FEMA office. One of the Canadian stations noted that our
> > president had just cut funding for this preparation because "it wasn't
> > showing any payback." Compassionate conservatism - yeah, sure. My
> > heart bleeds for you, but I a'in't forkin' over a dime.
>
> Why should those of us who are smart enough to not live there subsidize
> those of you who aren't smart enough to move?
>
> Fix your place up yourself, and let me fix mine. I'll be here to
> provide what support I can when the flag flies, but not if all of my
> money has been sucked up and given to you.

Those are brave words, although a tad on the short-sighted stingy
side. Disasters can occur anywhere, and when one happens to you
you'll be standing in the dole line along with everyone else.

Tom Donaly KA6RUH

4624. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 17:57:55 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AABBCA3.CF576BE4@bctv.com>
Source record: 168796

Richard Clark wrote:

> Just think of the level of service if it had been "the big one."
> Hint: it wouldn't have been any better. And this is for a region that
> has been going through earthquake preparedness for 25 years and has a
> local FEMA office. One of the Canadian stations noted that our
> president had just cut funding for this preparation because "it wasn't
> showing any payback." Compassionate conservatism - yeah, sure. My
> heart bleeds for you, but I a'in't forkin' over a dime.

Why should those of us who are smart enough to not live there subsidize
those of you who aren't smart enough to move?

Fix your place up yourself, and let me fix mine. I'll be here to
provide what support I can when the flag flies, but not if all of my
money has been sucked up and given to you.

4625. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:01:54 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AABBD92.D479ADE2@bctv.com>
Source record: 168797
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"John (KB3CDF)" wrote:
>
> I have read all these great tales of excellent success with inverted V
> and flat top antennas. The word spoken is "get them as high as you
> can".
>
> Can anyone suggest ideas for "man-made" supports that would enable
> such worthy antenna beasts?

Take 3 noncunductive poles. Tie them hear the top, then lift them up
into a tripod (teepee supports). Just drop the line across the fork and
you're in business.

4626. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:11:49 UTC
From: "David Michael Kelly"
Message-ID: <vkfnat4rq5hfttjf03na3jb679t1745oib@4ax.com>
Source record: 168798

On Sun, 11 Mar 2001 17:18:48 GMT, "Brian Hemmis"
<K3USC@worldnet.att.net> wrote:

>I mistakenly
>figured I might find someone here who had actually used one of these in the
>fashion I'm considering- you know a helpful tip or two !!

try posting this at http://www.eham.net in their "Ask the Experts"
section. I think ICOM needs to post their manuals in .pdf format like
Kenwood. Not that this would have helped in this instance but a least
you would have been aware of the unanswered question before buying. I
noticed that especially the ICOM antenna tuners have very limited
information available on the web.
--
david
AC7LY

4627. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:27:07 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <vognatch9enk1lvi89k32shmrvn7etmltn@4ax.com>
Source record: 168799

On Sun, 11 Mar 2001 17:57:55 +0000, Keith Wood <kw@bctv.com> wrote:

>
>
>Richard Clark wrote:
>
>> Just think of the level of service if it had been "the big one."
>> Hint: it wouldn't have been any better. And this is for a region that
>> has been going through earthquake preparedness for 25 years and has a
>> local FEMA office. One of the Canadian stations noted that our
>> president had just cut funding for this preparation because "it wasn't
>> showing any payback." Compassionate conservatism - yeah, sure. My
>> heart bleeds for you, but I a'in't forkin' over a dime.
>
>Why should those of us who are smart enough to not live there subsidize
>those of you who aren't smart enough to move?
>
>Fix your place up yourself, and let me fix mine. I'll be here to
>provide what support I can when the flag flies, but not if all of my
>money has been sucked up and given to you.

OK,

So the compassion is out the window.

When I was in the Navy, this was called getting f**ked without a kiss.
;->

73's
Richard Clark, KB7QHC

4628. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:30:12 UTC
From: dennis@wawa.juniper.net
Message-ID: <98gg7k$3v0$1@heap.juniper.net>
Source record: 168803

Keith Wood <kw@bctv.com> wrote:
>Roy Lewallen wrote:
>>
>> Gary Peach wrote:
>>
>> > Anyway if you are not making it for sale or trade, patent does not apply.
>>
>> This is a common misconception. A patent forbits others from "making,
>> using, or selling" the patented item. You're in violation of a patent
>> even if you make the patented item for your own use.
>
>No. You may make an absolutely identical item for your own use, so long
>as you do not reverse-engineer an original to do so, use original design
>documentation, or ever transfer it or offer to transfer it to another
>person without getting a license from the rights holder.
>
>Or, in other words, if you come up with the same idea, you can only get
>sued if you try to profict from it.

The U.S. patent law can be found at

http://www4.law.cornell.edu/uscode/35/

Since it is hard to prove a negative I would simply challenge you to
find something in the law which supports your assertion. What Roy said
matches what the law says pretty accurately. I don't think there
is anything in the law which matches what you said.

Dennis Ferguson

4629. CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:30:47 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AABC457.B4DE45FA@bctv.com>
Source record: 168801

I'm in an condo, can't put up a wire, but there IS an unused CATV lead-in (75-ohm coax) running right to the room where my HF rig will be.

Has anyone ever tried and had success with using the cable shielding as an antenna in such a case? It's disconnected at the pole, runs 25 - 30 feet (NW - SE, dropping 10 feet) to the corner of the house, then 14 feet along the eaves (N-S), then 9 feet vertical drop to the feed through.

4630. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:32:18 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <SwPq6.5660$Vg3.375190@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168800

QST - HA!

I tried to join and received a polite message that the moderator would not approve my membership. I guess its a selective group of "all interested hams".

"Fractenna" <fractenna@aol.com> wrote in message news:20010309221234.02033.00000704@ng-cu1.aol.com...
> I'd like to pass along this invitation for all interested hams to join us on
> the fractal antenna reflector. This is the primo forum on the web for the
> discussion of fractal antennas. Moderated, lively, and filtered for spam and
> off topic comments this is the home of fun feedback on a ham-grown technology.
>
> Dr. Cohen participates in this forum and it is the only one he responds to on
> the web.
>
> To join:
>
> fractalantenna-subscribe@yahoogroups.com
>
> 73
> Phil N1ZKT

4631. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:39:49 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3aabb93a_4@news1.prserv.net>
Source record: 168792

I wish to thank everyone who commented on my question about wet ladder line. My conclusions (based on group replies and private replies) are:

1. In theory, the wet line should not make much difference. (Exception: Roy's comments go against this conclusion.)

2. In practice, there can be a substantial problem -- especially on the "higher" bands (which I take to mean frequencies above 20 m).

My current use is modest -- involving a 45' dipole, up only 20', with about 110' of feed line. I plan to put up a full-wave (on 20 m) loop, with relays to open the "top" of the diamond loop, and use it for 30-10 meters. The top of the loop will be about 66' high, with about 150' of feed line, and the whole thing will be difficult to take down for changes after it is installed. I am beginning to think I should go with open line instead of ladder line. I have never worked with open line, and it looks like handling it (standoffs, feeding it through a wall, running along a basement ceiling, etc) could be a bit messy. Perhaps it is because we have had an unusually wet winter, but I am disappointed in the ladder line. Even heavy dew seems to affect it. (Several people pointed out that the high impedance of my current antenna, on most bands, contributes to the problem --- but my proposed loop has the same exposure.)

Bill Ogden
W2WO

4632. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 18:58:19 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <meinat8g1fheqdl3bj5s1lkl1r5ibmkeae@4ax.com>
Source record: 168802

On Sat, 10 Mar 2001 13:46:46 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>"Roy Lewallen" wrote ...
>> Gary Peach wrote:
>> > Anyway if you are not making it for sale or trade, patent does not
>apply.
>>
>> This is a common misconception. A patent forbits others from "making,
>> using, or selling" the patented item. You're in violation of a patent
>> even if you make the patented item for your own use.
>
>Ah! does this apply to civilised countries too :?o
>

Hi Gary,

Perhaps a slight bit of adjustment of perspective will help.
Copyright and Patent law, philosophically in a Capitalist state, is
aimed at protecting the owner from a loss of revenue.

73's
Richard Clark, KB7QHC

4633. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:06:27 UTC
From: Jeff Mayner <bk43@pacbellsucks.net>
Message-ID: <tanj59680kfgec@news.supernews.com>
Source record: 168805
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6D0D9A5.4ED1%stewartx@sccoast.net...
> TR@sky.net wrote:
>
> > Funny-0RG@arrl.org wrote:
> >
> >> I left CB radio [snip]
> >
> > 0 2 4 6 8 10
> > /
> > /
> > /
> > /
> > /
> > /
> > /
> > /
> > TROLL-O-METER
>
>
> You need to get your meter checked, TR. This message was way too
> transparent to rate a ten. It also lacked the style and sophistication to
> be a highly rated troll. My meter still shows it as less than a one (and
> its a generious meter).

Then you need to get a new meter. His meter detected a troll, period. Don't you think that something as dumb as a meter would register a 10 on, as you say, something as transparent as "ARRL's" post? Also, try using your spell check. When a person flames another but in the process misspells a simple word as "generous", they tend to lose all credibility.

Jeff

>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

4634. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:09:25 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <0tinat8bf2n1g7ble5c3vmdpef10bd0pe7@4ax.com>
Source record: 168806
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 11 Mar 2001 12:10:16 -0500, "John (KB3CDF)"
<murphman@erols.com> wrote:

>I have read all these great tales of excellent success with inverted V
>and flat top antennas. The word spoken is "get them as high as you
>can".
>
>Can anyone suggest ideas for "man-made" supports that would enable
>such worthy antenna beasts?
>
>Thanks in advance,

Hi John,

There's a glut of military surplus field masts on the market. They
come kitted up ready to deploy (no instructions provided) a 30 to 40
foot tall mast guyed at two or three levels. You get the mast as
stackable 5 foot tubes (heavy wall), guy plates, guy lines, stakes,
and sledge hammer for stakes (no instructions provided).

As a kit, not much bigger than my old seabag (same color, same
material). $90 and 40 footer was mine.

73's
Richard Clark, KB7QHC

4635. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:09:54 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABCD82.8588FADC@IEEE.org>
Source record: 168807

Brian Hemmis wrote:
> ...I mistakenly
> figured I might find someone here who had actually used one of these in the
> fashion I'm considering- you know a helpful tip or two !!

Mobile I used an SGC-230 and a 12ft whip to cover 20m-10m and
even 40m in a pinch. 12ft is 1/2WL on 39MHz so I didn't have
to worry about that. Just avoid any length that is 1/2WL on
any bands on which you want to operate.
--
http://www.mindspring.com/~w6rca

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4636. 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:13:47 UTC
From: Doug Hall <k4dsp@pobox.com>
Message-ID: <1uhnatopo6edlou2l60oo5ophp4ft2svbo@4ax.com>
Source record: 168811

Hi All,
For those who contemplate HF mobile at some point I thought you'd be interested in this comparison between a couple of different HF mobile antenna systems.
I compared a Radio Shack 102" stainless steel whip ($14.99) and Icom AH-4 autotuner ($309.95) to a center loaded antenna called the "Carolina Bug Katcher" ($99.95) from Lakeview Antennas (www.hamstick.com) Since the whip is only resonant on (or near) 10m I used the Icom AH-4 tuner with the whip. The bugcatcher, which covers 40-10m, doesn't need a tuner, but I left the tuner in line anyway just to keep the system the same all the way back to the antenna mount.
The purpose of the exercise was to see if the whip and tuner would be an acceptable alternative to the bug catcher. The whip/tuner is nice because I can change bands without stopping the car and changing coil taps. This is attractive when it's cold/rainy/dark. Also, the whip isn't as "ugly" as the bugcatcher, or at least that's what my daughter says. But beauty is in the eye of the beholder.
The test setup was as follows: The radio was an Icom 706Mk2G mounted in my car. The antenna mount is on the rear bumper. Each antenna was tested on the same mount, same feedline, etc. In other words, the system was the same except for the actual radiator being compared. I parked the car in a large open area away from other vehicles, and used a COM-120B service monitor in the lab at my office to monitor the field strength. I then transmitted a carrier on each band with each antenna with the radio set to the same power level. A friend of mine recorded the field strength readings on the spectrum display on the service monitor in the lab. Here are the results:

Band	Bugcatcher	Whip	Winner
40m	-62dBm	-76dBm	Bugcatcher, by 14dB
30m	-64dBm	-76dBm	Bugcatcher, by 12dB
20m	-44dBm	-52dBm	Bugcatcher, by 8dB
17m	-66dBm	-74dBm	Bugcatcher, by 8dB
15m	-59dBm	-69dBm	Bugcatcher, by 10dB
12m	-50dBm	-58dBm	Bugcatcher, by 8dB
10m	-58dBm	-56dBm	Whip/tuner, by 2dB
6m	-65dBm	-64dBm	Whip/tuner, by 1dB

Note: The readings are likely subject to an error or a dB or two. But the data tells a pretty convincing story, and should probably come as no surprise. Base loading just can't compete with center loading when it comes to efficiency.
Using 100w into the whip on 40 and 30m (the bands I use most) would be like running only 4 or 5 watts with the bugcatcher. Or put another

way, I'd have to run over 2500w on the whip to match the bugcatcher's 100w signal. It's not until you get to 10m and 6m (where the whip is no longer electrically "short") that the performance is similar. And of course, the gain of the bugcatcher is there on receive as well. You can't work what you can't hear.
Your mileage may vary. Comments are welcome. The usual disclaimer applies - I have no association with any of the companies listed here except as a customer. Also, the Carolina Bug Katcher is no longer available according to Lakeview's web page. But a similar antenna is available from Henry Allen K5BUG at www.texasbugcatcher.com
73,
Doug, K4DSP/M

4637. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:15:35 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABCED7.2EC2D431@IEEE.org>
Source record: 168809
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"John (KB3CDF)" wrote:
> Can anyone suggest ideas for "man-made" supports that would enable
> such worthy antenna beasts?

I use 2x4s in a 4x4 configuration for the bottom sections and then
fiberglas pipe for the upper sections.
--
http://www.mindspring.com/~w6rca

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4638. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:17:45 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABCF59.344336E2@IEEE.org>
Source record: 168810
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Richard Clark wrote:
> As a kit, not much bigger than my old seabag (same color, same
> material). $90 and 40 footer was mine.

Last time I checked, fiberglas pipe was about $2 per foot.
--
http://www.mindspring.com/~w6rca

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4639. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:21:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABD024.32B568B2@IEEE.org>
Source record: 168812

Donaly wrote:
> Those are brave words, although a tad on the short-sighted stingy
> side. Disasters can occur anywhere, and when one happens to you
> you'll be standing in the dole line along with everyone else.

Knock on wood -
No disaster has ever been recorded in my home town.
--
http://www.mindspring.com/~w6rca

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4640. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:21:11 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <586rOqmf24vJ90JgCiglpynX0pCZ@4ax.com>
Source record: 168808

"Brian Hemmis" <K3USC@worldnet.att.net> wrote:

>Nothing specific, only in the specs does it say will tune 3.5-54 mhz with an
>antenna longer than 23 feet...that's it, couple of drawings showing a whip
>and a long wire and formula to calculate undesirable lengths...I mistakenly
>figured I might find someone here who had actually used one of these in the
>fashion I'm considering- you know a helpful tip or two !!
>Oh well...

Well, I'd just string out the longest piece of wire possible, apply that formula
to it to make sure it's not an undesirable length, and then see which bands it
loads up on. Icom's absence of any real recommendations may be because one
simply needs to experiment with this device. (I have an mfj tuner that came with
a similar lack of instructions, but I guess you expect that from mfj :-(

Bob
k5qwg

>73, BH
>"Bob Miller" <bamiller@texas.net> wrote in message
>news:nYqrOs17DUlNGxTBjN++Sw1vePJ7@4ax.com...
>> "Brian Hemmis" <K3USC@worldnet.att.net> wrote:
>>
>> >Would you be so kind as to pass on the lengths...thanks ! BH
>>
>> Curious, doesn't the owner's manual that came with the tuner give any
>guidance
>> for wire lengths? Icom is usually pretty good with their documentation.
>>
>> Bob
>> k5qwg
>> >
>> >
>> >"Jack" <kc8pkn@arrl.net> wrote in message
>> >news:98deei$301$1@slb6.atl.mindspring.net...
>> >> Try to cut the wire in non resonant lengths, I am getting one for my
>> >IC-718
>> >> next week and the dealer has a cutting chart.
>> >>
>> >> Jack
>> >>
>> >>
>> >> "Brian Hemmis" <K3USC@worldnet.att.net> wrote in message
>> >> news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
>> >> > Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth

>condo
>> >> use
>> >> > in FL. Figured I'd run out some wire and attach a ground clamp to a
>cold
>> >> > water pipe. Any other suggestions ? If I am on the right track are
>there
>> >> any
>> >> > suggested wire lengths that you've had success with ? Appreciate any
>> >input
>> >> > from AH-4 users. Tnx, 73-Brian K3USC
>> >> >
>> >> >
>> >>
>> >>
>> >
>>
>

4641. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:23:44 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABD0C0.EB9DC99@IEEE.org>
Source record: 168814

Keith Wood wrote:
>
> I'm in an condo, can't put up a wire, but there IS an unused CATV
> lead-in (75-ohm coax) running right to the room where my HF rig will be.
>
> Has anyone ever tried and had success with using the cable shielding as
> an antenna in such a case? It's disconnected at the pole, runs 25 - 30
> feet (NW - SE, dropping 10 feet) to the corner of the house, then 14
> feet along the eaves (N-S), then 9 feet vertical drop to the feed
> through.

If it's completely disconnected, try it. It should work fed "Marconi style".
--
http://www.mindspring.com/~w6rca

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4642. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:33:58 UTC
From: Duncan Clark <NEWS@[127.0.0.1]>
Message-ID: <SHCiRjEmM9q6EwSF@ntlworld.com>
Source record: 168724

In message <3AAA1C79.779A32DC@eznec.com>, Roy Lewallen <w7el@eznec.com>
writes
>There's no way to find out what an applicant is even trying to patent,
>since the application isn't public.

Well US patent law is changing so that all patent applications will be
published, I think, 12 months after the initial application date. This
will then by like EU patent applications.

Duncan
G4ELJ

--
Support bacteria. They are the only culture some people have.

Duncan Clark

4643. Re: Frackysssss Baaaacccckkkk!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:36:30 UTC
From: k1bqt@aol.com
Message-ID: <20010311143630.24180.00000951@ng-fc1.aol.com>
Source record: 168815

Hi Peter--

Guessed we were in for it when that phony QEX jibe appeared. "That's a setup", I mused to myself. I'm told this week is spring break at many "institutions" of higher learning. Have an equipment review in the old Underwood at the moment.

73

Rick K1BQT

4644. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:52:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABD760.6F4530E2@IEEE.org>
Source record: 168817

Doug Hall wrote:
> Base loading just can't compete with center loading when
> it comes to efficiency.

I wouldn't call an antenna tuner at the base equal to "base loading".
Base loading would be putting the loading coil at the bottom of the
antenna which is better performance than an antenna tuner because
the coil radiates coherently with the antenna. Real base loading is
"only" 3-4 dB down from center loading.
--
http://www.mindspring.com/~w6rca

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4645. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 19:57:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98gl90$n2m$1@uranium.btinternet.com>
Source record: 168816

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote in message
news:3AAB8756.BC9218AC@IEEE.org...
> Reg Edwards wrote:
> >
> > Cec sed -
> > > I know it's not clear from the above but the mobile 40m
Hamstick is on
> > > the receiving end a few wavelengths away mounted on my truck.
It is tied
> > > into a Palomar PFS-1. In other words, would ground wave
measurements
> > > yield the desired information?
> > ==========
> > Not very likely !
>
==========
Roy wrote -
> We measure ground wave strength for our 75m mobile antenna
shootouts.
> Why wouldn't those techniques work for vertical antennas? Seems
> stronger ground waves would correspond to lower angles of
radiation.
==========

If that is the case, how is it that Eznec radiation patterns show
maximum radiation from a short grounded vertical occurs at a
considerable +ve elevation angle - simultaneously with zero
radiation at zero angle along the ground ?

Reg.

4646. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 20:01:59 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AABD9B7.BE6517C9@IEEE.org>
Source record: 168719

Reg Edwards wrote:
> If that is the case, how is it that Eznec radiation patterns show
> maximum radiation from a short grounded vertical occurs at a
> considerable +ve elevation angle - simultaneously with zero
> radiation at zero angle along the ground ?

EZNEC doesn't display ground wave signals by default, Reg.
My theory is that the lower the angle of radiation, the
more powerful the ground wave is in the vicinity of a few
wavelengths away from the vertical antenna. The question
I have is would raising a ground plane cause the measured
RF to miss the target antenna which remains at ground level?
--
http://www.mindspring.com/~w6rca

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4647. PVC vs CPVC K factor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 20:39:49 UTC
From: xxxpjock@gte.net
Message-ID: <poRq6.2835$oj3.796769@dfiatx1-snr1.gtei.net>
Source record: 168720

Does anyone have any information comparing the "K factor" of PVC versus CPVC pipe? I have seen some very interesting antennae construction pages on the net using PVC pipe as an enclosure, but I thought CPVC might last longer in sunlight. I understand UV destroys PVC after a time, while CPVC is more resistant to it.

Thanks and 73,

Phil - N4GWV - pjock (at) gte.net {note clever anti-spam ploy...}

4648. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 20:51:15 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98gq4b$437$1@uranium.btinternet.com>
Source record: 168722

OK Roy, I change my-non quantitative description of clean water
from "low loss" to "not low loss".

You have obtained from that handy data source of yours a
loss-factor of 0.04 at 1 MHz. This corresponds in a capacitor to a
Q of 25. If such a figure is due to molecular resonance then it
almost certain the loss-factor varies like a yo-yo over the
frequency spectrum. It may be zero at some HF frequencies. Any more
info ?

Your measured values indicate maximum loss did not occur at maximum
amount of water but at some intermediate value. This suggests some
other material or mechanism is involved. Or was it, perhaps, a
measuring error ?

Someone else remarked pH of rainwater is seldom 7. I undersatand
it is always acidic - lightning produces HNO3 = nitric acid.

I'd be grateful if someone could let me have the bare HF essentials
of Beldon 8230: Zo, velocity factor, conductor diameter, spacing
between conductor centres, and attenuation dB per 100 feet (or 30
metres) at some frequency. I've never heard of it.

Thanks.

Reg

Roy Lewallen <w7el@eznec.com> wrote in message
news:3AAA17C0.B7642F89@eznec.com...
> Reg Edwards wrote:
> >
> > Roy, the topic of conversation is Ladder Line.
>
> Hm. I'd swear you said something about the lossiness of water. I
hope
> you're not saying this thread is closed.
>
> > With flimsy 300-ohm
> > junk, where the line provides a gutter for rainwater, anything
can
> > happen.
>
> I suppose so. But the line I tested was Belden 8230, which has 20
AWG
> copper covered steel conductors. It's hardly flimsy junk. As it
was

> strung for the test, with frequent twisting, the line didn't hold
any
> appreciable quantity of water.
>
> > But out of curiosity, at what frequency on the 300-ohm line
were
> > your measurements made ?
>
> 21 MHz
>
> > On what length (feet or metres) of 300-ohm line were the
> > measurements made ?
>
> 100 feet
>
> > What was the total measured dBs of the 300-ohm line ?
>
> Dry, 0.8 dB. After about two weeks of dry weather, a light rain
fell,
> and the loss increased to 3.7 dB. Later, when hard rain fell,
loss
> dropped to 2.4 dB, then slowly to 1.5. I attributed this to the
line
> getting "washed" with clean water.
>
> As a matter of interest, Belden specifies 1.1 dB/100 feet at 100
MHz,
> which would be 0.5 dB at 21 MHz assuming purely conductor loss.
>
> > What was the percentage increase between dry and soaked ?
>
> "Soaked" wasn't the worst case. Dry, the loss was 17%. Damp, it
was 57%.
> So the loss when damp was 335% of the loss when dry. Or it was
40%
> greater. Take your pick.
>
> > And, of vital importance, what measurement method was used ?
>
> I connected the twinlead through two 4:1 transformers, the loss
of which
> (0.2 dB each) was measured by putting them back-to-back. The line
was
> running with a 1.5:1 SWR. I used a Bird wattmeter to measure the
power
> into the line+transformer, and the same meter to measure the
power out
> of the line+transformer. Reverse power was subtracted from
forward power
> to get the net.

>
> The line was suspended by TV standoff insulators above my wooden
deck,
> several feet off the ground and well away from the deck.
>
> > Finally, what is the estimated uncertainty in the measurement
of dB
> > differences ?
>
> I was operating at about mid-scale with the Bird, and using the
same
> meter for both measurements, so I'd say measured differences were
likely
> to be within a couple of watts. At a power level of about 50
watts, this
> is a couple of a tenths of a dB.
>
> > Were you able to determine the change in line impedance and
> > propagation velocity between wet and dry from your measurements
?
> > This would have been of use in distinguishing dielectric loss
from
> > copper loss.
>
> No, I didn't have the equipment to make those measurements and I
didn't
> try. I had no reason to suspect that getting the line wet would
change
> the conductivity of the copper, especially since it was coated.
with
> polyethylene. Perhaps you can explain how this might happen.
>
> The results of this experiment were published in "Technical
> Correspondence", QST, February 1982. It won't be long before you
could
> say this phenomenon was known by the ancients!
>
> I'd welcome seeing the results of any measurements you or anyone
else
> has made using better methodology.
>
> Roy Lewallen, W7EL
>
>
> > Roy Lewallen <w7el@eznec.com> wrote in message
> > news:3AA74C2D.51B989EC@eznec.com...
> > > Reg Edwards wrote:
> > > >
> > > > Conclusion about loss on higher freqs is not entirely
valid.

> > Clean
> > > > water is a low-loss material at HF.
> > > > . . .
> > >
> > > It's well known that although pure water has low DC
conductivity,
> > its RF
> > > loss is significant due to energy expended as its molecular
> > dipoles try
> > > to orient to the alternating field. _Reference Data For Radio
> > Engineers_
> > > shows distilled water to have a dissipation factor of 0.04 at
1
> > MHz.
> > > This is more than twice the loss of PVC plastic, and more
than
> > 200 times
> > > as lossy as a truly low loss material like polyethylene. So I
> > don't
> > > think "low-loss" is an accurate characterization of water.
Rain
> > water
> > > falling on a dusty surface, or for that matter through dusty
or
> > polluted
> > > air, will be more conductive in addition. The combination of
high
> > > dielectric constant and fairly high loss makes water
something
> > you don't
> > > want too close to your loading inductors or anywhere there's
a
> > high
> > > electric field, such as between feedline conductors.
> > >
> > > I've made measurements on 300 ohm twinlead that shows very
> > greatly
> > > increased loss when wet -- certainly not what you'd see if
water
> > were a
> > > "low-loss" material.
> > >
> > > Roy Lewallen, W7EL

4649. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 21:15:54 UTC
From: GAR GARIGUE <garigue@home.com>
Message-ID: <3AABF9B7.2471B6F6@home.com>
Source record: 168721
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hello there John ... Tom KI3R Port Vue Pa. I ran an inverted vee for a number of years on 40 using metal TV mast. Now I know some guys will say that the metal and its inherent length will cause difficulties. I had none. However I did turn down a dowel rod to fit inside the last section and used a HyGain balun there. Again if there were problems my signal or neighbors didn't let me know. Just be sure to guy obviously ..I used 2 at 90 degrees to the wires ... rayon line if I remember.

God Bless 73 Tom

"John (KB3CDF)" wrote:
>
> I have read all these great tales of excellent success with inverted V
> and flat top antennas. The word spoken is "get them as high as you
> can".
>
> Can anyone suggest ideas for "man-made" supports that would enable
> such worthy antenna beasts?
>
> Thanks in advance,
> --
> ~~~
> John
> 73's de KB3CDF

4650. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 21:34:29 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AABEF65.1154215B@oio.net>
Source record: 168723

Keith,
Thats a really 'bad' idea! You'll have a direct 'outlet'
into every place that has a CATV outlet. Not to mention that
the cabling doesn't belong to you.
'Doc

4651. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 21:48:16 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98h32u$9vo$1@lure.pipex.net>
Source record: 168731

"Richard Clark" wrote ...
> Gary Peach wrote:
> >"Roy Lewallen" wrote ...
> >> Gary Peach wrote:
> >> > Anyway if you are not making it for sale or trade,
> >> > patent does not apply.
> >>
> >> This is a common misconception. A patent forbits others from "making,
> >> using, or selling" the patented item. You're in violation of a patent
> >> even if you make the patented item for your own use.
> >
> > Ah! does this apply to civilised countries too :?o
>
> Perhaps a slight bit of adjustment of perspective will help.
> Copyright and Patent law, philosophically in a Capitalist state, is
> aimed at protecting the owner from a loss of revenue.

One can sympathise that anyone that has invested time and effort into
producing some novel device is morally entitled to the benefits of that
device.

Of course patent law has been used in a criminal fashion on more than one
occasion where patent has been taken out on the work of another.
One famous example being penicillin.

Actually a patent only protects the originator of a novel device if the
patentee has the resource to detect and prosecute at his/her own expense any
infringement of that patent.
In the long run when it comes to Law the process is determined by who has
the deepest pockets not the moral right.

A patent in principle is little different to mailing yourself a description
or working model of the novel device in order to demonstrate to a court that
you have the prior example or specification for the item in dispute by
virtue of the time stamp on the sealed envelope.

The fact that you have lodged a patent with the patent office merely uses
that office as a recognised depository of the chronological inception of the
novel device.

The patent office do not police or prosecute on behalf of the patentee.
So what DO you get for your money?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4652. metal ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:01:07 UTC
From: Ed <computer2@uswest.net>
Message-ID: <01c0aa7f$0a3fdd60$f409a0d8@dell>
Source record: 168725

I am thinking of putting a 440 mhz antenna on the top of my fiber glass topper, can I get by without a ground plane?

Thanks,

Ed, KB0UKG

4653. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:07:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC052E.6643474B@eznec.com>
Source record: 168726
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

The plans for the wood A-frame is still in the ARRL Antenna Book, at least in the 17th Edition, as it's been for decades.

Roy Lewallen, W7EL

"John (KB3CDF)" wrote:
>
> I have read all these great tales of excellent success with inverted V
> and flat top antennas. The word spoken is "get them as high as you
> can".
>
> Can anyone suggest ideas for "man-made" supports that would enable
> such worthy antenna beasts?
>
> Thanks in advance,
> --
> ~~~
> John
> 73's de KB3CDF

4654. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:25:42 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AAC0976.2F6BD99@bctv.com>
Source record: 168727

Donaly wrote:
>
> Keith Wood wrote:
> >
> > Richard Clark wrote:
> >
> > > Just think of the level of service if it had been "the big one."
> > > Hint: it wouldn't have been any better. And this is for a region that
> > > has been going through earthquake preparedness for 25 years and has a
> > > local FEMA office. One of the Canadian stations noted that our
> > > president had just cut funding for this preparation because "it wasn't
> > > showing any payback." Compassionate conservatism - yeah, sure. My
> > > heart bleeds for you, but I a'in't forkin' over a dime.
> >
> > Why should those of us who are smart enough to not live there subsidize
> > those of you who aren't smart enough to move?
> >
> > Fix your place up yourself, and let me fix mine. I'll be here to
> > provide what support I can when the flag flies, but not if all of my
> > money has been sucked up and given to you.
>
> Those are brave words, although a tad on the short-sighted stingy
> side. Disasters can occur anywhere, and when one happens to you
> you'll be standing in the dole line along with everyone else.

Actually, Tom, I have spent hundreds of hours doing disaster
communications. But I never demanded that people in Nebraska pay for my
then-insistence on living in the Fire Ring. Eventually, I moved.

It's not the government's money, it's my KIDS' money. Why do you feel
that you have a right to take it, because you choose to live where you
do?

4655. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:27:51 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AAC09F7.135B5EB6@bctv.com>
Source record: 168728

Richard Clark wrote:
>
> On Sun, 11 Mar 2001 17:57:55 +0000, Keith Wood <kw@bctv.com> wrote:
>
> > >
> > >
> > >Richard Clark wrote:
> > >
> > >> Just think of the level of service if it had been "the big one."
> > >> Hint: it wouldn't have been any better. And this is for a region that
> > >> has been going through earthquake preparedness for 25 years and has a
> > >> local FEMA office. One of the Canadian stations noted that our
> > >> president had just cut funding for this preparation because "it wasn't
> > >> showing any payback." Compassionate conservatism - yeah, sure. My
> > >> heart bleeds for you, but I a'in't forkin' over a dime.
> > >
> > >Why should those of us who are smart enough to not live there subsidize
> > >those of you who aren't smart enough to move?
> > >
> > >Fix your place up yourself, and let me fix mine. I'll be here to
> > >provide what support I can when the flag flies, but not if all of my
> > >money has been sucked up and given to you.
> >
> > OK,
> >
> > So the compassion is out the window.

How about some compassion for my kids? You want to take the food out of
their mouths.

Buy your own insurance. Fix your own house. Or move.

Don't demand MY money to cover for YOUR choices.

4656. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:30:41 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AAC0AA1.F01A5C7@bctv.com>
Source record: 168729

Dennis Ferguson wrote:
>
> Keith Wood <kw@bctv.com> wrote:
> >Roy Lewallen wrote:
> >>
> >> Gary Peach wrote:
> >>
> >> > Anyway if you are not making it for sale or trade, patent does not apply.
> >>
> >> This is a common misconception. A patent forbits others from "making,
> >> using, or selling" the patented item. You're in violation of a patent
> >> even if you make the patented item for your own use.
> >
> >No. You may make an absolutely identical item for your own use, so long
> >as you do not reverse-engineer an original to do so, use original design
> >documentation, or ever transfer it or offer to transfer it to another
> >person without getting a license from the rights holder.
> >
> >Or, in other words, if you come up with the same idea, you can only get
> >sued if you try to profict from it.
>
> The U.S. patent law can be found at
>
> http://www4.law.cornell.edu/uscode/35/
>
> Since it is hard to prove a negative I would simply challenge you to
> find something in the law which supports your assertion. What Roy said
> matches what the law says pretty accurately. I don't think there
> is anything in the law which matches what you said.

When I do legal research, I am paid for my work. However, I would turn
this around, and invite you to show me ANY case under the current US
patent law where a private person lost a suit over private,
noncommercial manufacture and use of a patented construct.

4657. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:36:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC0BFC.7A45BF3C@eznec.com>
Source record: 168730

Reg Edwards wrote:
>
> OK Roy, I change my-non quantitative description of clean water
> from "low loss" to "not low loss".
>
> You have obtained from that handy data source of yours a
> loss-factor of 0.04 at 1 MHz. This corresponds in a capacitor to a
> Q of 25. If such a figure is due to molecular resonance then it
> almost certain the loss-factor varies like a yo-yo over the
> frequency spectrum. It may be zero at some HF frequencies. Any more
> info ?

Just a little. From the same source, the dissipation factor is 0.005 at 100 MHz, 0.157 at 3 GHz, and 0.265 at 25 GHz, not of much use in seeing what happens over the HF range. I think the first resonance occurs well above HF, but I really don't know for sure.

> Your measured values indicate maximum loss did not occur at maximum
> amount of water but at some intermediate value. This suggests some
> other material or mechanism is involved. Or was it, perhaps, a
> measuring error ?

Although measurement error is always a possibility, the methodology was so simple that it's unlikely. I felt then, and do now, that the cause is likely due to the cleanliness of the water. The line had been out in dry weather, subject to dust, for a couple of weeks before it first rained. So the line surely had a coating of dust on it. After it rained awhile, it's reasonable to assume that at least some of the dust was washed away. Dusty water is a whole lot more conductive than pure water, so I'd expect the loss to be correspondingly greater.

The _CRC Handbook of Chemistry and Physics_ shows some interesting figures for the DC conductivity of water with varying amounts of ordinary salt dissoved in it. The conductivity of pure water is given as 0.0 mmho/cm. With enough salt to depress the freezing point just 0.037 degrees C (0.01 g-mol/l NaCl), the conductivity is 1.0 mmho/cm (0.1 S/m). At 1 degree freezing point depression (about 0.3 g-mol/l), the conductivity is 26 mmho/cm (0.26 S/m). Compare this to "average" soil at 0.005 S/m, and it becomes obvious that even a teeny tiny amount of dissolved salt makes water quite conductive indeed. Coupled with its high dielectric constant, you have a bad combination.

> Someone else remarked pH of rainwater is seldom 7. I undersatand
> it is always acidic - lightning produces HNO3 = nitric acid.

This wouldn't be a surprise at all, especially in an urban environment.

> I'd be grateful if someone could let me have the bare HF essentials
> of Beldon 8230: Zo, velocity factor, conductor diameter, spacing
> between conductor centres, and attenuation dB per 100 feet (or 30
> metres) at some frequency. I've never heard of it.

1. Point your browser to http://www.belden.com.
2. Click "Products & Services".
3. Click "The Belden Catalog".
4. In the Search window, enter '8230'.
5. Click "Go".
6. Click "See full specs".
7. Click "Tech data."

>
> Thanks.
> ----
> Reg

Roy Lewallen, W7EL

4658. Needed documentation and connector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:56:10 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <ugUq6.719$7d.93399@newshog.newsread.com>
Source record: 168733
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.swap

Help!

I have a Wilson WR-1000 Rotor and control that have never been used.
Unfortunately,
I need a 10 pin connector to fit the old Wilson WR-1000 rotor and the
documentation/manual for the rotor and control box.

"I think" I have a connector, or at least I had one, but can not find it.
I never did have a manual.

I'd greatly appreciate any help.

If any one responds, please copy me via e-mail as I don't always get to see
replies on the newsgroups.

Thanks,

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

4659. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:58:25 UTC
From: "Rudy Marcelletti, K8SWD" <rudym@net-link.net>
Message-ID: <3aac0f56$0$62149$bbae4d71@news.net-link.net>
Source record: 168732

Brian: 23 feet is the minimum length of wire for you coupler. This length is at the "bottom" of one of "non-resonant" windows. This "window" is the first one of significant size that will produce a decent signal. The window is 23 to 32 feet, with 28 feet about the center of this window. Here are some more "center" window lengths: 40, 58, 76, 95, 109, and 145 feet. Generally, you can go about 4 or 5 feet either way of center and be OK. Use the formula 300/freq mhz x .5 to aviod multiples of half waves on any given freq. Using the formula and the above lengths, I don't think you will come up with any of the above lengths. I like the shorter 4 as they are easier to work with. Try a 40 foot (or bigger) loop with your coupler. Try the 76 foot length in an inverted L configuration. I like using insulated 12 gauge stranded wire or Flexweave wire because it is a lot easier to work with vs the hard drawn bare stranded 14 ga "antenna" wire as this will tend to kink and bind and is hard to wind up for portable use. The "quality and size" of your ground and/or counterpoise DOES matter with this system. As a rule of thumb, keep your counterpoise about 10% longer than the antenna wire, i.e., 58 foot antenna wire, use at least 64 feet counterpoise radials. 4 minumum. 8 works real good. 12 is real nice. More is overkill for this system, in my opinion. Keep them fanned under the antenna wire. Have fun matching stuff and making new "things" talk.

Brian Hemmis <K3USC@worldnet.att.net> wrote in message
news:jBvq6.3878$fw6.270654@bgtnsc04-news.ops.worldnet.att.net...
> Would you be so kind as to pass on the lengths...thanks ! BH
>
>
> "Jack" <kc8pkn@arrl.net> wrote in message
> news:98deei$301$1@slb6.atl.mindspring.net...
> > Try to cut the wire in non resonant lengths, I am getting one for my
> IC-718
> > next week and the dealer has a cutting chart.
> >
> > Jack
> >
> >
> > "Brian Hemmis" <K3USC@worldnet.att.net> wrote in message
> > news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
> > > Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth
condo
> > use
> > > in FL. Figured I'd run out some wire and attach a ground clamp to a
cold
> > > water pipe. Any other suggestions ? If I am on the right track are
there

> > any
> > > suggested wire lengths that you've had success with ? Appreciate any
> input
> > > from AH-4 users. Tnx, 73-Brian K3USC
> > >
> > >
> >
> >
>
>

4660. Re: Need support. NO TREEs and No TOWER.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-11 23:58:58 UTC
From: Glen <ozdream@iname.com>
Message-ID: <3AAC1142.35C67B87@iname.com>
Source record: 168734
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

G'day, as for the inverted "V" I have a B & W end fed wire antenna in a inverted "V" configuration and it works great the centre is about 50 feet high and both ends about 12 feet off the ground.

I work DX all over the world and have good coverage on 80 meters 300 to 600 miles at least running only 100 watts..

Glen VE7SDX

"John (KB3CDF)" wrote:

> I have read all these great tales of excellent success with inverted V
> and flat top antennas. The word spoken is "get them as high as you
> can".
>
> Can anyone suggest ideas for "man-made" supports that would enable
> such worthy antenna beasts?
>
> Thanks in advance,
> --
> ~~~
> John
> 73's de KB3CDF

--
Cheers, Glen ozdream@iname.com
ICQ #17239752

4661. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 00:06:44 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <ku3h89.bqd.ln@mail.specsol.com>
Source record: 168735

Tom W8JI <2w8ji@akorn.net> wrote:
> On Sun, 11 Mar 2001 06:05:03 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:

>>Have to disagree with that one based on empirical experience. I've worked
>>PSK stations I couln't hear at all.
>>
>>Jim Pennino

> Hi Jim,

> I heard the same thing from K1BQT, and figured out why he thought it
> was true. There certainly is no technical reason why PSK would be more
> reliable than CW...as a matter of fact the opposite is true.

> Because PSK looks for a carrier drop and an abrupt reversal in
> phase...it has to be above the noise to be decoded.

> CW, on the other hand, can easily be copied with a zero dB S/N ratio.
> Many or most skilled CW people can copy CW with negative S/N ratios.

> The reason the myth that PSK allows us to work stations we "can't
> hear" exists is because most PSK ops use a wide bandwidth on the
> receiver, and move all the selectivity to the computer.

> By ear they are listening to a bandwidth of maybe 3 kHz, while the
> audio filter is set at perhaps 70 Hz. In this case the computer sees a
> 16 dB reduction in broadband noise compared to what the "ear" hears.

> If we use 250Hz selectivity on the receiver, we'll find we can plainly
> copy CW signals at level that produce very poor print on PSK.

> Now I certainly agree that there might be a "woooden eared" CW op who
> might not copy signals that a PSK system will decode, but that would
> be the exception rather than the rule.

> Because I can copy CW signals with a negative S/N ratio, as can many
> other CW ops can, the difference to me is startling. It has to be an
> absolutely solid CW signal to get any print at all on the guy on PSK.

> Try setting your bandwidth to 250 Hz, and see if you don't notice the
> "PSK advantage" going away. I can work DX stations perfectly solid on
> CW that I have no hope of decoding on PSK.

> PSK not only requires higher S/N ratio to decode, it also requires
> much higher average power than CW to deliver the same information.
> It also has exceptionally poor dynamic range. That's why PSK operators
> whine constantly about QRO operators.

> 73 Tom

Hi Tom,

I'd buy the bandwidth arguement except for one thing. I normally use the CW filter on weak signals to keep the locals from AGCing the weak ones out of existance and I still can't hear the PSK signal, oh maybe a little now and then, just enough to tell there is something more than noise there. But enough to be copyable CW, not a chance.

Now, if I had an outboard DSP audio filter with all the tricks built into it that the PSK program has, I just might be able to hear it, but I don't. So given a stock tranceiver and a PSK program, I can work PSK that I can't hear.

I have no idea where the poor dynamic range comment comes from other than perhaps the problem of strong signals AGCing out the weak ones, but you have that problem with all modes. It just gets focus on PSK since most everyone runs 30 to 40 Watts and some clown running 200W REALLY stands out.

I have seen differences in the abilities of PSK programs; some are noticably better than others. Perhaps you should try a different one. Hamscope for example, seems to do everything so so and apears to be quit sensitive to QRM. WinWarbler only does BPSK and QPSK but with some playing with the FFT parameters does it very well.

Jim Pennino

4662. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 00:41:55 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAC1B53.2C71@wt.net>
Source record: 168736

W6RCecilA wrote:
>
> Reg Edwards wrote:
> > If that is the case, how is it that Eznec radiation patterns show
> > maximum radiation from a short grounded vertical occurs at a
> > considerable +ve elevation angle - simultaneously with zero
> > radiation at zero angle along the ground ?
>
> EZNEC doesn't display ground wave signals by default, Reg.
> My theory is that the lower the angle of radiation, the
> more powerful the ground wave is in the vicinity of a few
> wavelengths away from the vertical antenna. The question
> I have is would raising a ground plane cause the measured
> RF to miss the target antenna which remains at ground level?

I don't think so. Also the small changes in the elevation pattern will
be hard to detect I think. I think you will see more FS difference due
to ground loss changes than elevation pattern change. MK
--
http://web.wt.net/~nm5k

4663. Re: Yaesu ATAS-100 ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 01:22:32 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <sxVq6.3237$o64.306916@paloalto-snr1.gtei.net>
Source record: 168737

"Julian" <KB9YXM@arrl.net> wrote in message
news:98g69o$ll0$1@ousrvr3.oulu.fi...
> Hello everyone.
> Julian KB9YXM
> I have 2 questions for you old timers around.
> The first is a 6 meter yagi that can be used as a portable yagi for
> operation out and about in the forest and mountains.
> So my question is, "Can anyone tell me how to build a 6 meter yagi that
> would fit the bill?"
> My second question is, I have a Yaesu ATAS-100 antenna that I would like
to
> use as a portable Base Station antenna again out in teh forrest or it the
> mountains. Can anyone here help me to build a a ground plane kit that
would
> work well out in the bush. Drawings of some sort, I could fugure out the
> numbers myself but I need the basic idea and a drawing of some sort would
be
> great.
> Thanks everyone and 73's
> Julian White
> OH/KB9YXM
>

I made a simple mounting bracket for my ATAS out of 2" aluminum "L" stock, and a 2" SO-239 barrel connector. I use u-bolts to attach it at the top of a 30' push up mast, and for a counterpoise I cut pieces of regular hookup wire at 1/4 wave lengths for each of the bands. I attach one end of these counterpoise wires to the "L' bracket and a small weight to the other ends and just let them hang down.

It works great for me, the ATAS tunes fine on all bands and I get good signal reports both stateside and overseas.

73 de W6DKN

4664. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 01:53:13 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AAC2C09.5E87@bellsouth.net>
Source record: 168738

Doug,

Your test results were consistent with my own experience. No matter what, anything other than a Hi Q, resonant antenna is a compromise and, generally, will not work as well as the resonant antenna. I was using center-loaded antennas in the late '60s, and, since I love to experiment with mobile antennas, I did lots of comparisons. In every case, and accounting for certain anomolies, the center loaded antenna wins every time.

As you say, "your mileage may vary", and, certainly, one must take into account one's spouse's feelings about big, "ugly" antennas on the family car. Sometimes, one just cannot have a huge antenna and must do the best they can with what they are able to use.

I build screwdriver antennas, and one of the things I did with mine was to get away from PVC and "skinny" little windings. My own screwdriver is a 3" version and is comparable to the old Henry Allen #66 Bugcatcher coil. It has excellent performance.

I hear lots of fellows bragging about how "well" they do with hamsticks. Not criticizing, of course (to each his own), but I find them to be the WORST performing antennas around. Just MHO, but to my mind, it does not make sense to buy a $1000 radio and hamper it with a $20 antenna. That antenna hanging onto the bumper can make or break your station, and I want the maximum from my mobile.

Thanks for sharing your test results with us.

Jerry
K4KWH

Doug Hall wrote:
>
> Hi All,
> For those who contemplate HF mobile at some point I thought you'd
> be interested in this comparison between a couple of different HF
> mobile antenna systems.
> I compared a Radio Shack 102" stainless steel whip ($14.99) and
> Icom AH-4 autotuner ($309.95) to a center loaded antenna called the
> "Carolina Bug Katcher" ($99.95) from Lakeview Antennas
> (www.hamstick.com) Since the whip is only resonant on (or near) 10m I
> used the Icom AH-4 tuner with the whip. The bugcatcher, which covers
> 40-10m, doesn't need a tuner, but I left the tuner in line anyway just
> to keep the system the same all the way back to the antenna mount.
> The purpose of the exercise was to see if the whip and tuner would

> be an acceptable alternative to the bug catcher. The whip/tuner is
> nice because I can change bands without stopping the car and changing
> coil taps. This is attractive when it's cold/rainy/dark. Also, the
> whip isn't as "ugly" as the bugcatcher, or at least that's what my
> daughter says. But beauty is in the eye of the beholder.
> The test setup was as follows: The radio was an Icom 706Mk2G
> mounted in my car. The antenna mount is on the rear bumper. Each
> antenna was tested on the same mount, same feedline, etc. In other
> words, the system was the same except for the actual radiator being
> compared. I parked the car in a large open area away from other
> vehicles, and used a COM-120B service monitor in the lab at my office
> to monitor the field strength. I then transmitted a carrier on each
> band with each antenna with the radio set to the same power level. A
> friend of mine recorded the field strength readings on the spectrum
> display on the service monitor in the lab. Here are the results:
>
> Band Bugcatcher Whip Winner
> ==== ========== ==== ======
> 40m -62dBm -76dBm Bugcatcher, by 14dB
> 30m -64dBm -76dBm Bugcatcher, by 12dB
> 20m -44dBm -52dBm Bugcatcher, by 8dB
> 17m -66dBm -74dBm Bugcatcher, by 8dB
> 15m -59dBm -69dBm Bugcatcher, by 10dB
> 12m -50dBm -58dBm Bugcatcher, by 8dB
> 10m -58dBm -56dBm Whip/tuner, by 2dB
> 6m -65dBm -64dBm Whip/tuner, by 1dB
>
> Note: The readings are likely subject to an error or a dB or two. But
> the data tells a pretty convincing story, and should probably come as
> no surprise. Base loading just can't compete with center loading when
> it comes to efficiency.
> Using 100w into the whip on 40 and 30m (the bands I use most) would
> be like running only 4 or 5 watts with the bugcatcher. Or put another
> way, I'd have to run over 2500w on the whip to match the bugcatcher's
> 100w signal. It's not until you get to 10m and 6m (where the whip is
> no longer electrically "short") that the performance is similar. And
> of course, the gain of the bugcatcher is there on receive as well. You
> can't work what you can't hear.
> Your mileage may vary. Comments are welcome. The usual disclaimer
> applies - I have no association with any of the companies listed here
> except as a customer. Also, the Carolina Bug Katcher is no longer
> available according to Lakeview's web page. But a similar antenna is
> available from Henry Allen K5BUG at www.texasbugcatcher.com
> 73,
> Doug, K4DSP/M

4665. Re: Frackysssss Baaaacccckkkk!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 01:55:21 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AAC2C89.3652@bellsouth.net>
Source record: 168739

I thought AOL is: America OFF Line. LOL!

Jerry

Peter O. Brackett wrote:
>
> Hello Rick:
>
> Thanks for that information on AOL mail account "ownership:" Heh, heh.
>
> Seems sort of like a ham radio "pirate". The call you hear on the air may
> not be the "real McCoy" it could be someone else using ventriloqy. Could it
> be that Phil is really the voice of Edgar Bergen or Senor Wencelas?
>
> BTW... what is AOL? Being an "old time" Internaut, and active USENET NG
> user since the days of UUCP ubiquity on PDP-11 dial up networking, I'm not
> familiar with AOL... is that one of those On Line Services like CompuServ?
> [I hope Steve Case is lurking, I can hear him choking now!]
>
> I suppose that, having been around the Internet to experience UUCP dial up
> networking, is sort of like having been around ham radio when "Spark" was in
> use.
>
> I really liked your latest article in QST, keep it up, we need more...
>
> Best,
>
> -Peter K1PO
>
> "Rick Littlefield" <k1bqt@aol.com> wrote in message
> news:20010310113945.07017.00000129@ng-mj1.aol.com...
> > Hi Peter--
> >
> > The E-mail address you cite has a long history of issuing NG posts under a
> > variety of signatures. This irregularity suggests AOL's password normal
> > guidelines have been intentionally compromised. As a result, the
> individual who
> > funds, maintains, and issues passwords for the account is soley
> responsible and
> > fully accountalbe for its total content, regardless of signature.
> >
> > Rick K1BQT

4666. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:20:03 UTC
From: Bob Camp <bob@cq.nu>
Message-ID: <nnWq6.146014$Vj5.21874927@news02.optonline.net>
Source record: 168742

Keith,

One risk is that it is still grounded at the pole. If it is then you will be loading into the CATV system ground. I suspect that your cable company will be less than happy about the results.

The other risk is that it is not grounded at the pole, but is still pretty darn close to the break out box. In this case you probably will have a lot of RF within a few inches of the CATV stuff. Again highly likely to make the cable guy a bit bothered.

As a receive antenna it should be pretty darn good at picking up power line noise .....

Did I mention what happens when lightning hits the power / cable lines .....

All that said - yes you can load it up with a good tuner and it will get out better than a lot of antennas.

Bob

"Keith Wood" <kw@bctv.com> wrote in message
news:3AABC457.B4DE45FA@bctv.com...
>
> I'm in an condo, can't put up a wire, but there IS an unused CATV
> lead-in (75-ohm coax) running right to the room where my HF rig will
be.
>
> Has anyone ever tried and had success with using the cable shielding
as
> an antenna in such a case? It's disconnected at the pole, runs 25 -
30
> feet (NW - SE, dropping 10 feet) to the corner of the house, then 14
> feet along the eaves (N-S), then 9 feet vertical drop to the feed
> through.

4667. Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:22:31 UTC
From: djohnson <dbjohnson@sympatico.ca>
Message-ID: <HpWq6.420352$JT5.12874844@news20.bellglobal.com>
Source record: 168740

I am taking down a TH6-DXX and putting up a vertical due to space limitation. Need to handle 1000 watts and work 10-15-20-40-80 meters. Been looking at many manufacturers but which is the best? Anybody have input ?

4668. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:23:20 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3AAC3318.F35D352D@ix.netcom.com>
Source record: 168741
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
> >> I left CB radio [snip]
> >
> > 0 2 4 6 8 10
> > |
> > |
> > |
> > |
> > |
> > |
> > |
> > |
> > TROLL-O-METER after recalibration!
>
```

4669. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:38:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC36AB.FFA36618@eznec.com>
Source record: 168743

W6RCecilA wrote:
>
> Reg Edwards wrote:
> > If that is the case, how is it that Eznec radiation patterns show
> > maximum radiation from a short grounded vertical occurs at a
> > considerable +ve elevation angle - simultaneously with zero
> > radiation at zero angle along the ground ?
>
> EZNEC doesn't display ground wave signals by default, Reg.
> . . .

Reg knows that. It's a favorite troll of his.

C'mon Reg, you can think up some new trolls, can't you?

Roy Lewallen, W7EL

4670. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:42:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC377C.762D3ECF@eznec.com>
Source record: 168744

I don't know what you mean by "lower angles of radiation", unless you mean the elevation angle at which the sky wave is maximum. Broadcasters go to great pains to minimize the sky wave while maximizing the ground wave, illustrating that you can't necessarily correlate the two.

The ground wave and sky wave do change in proportion, of course, if you don't make any change in the antenna except its efficiency. Neither the ground wave nor the sky wave radiation pattern changes shape in that case.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Reg Edwards wrote:
> >
> > Cec sed -
> > > I know it's not clear from the above but the mobile 40m Hamstick is on
> > > the receiving end a few wavelengths away mounted on my truck. It is tied
> > > into a Palomar PFS-1. In other words, would ground wave measurements
> > > yield the desired information?
> > ==========
> > Not very likely !
>
> We measure ground wave strength for our 75m mobile antenna shootouts.
> Why wouldn't those techniques work for vertical antennas? Seems
> stronger ground waves would correspond to lower angles of radiation.
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4671. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:45:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC383C.451B4E00@eznec.com>
Source record: 168745

If you're talking about using a hamstick for measuring the field from another vertical, it should be fine, as long as you're careful to eliminate any significant response to horizontally polarized fields. If you use it as the test antenna with various ground systems, you'll have some information about how a hamstick does under those conditions, which would be interesting. However, it might not be easy to extrapolate the results to what you'd get with a full sized vertical.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > But to my knowledge there are no published
> > comparative measurements between elevated and buried radial systems at a
> > frequency below 8 MHz. If anyone does know of any, I'd really appreciate
> > your letting me know where they're published.
>
> I'm going to put up a 40m vertical with elevated radials. It would be
> easy for me to make comparative field strength measurements at different
> radial heights while I'm at it. That will give me a spring ham project.
> Would a mobile 40m Hamstick be OK for making such measurements?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4672. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:47:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC38C8.7D6B0D8F@eznec.com>
Source record: 168746

Sorry, I answered the first one before I read this. When you elevate the radials, you make very little change in the radiation pattern, so I believe you could use ground wave measurements to measure the relative efficiency of various ground systems. I'd recommend getting far enough away from the test antenna that its height is negligible relative to the distance.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> W6RCecilA wrote:
> > I'm going to put up a 40m vertical with elevated radials. It would be
> > easy for me to make comparative field strength measurements at different
> > radial heights while I'm at it. That will give me a spring ham project.
> > Would a mobile 40m Hamstick be OK for making such measurements?
>
> I know it's not clear from the above but the mobile 40m Hamstick is on
> the receiving end a few wavelengths away mounted on my truck. It is tied
> into a Palomar PFS-1. In other words, would ground wave measurements
> yield the desired information?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4673. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:51:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC39C1.7C65C901@eznec.com>
Source record: 168747

Roy Lewallen wrote:

> S/m). At 1 degree freezing point depression (about 0.3 g-mol/l), the
> conductivity is 26 mmho/cm (0.26 S/m). Compare this to "average". . .

Correction: 26 mmho/cm is 2.6, not 0.26 S/m. My apology.

Roy Lewallen, W7EL

4674. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 02:55:48 UTC
From: h <not@aol.com>
Message-ID: <taoehirn1q1a5e@corp.supernews.com>
Source record: 168748
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

So your point?
If your gonna troll you gotta do better

--
Sincerely,
Ken
pwrguy@intergrafix.net
"ARRL" <Funny-0RG@arrl.org> wrote in message
news:BackTo11meters@CB.ARRL.ORG...
> I left CB radio 19 years ago when I got my novice ticket. It felt good
> communicating with people that knew what they were doing and were proud of
> their accomplishments in getting licensed. Over the past year things have
> gotten shitty on the bands and operators are stupid. It sounds just like
the
> CB I left 20 years ago except that the rig's readout is showing a ham
> frequency. To bad there isn't a better radio service I can go to now that
the
> bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters
in
> the middle of a ham band.
>
>
>

4675. Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 03:21:55 UTC
From: W4JLE <Fred@w4jle.com>
Message-ID: <98hfdelqe1@iac5.navix.net>
Source record: 168749

Listen buttwad, you were the one that said all antennas are fractal. You and your lawyers can all go get to know each other in the biblical sense.

Fred W4JLE
3/11/01

PRIVATE AND CONFIDENTIAL

On 3/11/01, Fred Hambrecht posted the following public statement on rec.radio.amateur.antenna:

<< I hope he doesn't find out about my sales of 11 meter fractal antennas. Seems the CBers love them and I haven't been able to build them fast enough. I spec them at 27 dB gain and simply point the prospective users to the freaktenna web site. They come away so confused that any gain figure seems supported.>>

Mr. Hambrecht:

I am writing to request that you provide details regarding the sales of the fractal element antennas you have publicly discussed. It is likely that your sale of said products is in patent violation with respect to the patents assigned to Fractal Antenna Systems,Inc. You may wish to search on the www.uspto.gov site to get more information about these issued patents.

In addition, Fractal Antenna Systems, Inc. has pending patents that also are quite likely to be infringed upon issuance by these sales.

If these antenna products consist or comprise parts which are described by our extant patent claims, you are requested to cease and desist in their sale effective immediately. I urge you to review your sale of these products with your attorney.

Thank you for your attention in this matter.

Cordially,

Nathan Cohen, Ph.D.
CTO
Fractal Antenna Systems, Inc.
617-381-9595

COPY: Via registered mail to be sent 3/12/01
XC: M. Kaufman, Esq.
F. Hopengarten, Esq.

4676. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 03:40:05 UTC
From: 2w8ji@akorn.net
Message-ID: <3aac4044.557740796@news.accessunited.com>
Source record: 168750

On Sun, 11 Mar 2001 16:06:44 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:
Hi Jim,

>I'd buy the bandwidth arguement except for one thing. I normally use the
>CW filter on weak signals to keep the locals from AGCing the weak ones
>out of existance and I still can't hear the PSK signal, oh maybe a
>little now and then, just enough to tell there is something more than
>noise there. But enough to be copyable CW, not a chance.

What CW filter BW do you use?

>don't. So given a stock tranceiver and a PSK program, I can work PSK
>that I can't hear.

Get an audio filter program for CW! Level the playing field.

>I have no idea where the poor dynamic range comment comes from other
>than perhaps the problem of strong signals AGCing out the weak ones, but
>you have that problem with all modes. It just gets focus on PSK since
>most everyone runs 30 to 40 Watts and some clown running 200W REALLY
>stands out.

We sure don't have an AGC problem with all modes! Virtually all other
modes match the BW of the receiver to the BW of the signal. Receiving
a 70 Hz wide signal on a 500 to 3000Hz wide receiver is just asking
for problems with off-channel signals blocking the receiver.

I don't operate CW with a 5 kHz filter, and I don't operate SSB with a
40 kHz wide filter. If I did, my life would be spent whining about
other people being too strong.

With propagation making far more than 50 dB difference and the
additional difference between antennas, I don't know how you can tell
a 200 watt signal from a 35 watt signal. That's only about 7 dB
difference Jim, not 50 dB.

While the use of a nbarrow CW filter helps the receiver problemss, PSK
ops still have tendency to hunker down in clusters a few hundred Hz
apart. Not only that, since the PSK tone is dumped into the audio
chain of a SSB transmitter, all sorts of problems can be created.

There is hum and noise from ground loops, harmonic distortion (that
does not show up on your IMD display), and even less than perfect
carrier and sideband suppression in a few rigs.

All of this stuff adds up to poor performance when strong signals are
mixed with weaker ones.

>I have seen differences in the abilities of PSK programs; some are
>noticably better than others. Perhaps you should try a different one.

I have the program in my DX4WIN software, and Digipan. I can send CW much faster than I can type, so I really don't operate PSK much. If I want to type, I can get on Internet and run all the power I want.

73 Tom

4677. Re: Isloop antenna in attic - advice??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 03:57:09 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <pOXq6.398048$ge4.139664751@news2.rdc2.tx.home.com>
Source record: 168751

30" I thought I had it rough!! Good job on scarfing up a Isoloop. I would
put in your attic if it would be reasonably clear (better than 4 feet) of
any large metal objects (furnace flue, power wiring ect.)
Also the weakness of the Isoloop was poor tolerance to weather (plastic case
would crack and break down and no parts to be found). 50 watts might be too
much on some bands (10 & 15m possibly) for good neighbor relations, take
advantage of the relativity good efficiency on the upper bands and go easy
with it.
Good Luck
Cliff N0HC
"Tom G." <tegwilym@wolfenet.com> wrote in message
news:wdyq6.294$x81.157211677@den-news1.rmi.net...
> Hello,
> I live in a condo/townhouse and just got an Isoloop atenna that I bought
> from a guy on the internet. My next task is to mount the thing someplace.
> I do have a patio area next to my unit with a 6 foot tall fence (keeps the
> neighbors from peeking in!). I'm thinking of 2 options for mounting this
> thing. 1) On the patio on a short pole around 6 foot tall 2) in my attic
> which has about 30 inches clearance at the peak (See photo here:
> http://www.geocities.com/tegwilym/station/setup.html). I figure I could
> just hang it from one of the beams in the attic someplace away from the
> other antenna in the picture (this is a QFH antenna for satellite
> reception). I have had excellent results with the satellite antenna, so I
> know that RF is getting into the radio ok through the roof. I'm just
> wondering if the Isoloop would radiate ok from up in the attic also? I
have
> read that it works pretty well without too much TVI, but I'll probably
keep
> it down to about 50 watts at the most - reduce the chance of my neighbors
> catching me!
>
> Any ideas?
>
> Thanks in advance!
>
> Feel free to mail me direct if you like, I'm already on every spam list
> anyway so there isn't much good in hiding my email address! :-)
>
> tegwilym@wolfenet.com
>
> Tom KA7VIK -- Seattle
>
>
>

4678. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 04:12:20 UTC
From: Brian Hemmis <K3USC@worldnet.att.net>
Message-ID: <E0Yq6.6313$Vg3.434883@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168752

Thanks Rudy, This is the kind of info I was looking for...really appreciate
it ! 73, Brian K3USC

"Rudy Marcelletti, K8SWD" <rudym@net-link.net> wrote in message
news:3aac0f56$0$62149$bbae4d71@news.net-link.net...
> Brian: 23 feet is the minimum length of wire for you coupler. This
length
> is at the "bottom" of one of "non-resonant" windows. This "window" is the
> first one of significant size that will produce a decent signal. The
window
> is 23 to 32 feet, with 28 feet about the center of this window. Here are
> some more "center" window lengths: 40, 58, 76, 95, 109, and 145 feet.
> Generally, you can go about 4 or 5 feet either way of center and be OK.
Use
> the formula 300/freq mhz x .5 to aviod multiples of half waves on any
given
> freq. Using the formula and the above lengths, I don't think you will
come
> up with any of the above lengths. I like the shorter 4 as they are
easier
> to work with. Try a 40 foot (or bigger) loop with your coupler. Try the
76
> foot length in an inverted L configuration. I like using insulated 12
gauge
> stranded wire or Flexweave wire because it is a lot easier to work with vs
> the hard drawn bare stranded 14 ga "antenna" wire as this will tend to
kink
> and bind and is hard to wind up for portable use. The "quality and size"
of
> your ground and/or counterpoise DOES matter with this system. As a rule of
> thumb, keep your counterpoise about 10% longer than the antenna wire,
i.e.,
> 58 foot antenna wire, use at least 64 feet counterpoise radials. 4
minumum.
> 8 works real good. 12 is real nice. More is overkill for this system, in
> my opinion. Keep them fanned under the antenna wire. Have fun matching
> stuff and making new "things" talk.
>
> Brian Hemmis <K3USC@worldnet.att.net> wrote in message
> news:jBvq6.3878$fw6.270654@bgtnsc04-news.ops.worldnet.att.net...
> > Would you be so kind as to pass on the lengths...thanks ! BH
> >
> >
> > "Jack" <kc8pkn@arrl.net> wrote in message

> > news:98deei$301$1@slb6.atl.mindspring.net...
> > > Try to cut the wire in non resonant lengths, I am getting one for my
> > IC-718
> > > next week and the dealer has a cutting chart.
> > >
> > > Jack
> > >
> > >
> > > "Brian Hemmis" <K3USC@worldnet.att.net> wrote in message
> > > news:2hcq6.2330$Vg3.146408@bgtnsc06-news.ops.worldnet.att.net...
> > > > Just bought the IC-706 MK2/G and AH-4 combo for portable- stealth
> condo
> > > use
> > > > in FL. Figured I'd run out some wire and attach a ground clamp to a
> cold
> > > > water pipe. Any other suggestions ? If I am on the right track are
> there
> > > any
> > > > suggested wire lengths that you've had success with ? Appreciate any
> > input
> > > > from AH-4 users. Tnx, 73-Brian K3USC
> > > >
> > > >
> > >
> > >
> >
> >
>
>

4679. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 04:29:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98hj88$gr8$1@uranium.btinternet.com>
Source record: 168753

W6RCecilA > Reg Edwards wrote:
> > If that is the case, how is it that Eznec radiation patterns
show
> > maximum radiation from a short grounded vertical occurs at a
> > considerable +ve elevation angle - simultaneously with zero
> > radiation at zero angle along the ground ?
>
> EZNEC doesn't display ground wave signals by default, Reg.
> My theory is that the lower the angle of radiation, the
> more powerful the ground wave is in the vicinity of a few
> wavelengths away from the vertical antenna. The question
> I have is would raising a ground plane cause the measured
> RF to miss the target antenna which remains at ground level?
==========
If EZNEC doesn't display ground wave signals by default then it
doesn't display low angle stuff with any degree of accurately
either. Otherwise, at what elevation angle does accuracy kick in ?

But I don't think any severe measurement problems will occur by
elevating the radial system of a short antenna a short distance
above the ground provided the transmitting and receiving antennas
are 8 or 10 wavelengths apart, ie., not within each other's near
fields.

The radiation patterns along the ground and at very low elevation
angles of 1/4-wave and 1/40-wave ground-mounted verticals are not
very different from each other. But EZNEC won't show it.

I suppose if the discrepancy was known then it could be corrected
by tilting the elevated transmitting antenna slightly in the
direction of the receiver. Intuitively, it won't matter very much
anyway. Other factors will produce greater discrepancies. For
example, raising height only a small amount from the ground will
greatly change ground induced loss. It will also severely detune
the system.

We are considering measuring techniques and accuracy. So the words
"greatly" and "severely" are relative. Over a practical skywave
path hardly any difference would be detected by a small change in
height of radials once they are above the ground.

Reg.

4680. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 04:57:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98hks5lep1@neptunium.btinternet.com>
Source record: 168754

W6RCecilA wrote:
> Doug Hall wrote:
> > Base loading just can't compete with center loading when
> > it comes to efficiency.
>
> I wouldn't call an antenna tuner at the base equal to "base
loading".
> Base loading would be putting the loading coil at the bottom of
the
> antenna which is better performance than an antenna tuner because
> the coil radiates coherently with the antenna. Real base loading
is
> "only" 3-4 dB down from center loading.
==========
Sorry Cecil, must disagree.

There is no difference whatsoever between a loading coil at the bottom of the antenna and a coil in the tuner immediately adjacent to the base of the antenna. A coil in an HF antenna conductor radiates no more than the length of the conductor the coil has replaced.

This is because the currents flowing horizontally in the coil turns flow in opposite directions on opposite sides of the coil and, being relatively close together, cancel out. This neat little analysis falls down at VHF where the coil diameter becomes a large fraction of a wavelength. Then you have a Moon-bounce Helical.

There is one advantage in locating the coil in the antenna - it can be made physically much larger than when inside the tuner. Double dimensions and coil Q is also doubled. There are no screening box losses either. But this advantage is not worth the trouble when, as often the case, most loss occurs in the ground.

Reg.

4681. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 05:08:24 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98hlp5$7st$1@slb6.atl.mindspring.net>
Source record: 168755

"'Doc" <w5lz@oio.net> wrote in message news:3AABEF65.1154215B@oio.net...
>
>
> Keith,
> Thats a really 'bad' idea! You'll have a direct 'outlet'
> into every place that has a CATV outlet. Not to mention that
> the cabling doesn't belong to you.
> 'Doc

How do you mean 'Doc? If he currently does not have cable service then the coax will run from his wall plate to a junction box where it will hang disconnected. It doesn't get connected until he subscribes to a cable service. The cable company then sends a tech out to physically connect the coax to the service.
Were you referring to induced signals ?
And you are right about the ownership of the cable but if it doesn't cause any interference and he never keys while the cable guy is hooking someone else up (ouch), would there really be any harm? I think that is more of a moral decision.
Just wondering...
KB9WFK

4682. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 05:13:39 UTC
From: Jim Pennino <jimp@mail.specsol.com>
Message-ID: <3ulh89.1e9.ln@mail.specsol.com>
Source record: 168757

Tom W8JI <2w8ji@akorn.net> wrote:
> On Sun, 11 Mar 2001 16:06:44 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:
> Hi Jim,

>>I'd buy the bandwidth arguement except for one thing. I normally use the
>>CW filter on weak signals to keep the locals from AGCing the weak ones
>>out of existance and I still can't hear the PSK signal, oh maybe a
>>little now and then, just enough to tell there is something more than
>>noise there. But enough to be copyable CW, not a chance.

> What CW filter BW do you use?

The narrowest you could get for a TS-440 from Kenwood when it was new,
270 Hz.

When the 440 finally dies or I hit the lotto, which ever comes first, it
will get replaced with something with DSP IF and audio.

>>don't. So given a stock tranceiver and a PSK program, I can work PSK
>>that I can't hear.

> Get an audio filter program for CW! Level the playing field.

Thought about it but I've never been a big fan of CW. Fact is, after
about four months of using PSK, I put the key and the keyer in the
closet.

>>I have no idea where the poor dynamic range comment comes from other
>>than perhaps the problem of strong signals AGCing out the weak ones, but
>>you have that problem with all modes. It just gets focus on PSK since
>>most everyone runs 30 to 40 Watts and some clown running 200W REALLY
>>stands out.

> We sure don't have an AGC problem with all modes! Virtually all other
> modes match the BW of the receiver to the BW of the signal. Receiving
> a 70 Hz wide signal on a 500 to 3000Hz wide receiver is just asking
> for problems with off-channel signals blocking the receiver.

In general, I would agree with the sentiment, but the realities of
the steepness of filter skirts do cause AGC problems with weak signals
on all modes, especially rigs with the technology of the 440.

Current DSP rigs have vastly better specs of course, but I don't have
one yet.

> I don't operate CW with a 5 kHz filter, and I don't operate SSB with a
> 40 kHz wide filter. If I did, my life would be spent whining about

> other people being too strong.

> With propagation making far more than 50 dB difference and the
> additional difference between antennas, I don't know how you can tell
> a 200 watt signal from a 35 watt signal. That's only about 7 dB
> difference Jim, not 50 dB.

The problem is usually with a weak DX station and some local new to PSK
that isn't aware that a KW is overkill in that mode. I can tell they
are running 200W because I'm monitoring them in another window, WAY
outside the passband of the CW filter, and they SAY they are running
200W.

> While the use of a nbarrow CW filter helps the receiver problemss, PSK
> ops still have tendency to hunker down in clusters a few hundred Hz
> apart. Not only that, since the PSK tone is dumped into the audio
> chain of a SSB transmitter, all sorts of problems can be created.

Most would consider the ability to put a whole lot of QSOs in a small
bit of sprectrum an advantage of the mode, but YMMV.

The usual problem with PSK newbies is audio overdrive trying to get
lots of unneeded watts out creating LOTS of extra sidebands.

> There is hum and noise from ground loops, harmonic distortion (that
> does not show up on your IMD display), and even less than perfect
> carrier and sideband suppression in a few rigs.

Oh, it does show up on the display; I see a lot of it.

> All of this stuff adds up to poor performance when strong signals are
> mixed with weaker ones.

>>I have seen differences in the abilities of PSK programs; some are
>>noticably better than others. Perhaps you should try a different one.

> I have the program in my DX4WIN software, and Digipan. I can send CW
> much faster than I can type, so I really don't operate PSK much. If I
> want to type, I can get on Internet and run all the power I want.

A coffee versus tea arguement; I can type a lot faster than I can send
CW even with a keyer. Mostly I like PSK because a lot of power is NOT
required. I live in a very populated area, and a marginal TV fringe
area to boot. If I were to put up a full sized 3 element 20M beam, I
would be hard pressed to keep it inside my property line, and no ones TV
frontend overloads from 30W.

Jim Pennino

4683. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 05:17:56 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAC5C04.15E@wt.net>
Source record: 168756

Tom W8JI wrote:
>
> On Sun, 11 Mar 2001 16:06:44 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:
> Hi Jim,
>
> >I'd buy the bandwidth arguement except for one thing. I normally use the
> >CW filter on weak signals to keep the locals from AGCing the weak ones
> >out of existance and I still can't hear the PSK signal, oh maybe a
> >little now and then, just enough to tell there is something more than
> >noise there. But enough to be copyable CW, not a chance.
>
> What CW filter BW do you use?
>
> >don't. So given a stock tranceiver and a PSK program, I can work PSK
> >that I can't hear.
>
> Get an audio filter program for CW! Level the playing field.

A good DSP program for this is chromasound. You can drag and drop any filter you want. The only hang is I can't run both the DSP and a PSK program at the same time on a single sound card. I think you could do it with two sound cards, or use two computers. A chromasound working demo is on their silicon pixels website. So far, it's the best puter DSP I've seen. It does great for CW, but if you use a SSB filter with crowded band cdx expect some blowby. But it's still way better than no filter at all. I haven't done too much PSK, but have tried hamscope a bit. I had pretty good luck with it here. The copy of MFSK16 thru 80m noise was pretty impressive compared to rtty. But the signals I were copying were plainly audible. I've downloded most the other PSK programs also, but haven't tried them yet. MK

--
http://web.wt.net/~nm5k

4684. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 05:25:53 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAC5DE0.B5C92118@IEEE.org>
Source record: 168758

Reg Edwards wrote:
> If EZNEC doesn't display ground wave signals by default then it
> doesn't display low angle stuff with any degree of accurately
> either. Otherwise, at what elevation angle does accuracy kick in ?

EZNEC displays the far field at infinity. Presumably the ground wave
doesn't make it to infinity.
--
http://www.mindspring.com/~w6rca

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4685. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 05:39:06 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D1CB29.52D1%stewartx@sccoast.net>
Source record: 168759
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Jeff Mayner wrote:

> "Dwight Stewart" wrote...
>>
>> TR@sky.net wrote:
>>
>>> Funny-0RG@arrl.org wrote:
>>>
>>>> I left CB radio [snip]
>>>
>>> 0 2 4 6 8 10
>>> /
>>> /
>>> /
>>> /
>>> /
>>> /
>>> /
>>> /
>>> TROLL-O-METER
>>
>>
>> You need to get your meter checked, TR. This
>> message was way too transparent to rate a ten.
>> It also lacked the style and sophistication to
>> be a highly rated troll. My meter still shows
>> it as less than a one (and its a generious meter).
>
> Then you need to get a new meter. His meter
> detected a troll, period. Don't you think that
> something as dumb as a meter would register a
> 10 on, as you say, something as transparent as
> "ARRL's" post? Also, try using your spell check.
> When a person flames another but in the process
> misspells a simple word as "generous", they tend
> to lose all credibility.

It was a joke, Jeff. There isn't a meter, and my message wasn't a flame.
And I certainly wasn't seeking "credibility" with nonsense such as this.

As for the fake meter, it isn't an on/off meter (on for troll, off for no
troll). It is a meter that rates a troll on a scale from one to ten. Since
this troll was so obvious, it simply doesn't rate very high as a troll in my

opinion.

However, since you control your own fake meter, you're free to rate the troll how you want. And I assure you that I will not hold your troll rating against you. [insert big grin here]

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4686. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 05:49:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAC6354.4EDFAB8C@IEEE.org>
Source record: 168760

Reg Edwards wrote:
> There is no difference whatsoever between a loading coil at the
> bottom of the antenna and a coil in the tuner immediately adjacent
> to the base of the antenna. A coil in an HF antenna conductor
> radiates no more than the length of the conductor the coil has
> replaced.

But Reg, a coil in the trunk in a shielded enclosure doesn't
radiate as much as the length of the conductor. Those coils are
quite often horizontal iron-core toroids and hardly radiate at all.
The radiation from the length of an air-core vertical loading coil
is measurable even though it radiates no more than the length of the
coil.

I'm quoting from 75m mobile antenna shootout results. The antennas
with the exposed base loading coils performed better than the whips
with the auto tuners in the trunk. In particular, 57.2 dB for a
base loaded whip VS 52.2 dB for an autotuner driven whip.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4687. Re: Isloop antenna in attic - advice??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 06:24:05 UTC
From: Tom Gwilym <tegwilym@wolfenet.com>
Message-ID: <bYZq6.540$ji.233388168@den-news1.rmi.net>
Source record: 168761

Well, I managed to get the antenna up in the attic last night. I found that the best place I could squeeze it in was an open place that has about 25 inches of vertical clearance. After playing around with it, I did seem to get it tuned up on 21 mhz and had a very flat SWR and 50 watts going out of it. The only problem is that I am getting some RF back in the shack and it gets into my Astron 7amp power supply which is powering the keyer. When I key down to transmit, I hear a click (in the power supply), and the keyer shuts off. I was just fooling around using AM modulation to try to tune the antenna instead.
When I was transmitting on AM, I ran out to look at my tv which was turned on, and I didn't see anything strange. I have cable, and the tv is probably about 15 feet from the antenna.
the antenna sure is twitchy to tune, but it will go flat on the meter with a little bit of fooling around. Any ideas on how to clear up the RF problem? RF chokes around the power supply cable and the cable that powers the keyer???

Tom

"Cliff Holloway" <cholloway14@home.com> wrote in message
news:pOXq6.398048$ge4.139664751@news2.rdc2.tx.home.com...
> 30" I thought I had it rough!! Good job on scarfing up a Isoloop. I would
> put in your attic if it would be reasonably clear (better than 4 feet) of
> any large metal objects (furnace flue, power wiring ect.)
> Also the weakness of the Isoloop was poor tolerance to weather (plastic
case
> would crack and break down and no parts to be found). 50 watts might be
too
> much on some bands (10 & 15m possibly) for good neighbor relations, take
> advantage of the relativity good efficiency on the upper bands and go easy
> with it.
> Good Luck
> Cliff N0HC
> "Tom G." <tegwilym@wolfenet.com> wrote in message
> news:wdyq6.294$x81.157211677@den-news1.rmi.net...
> > Hello,
> > I live in a condo/townhouse and just got an Isoloop atenna that I bought
> > from a guy on the internet. My next task is to mount the thing
someplace.
> > I do have a patio area next to my unit with a 6 foot tall fence (keeps
the
> > neighbors from peeking in!). I'm thinking of 2 options for mounting
this
> > thing. 1) On the patio on a short pole around 6 foot tall 2) in my
attic

> > which has about 30 inches clearance at the peak (See photo here:
> > http://www.geocities.com/tegwilym/station/setup.html). I figure I could
> > just hang it from one of the beams in the attic someplace away from the
> > other antenna in the picture (this is a QFH antenna for satellite
> > reception). I have had excellent results with the satellite antenna, so
I
> > know that RF is getting into the radio ok through the roof. I'm just
> > wondering if the Isoloop would radiate ok from up in the attic also? I
> have
> > read that it works pretty well without too much TVI, but I'll probably
> keep
> > it down to about 50 watts at the most - reduce the chance of my
neighbors
> > catching me!
> >
> > Any ideas?
> >
> > Thanks in advance!
> >
> > Feel free to mail me direct if you like, I'm already on every spam list
> > anyway so there isn't much good in hiding my email address! :-)
> >
> > tegwilym@wolfenet.com
> >
> > Tom KA7VIK -- Seattle
> >
> >
> >
>
>

4688. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 06:32:45 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <h4_q6.934$551.53391@typhoon.mw.mediaone.net>
Source record: 168766

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:988rjtrku1@lure.pipex.net...
>
> "Leland C. Scott" wrote in message
news:taf7qje6us3n92@corp.supernews.com...
> > "Gary Peach" wrote ...
> > > Did you ever hear of a "Metrosil"?
> > > I very high resistance to a low voltage and a low resistance to a high
> > > voltage.
> >
> > No. Any references on the WEB for more info?
>
> They are an old device manufactured by Metropolitam Vickers, (GE will
> probably have them probably called transient suppressors),

If your referring to MOVs I know about them.

> Sometimes the forward resistance of a diode is too low and it sustains
> ringing for longer than better methods where a proper disipative
resistanace
> of the correct value is engineered into whatever it is that you wish to
> supress.

That would be true if you wanted to stop the ringing in less than one cycle.
Most of the time all you want to do is clamp the voltage spike.

> LR should be such that all of the energy is disipated before the
> second overswing, in other words critically damped instead of leaving it
to
> pot luck that the diode forward resistance will do the job. Also if the
> excess energy exceeds the disipation capacity of the diode then you will
> blow a lot of diodes and either burn out a lot of points or blow up a lot
of
> control transistors.
> Of course the hardest thing to damp and control is a DC motor wher the
> stored mechanical energy and Lenz's Law produce a back EMF of the same
> polarity as the original supplied voltage, here a single diode does little
> good and a more complex arrangement is required. Where Hams might
encounter
> this problem is with rotators

The motor controllers I see use either regeneration, or a dump resistor, in
those cases.

> I suppose you never saw a solid carbon resistor filed to adjust it's
value,

> this was often done for meter multipliers and shunts when accurate
> caliobration was required,

Oh I have. I have even done it myself once or twice. The problem is finding somebody who still manufactures carbon composition resistors today. Just about everyone is going metal film, and or surface mount. I had an application using a 2 watt 15 ohm carbon resistor, manufactured by Allen Bradley, which quit making them. Now try to find a replacement than will not bust the bank, if you can find one. I finally switched to the metal film version.

> I take it that you have witnessed this for yourself. ;)

Yup, way back as a kid when I was playing around with electrical stuff. Learned all about inductive ring up real fast.

> Sadly not always easy to come by once you retire

I got about a dozen from Caddock as free samples. Just call, or E-mail, a vendor. Tell them you are a consultant. ;-) Many times you can get free parts as "engineering" approval samples. Or if you can't get them free you can buy them at the 1K to 10K price, and save some money.

> Is this a bifilar winding similar to the resistance element used on a Post
> Office Box?

Yes it is. But this type of design is not very good when you are working at MHz frequencies. The flat film type is much better at high frequencies. I tried using some of those in a snubber circuit, they don't work for crap at high dv/dts. If crummy resistors don't get you, then the capacitor will. Many capacitor designs look more like an inductor at high frequency.

>
> > > Presumably this is why they generate noise up into VHF/UHF
> >
> > This is maybe due to the reverse recovery effect when the diode "snaps"
> off.
>
> That may supply the stimulus, but not the resonance, that will be
determined
> entirely by the passive elements in the circuit.

True. The reverse recovery blip of current is a pulse source rich in harmonics. This is what provides the external tuned circuit with the energy to ring.

>
> > The results would be similar to what happens with a step recovery diode.
>
> Ah! the dreaded Hole storage effect.

Basically yes. The PN junction acts like a tiny capacitor that must be discharged before current through the PN junction stops when the current flow reverses. The capacitor is discharged through a combination of reverse

current flow, and charge carriers crossing the junction to recombine with an opposite charge carrier.

There is also an even less talked about effect, the forward diode recovery effect. The PN junction must reach a certain level of concentration of charge carries before the junction will conduct in the forward direction. Until that condition is reached the forward voltage across the diode can easily exceed the normal forward voltage drop of a PN junction. How much of a voltage rise you see depends on the diode junction size, current level, and how fast the current rise, di/dt, is through the diode.

> On Octal bases?
> Used in Railway signalling a lot?

No. These are standard machine tool control relays, manufactured by either Allen Bradley or Square D, and mount directly on a cabinet subpanel. These relays have stackable contact heads with 4 contacts each. You can stack as many as two of these on a relay coil base for a total of 8 contacts. Each contact can be set for either normally open, or normally closed, by pulling out the contact element itself, and flipping it over, then reinstalling it in the head. There are also time delay contacts too. These work by air flowing in, or out, of a tiny bellows coupled to a switch in the timer head. A screw, or thumb wheel, sets the rate of air flow, thus the time delay.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

4689. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 07:01:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAC742F.6C83@wt.net>
Source record: 168762

VE9SRB wrote:
>
> QST - HA!
>
> I tried to join and received a polite message that the moderator would not
> approve my membership. I guess its a selective group of "all interested
> hams".
>

I think the good shepard decided he didn't want anyone that knew what
they were talking about, being around to taint his flock of sheep.
According to the gospel of Frac, there will be no other gods before
thee. MK
--
http://web.wt.net/~nm5k

4690. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 07:03:41 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <98hscd$m16$2@bashir.peak.org>
Source record: 168763

VE9SRB <srbest@att.net> wrote:
: QST - HA!

: I tried to join and received a polite message that the moderator would not
: approve my membership. I guess its a selective group of "all interested
: hams".

Not surprising. I suspect that anyone with an fair knowledge of antennas
will not be welcome. Nor will people who have pointed out just how limited
and useless his patent is.

--
Bill Nelson (billn@peak.org)

4691. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 07:08:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAC75F0.1760BAFF@eznec.com>
Source record: 168764

Reg Edwards wrote:

> If EZNEC doesn't display ground wave signals by default then it
> doesn't display low angle stuff with any degree of accurately
> either. Otherwise, at what elevation angle does accuracy kick in ?

That's not correct. Ground wave signals are rapidly attenuated with distance, more so as frequency increases. The ARRL Antenna Book has graphs that show this. Beyond the few miles of range where the ground wave signal has faded below the noise level, EZNEC is as accurate at any angle as any program which does include ground wave analysis. (This can be easily verified by running NEC-2 with ground wave analysis enabled, or with EZNEC pro if you have it.)

But I'm sure you know this, since I've explained it several times before on the newsgroup and it's easily verified. Don't you realize that repeating something you know to be false casts doubt on the credibility of everything else you say?

> But I don't think any severe measurement problems will occur by
> elevating the radial system of a short antenna a short distance
> above the ground provided the transmitting and receiving antennas
> are 8 or 10 wavelengths apart, ie., not within each other's near
> fields.
>
> The radiation patterns along the ground and at very low elevation
> angles of 1/4-wave and 1/40-wave ground-mounted verticals are not
> very different from each other. But EZNEC won't show it.

You really should run these analyses with EZNEC before saying what it will or won't do. Anyone who is interested can do the following with any version of EZNEC, including the free demo version available from http://eznec.com (details will be different if you're using a DOS version):

1. Start EZNEC.
2. Open example file Vert1.
3. Click "FF Plot" to generate a 2D elevation plot.
4. In the plot window, click "Save As", give the file a name, and click "Save" in the file dialog box.
5. Open the Wires Window by clicking on the Wires line in the Control Center (main window).
6. Change the wire End 2 Z coordinate from 10.3 to 1.03 meters. This reduces its length from about 1/4 to about 1/40 wavelength.
7. Press the <Enter> key to accept the change.
8. Run "FF Plot" again.

9. In the plot window, click "Add Trace", and select or enter the name of the trace you just saved.

You'll see the patterns of two verticals of length about 1/4 and 1/40 wavelength overlaid. Judge for yourself whether the patterns are the same at low angles. (Be aware that this model doesn't include ground resistance loss, so both model antennas are 100% efficient. If you do include the ground system loss as a resistor or by using the High Accuracy ground model and radials just above the ground, you'll find that the 1/40 wavelength antenna is really a lot less efficient unless you have a very elaborate ground system.)

If you are for some reason interested in knowing the intensity of the ground wave field, use the "near field" analysis, which does include the total field. Do this for the 1/4 and 1/40 wavelength antennas if you're interested.

> I suppose if the discrepancy was known then it could be corrected
> by tilting the elevated transmitting antenna slightly in the
> direction of the receiver. Intuitively, it won't matter very much
> anyway. Other factors will produce greater discrepancies. For
> example, raising height only a small amount from the ground will
> greatly change ground induced loss. It will also severely detune
> the system.
>
> We are considering measuring techniques and accuracy. So the words
> "greatly" and "severely" are relative. Over a practical skywave
> path hardly any difference would be detected by a small change in
> height of radials once they are above the ground.
> ----
> Reg.

Roy Lewallen, W7EL

4692. L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 07:21:28 UTC
From: rb <rbigg@pcola.gulf.net>
Message-ID: <YN_q6.15697$Xe.1131192@bin1.nnrp.aus1.giganews.com>
Source record: 168765

What's the rule of thumb for initial tuning adjustment of a roller coil L tuner into ladderline? The manual on my T tuner says to tune the roller coil for max rcvr noise, and then the two var caps. After that, put low pwr carrier in for fine tuning. Does this also apply to L tuner circuits with roller coils?

4693. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 09:00:50 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAC9042.6509@wt.net>
Source record: 168672

rb wrote:
>
> What's the rule of thumb for initial tuning adjustment of a roller coil L
> tuner into ladderline? The manual on my T tuner says to tune the roller
> coil for max rcvr noise, and then the two var caps. After that, put low pwr
> carrier in for fine tuning. Does this also apply to L tuner circuits with
> roller coils?

About the same. Using the noise can get you pretty close as far as the coil goes. You want to use the least amount of coil to get a match. So say you peak the noise, and tweak the caps, and you have a good match. After that, I keep slowly lowering the coil turns and tweaking the caps until I can't get a decent match. Then I go back to the point of least coil and acceptable SWR. This way you are assured of being tuned at the most efficient point. Most of these tuners can do a match with 49 different settings of coil/caps. Only the setting using the least coil is fairly efficient. So there is really only one correct setting if you don't want to waste power. I did a test of the losses with different tuner settings on this MFJ-989c I have. I found if you use too much inductance, 20% loss is easy to come by. Of course, many will say you can't hear the difference, and they are probably right, but I still hate to just throw away available power. If you run an amp this 20% can build up a lot of heat. I found if you are very careful with the tuning, the loss can be almost unreadable on a normal wattmeter. MK
--
http://web.wt.net/~nm5k

4694. DX Radio System Multi GP - opinion?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 10:24:57 UTC
From: CA <sm6pxj@hotmail.com>
Message-ID: <Ns1r6.982$341.3062@nntpserver.swip.net>
Source record: 168767

Anyone that have tried the multiband GP from DX Radio System (in France)?

http://www.ktv.se/ktv/image/multigp1.pdf

http://www.dxsr-antennas.com/

4695. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 10:28:31 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98i9kb$n9j$1@lure.pipex.net>
Source record: 168669

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >I think that you have not been quite honest in witholding some of the
data.
> >My calculations are correct.
>
> It seems like you are saying:
>
> 1.) I measured noise floor in a working system with accurate
> instruments, and presented the data.
>
> 2.) Since measured results disagree with your "calculations", which
> you consider flawless, I must have "withheld data".
>
> What about the hundreds of other people who's emperical results fly in
> the face of your "calculations"?

I don't think that they do, if you look carefully towards the end of whatI
have atempted to demonstrate mathematically you will see that I credit your
proposition with an improvement of up to 1 dB improvement in Signal to noise
Ratio, but this is at the expense of a loss of a great deal of dynamic range
of the reciever and the introduction of all sorts of internal problems down
the receiver chain not least of which is running the predetection filters at
far too high a level. If you consult the literature about high 'Q' filters
you will see that the recomendations suggest that you operate them at as low
power levels as practicable to prevent ringing etc.

> >> Factually, a preamplifier often is needed on 160 meters with many
> >> receiving antennas. There obviously are many things being ignored in
> >> some of the answers given.
> >
> >Not ignored, but unstated in your original query.
>
> What query? I made no query. I offered real-world data, since I have
> it available.

I'm sorry if I miss inerpreted a request for a source of a preamplifier as a
query.
I mistakenly assumed that as you request a pre amplifier that you had not
yet undertaken any practical observations. I was trying to save you some
money. When I last looked for the commercial device offered by one of our
reputable dealers such amplifiers were going for about 250 UKP approx US$360
I decided that for a dB improvement at 160 m that was uneconomic for me.
I might conclude differently now that PSK31 has become so popular.

> >> At my location, even arrays of 880 foot long Beverages require
> >> amplification before going to the receivers. My small verticals, and
> >> certainly any small loops (if I had them), would require
> >> amplification.
> >
> >I thought that you had a 40 foot square yard! ?
>
> I never said how big my "yard" was.

I can't be bothered to go back through the postings in this topic but somewhere this garden size was mentioned. This raised my interest as due to my personal circumstances I live in the centre of a town to be near to the shops and Doctors etc. My backyard is 25' x 65' approx and I am looking for an antenna that will operate satisfactorily on long wavelengths. I know that I shall have to pay a huge efficiency debt for my practical situation, but so be it, I think it prudent to know what I am walking into before I set out. I had hoped that free and frank discussion in this so convenient medium amongst fellow experimenters would not only be pleasent, but also useful to all concerned. If in my quest for vigour I have upset you by a too search approach then I appologies. Never the less the facts remain the facts.

> >> For a working MEASURED example, noise floor to the NE on an array of
> >> 880 foot long Beverages on a quiet winter night, using 3.5 kHz
> >> bandwidth, is -123 dBm with no feedline loss. That's 194 nanovolts (I
> >> have a 75 ohm system) with a very wide 3.5kHz bandwidth.
> >
> >That is interesting, (obviously not your back yard), and indicates a loss
of
> >approximately 29 dB for that antenna.
>
> Simple enough to check.
>
> That array, after feedline losses are deducted, is typically slightly
> less than 20 dB down from a 200 foot tall single element vertical with
> 100 200 foot long radials and a vacuum variable and large edge wound
> inductor for matching, when signal levels from distant stations in the
> direction where the Beverages point are compared.

So what is the gain of the reference AE?

> It might be as much lower as 12-20 dB (QSB, sorry), but it very
> obviously is much less than 29 dB down.

My figure of 29 dB is due to the absolute efficiency not the comparative gain compared to an uncalibrated reference.

> >-198.6 - (-123) = 75.6
> >3,500 Hz = 35.4 dB
> >
> >75.6 - 35.4 = 40.2dB = 10,471°K
> >
> >Which is approximately in accord with the 9,000,000°K that I proposed for
> >the Sky Temperature (Tsky) on 160 m during the quite times.

>
> And your numbers come from what stone tablet???

OK a readily accessible reference that many Hams will have is
"RSGB RADIO COMMUNICATIONS HANDBOOK"
Fig 15.6
I chose the quitest noise temperature for 160 m as this favoured your case
the most.
In fact the sky temperature can be up to 45 dB hotter at 160 m
than the low of 9,000,000°K that I chose for my worked example.

> >10 log(9,000,00/ 10,500) = 29.3 dB loss.
> >or 0.1% efficiency whichever way you like to look at it.
>
> Maybe you, not me. I have to trust my Sierra 303B and various signal
> sources.

Just how do you launch the signal to make this measurement?
Is the calibration signal that you use a Frauenhoffer wave
or are you in the near field. Do you make your measurements with the
energising probe in different positions with respect to the Aerial under
measurement? The position of the launching probe in the near field is
critical and highly variable.

> >However the S/N ratio is still less than that at the I/P from free space
to
> >the antenna.
>
> How do you know that?

please follow the example for (Si/Ni) / (So/No)
This is all standard work and can be verified in any good standard text on
the subject of noise and receivers or transmission theory. It is used every
day by millions of competent engineers and the results always come up
trumps. They have fitted the theory for the last 70 plus years. Now I will
be the first to admit that this is not conclusive proof of the absolute
correctness of the theory, that would suggest a closed mind and an infinite
knowledge of everything past present and future, of course such a God like
quality may be confered by others, but I would still remain unconvinced in
the absoluteness of the theory.
In the mean time because it works not only for me but millions of others I
have no proven alternative to hand I will continue to use it untill
convinced that it is flawed. I would hope that I am amongst others in such
an objective approach not only to this hobby, but to life.

This is the bit that you should attempt to understand.

> >Putting 9,000°K directly into a mixer gives
> >Ts = Ta + Tr
> >= 9,000 + 2,500 = 11,500°K
> >S/N in is S/ kBTsky
> >The signal is 29 dB down too so S/N out is

> >(eff x S)/(eff x Nsky + Nr)
> >0.001S/ kB(0.001 x 9,000,000 +2,500)
> >(Si/Ni)/(So/No) becomes
> >(eff Tsky + Tr)/eff TSky
> >(0.001 x 9,000,000 + 2,500)/ (0.001 x 9,000,000)
> >= 11,500/ 9,000 = 1.28
> >or approximate 1 dB loss of signal to noise ratio.

Her is the bit that ses that for any system the signal to noise ratio out of it is always worse than what you put into it because a perfect syatem does not exist and any practical system will always add some noise of it's own.

"Send reinforcements I'm going to advance"
I won't bother to rehearse that one as you are no doubt quite familiar with it.

> >Where
> >Si and Ni are signal and noise in respectively
> >So and No are signal and noise out respectively
> >
> >Now with the amplifier gain G;
> >say for example 30 dB (makes the numbers easier to follow)
> >S/N = (G eff S)/(G eff (Na + Namp) + Nr)
> >(Si/Ni)/(So/No)
> >= (G eff(Tsky + Tamp) +Tr)/ G eff Tsky
> >= (1,000 x 0.001(9,000,000 + 300) +2,500)/ 1,000 x 0.001x9,000,000
> >= 9,002,800/ 9,000,000
> >= 1.0003
> >or 0.0014 dB
> >= (1,000 x 0.001x S)/ kB (1,000 x 0.001x(9,000,000 + 300) +2,500)
> >Thus an amplifier can win you about a dB of signal to noise however you have
> >reduced the dynamic range of the receiver by 30 dB in the example.

And her is wher I credit your contention that the amplifier gives an improvement. If you can afford the price and you think that 1 dB using SSB will give you a worthwhile advantage then please go ahead it is your money after all. At least you'll get some benefit on 28 MHz if your Rx doesn't already have a built in RF Amplifier

> You are pulling numbers from the thin air instead of staying with a
> working example. That's often a problem when people ask a simple
> question, and get an answer from a textbook.

Had you provided data I would either have accepted or disputed the data provided, had I been content with the data then I would/will rehearse the exercise using your data. In the abscence i used data which is freely available to the majorioty of Hams who can do the calculations for themselves. Ther will be readers to this excgange that are quite unfamiliar with this topic and I had hoped that by exercising it for your benefit that the dialog would be in a small measure a teaching exercise or at least a basis for considered debate. As far as I am concerned I am not out to win an

argument, merely preventing the little grey cells from becoming completely atrified in retirement. I shall go out kickiong and screaming to the last, no graceful resignation to the inevitable. I have no objective to accumulate laurels, (I have enough of those thank you), nor do I have the objective of denigrating any other living soul I am motivated to find like inquistive minds and wher possible give encouragement to those just coming through the hobby and who wish to go a little further than the requirements of the examination required for certification.
There is life after the RAE

> 1.) The FT-1000D, which has a fairly good receiver by amateur
> standards, has about 10dB S/N with a .2 uV input signal and 2.5 KHz
> selectivity.

((2 x 10^-7)^2)/50 = 8 x 10^-16 Watts
10 Log (8 x 10^-16) = -150.9 dBW

Converting to dBm as this is the usual units for receiver calculation due to the scales of the available instruments used.

= -120.9 dBm calibration signal

Now this value is producing 10 dB S/N
therefore threshold is -131 dBm

the bandwidth 2,500 Hz = 34 dB Hz

-131 = -198.6 + 34 + 10 log(T)
TdB = 33.6 dB
Tr = 2,290.9 °K

NF (in dB = 10 Log(1+ (Ts/290)
= 10 log (1 + 2,291/290)
= 10 Log(1+ 7.9)
= 9.5 dB

This is the typical noise figure for a mixer with no RF amplifier.
They are usually about 10 dB

> That's a NF of 20 dB, or a temperature of almost 29,000°K.

I think that you are a decimal point out OM
2,900°K is nearer the right figure and you will find most RX with solidstate mixers and no RF amplifier have this sort of noise figure.
A good balanced mixer with the correct Local Oscilator injection level will come up with this sort of figure fairly consistently and have an insertion loss of a couple of dB

> 2.) The sky-noise you are using is not accurate at every location,
> every season, and every time of day. It is also most likely for a
> non-directional antenna.

No indeed it is not ther is a variation of some 45 dB which is mean medicine in anybodies language. I chose the best case, the case that would favour

your contention. The hotter the sky gets the worse having an RF becomes. Try using the switch attenuator fitted to many modern RX on top band you'll need it all. On 20 m during the mid-day noise peak 10 to twenty dB is probably the setting. I would like the possibility of putting in 3, 6, 10, 20, 30, 40 dB but I have not seen such a receiver so an external switched attenuator is an advantage. You want just enough attenuation to knock the noise back without attenuating the signal to a level below the receiver noise.

> Ignoring the above is NOT a good idea, when answering a question.

I stated the parameters for my example. I'm sure that many will not be following the maths as it is without putting a load more calculations for other values, however if you are prepared to accept that I won't cheat I'll publish a small table of results of improvement of S/N and reduction of dynamic range for a variety of sky temperatures.
My aim is to assist, contrary to any differnt opinion which you may have formed. :)

> >It would help if you could provide some AGC to the preamplifier.
> >If that is not possible it would help to use an amplifier of less gain than
> >my example. We could calculate the break even point, if you want I'll set up
> >the spread sheet to calculate a table for you and you can make your choice
> >to suite your conditions.
>
> No, that is NOT true at all. AGC to the preamplifier would only work
> when the desired signal was into the AGC response. As a rule, overload
> and IMD comes from signals outside the passband of the receiver.

That is precisely why you don't want excess front end gain. The IMD will only occur when adequate levels combine in a non linear device, this is withing the set despite the fact that the signals originate exernal to the set. the object of the exercise is to keep those signals out of the set. you can do this best with a pre input filter with nice steep sides and a very large rejection ratio. Using amplification only makes those signals larger and more difficult to eliminate. Leakage around and saturation of the filter etc.

> AGC would have no effect on the systems IMD performance on weak
> signals...where it is most problematic.

Here you should use a filter immediately at the aerial of at least three sections and 18 dB/Octave rejection to out of band signals.

> More important than this, you are dictating my system works
> differently than it actually does.

I think that if you look carefully that I support some of your contentions, but do not completely share your conclusions.
Take a look at my web page for my background click on the picture of me, (The good looking one), for a mini technical bio. with pictures.

www.gary.peach.dial.pipex.com

> >If you are working machine modes the fraction of a db signal to noise
will
> >be very helpful with rare DX but for 10 dB S/N SSB not much use to you at
> >all.
>
> Nonsense.

This is a table of counted errors in a known passage of text 1,000
characters long. The relationship is
P[E] = 1- erf(S/N)

erf is a function that you can look up just like logs
P[E] is the statistical probability that an error will occur in a noise
environment with a signal to noise ratio S/N
This works for speechs in parliament, trying to communicate across a noisy
machine shop or in a railway station etc.
It does work well and NASA use it ALL of the time for statistical analysis
of the data from their deep space spacecraft.

| ERRORS
S/N | per 1000
0.1 dB | 147.85
0.2 dB | 138.64
0.3 dB | 129.68
0.4 dB | 120.98
0.5 dB | 112.56
0.6 dB | 104.43
0.7 dB | 96.60
0.8 dB | 89.08
0.9 dB | 81.88
1.0 dB | 75.01
1.1 dB | 68.48
1.2 dB | 62.28
1.3 dB | 56.43
1.4 dB | 50.92
1.5 dB | 45.76
1.6 dB | 40.94
1.7 dB | 36.46
1.8 dB | 32.31
1.9 dB | 28.50
2.0 dB | 25.00
2.1 dB | 21.81
2.2 dB | 18.92
2.3 dB | 16.32
2.4 dB | 13.99
2.5 dB | 11.91
2.6 dB | 10.07
2.7 dB | 8.45
2.8 dB | 7.04
2.9 dB | 5.82

3.0 dB | 4.78
3.1 dB | 3.88
3.2 dB | 3.13
3.3 dB | 2.50
3.4 dB | 1.98
3.5 dB | 1.55
3.6 dB | 1.20
3.7 dB | 0.92
3.8 dB | 0.69
3.9 dB | 0.52
4.0 dB | 0.38

> >Presumably on transmit you feed your other antenna which you say is of
> >comparable gain with 400 kW for full ERP ;)
>
> ?? Did I say that? Or did you imagine it?

Please observe the emoticon, technical discussion can be a lot easier with a
little humour. This may be an innovation for you but the old hands do it all
of the time, except for a very few old stick in the muds. Their loss. :(

> >> My FT-1000D barely makes that level with 10 dB internal S/N ratio
> >> preamp on, and that is for wider-than-SSB bandwidths! On CW, forget
> >> it. The receiver sounds stone dead and I would loose many weak signals
> >> that would otherwise be workable without external amplification!

I saw that somebody else had independently addrressed this point so I will
not restate the excellent advice so given.

> >Of course it sounds stone dead,
> > but the S/N ratio of any CW signals that you receive will be great.
> > Once again if you work PSK31 you will not be able to
> >hear the signals, but they are there none the less, and if you can tune
to
> >them they will decode without error. HamScope is a great application for
> >this purpose.
>
> Nonsense.

Try it and see, you'll be pleasently surprised.
Just look at the numbers of Hams coming up on PSK31.
Ask some of the truthful old CW ops that have tried PSK31.
You'll get a lot more new countries with this newly available to Hams mode
This mode was what we were using to get the images of Mars back from
Mariner IV in 1966. The system temperature was 40°K and the bit rate was 8
BPS in a 2 BLo bandwidth of 8 Hz. Lots of good fun several hours per
picture.
The round trip light time was of the order 20 Minutes. (don't mean to blind
you with science. The bit errors had to be less than one in 1,000 for the
scientific analysis team to accept the data. (That's the guys that look at
the pictures and say there are no little green men on Mars)

> PSK is not as effective as the human ear on CW (assuming you know
> morse code, and have normal CW skills) for digging signals out of the
> noise.

History will decide that debate I think.
I would love to understand this myserious facility that CW ops claim to
have.
I wouldlike to see a series of experiments done in an attempt to quantify
these claims. If they are proved significant then ther is a great deal more
to be done with machine encoding and communication in a noisy environment.

> Readability is far better on CW than on PSK, when all things (gain,
> receiver bandwidth) are equal.
>
> It's better get back to consider there things by fact, not hearsay.

I fear that this discourse has become so long that the content is now lost
and anything which I have to say further to amplify the facts for you and
those trying to follow this debate, (they probably gave up ages ago), will
have to be in a seriously edited version of this post.

I wish you luck and I am so pleased to be able to debate such technical
issues with somebodyt as equally dedicated to learning and understanding the
truth of nature.
73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4696. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 10:47:52 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98i9kd$n9j$2@lure.pipex.net>
Source record: 168768

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3aab93b5.513558671@news.accessunited.com...
> On Sun, 11 Mar 2001 06:05:03 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:
>
> >Have to disagree with that one based on empirical experience. I've worked
> >PSK stations I couln't hear at all.
> >
> >Jim Pennino
>
>
> Hi Jim,
>
> I heard the same thing from K1BQT, and figured out why he thought it
> was true. There certainly is no technical reason why PSK would be more
> reliable than CW...as a matter of fact the opposite is true.
>
> Because PSK looks for a carrier drop and an abrupt reversal in
> phase...it has to be above the noise to be decoded.

Actually the integral of the phase shift is detected, since this builds up
over the duration of the bit time the S/N is enhanced. If the detection
process relied only upon the instantaneous phase change then I doubt the
system would work at all.
I recommend Viterbi
"Phase-Locked Loop Dynamics in the Presence of Noise by Fokker-Planck
Techniques"
Proceedings of the IEEE Vol 51, No 12 pp. 1737-1753, December 1963

to answer your deeper questions on Phase Shift Keying.

If you can lay your hands on NASA technical report No 32-819
Theory of Practical Design of Phase-Locked Receivers Vol 1
by Robert C. Tausworthe
Jet Propulsion Laboratory
California Institute of Technology
Pasadena California
February 15, 1966

The theory is set out simply and the essentials are shown in an appendix.

You'll just love the pictures :)

Other authors to look for are Jaffe & Rechtin, Davenport & Root
And if you can find a rare document by Robert C Bunce July 1963 for a full
mathematical treatment at elementary engineering level in manuscript form.

NASA Re-Order No. 63-211

It will assist you if you have a knowledge of servo techniques.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4697. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 10:48:55 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaca36f.583131195@news.accessunited.com>
Source record: 168670

On Sun, 11 Mar 2001 21:13:39 -0800, Jim Pennino
<jimp@mail.specsol.com> wrote:
>When the 440 finally dies or I hit the lotto, which ever comes first, it
>will get replaced with something with DSP IF and audio.

DSP filtered radios are OK if you don't stack strong signals near
them. They really need a conventional filter ahead of the DSP, like
the new Yaesu has.

>> We sure don't have an AGC problem with all modes! Virtually all other
>> modes match the BW of the receiver to the BW of the signal. Receiving
>> a 70 Hz wide signal on a 500 to 3000Hz wide receiver is just asking
>> for problems with off-channel signals blocking the receiver.
>
>In general, I would agree with the sentiment, but the realities of
>the steepness of filter skirts do cause AGC problems with weak signals
>on all modes, especially rigs with the technology of the 440.

I'm not how the 440 behaves. There is absolutely no reason to have AGC
problems with off-frequency signals. That happens only if something
overloads ahead of the narrow filter.

I do not experience that with any of my rigs, unless there is an S
meter pinning signal.

>Current DSP rigs have vastly better specs of course, but I don't have
>one yet.

They certainly have impressive reading advertisements, but I won't be
using one anytime soon untill the close-spaced dynamic range is the
same or better as conventionally filtered rigs. I have enough problems
being bothered by clicks from close signals as it is.

>The problem is usually with a weak DX station and some local new to PSK
>that isn't aware that a KW is overkill in that mode. I can tell they
>are running 200W because I'm monitoring them in another window, WAY
>outside the passband of the CW filter, and they SAY they are running
>200W.

Why should that bother you?

>Most would consider the ability to put a whole lot of QSOs in a small
>bit of sprectrum an advantage of the mode, but YMMV.

It would be nice if the systems had reasonable dynamic range. They
don't, because of the modulation and filtering schemes.

>The usual problem with PSK newbies is audio overdrive trying to get
>lots of unneeded watts out creating LOTS of extra sidebands.

My FT 1000D generates harmonic distortion that is only about 25 dB down no matter where the gain is set. PSK ops tend to think that minus 25 dB or more is "excellent" spectral purity. -50dB will get you lynched on CW, because people are used to having strong signals next to weak ones without QRM.

>> There is hum and noise from ground loops, harmonic distortion (that
>> does not show up on your IMD display), and even less than perfect
>> carrier and sideband suppression in a few rigs.
>
>Oh, it does show up on the display; I see a lot of it.

You can only see it if you are using a wide filter and the signal is somewhat strong. It does not show up on the "IMD" reading.

I see PSK ops with harmonic distortion all the time getting excellent signal reports. Most likely because the harmonics are outside the passband of the receiver. One cure for that is to use a high pitched tone all the time, so the SSB filter eliminates or reduces the IMD.

Many SSB transmitters are not designed to provide the low harmonic distortion required when driving the audio with a tone that is used to provide RF output. Collins tried that for generating CW in the early S line, and users constantly had complaints about spurious signals when operating CW.

99% of the whining by PSK ops about "high power" would vanish if the system had decent dynamic range. PSK ops simply don't understand the system isn't as good as they are led to believe. They think the problem is caused by an extra 10 dB of transmitter power, when the real problem is poor system dynamic range. When normal propagation variations can well over 50 dB spread in signals, it's silly to think that everyone running the same power will cure things.

If PSK was a closed loop system, things would be a lot better.

73 Tom

4698. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 10:58:12 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaca96e.584666547@news.accessunited.com>
Source record: 168671

On Sun, 11 Mar 2001 23:49:08 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>But Reg, a coil in the trunk in a shielded enclosure doesn't
>radiate as much as the length of the conductor. Those coils are
>quite often horizontal iron-core toroids and hardly radiate at all.
>The radiation from the length of an air-core vertical loading coil
>is measurable even though it radiates no more than the length of the
>coil.

Hi Cecl,

The largest problem is stray capacitance lowers system efficiency, not
a lack of contributing radiation from the inductor.

Any shunting C at all at the base of the antenna, or in the lead from
the antenna to the loading inductor reduces system efficiency. You
always want the capacitance of the antenna to dominate the system.
That's why the inductor, even if the system is base loaded, should be
positioned so that the coil is above sheet metal. That's the reason
longer slender coils work better in many applications.

Stray capacitance is the reason everyone measures higher loss by
locating the loading away from the point above the antenna mounting.
Tuners are especially bad, becuuase they really add a lot of stray C,
lowering the Q and increasing current in the inductors.

73 Tom

4699. FS T2X Tailtwister rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 12:00:49 UTC
From: jonweiner@aol.com
Message-ID: <20010312070049.03113.00001442@ng-md1.aol.com>
Source record: 168673

I have for sale an excellent T2X Tailtwister heavy duty rotor. Looks as new in the original carton with original manual. Has all stainless hardware and C.A.T.S. weatherproof connector. Works perfectly. Price $375. plus shipping.

Jon, K1VVC

4700. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 12:25:02 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3aacc020_2@news.cybertours.com>
Source record: 168674

"KB9WFK" <KB9WFK@mindspring.com> wrote in message
news:98hlp5$7st$1@slb6.atl.mindspring.net...
>
> "'Doc" <w5lz@oio.net> wrote in message news:3AABEF65.1154215B@oio.net...
> >
> >
> > Keith,
> > Thats a really 'bad' idea! You'll have a direct 'outlet'
> > into every place that has a CATV outlet. Not to mention that
> > the cabling doesn't belong to you.
> > 'Doc
>
> How do you mean 'Doc? If he currently does not have cable service then
the
> coax will run from his wall plate to a junction box where it will hang
> disconnected. It doesn't get connected until he subscribes to a cable
> service. The cable company then sends a tech out to physically connect
the
> coax to the service.
> Were you referring to induced signals ?
> And you are right about the ownership of the cable but if it doesn't
cause
> any interference and he never keys while the cable guy is hooking someone
> else up (ouch), would there really be any harm? I think that is more of a
> moral decision.
> Just wondering...
> KB9WFK
Not so on all cable systems.. ours though we dont subscribe is connected all
the time- they sell the desrambling box upon subscription and install that..
As Doc says it's still a poor Idea.. just asking for problems. IMHO.
73 Dave

4701. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 12:36:10 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98ifrr$28e$1@slb0.atl.mindspring.net>
Source record: 168675

Mark:

I believe that he was asking about adjusting an "L-Tuner" and not the "T-Tuner" which is what you described.

Although I have never owned a "store bought" L-Tuner, I believe that the tuning procedure is much different, than for a "T-Tuner". The "T-Tuner" has three adudjustable elements, usually two capacitors and one inductor. While the "L-Tuner" has only two adjustable elements an inductor and a capacitor.

There will usually be a method for, and a tuning step, of configuring the L and C into different orientations with respect to each other in the circuit to get them into the right configuration to effect the matching, which complicates the process.

When the correct orientation of the L and C are found then there will subsequently only be a single setting of inductor and capacitor which matches a given situation of reactance cancellation and impedance transformation.

And so the tuning procedure for the "L-Tuner" is probably quite different from that of a "T-Tuner" which often has many different settings of the three components to effect an impedance transformation, and no configurations to arrange.

-Peter K1PO

"Mark Keith" <nm5k@wt.net> wrote in message news:3AAC9042.6509@wt.net...
> rb wrote:
> >
> > What's the rule of thumb for initial tuning adjustment of a roller coil
L
> > tuner into ladderline? The manual on my T tuner says to tune the roller
> > coil for max rcvr noise, and then the two var caps. After that, put low
pwr
> > carrier in for fine tuning. Does this also apply to L tuner circuits
with
> > roller coils?
>
> About the same. Using the noise can get you pretty close as far as the
> coil goes. You want to use the least amount of coil to get a match. So
> say you peak the noise, and tweak the caps, and you have a good match.
> After that, I keep slowly lowering the coil turns and tweaking the caps
> until I can't get a decent match. Then I go back to the point of least
> coil and acceptable SWR. This way you are assured of being tuned at the
> most efficient point. Most of these tuners can do a match with 49

> different settings of coil/caps. Only the setting using the least coil
> is fairly efficient. So there is really only one correct setting if you
> don't want to waste power. I did a test of the losses with different
> tuner settings on this MFJ-989c I have. I found if you use too much
> inductance, 20% loss is easy to come by. Of course, many will say you
> can't hear the difference, and they are probably right, but I still hate
> to just throw away available power. If you run an amp this 20% can build
> up a lot of heat. I found if you are very careful with the tuning, the
> loss can be almost unreadable on a normal wattmeter. MK
> --
> http://web.wt.net/~nm5k

4702. FA WILSON 1000 MAG MOUNT ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 13:20:16 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AACCD10.70F68C80@bellsouth.net>
Source record: 168676

Heres a great chance to get a good antenna at a good price.

http://page.auctions.yahoo.com/auction/50026955

thanks for looking low buy price.

4703. Re: metal ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 13:22:05 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3AACCD7D.E18B43C9@warwick.net>
Source record: 168677

Yes Ed you can. There are several manufacturers of what look like center loaded antennas for UHF. They stand about 31 inches high and are listed as 5 BD gain antennas but are also spec'd at 3 dB w/o the plane. The only catch with them is that you have to look for the ones which state that they are intended for non/G.P. service. They have extra parts inside to make them tune correctly.
The same goes for half wave offerings which stand about 12" high and are spec's at 2.1 dB w/a G.P., unity gain w/o. You can see such at the Antenex.com web site.
The other option is to install a ground plane kit, which consists of some adhesive backed copper strips and a device which will connect them to the mount but you'd have to remove whatever liner is in the topper to install the kit properly.
One other thought, whichever antenna you choose, make sure that the mount is designed to work with the thickness of the surface that you're going to mount it to. The 3/4" mounts (commonly called Motorola mounts, or NMO by Larsen) are limited in the range of thicknesses they will successfully work with and are offered in several sizes.
Stan

Ed wrote:
>
> I am thinking of putting a 440 mhz antenna on the top of my fiber glass
> topper, can I get by without a ground plane?
>
> Thanks,
>
> Ed, KB0UKG

4704. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 13:32:09 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AACCFD9.790E971@IEEE.org>
Source record: 168678

Tom W8JI wrote:
> If PSK was a closed loop system, things would be a lot better.

The commercial version of PACTOR II is closed loop.
--
http://www.mindspring.com/~w6rca

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4705. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 13:47:15 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AACD363.9315B40B@IEEE.org>
Source record: 168679

Tom W8JI wrote:
> The largest problem is stray capacitance lowers system efficiency, not
> a lack of contributing radiation from the inductor.

That may be true, Tom, but consider mounting the one foot long loading coil (taking care to reduce stray capacitance) physically inside the trunk of a car with an external nine foot whip VS mounting the one foot loading coil externally on top of the trunk with a nine foot whip. That's a nine foot radiator VS a ten foot radiator. That one foot difference is measurable.
--
http://www.mindspring.com/~w6rca

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4706. FA DENTRON ANTENNA TUNER

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 14:53:38 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AACE2F2.462950A4@bellsouth.net>
Source record: 168681
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.cb

Real nice Dentron antenna
http://page.auctions.yahoo.com/auction/50027772

4707. Balun dimension needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 14:56:52 UTC
From: OE1MWW <please.nomail@all.com>
Message-ID: <cnopatcd1ck5jb01tavj7lu472fv7bkbjg@4ax.com>
Source record: 168682

Hello all,

I wanted to make a 1:4 balun for a dipole or wire antenna, to be used
with my FT-817 (max. 5 W)

What kind of core, size and dimension do I need ?

what AL value is best to cover 3,5 to 30 MHZ ?

and how many bifillar turns do I need ?

Thanks for the help in advance
73's
Wolfgang
OE1MWW

4708. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:01:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AACE4AD.66BAE38C@IEEE.org>
Source record: 168685

Peter wrote:
>
> Hi, and a question from a newbie.
> I want to build a very simple dipole for my 161.45 MHz transceiver.
> According to the 234/Mhz formula, each element of the dipole would be
> 17.4 inches, right?
> I also understand that if I extend this length at odd multiples, I
> could make each element 34.8 or even 69.6 inches, right?
> Would these extended lenght dipoles improve range of transmission,
> other things being equal?
> Am I missing anything?

You seem to be ignoring antenna impedance. The impedance of the
1/2WL dipole would be low. The impedance of the one WL or two WL
dipoles would be high. What are you using for a transmission line?
--
http://www.mindspring.com/~w6rca

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4709. L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:01:54 UTC
From: rb <rbigg@pcola.gulf.net>
Message-ID: <Cx5r6.22555$Xe.1351265@bin1.nnrp.aus1.giganews.com>
Source record: 168683

Right on, Mark! There are certainly "phantom" match combos possible in many tuners, and only one that gives best match. Like you say, it is with least L. This applies to Ts, Ls, etc.

4710. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:03:42 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AACE54E.DE709419@hiwaay.net>
Source record: 168684

Steve- you should try complaining to the Yahoo groups people. Once-
Fracky cut me off the list when it was egroups, because of something I
said here. I asked the support people to look into it (I had had no
notice)- HIs reaction was quick and a real temper-tantrum- But- he put
me back on the list.

Apparently they told him to be good and live up to their "terms of
service". If I remember right, keeping you off the list for something
that did not happen on the list is a violation. It might be interesting
to see what their reaction is.

I have left the list, voluntarily, since then. I left because there was
nothing there. No posts were published without editing by fracky to
comply with his views.

Bill-W4BSG

VE9SRB wrote:
>
> QST - HA!
>
> I tried to join and received a polite message that the moderator would not
> approve my membership. I guess its a selective group of "all interested
> hams".
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20010309221234.02033.00000704@ng-cu1.aol.com...
> > I'd like to pass along this invitation for all interested hams to join us
> on
> > the fractal antenna reflector. This is the primo forum on the web for the
> > discussion of fractal antennas. Moderated, lively, and filtered for spam
> and
> > off topic comments this is the home of fun feedback on a ham-grown
> technology.
> >
> > Dr. Cohen participates in this forum and it is the only one he responds to
> on
> > the web.
> >
> > To join:
> >
> > fractalantenna-subscribe@yahoogroups.com
> >
> > 73
> > Phil N1ZKT

4711. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:49:01 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Nd6r6.5991$Rb.469919@bgtnsc05-news.ops.worldnet.att.net>
Source record: 168686

"Fractenna" <fractenna@aol.com> wrote in message
news:20010309161211.00599.00000504@ng-cd1.aol.com...
> Just as an update since others have brought this up, Dr. Cohen does not
write
> articles for ham magazines anymore--after many from 1995-1998-- and
declined to
> write one for QEX.
>
> <snip>
>
> 73 to All,
> Phil de N1ZKT

Someone else may be writing the article.

4712. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:49:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98ir5n$d17$1@uranium.btinternet.com>
Source record: 168687

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote in message
news:3AAC6354.4EDFAB8C@IEEE.org...
> But Reg, a coil in the trunk in a shielded enclosure doesn't
> radiate as much as the length of the conductor.
============================

Of course it doesn't - it radiates nothing at all - it's shielded
!

In any case, perhaps I didn't make it clear that the length of
conductor involved with any radiation is that portion of antenna
length which is replaced by the coil when it is taken out of the
tuner box and inserted in the open air at the the base of the
antenna.

If the overall height of the antenna is unchanged by inserting a
loading coil at its base then the radiation resistance must also
remain unchanged. It follows that radiation from the coil is
exactly the same as from the straight length of antenna conductor
it has replaced.

(If otherwise, where in the ARRL bible is it shown how to calculate
the radiation resistance of a solenoid. Marconi never seemed to
latch onto the idea either.)

Neither is the current distribution along the antenna changed by
inserting a loading coil at its bottom end - so again, no change
in radiation resistance.

The length of antenna conductor the coil has replaced is the same
as the length of the coil. (It has nothing to do with the length of
wire on the coil).

Of course, if by inserting a coil the height of the antenna
increases by the length of the coil (say by a few percent) there
will be a small increase in radiation resistance and a
corresponding small increase in field strength.

If your measurements show a considerable increase in efficiency
when the coil is moved from inside the car and re-located in the
gap created by cutting 6 inches off the bottom end of the antenna,
the overall antenna height remaining unchanged, then either the
coil has a higher Q (it is bigger and has fewer turns of thicker
wire for the same inductance) and hence lower loss, or your
measurements are in error.

Compact automatic tuners have terrible Q coils (20 AWG in mine).
An increase in Q from 100 (inside tuner) to 400 (big fat base
loading coil) may improve field strength by 6 dB if ground loss is
small.

(Incidentally, if ground loss is small, there is little or nothing
to be gained by shifting the coil higher up the antenna as is often
advocated. Top-capacitance loading is much more effective and
efficient. Unfortunately it has a higher wind resistance.)

As a sanity check, use EZNEC to insert a zero-loss loading coil at
the bottom of a vertical above a perfect ground and check that
input (radiation) resistance remains unchanged. If it DOES change
then there must be something wrong with EZNEC.

You may have noticed I havn't mentioned Thevenin, Pollard, Norton,
Maxwell, non-dissipative resistance, Foster, reflection,
reciprocity, superposition, swr or even conjugate match. They are
SO confusing. ;o)

Reg, G4FGQ

4713. Installation of DX-CC 80-10M Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:51:04 UTC
From: george vollmann <georgev@cts.com>
Message-ID: <3AACF067.A05233D5@cts.com>
Source record: 168688

Has anyone done an installation of the DX-CC in an
inverted VEE with/without an antenna tuner? Can you
share any "gottcha's" with me, I am about to begin this
process!

tnx,
George Vollmann (georgev@cts.com)

4714. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:57:36 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaceae2.2589585@news.accessunited.com>
Source record: 168689

On Mon, 12 Mar 2001 10:28:31 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>I don't think that they do, if you look carefully towards the end of whatI
>have atempted to demonstrate mathematically you will see that I credit your
>proposition with an improvement of up to 1 dB improvement in Signal to noise

The improvement is much more than that, because the receivers sound
"dead" on the antenna when there is no amplifier. I can NOT hear any
noise from the antenna when using narrow filters, and the receiver
audio is required to be nearly full-on. Not a pleasant situation when
a S-8 signal appears.

Your "books" may disagree, but that is how it works. I suspect the
reason for the error is the "book" poredict much higher noise than
really exists at times, and people tend to ignore the directivity of
the antenna which reduces noise.

>Ratio, but this is at the expense of a loss of a great deal of dynamic range
>of the reciever and the introduction of all sorts of internal problems down
>the receiver chain not least of which is running the predetection filters at

Non-issue. I am NOT amplifying my transmitting antennas.

The strongest signals are typically only in the range of -40 dBm. My
receivers barely have problems handling my own transmit signal, which
is only +20 dBm.

>> What query? I made no query. I offered real-world data, since I have
>> it available.
>
>I'm sorry if I miss inerpreted a request for a source of a preamplifier as a
>query.

I never made a request for a preamplier either.

>I mistakenly assumed that as you request a pre amplifier that you had not
>yet undertaken any practical observations. I was trying to save you some
>money.

I do not live in the UK. I build my own amplifiers. You seem to be
mixed up.

>> I never said how big my "yard" was.
>
>I can't be bothered to go back through the postings in this topic but
>somewhere this garden size was mentioned. This raised my interest as due to

I never said how big my yard was.

>all concerned. If in my quest for vigour I have upset you by a too search
>approach then I appologies. Never the less the facts remain the facts.

Your answer was incorrect, the fellow who lived in the UK and who
asked the questions verified he DID need an amplifier, as does
virtually EVERYONE who uses an antenna like he described.

When theory predicts the opposite of the results of dozens of people,
it's time to look for the mistake in the "theory". I suspect it is
because of ignoring some things, and being too conservative in others.

>> That array, after feedline losses are deducted, is typically slightly
>> less than 20 dB down from a 200 foot tall single element vertical with
>> 100 200 foot long radials and a vacuum variable and large edge wound
>> inductor for matching, when signal levels from distant stations in the
>> direction where the Beverages point are compared.
>
>So what is the gain of the reference AE?

Certainly it is nearly 100% efficient. Gain would generally reduce the
noise, not increase it, unless the noise was primarily coming from one
direction.

>> It might be as much lower as 12-20 dB (QSB, sorry), but it very
>> obviously is much less than 29 dB down.
>
>My figure of 29 dB is due to the absolute efficiency not the comparative
>gain compared to an uncalibrated reference.

Hmm, so you are now telling me a 3/8 wl vertical over 100 3/8th wl
radials in an open pasture on farmland is less than 10% efficient?

I don't think so. I think your numbers are incorrect. You are assuming
the noise is higher than it is, and ignoring the directivity of the
receiving antenna.

>> And your numbers come from what stone tablet???
>
>OK a readily accessible reference that many Hams will have is
>"RSGB RADIO COMMUNICATIONS HANDBOOK"
>Fig 15.6
>I chose the quitest noise temperature for 160 m as this favoured your case
>the most.
>In fact the sky temperature can be up to 45 dB hotter at 160 m
>than the low of 9,000,000°K that I chose for my worked example.

Gary, all this back and forth and you are using a RSGB book's noise
temperature as your reference upon which you try to answer all
questions about gain and noise? You know better than that!

>Just how do you launch the signal to make this measurement?

I don't "launch" noise, I receive it and measure the level. It is
launched by storms and other distant noise sources.

>measurement? The position of the launching probe in the near field is
>critical and highly variable.

What the hell are you muttering about Gary? I measured the terminal
voltage of the antennas.

>> That's a NF of 20 dB, or a temperature of almost 29,000°K.
>
>I think that you are a decimal point out OM
>2,900°K is nearer the right figure and you will find most RX with solidstate
>mixers and no RF amplifier have this sort of noise figure.
>A good balanced mixer with the correct Local Oscilator injection level will
>come up with this sort of figure fairly consistently and have an insertion
>loss of a couple of dB

You are right, I am a decimal point out.

>> 2.) The sky-noise you are using is not accurate at every location,
>> every season, and every time of day. It is also most likely for a
>> non-directional antenna.
>
>No indeed it is not ther is a variation of some 45 dB which is mean medicine
>in anybodies language. I chose the best case, the case that would favour
>your contention. The hotter the sky gets the worse having an RF becomes. Try

Your best case is clearly incorrect. Your advice to the other
gentleman was incorrect, and he knew it. He knew it because he did an
A-B test and found he needed an amplifier, just like I and many others
have found.

I suggest there are two major errors behind your mistaken advice:

1.) The noise can be and often is a lot lower than the RSGB book
indicated.

2.) You ignored directivity of the antenna.

73 Tom

4715. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 15:59:15 UTC
From: 2w8ji@akorn.net
Message-ID: <3aacf19c.4312205@news.accessunited.com>
Source record: 168690

On Mon, 12 Mar 2001 07:47:15 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:
>That may be true, Tom, but consider mounting the one foot long loading
>coil (taking care to reduce stray capacitance) physically inside the trunk
>of a car with an external nine foot whip VS mounting the one foot loading
>coil externally on top of the trunk with a nine foot whip. That's a nine
>foot radiator VS a ten foot radiator. That one foot difference is
>measurable.

I was assuming all things equal, like overall height.

That would stop people from using a 100 foot tall loading coil on 160
meters.

73 Tom

4716. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:10:12 UTC
From: richardharrison@webtv.net
Message-ID: <20714-3AACF4E4-47@storefull-114.iap.bryant.webtv.net>
Source record: 168697

Cecil, W6RCA wrote:
"The radiation from the length of an air-core vertical loading coil is measurable even though it radiates no more than the length of the coil."

Placement of the coil may affect radiation. Terman says: "An analysis of the sectionalized tower is given by G.H. Brown in "A Note on the Placement of the Coil in a Sectionalized Tower", "Broadcast News" no. 22, p.14, October, 1930.

I notice that Terman`s drawing of a "sectionalized tower" places the loading coil near the top. Wouldn`t that lengthen the high-current section of the shortened tower?

Best regards, Richard Harrison, KB5WZI

4717. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:15:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98isu6$r2q$1@plutonium.btinternet.com>
Source record: 168691

Roy Lewallen wrote -
> W6RCecilA wrote:
> >
> > Reg Edwards wrote:
> > > If that is the case, how is it that Eznec radiation patterns
show
> > > maximum radiation from a short grounded vertical occurs at a
> > > considerable +ve elevation angle - simultaneously with zero
> > > radiation at zero angle along the ground ?
> >
> > EZNEC doesn't display ground wave signals by default, Reg.
> > . . .
>
> Reg knows that. It's a favorite troll of his.
>
> C'mon Reg, you can think up some new trolls, can't you?
>
==========
Roy, 'twas not I who said it. It was Cecil ! And he was only
trying to help you out.

Reg.

4718. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:28:51 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AACF943.AE0BA17E@IEEE.org>
Source record: 168693

Reg Edwards wrote:
> If the overall height of the antenna is unchanged by inserting a
> loading coil at its base then the radiation resistance must also
> remain unchanged.

But Reg, if a loading coil is inserted at the base of a whip, it's obvious that the antenna length increases by the length of the coil. Nobody is going to chop off their whip just to keep the antenna length the same.

> The length of antenna conductor the coil has replaced is the same
> as the length of the coil. (It has nothing to do with the length of
> wire on the coil).

Nobody said it had anything to do with the length of the wire on the coil. The inserted coil adds linear length to the antenna for any given whip.

> Of course, if by inserting a coil the height of the antenna
> increases by the length of the coil (say by a few percent) there
> will be a small increase in radiation resistance and a
> corresponding small increase in field strength.

Yep, that's what I'm saying. We have measured that effect at the 75m mobile antenna shootouts. The difference between a 11.5' whip driven directly by an SGC-230 autotuner VS that same 11.5' whip riding atop a Texas Bugcatcher coil was 4 dB.

> If your measurements show a considerable increase in efficiency
> when the coil is moved from inside the car and re-located in the
> gap created by cutting 6 inches off the bottom end of the antenna,
> the overall antenna height remaining unchanged, ...

Reg, nobody is going to chop off their whip to maintain the same overall height. They will simply insert the coil under the existing whip.

> (Incidentally, if ground loss is small, there is little or nothing
> to be gained by shifting the coil higher up the antenna as is often
> advocated.

The inductance required to resonate the mobile antenna goes down as the coil is moved from the bottom to the middle. Less inductance means less wire in the coil and less I^2*R loss.

> As a sanity check, use EZNEC to insert a zero-loss loading coil at
> the bottom of a vertical above a perfect ground and check that

> input (radiation) resistance remains unchanged. If it DOES change
> then there must be something wrong with EZNEC.

Where can I get one of them thar zero-loss loading coils?
--
http://www.mindspring.com/~w6rca

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4719. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:35:09 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AACFABD.83CDB08C@IEEE.org>
Source record: 168695

pete wrote:
> Would that 1/2WL dipole be the 17.4 inches (each element) one?

Yep.

> I plan to use some RG 58 type coax for the TL, say about 10 feet long.
> Would there be any special concerns?

If you are going to use coax, go with the 17.4" each element. You
can obtain more gain (directivity) with a 7.25' center fed dipole
but some sort of matching network is usually required. Your first
attempt with the dipole will probably not be resonant on exactly
161.45 MHz.
--
http://www.mindspring.com/~w6rca

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4720. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:37:26 UTC
From: richardharrison@webtv.net
Message-ID: <12686-3AACFB46-48@storefull-112.iap.bryant.webtv.net>
Source record: 168696

Cecil wrote:
"You seem to be ignoring antenna impedance."

Yes, and another problem is that current reverses direction every 1/2-wavelengh of travel in the wire. The 1/2-wave dipole is fine, and radiated broadside to the wire without extra lobes produced by interference between radiation sources of opposing phases.

Extensions to the dipole have reversed currents and so produce reversed phase radiation unless something is done to avoid it.

Colibear arrays use phase inverters at the ends of the dipole and every 1/2-wavelength thereafter, Often the phase inverter is a short-circuited 1/4-wave stub.

Best regards, Richard Harrison, KB5WZI

4721. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:41:51 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AACFC4F.C3EB9CB0@oio.net>
Source record: 168694

pete,
That 17.4" is a 1/4 wave length, or 1/2 of the antenna's
total length. A full wave length would 4 times 17.4". Stick
to the 1/2 wave length dipole...
'Doc

4722. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 16:42:04 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AACFC5C.F98FF166@IEEE.org>
Source record: 168698

'Doc wrote:
>
> pete,
> That 17.4" is a 1/4 wave length, or 1/2 of the antenna's
> total length. A full wave length would 4 times 17.4". Stick
> to the 1/2 wave length dipole...
> 'Doc

He said 17.4" for each of the two elements. That's 1/2WL.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4723. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 17:08:35 UTC
From: kb7qhc@home.com
Message-ID: <3aad018f.862445340@news.seanet.com>
Source record: 168699

On Sun, 11 Mar 2001 21:48:16 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>The patent office do not police or prosecute on behalf of the patentee.
>So what DO you get for your money?
>--
>Gary7SLL

Hi Gary,

Courtesy of the tax cuts of the 80's from the less than compassionate
conservatives: fees far in excess of the taxes returned. (The
politicians merely moved their hand from one empty pocket to the other
that still had change while thumping the tub over their fiscal
skills.)

73's
Richard Clark, KB7QHC

4724. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 17:24:53 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AAD0665.43BFCD2C@hiwaay.net>
Source record: 168700

Peter- these comments are fine, but I would like your views on the
"differential T" tuner, like the MFJ986. This has only two controls,
and, supposedly, only one final setting for a given combo of load
characteristics and tranformation.

Bill-W4BSG

"Peter O. Brackett" wrote:
>
> Mark:
>
> I believe that he was asking about adjusting an "L-Tuner" and not the
> "T-Tuner" which is what you described.
>
> Although I have never owned a "store bought" L-Tuner, I believe that the
> tuning procedure is much different, than for a "T-Tuner". The "T-Tuner" has
> three adudjustable elements, usually two capacitors and one inductor. While
> the "L-Tuner" has only two adjustable elements an inductor and a capacitor.
>
> There will usually be a method for, and a tuning step, of configuring the L
> and C into different orientations with respect to each other in the circuit
> to get them into the right configuration to effect the matching, which
> complicates the process.
>
> When the correct orientation of the L and C are found then there will
> subsequently only be a single setting of inductor and capacitor which
> matches a given situation of reactance cancellation and impedance
> transformation.
>
> And so the tuning procedure for the "L-Tuner" is probably quite different
> from that of a "T-Tuner" which often has many different settings of the
> three components to effect an impedance transformation, and no
> configurations to arrange.
>
> -Peter K1PO
>
> "Mark Keith" <nm5k@wt.net> wrote in message news:3AAC9042.6509@wt.net...
> > rb wrote:
> > >
> > > What's the rule of thumb for initial tuning adjustment of a roller coil
> L
> > > tuner into ladderline? The manual on my T tuner says to tune the roller
> > > coil for max rcvr noise, and then the two var caps. After that, put low
> pwr
> > > carrier in for fine tuning. Does this also apply to L tuner circuits

> with
> > > roller coils?
> >
> > About the same. Using the noise can get you pretty close as far as the
> > coil goes. You want to use the least amount of coil to get a match. So
> > say you peak the noise, and tweak the caps, and you have a good match.
> > After that, I keep slowly lowering the coil turns and tweaking the caps
> > until I can't get a decent match. Then I go back to the point of least
> > coil and acceptable SWR. This way you are assured of being tuned at the
> > most efficient point. Most of these tuners can do a match with 49
> > different settings of coil/caps. Only the setting using the least coil
> > is fairly efficient. So there is really only one correct setting if you
> > don't want to waste power. I did a test of the losses with different
> > tuner settings on this MFJ-989c I have. I found if you use too much
> > inductance, 20% loss is easy to come by. Of course, many will say you
> > can't hear the difference, and they are probably right, but I still hate
> > to just throw away available power. If you run an amp this 20% can build
> > up a lot of heat. I found if you are very careful with the tuning, the
> > loss can be almost unreadable on a normal wattmeter. MK
> > --
> > http://web.wt.net/~nm5k

4725. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 17:32:21 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98j1cfgnt1@slb6.atl.mindspring.net>
Source record: 168701

> >
> > How do you mean 'Doc? If he currently does not have cable service then
> the
> > coax will run from his wall plate to a junction box where it will hang
> > disconnected. It doesn't get connected until he subscribes to a cable
> > service. The cable company then sends a tech out to physically connect
> the
> > coax to the service.
> > Were you referring to induced signals ?
> > And you are right about the ownership of the cable but if it doesn't
> cause
> > any interference and he never keys while the cable guy is hooking
someone
> > else up (ouch), would there really be any harm? I think that is more of
a
> > moral decision.
> > Just wondering...
> > KB9WFK
> Not so on all cable systems.. ours though we dont subscribe is connected
all
> the time- they sell the desrambling box upon subscription and install
that..
> As Doc says it's still a poor Idea.. just asking for problems. IMHO.
> 73 Dave
>
I don't necessarily disagree about asking for problems, just wondering where
the problem was. From my experiences, even though the cable company rents
you the box they still disconnect the cable when service is stopped to keep
you from buying a "pirate" descrambler. That is what Time Warner/ AT&T does
anyway. YMMV

4726. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 17:38:14 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <WVWHvuAGmQr6EwLn@pickmere.demon.co.uk>
Source record: 168712

>
snip

>The reason I have had to go for this type of antenna is because my garden is
>only 4ft square!

snip
>
>BTW, I do have some 300m of copper burried under the front and rear gardens
>which I tuned the vertical
>against.

You buried 300m of copper straight down????

Mike
--
M.J.Powell

4727. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 17:39:21 UTC
From: kb7qhc@home.com
Message-ID: <3aae0447.863141451@news.seanet.com>
Source record: 168702

On Sun, 11 Mar 2001 22:21:55 -0500, "W4JLE" <Fred@w4jle.com> wrote:

>
>In addition, Fractal Antenna Systems, Inc. has pending patents that also are
>quite likely to be infringed upon issuance by these sales.
>
>If these antenna products consist or comprise parts which are described by
>our extant patent claims, you are requested to cease and desist in their
>sale effective immediately. I urge you to review your sale of these products
>with your attorney.
>
>Thank you for your attention in this matter.
>
>Cordially,
>
>Nathan Cohen, Ph.D.

Hi Fred,

If anyone has a basis for suit for defamation of character, it is that poor lawyer who made the mistake of taking on fraudtenna as a client.

However, the legal folderol aside (being meaningless in a hobby based forum) I appreciate your posted example of fractal humor.

I am glad of one variation however. I note there is no reference to "possible legal consequences." Another, is the notable lack of public correspondence from herr doktor - no doubt due to "possibly legal consequences" which could translate into conformance to a court order to cease and desist on his own part. The judge "could have" offered to ameliorate this if fraudtenna simply apologize for its slanders, and fraudtenna "could have" simply rejected that option in favor of the restraining order. - to each their poison ;->

Well, anyway Fred, I am sure you took careful stock of the situation and confirmed that your construction efforts did not abridge the pending rights of fraudtenna :-O

PUBLIC NOTICE TO FRAUDTENNA, AND ITS MINIONS

In the way of pubic notice to fraudtenna, I am thinking of a design for which I will soon submit a patent application and I hereby order you to cease all operations in this field of endeavor and to surrender all documents relating to my idea to me immediately. As my idea has coverage of a patent pending status, you are hereby ordered to cease and desist. If you fail to act in the next 3 or 4 years, I may be forced to take the first step toward a "possible legal action."

;->

73's
Richard Clark, KB7QHC

4728. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 18:21:35 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3AAD13AF.E497ADE8@iquest.net>
Source record: 168703

Look closely at BUTTERNUT HF5V (discountinued) or the replacement HF6V
(Includes 30m). Check www.eham.com reviews for various reports. Don't
forget to install lots of radials.

Bests,
Patrick W9GTA

djohnson wrote:
>
> I am taking down a TH6-DXX and putting up a vertical due to space
> limitation. Need to handle 1000 watts and work 10-15-20-40-80 meters. Been
> looking at many manufacturers but which is the best? Anybody have input ?

4729. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 18:34:20 UTC
From: kb7qhc@home.com
Message-ID: <3aad0ec8.865830378@news.seanet.com>
Source record: 168704

On Sun, 11 Mar 2001 23:27:51 +0000, Keith Wood <kw@bctv.com> wrote:

>
>
>Richard Clark wrote:
>>
>> On Sun, 11 Mar 2001 17:57:55 +0000, Keith Wood <kw@bctv.com> wrote:
>>
>> >
>> >
>> >Richard Clark wrote:
>> >
>> >> Just think of the level of service if it had been "the big one."
>> >> Hint: it wouldn't have been any better. And this is for a region that
>> >> has been going through earthquake preparedness for 25 years and has a
>> >> local FEMA office. One of the Canadian stations noted that our
>> >> president had just cut funding for this preparation because "it wasn't
>> >> showing any payback." Compassionate conservatism - yeah, sure. My
>> >> heart bleeds for you, but I a'in't forkin' over a dime.
>> >
>> >Why should those of us who are smart enough to not live there subsidize
>> >those of you who aren't smart enough to move?
>> >
>> >Fix your place up yourself, and let me fix mine. I'll be here to
>> >provide what support I can when the flag flies, but not if all of my
>> >money has been sucked up and given to you.
>>
>> OK,
>>
>> So the compassion is out the window.
>
>How about some compassion for my kids? You want to take the food out of
>their mouths.
>
>Buy your own insurance. Fix your own house. Or move.
>
>Don't demand MY money to cover for YOUR choices.

Taking food out of your children's mouths? The Saddam plea....
Thankfully the reference to the flag wasn't waved again, I having
fought for it while the right winger's coddeled and bought and paid
for deferrals kids spat on me in uniform - I am glad for that at
least. It was tough enough with a non-smoking doper as president, and
now the conservatives have aced that with a non-inhaling crack smoker.
No wonder compassion is such an ephemeral and ambiguous thing. :-)

I have moved quite often in my life, at the beck and call of the US Military for 26 years. It was the military that put me here in harms way so that I could preserve you and your children's freedom. Let me count the ways, California three times (twice in earthquake prone territory), Japan (earthquakes every day so it seemed), and here in the great northwest (when it was commonly supposed there was no earthquake problem). And if I suffered any from these assignments its my own damn fault (consistent with the attitudes of those coddled children at least - fruit not falling far from the tree and all).

There's choices for you. And still no kiss ;->

73's
Richard Clark, KB7QHC

4730. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 18:40:24 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAD1818.7809F29D@IEEE.org>
Source record: 168706

Richard Harrison wrote:
> I notice that Terman`s drawing of a "sectionalized tower" places the
> loading coil near the top. Wouldn`t that lengthen the high-current
> section of the shortened tower?

I think we've proven at the 75m shootouts that the longer the bottom
section is before encountering the coil, the stronger is the signal
(for antennas without top hats).
--
http://www.mindspring.com/~w6rca

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4731. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 18:49:40 UTC
From: 2w8ji@akorn.net
Message-ID: <3aad1926.14435067@news.accessunited.com>
Source record: 168705

On Mon, 12 Mar 2001 15:49:31 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:
>If your measurements show a considerable increase in efficiency
>when the coil is moved from inside the car and re-located in the
>gap created by cutting 6 inches off the bottom end of the antenna,
>the overall antenna height remaining unchanged, then either the
>coil has a higher Q (it is bigger and has fewer turns of thicker
>wire for the same inductance) and hence lower loss, or your
>measurements are in error.

You are absolutely wrong Reg.

You have neglected capacitance from the base of the antenna to the
vehicle, and of the inductor and the lead to the base of the antenna
mount.

That capacitance can not be ignored, because it increases current
dramatically in the coil and contributes nothing to radiation.

73 Tom

4732. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 19:03:15 UTC
From: 2w8ji@akorn.net
Message-ID: <3aad1a63.14752105@news.accessunited.com>
Source record: 168707

On Mon, 12 Mar 2001 10:28:51 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Nobody said it had anything to do with the length of the wire on the
>coil. The inserted coil adds linear length to the antenna for any
>given whip.

The added length would NEVER account for the large FS change you see.

That FS change is caused by the current in the inductor being reduced
when the area beyond the inductor does not have shunt capacitance
directly to ground.

Even the smallest amount or parallel capacitance hurts efficiency a
noticable amount.

>Yep, that's what I'm saying. We have measured that effect at the
>75m mobile antenna shootouts. The difference between a 11.5' whip
>driven directly by an SGC-230 autotuner VS that same 11.5' whip
>riding atop a Texas Bugcatcher coil was 4 dB.

No doubt. Think of the reduction in shunting capacitance after the
inductor.

>> (Incidentally, if ground loss is small, there is little or nothing
>> to be gained by shifting the coil higher up the antenna as is often
>> advocated.
>
>The inductance required to resonate the mobile antenna goes down as
>the coil is moved from the bottom to the middle. Less inductance
>means less wire in the coil and less I^2*R loss.

You have that backwards Cecil. The inductance required increases as
the coil is moved up in the antenna. The radiation resistance of the
antenna also increases.

Reg is correct, if most losses are concentrated in the coil rather
than the ground, base loading is every bit as as good (or can even be
better) than top or mid-loading.

In the real world, that often is not the case. Espoecially if you use
the poor ground systems Reg often advocates using. In that case,
moving the inductor higher increases efficiency because radiation
resistance increases faster than inductor ESR.

>> As a sanity check, use EZNEC to insert a zero-loss loading coil at
>> the bottom of a vertical above a perfect ground and check that
>> input (radiation) resistance remains unchanged. If it DOES change

>> then there must be something wrong with EZNEC.
>
>Where can I get one of them thar zero-loss loading coils?

Download "solenoid" and you will come close. You can design inductors
with Q's in the thousands in a virtual inductor.

Just don't try to build one.

73 Tom

4733. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 19:10:59 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAD1F43.B9D4F081@IEEE.org>
Source record: 168708

Tom W8JI wrote:
> >The inductance required to resonate the mobile antenna goes down as
> >the coil is moved from the bottom to the middle. Less inductance
> >means less wire in the coil and less I^2*R loss.
>
> You have that backwards Cecil. The inductance required increases as
> the coil is moved up in the antenna. The radiation resistance of the
> antenna also increases.

Yep, my autopilot suffered a massive brain fart. I was picturing
current decreasing so I^2 decreases, inductance increasing as the
square of the turns, while resistance increases only as the turns.
--
http://www.mindspring.com/~w6rca

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4734. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 19:41:51 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98je9tdtd1@lure.pipex.net>
Source record: 168715

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >I don't think that they do, if you look carefully towards the end of
whatI
> >have atempted to demonstrate mathematically you will see that I credit
your
> >proposition with an improvement of up to 1 dB improvement in Signal to
noise
>
> The improvement is much more than that, because the receivers sound
> "dead" on the antenna when there is no amplifier.

What exactly has sounding dead to do with signal to noise ratio, perhaps you
should advance the AF gain a little if you like to hear the noise,
personally I find it tiring and back it off until it is barely audible.

> I can NOT hear any noise from the antenna when using narrow filters,
> and the receiver audio is required to be nearly full-on.
> Not a pleasant situation when a S-8 signal appears.

That would seem to indicate that you need some AGC.

> Your "books" may disagree, but that is how it works. I suspect the
> reason for the error is the "book" poredict much higher noise than
> really exists at times, and people tend to ignore the directivity of
> the antenna which reduces noise.

see note below

> >Ratio, but this is at the expense of a loss of a great deal of dynamic
range
> >of the reciever and the introduction of all sorts of internal problems
down
> >the receiver chain not least of which is running the predetection filters
at
>
> Non-issue. I am NOT amplifying my transmitting antennas.

Non sequiter

> The strongest signals are typically only in the range of -40 dBm. My
> receivers barely have problems handling my own transmit signal, which
> is only +20 dBm.

Is that input to the antenna? or ERP?

> >> What query? I made no query. I offered real-world data, since I have
> >> it available.

> I do not live in the UK. I build my own amplifiers.

It is also possible to build your own amplifiers in the UK,
though sourcing the components can be a bind at times.

> You seem to be mixed up.

I wouldn't be surprised, :)

> >> I never said how big my "yard" was.

OK I'll aske the question.

How big is your back yard?

> >all concerned. If in my quest for rigour I have upset you by a too
searching
> >approach then I appologies. Never the less the facts remain the facts.
>
> Your answer was incorrect, the fellow who lived in the UK and who
> asked the questions verified he DID need an amplifier, as does
> virtually EVERYONE who uses an antenna like he described.

I guess you'd pick up as much signal on a telescopic whip a foot long.

> When theory predicts the opposite of the results of dozens of people,
> it's time to look for the mistake in the "theory". I suspect it is
> because of ignoring some things, and being too conservative in others.

Perhaps you would lay out the data that I might ensure that I have not
ignored anything or been conservative.

> >> That array, after feedline losses are deducted, is typically slightly
> >> less than 20 dB down from a 200 foot tall single element vertical with
> >> 100 200 foot long radials and a vacuum variable and large edge wound
> >> inductor for matching, when signal levels from distant stations in the
> >> direction where the Beverages point are compared.
> >
> >So what is the gain of the reference AE?
>
> Certainly it is nearly 100% efficient.

Wow! even our US$36,000,000 paraboloid could only make about 60%

> Gain would generally reduce the noise, not increase it,

How can you make such a statement.
If I have a quantity ofnoise power Pn and I put it through an amplifier the
out of the amplifier I get G Pn.

100 mW of noise into an amplifier with a gain of 10 will give me a watt of
noise out.
Additionally the amplifier will not be perfect so it will add some noise of

its own in fact if I measure carefully I'll have a little more than a Watt
of noise out.

> unless the noise was primarily coming from one direction.

The amplifier does not care from whence the noise comes.
>
> >> It might be as much lower as 12-20 dB (QSB, sorry), but it very
> >> obviously is much less than 29 dB down.
> >
> >My figure of 29 dB is due to the absolute efficiency not the comparative
> >gain compared to an uncalibrated reference.
>
> Hmm, so you are now telling me a 3/8 wl vertical over 100 3/8th wl
> radials in an open pasture on farmland is less than 10% efficient?

Why should it be more efficient?

> I don't think so. I think your numbers are incorrect. You are assuming
> the noise is higher than it is, and ignoring the directivity of the
> receiving antenna.

If the receiveing antenna is a 3/8 vertical then it will have no
directivity.

> >> And your numbers come from what stone tablet???
> >
> >OK a readily accessible reference that many Hams will have is
> >"RSGB RADIO COMMUNICATIONS HANDBOOK"
> >Fig 15.6
> >I chose the quitest noise temperature for 160 m as this favoured your
case
> >the most.
> >In fact the sky temperature can be up to 45 dB hotter at 160 m
> >than the low of 9,000,000°K that I chose for my worked example.
>
> Gary, all this back and forth and you are using a RSGB book's noise
> temperature as your reference upon which you try to answer all
> questions about gain and noise? You know better than that!

I could quote people like Hogg and Mumford (Bell Labs), but just how many
hams would have them on their book shelves?
I chose a reference that many people in this hobby might have.
Had the ARRL Handbook actually had anything on Sky Noise then I would also
have refered to it.

> >Just how do you launch the signal to make this measurement?
>
> I don't "launch" noise, I receive it and measure the level. It is
> launched by storms and other distant noise sources.

Your snipped example outlined a calibration process using a coherent signal,
in order for that signal to enter the Antenna it would need to be launched

into free space.

> >measurement? The position of the launching probe in the near field is
> >critical and highly variable.
>
> What the hell are you muttering about Gary? I measured the terminal
> voltage of the antennas.

With what applied signal?
and please don't be rude.

> >> That's a NF of 20 dB, or a temperature of almost 29,000°K.
> >
> >I think that you are a decimal point out OM
> >2,900°K is nearer the right figure and you will find most RX with
solidstate
> >mixers and no RF amplifier have this sort of noise figure.
> >A good balanced mixer with the correct Local Oscilator injection level
will
> >come up with this sort of figure fairly consistently and have an
insertion
> >loss of a couple of dB
>
> You are right, I am a decimal point out.

For future reference you might like to use the chart in the ARRL Handbook
12.2 Fig 1 "Relationship between noise figure and noise temperature"

> >> 2.) The sky-noise you are using is not accurate at every location,
> >> every season, and every time of day. It is also most likely for a
> >> non-directional antenna.

The figure that I use is that published in the literature, as the discussion
is of a general nature then one can only use that which is generally
accepted to be the case. The original work that was done in order to publish
these figure would not be bassed upon a single observation but a controlled
and verified experiment.

> >No indeed it is not, there is a variation of some 45 dB which is mean
medicine
> >in anybodies language. I chose the best case, the case that would favour
> >your contention.
> >The hotter the sky gets, the worse having an RF Amp becomes.
>
> Your best case is clearly incorrect. Your advice to the other
> gentleman was incorrect, and he knew it. He knew it because he did an
> A-B test and found he needed an amplifier, just like I and many others
> have found.

I suspect that your observations show what might be expected when the
receiver input is terminated in what is little better than a leaky resistive
load. An amplifier will produce produce an increase in the hissing sound,

but it will not show any appreciable improvement in Signal to Noise ratio.

> I suggest there are two major errors behind your mistaken advice:

Perhaps others would like to comment in order to break the dead lock.

> 1.) The noise can be and often is a lot lower than the RSGB book
> indicated.

I chose the lowest figure of actual sky noise.
If you see lest than this amount out of your attena then it is lost due to the inefficiency of the Antenna. In fact this method if the sky noise is known at the time of measurement is a good way to calibrate the efficiency of an Antenna.

> 2.) You ignored directivity of the antenna.

Directivity will assist where noise is man made.
Such man made noise is over and above the natural sky noise which is uniformly distributed at the low level which I chose for the calculations in my example. If additional noise at these frequencies was from a thunder storm thenm directivity would change things, however the noise from lightening is over and above the base noise used in the examples.

I would like to direct your attention to
Page 12.3 of the 1987 ARRL Handbook
middle column, last paragraph before the sub heading 'Selectivity'.

"Typical noise figure for a good receiver operating
below 30 MHz runs about 5 to 10 dB,
Lower noise figures can be obtained,
but they are of no real value because of
the external noise arriving from the antenna."

"It is important to remember also that optimum noise figure in an RF amplifier does not always coincide with maximum stage gain ...

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4735. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 19:54:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAD295F.1526F0EF@eznec.com>
Source record: 168709

Nice misdirection.

On 12 Mar 2001, Reg Edwards, not Cecil, wrote:

>If that is the case, how is it that Eznec radiation patterns show
>maximum radiation from a short grounded vertical occurs at a
>considerable +ve elevation angle - simultaneously with zero
>radiation at zero angle along the ground ?
>----
>Reg.

You've often said you don't know what a troll is. That, Reg, was a troll. You know that (as Cecil once again pointed out) that EZNEC doesn't display ground wave signals as part of its far field results. And you know why, since I've explained it many times on this newsgroup. The troll is getting a little stale, though. You're a clever person, so surely you can come up with another one?

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy Lewallen wrote -
> > W6RCecilA wrote:
> > >
> > > Reg Edwards wrote:
> > > > If that is the case, how is it that Eznec radiation patterns
> show
> > > > maximum radiation from a short grounded vertical occurs at a
> > > > considerable +ve elevation angle - simultaneously with zero
> > > > radiation at zero angle along the ground ?
> > >
> > > EZNEC doesn't display ground wave signals by default, Reg.
> > > . . .
> >
> > Reg knows that. It's a favorite troll of his.
> >
> > C'mon Reg, you can think up some new trolls, can't you?
> >
> ========================
> Roy, 'twas not I who said it. It was Cecil ! And he was only
> trying to help you out.
> ----
> Reg.

4736. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 20:12:16 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAD2DA0.486D@wt.net>
Source record: 168710

Peter O. Brackett wrote:

> And so the tuning procedure for the "L-Tuner" is probably quite different
> from that of a "T-Tuner" which often has many different settings of the
> three components to effect an impedance transformation, and no
> configurations to arrange.
>
> -Peter K1PO

I still tune both the same way. The least inductance to be able to get a
good match. MK
--
http://web.wt.net/~nm5k

4737. The Best Wire Ant. in the Business

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 20:15:42 UTC
From: "radiosigs@mindspring.com" <radiosigs@mindspring.com>
Message-ID: <98jea6$o08$1@slb7.atl.mindspring.net>
Source record: 168716

A 20 METER "CLOUDWARMER"
I thank you for showing an interest in my antenna which was voted theA number one wire antenna is North America by an independent research organization: AF2Y Enterprises! I did NOT invent it; the idea was given to me by WB2OTK in South Carolina. He didn't invent it either. Who then did? I don't know; I don't care; all I know is that it works like a BOMB! Furthermore the U.S. military is using it under the name N.V.I.S.(Near Vertical Incidence Skywave). In 30 years on the air, it is the best wire antenna I've ever used and can easily challege commercial beams for effectiveness.

A few basic concepts to begin with. A "Cloudwarmer" is a MONOBAND 2 element wire beam. I stress MONOBAND and it can be erected for ANY BAND. Secondly it is based entirely on mathematics and is uncomplicated. Thirdly, all that's required is standard wire, 52 ohm coax of any length and five insulators. Also I do not recommend using a tuner because if the construction is correct and adjustments,if necessary are made, a tuner will be unnecessary and furthermore it may mess up the mathematical relationships which govern this antenna. Lastly, any ham who can set up a standard dipole can EASILY construct a Cloudwarmer. And if any ham cannot construct a standard dipole, then he or she has no business being on the air therefore delete this information and take up basket weaving!

Keep this in mind because it applies to any Cloudwarmer for any band. The "Warmer" consists of a driven element called a dipole with a parasitic called a reflector the latter of which is 6% longer and placed between .15 and .2 wavelengths below and parallel to the driven element or as NEARLY parallel as possible. THAT'S IT. It is also known as a "SCATTERBEAM" because the RF hits the ionosphere at high angles and then scatters all over the world. It is a COMPLETELY NON-DIRECTIONAL ANTENNA on the order of a vertical but better than one for INTENSIFIED OMNIDIRECTIVITY.

Now for the mathematics. Let's talk about the numerical figures regarding wavelengths. Let's say a 20 meter HALF WAVE dipole is to be constructed to resonate with a very low SWR at 14.300. Using the formula 468/frequency , we see that such a dipole must be 32.7 feet which equates to 32'8". Let's now convert that to inches. 32' x 12 =384 inches +8=392 inches. That's a HALF WAVE. Double it and we get 784 inches therefore we now know there are 784 inches in a FULL WAVE dipole FOR 14.300. The reflector we discussed which ALWAYS GOES BENEATH the dipole i.e. driven element can be between .15 to .2 wavelengths in distance. What then has to be the length it we place it, for example .15 wavelengths below? Simply multiply 784 x .15 and we come out with 117.6 inches and divide by twelve to convert to feet and we get 9.8 which is 9 feet,10 inches. That is the minimum distance the reflector must be placed underneath the dipole. The maximum is .2

wavelengths and to change that to feet multiply 784 x .2=156.8 inches, divide by 12 and we come up with 13 feet. We now know that the reflector can be placed from 9 feet, 10 inches to 13 feet below. MIne is at 10 feet; supposedly increasing the distance will give more gain but I do just fine right where it is.

The reflector must be 6% LONGER than the dipole. We already know the length of that dipole for 14.300 is 392 inches. Multiply by .06 and we get 23.5 inches which is 23'6" and that's the length of my reflector.

So now with the math done, we proceed to erect that Cloudwarmer. Put up a dipole 16'4" from either side of the center insulator and feed it with any length of, for example, RG8U. Take an SWR reading and WRITE IT DOWN..it's VERY IMPORTANT.
Next, string out a relector wire about 10 feet below and about 2 feet LONGER as parallel as possible. Each end should terminate in insulators. There is NO ELECTRICAL CONNECTION between it and the driven element dipole nor is there any electrical connection between it and the coax feed. It just hangs there minding its own business but is nevertheless the secret to success!

Now take an SWR reading with everything in place. If you see ANY change whatsoever, good or bad, LEAVE THE INSTALLATION ALONE! It's working! If there's no change then either LOWER the reflector 6" at a time or LENGTHEN it by a few inches. What we MUST see is a change in that SWR. Once it happens, go work the world and YOU WILL.

We know that a dipole less than a full wavelength high has a multilobular pattern with appreciable ground loss. Now when we use a vertical at ground level, we must add radials. Why? Because we must minimize ground loss. The radials are RF collectors meaning that the emitted RF instantaneously is picked up by them and RETURNED to the base of the vertical to be RERADIATED at about 15 degrees to the horizon. That reflector acts just about the same way. It MINIMIZES ground losses by reradiating the RF into the "clouds" at much higher intensity than will a standard dipole and your signal will be heard in places you never knew existed. The Cloudwarmer has APPRECIABLE gain on receive versus a standard dipole and vertical-REMARKABLE GAIN. And on transmit, try switching back and forth between it and another antenna and see what happens. The person on the other end will be STUNNED!

4738. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 20:28:49 UTC
From: "radiosigs@mindspring.com" <radiosigs@mindspring.com>
Message-ID: <98jf29$60$1@slb0.atl.mindspring.net>
Source record: 168717

A G5RV will work very well on 20, 40 and 75 but awful on 10 and 15. The
WARC bands? Don't know-never was one one.
AF2Y

In article <mvxp6.12697$a7.131492@typhoon.neo.rr.com>, "Alan Watts"
<awatts@neo.rr.com> wrote:

> Anybody have experience with one? How does a G5RV compare to, say, a
> 40M dipole on 40M -- at the same height? -- a 10M dipole on 10M?
>
> Also, I'll have to run it through the near tops of some trees --
> should I replace the bare copper horizontal wire part with insulated
> wire to keep from maybe starting a fire.
>
> It's 102 feet long, and I can't run it completely free of tree limbs
> and foliage.
>
> Alan
>
>

4739. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 20:46:42 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AAD35B1.41CD3640@cybatek.fsnet.co.uk>
Source record: 168711

Woa there !
I think you've got your knickers in a bit of a twist Gary!
(And I mean it in the best possible way!)

Firstly, I'm Mike Tatum, I posted the original article.
I live in the UK.
I have a garden that is 40ft x 40ft.
I have a small receving antenna for 160m that requires a preamp.

Let me explain how I came to this conclusion without using any numbers at all :

I use a homebrew vertical antenna for transmitting on 160m.
It's great, it's small in comparison to a wave length, but it works and I've
made contacts across
the atlantic using it, and I'm very happy with it!

I decided to look into ways of improving my _receiving_ capability on 160m, as
this is as important
if not more important than getting a big signal out.
(I learnt this very quickly!)

So, having a small garden, yes just 40ft x 40ft, I had to think small!
A rather neat antenna for receiving became available to me and I bought it,
paid real cash for it too!

Having made it resonant on 160m I attached it to a small lightweight rotator
and put it in the garden.
The first thing I noticed was the _HUGE_ nulls off of each end, using my
FT1000MP receiver I have measured
the null to be around 60db.
(No maths please!!)

So, I started to listen around 160m one evening, I often struggle with QRN on
the vertical,
switching to the receive antenna I note a distinct drop in S reading but an
even further drop in noise,
such that I can hear stations that aren't detectable on the vertical.

Swinging the RX antenna around I am able to null out the source of the noise
making the
stations fully readable, but without any S reading at all.

Next I borrowed a 25db gain preamp from a good friend, Bob (G4VGO), he's not
into maths either, but he knows his stuff!
(And my girlfriend thinks he looks like father christmas, but that's another
story :))

Anyways, I connected the preamp up and did some more tests.
Listening to a station in the Azore Islands I tuned the best I could using the vertical antenna, the guy ended up being
about a 3/9 with +10db of QRN.

Next I switched over to the RX antenna, swung it round so that the noise source was in one of the deep
nulls off the end of the antenna, immediately I noticed that I could hear the Azore Islands station perfectly, no S reading
but _perfectly_ Q5 ... I took a deep breath and switched on the preamp, WOW!
(Still no maths !)

The noise level came up to around an S1 but the chap in the Azore Islands was now 5/7-8 with me !
PERFECT!
At this point I pinched myself a few times to make sure I wasn't dreaming!

Just to prove it I switched back to the vertical, +10db of QRN and just about able to hear the chap, switched back to
the rx antenna perfect 5/7-8 fully readable and indeed a pleasure to listen to, switched back to the vertical +10db of noise,
back to the RX antenna 5/7-8 perfectly readable ... etc etc etc ...

Now, I'm a relatively simple chap when it comes to numbers, I work with computers all day so I let them worry about the numbers,
but one thing I know for sure is "I need a 26db preamp" it works, it does what I want in my 40ft x 40ft garden in little ole England!

So chaps, I really appreciate all the help and good intentions, honestly I do!
... but please, lets not start a nuclear war over this,
after all I only wanted to know where I could buy a 26db gain preamp from !

Thanks and I hope this was a fun read!

Mike Tatum.
(A small radio ham in a small garden in a small country with an even smaller receiving antenna!)

Gary Peach wrote:

> "Tom W8JI" wrote ...
> > Gary Peach wrote:
> > >I think that you have not been quite honest in witholding some of the
> data.
> > >My calculations are correct.
> >
> > It seems like you are saying:
> >
> > 1.) I measured noise floor in a working system with accurate
> > instruments, and presented the data.
> >
> > 2.) Since measured results disagree with your "calculations", which
> > you consider flawless, I must have "withheld data".
> >

> > What about the hundreds of other people who's emperical results fly in
> > the face of your "calculations"?
>
> I don't think that they do, if you look carefully towards the end of whatI
> have atempted to demonstrate mathematically you will see that I credit your
> proposition with an improvement of up to 1 dB improvement in Signal to noise
> Ratio, but this is at the expense of a loss of a great deal of dynamic range
> of the reciever and the introduction of all sorts of internal problems down
> the receiver chain not least of which is running the predetection filters at
> far too high a level. If you consult the literature about high 'Q' filters
> you will see that the recomendations suggest that you operate them at as low
> power levels as practicable to prevent ringing etc.
>
> > >> Factually, a preamplifier often is needed on 160 meters with many
> > >> receiving antennas. There obviously are many things being ignored in
> > >> some of the answers given.
> > >
> > >Not ignored, but unstated in your original query.
> >
> > What query? I made no query. I offered real-world data, since I have
> > it available.
>
> I'm sorry if I miss inerpreted a request for a source of a preamplifier as a
> query.
> I mistakenly assumed that as you request a pre amplifier that you had not
> yet undertaken any practical observations. I was trying to save you some
> money. When I last looked for the commercial device offered by one of our
> reputable dealers such amplifiers were going for about 250 UKP approx US$360
> I decided that for a dB improvement at 160 m that was uneconomic for me.
> I might conclude differently now that PSK31 has become so popular.
>
> > >> At my location, even arrays of 880 foot long Beverages require
> > >> amplification before going to the receivers. My small verticals, and
> > >> certainly any small loops (if I had them), would require
> > >> amplification.
> > >
> > >I thought that you had a 40 foot square yard! ?
> >
> > I never said how big my "yard" was.
>
> I can't be bothered to go back through the postings in this topic but
> somewhere this garden size was mentioned. This raised my interest as due to
> my personal circumstances I live in the centre of a town to be near to the
> shops and Doctors etc. My backyard is 25' x 65' approx and I am looking for
> an antenna that will operate satisfactorily on long wavelengths. I know that
> I shall have to pay a huge efficiency debt for my practical situation, but
> so be it, I think it prudent to know what I am walking into before I set
> out. I had hoped that free and frank discussion in this so convenient medium
> amongst fellow experimenters would not only be pleasent, but also useful to
> all concerned. If in my quest for vigour I have upset you by a too search

> approach then I appologies. Never the less the facts remain the facts.
>
> > >> For a working MEASURED example, noise floor to the NE on an array of
> > >> 880 foot long Beverages on a quiet winter night, using 3.5 kHz
> > >> bandwidth, is -123 dBm with no feedline loss. That's 194 nanovolts (I
> > >> have a 75 ohm system) with a very wide 3.5kHz bandwidth.
> > >
> > >That is interesting, (obviously not your back yard), and indicates a loss
> of
> > >approximately 29 dB for that antenna.
> >
> > Simple enough to check.
> >
> > That array, after feedline losses are deducted, is typically slightly
> > less than 20 dB down from a 200 foot tall single element vertical with
> > 100 200 foot long radials and a vacuum variable and large edge wound
> > inductor for matching, when signal levels from distant stations in the
> > direction where the Beverages point are compared.
>
> So what is the gain of the reference AE?
>
> > It might be as much lower as 12-20 dB (QSB, sorry), but it very
> > obviously is much less than 29 dB down.
>
> My figure of 29 dB is due to the absolute efficiency not the comparative
> gain compared to an uncalibrated reference.
>
> > >-198.6 - (-123) = 75.6
> > >3,500 Hz = 35.4 dB
> > >
> > >75.6 - 35.4 = 40.2dB = 10,471ï¿½K
> > >
> > >Which is approximately in accord with the 9,000,000ï¿½K that I proposed for
> > >the Sky Temperature (Tsky) on 160 m during the quite times.
> >
> > And your numbers come from what stone tablet???
>
> OK a readily accessible reference that many Hams will have is
> "RSGB RADIO COMMUNICATIONS HANDBOOK"
> Fig 15.6
> I chose the quitest noise temperature for 160 m as this favoured your case
> the most.
> In fact the sky temperature can be up to 45 dB hotter at 160 m
> than the low of 9,000,000ï¿½K that I chose for my worked example.
>
> > >10 log(9,000,00/ 10,500) = 29.3 dB loss.
> > >or 0.1% efficiency whichever way you like to look at it.
> >
> > Maybe you, not me. I have to trust my Sierra 303B and various signal
> > sources.

>
> Just how do you launch the signal to make this measurement?
> Is the calibration signal that you use a Frauenhoffer wave
> or are you in the near field. Do you make your measurements with the
> energising probe in different positions with respect to the Aerial under
> measurement? The position of the launching probe in the near field is
> critical and highly variable.
>
> > >However the S/N ratio is still less than that at the I/P from free space
> to
> > >the antenna.
> >
> > How do you know that?
>
> please follow the example for (Si/Ni) / (So/No)
> This is all standard work and can be verified in any good standard text on
> the subject of noise and receivers or transmission theory. It is used every
> day by millions of competent engineers and the results always come up
> trumps. They have fitted the theory for the last 70 plus years. Now I will
> be the first to admit that this is not conclusive proof of the absolute
> correctness of the theory, that would suggest a closed mind and an infinite
> knowledge of everything past present and future, of course such a God like
> quality may be confered by others, but I would still remain unconvinced in
> the absoluteness of the theory.
> In the mean time because it works not only for me but millions of others I
> have no proven alternative to hand I will continue to use it untill
> convinced that it is flawed. I would hope that I am amongst others in such
> an objective approach not only to this hobby, but to life.
>
> This is the bit that you should attempt to understand.
>
> > >Putting 9,000ï¿½K directly into a mixer gives
> > >Ts = Ta + Tr
> > >= 9,000 + 2,500 = 11,500ï¿½K
> > >S/N in is S/ kBTsky
> > >The signal is 29 dB down too so S/N out is
> > >(eff x S)/(eff x Nsky + Nr)
> > >0.001S/ kB(0.001 x 9,000,000 +2,500)
> > >(Si/Ni)/(So/No) becomes
> > >(eff Tsky + Tr)/eff TSky
> > >(0.001 x 9,000,000 + 2,500)/ (0.001 x 9,000,000)
> > >= 11,500/ 9,000 = 1.28
> > >or approximate 1 dB loss of signal to noise ratio.
>
> Her is the bit that ses that for any system the signal to noise ratio out of
> it is always worse than what you put into it because a perfect syatem does
> not exist and any practical system will always add some noise of it's own.
>
> "Send reinforcements I'm going to advance"
> I won't bother to rehearse that one as you are no doubt quite familiar with

> it.
>
> > >Where
> > >Si and Ni are signal and noise in respectively
> > >So and No are signal and noise out respectively
> > >
> > >Now with the amplifier gain G;
> > >say for example 30 dB (makes the numbers easier to follow)
> > >S/N = (G eff S)/(G eff (Na + Namp) + Nr)
> > >(Si/Ni)/(So/No)
> > >= (G eff(Tsky + Tamp) +Tr)/ G eff Tsky
> > >= (1,000 x 0.001(9,000,000 + 300) +2,500)/ 1,000 x 0.001x9,000,000
> > >= 9,002,800/ 9,000,000
> > >= 1.0003
> > >or 0.0014 dB
> > >= (1,000 x 0.001x S)/ kB (1,000 x 0.001x(9,000,000 + 300) +2,500)
> > >Thus an amplifier can win you about a dB of signal to noise however you
> have
> > >reduced the dynamic range of the receiver by 30 dB in the example.
>
> And her is wher I credit your contention that the amplifier gives an
> improvement. If you can afford the price and you think that 1 dB using SSB
> will give you a worthwhile advantage then please go ahead it is your money
> after all. At least you'll get some benefit on 28 MHz if your Rx doesn't
> already have a built in RF Amplifier
>
> > You are pulling numbers from the thin air instead of staying with a
> > working example. That's often a problem when people ask a simple
> > question, and get an answer from a textbook.
>
> Had you provided data I would either have accepted or disputed the data
> provided, had I been content with the data then I would/will rehearse the
> exercise using your data. In the abscence i used data which is freely
> available to the majorioty of Hams who can do the calculations for
> themselves. Ther will be readers to this excgange that are quite unfamiliar
> with this topic and I had hoped that by exercising it for your benefit that
> the dialog would be in a small measure a teaching exercise or at least a
> basis for considered debate. As far as I am concerned I am not out to win an
> argument, merely preventing the little grey cells from becoming completely
> atrified in retirement. I shall go out kickiong and screaming to the last,
> no graceful resignation to the inevitable. I have no objective to accumulate
> laurels, (I have enough of those thank you), nor do I have the objective of
> denigrating any other living soul I am motivated to find like inquistive
> minds and wher possible give encouragement to those just coming through the
> hobby and who wish to go a little further than the requirements of the
> examination required for certification.
> There is life after the RAE
>
> > 1.) The FT-1000D, which has a fairly good receiver by amateur
> > standards, has about 10dB S/N with a .2 uV input signal and 2.5 KHz

> > selectivity.
>
> ((2 x 10^-7)^2)/50 = 8 x 10^-16 Watts
> 10 Log (8 x 10^-16) = -150.9 dBW
>
> Converting to dBm as this is the usual units for receiver calculation
> due to the scales of the available instruments used.
>
> = -120.9 dBm calibration signal
>
> Now this value is producing 10 dB S/N
> therefore threshold is -131 dBm
>
> the bandwidth 2,500 Hz = 34 dB Hz
>
> -131 = -198.6 + 34 + 10 log(T)
> TdB = 33.6 dB
> Tr = 2,290.9 ï¿½K
>
> NF (in dB = 10 Log(1+ (Ts/290)
> = 10 log (1 + 2,291/290)
> = 10 Log(1+ 7.9)
> = 9.5 dB
>
> This is the typical noise figure for a mixer with no RF amplifier.
> They are usually about 10 dB
>
> > That's a NF of 20 dB, or a temperature of almost 29,000ï¿½K.
>
> I think that you are a decimal point out OM
> 2,900ï¿½K is nearer the right figure and you will find most RX with solidstate
> mixers and no RF amplifier have this sort of noise figure.
> A good balanced mixer with the correct Local Oscilator injection level will
> come up with this sort of figure fairly consistently and have an insertion
> loss of a couple of dB
>
> > 2.) The sky-noise you are using is not accurate at every location,
> > every season, and every time of day. It is also most likely for a
> > non-directional antenna.
>
> No indeed it is not ther is a variation of some 45 dB which is mean medicine
> in anybodies language. I chose the best case, the case that would favour
> your contention. The hotter the sky gets the worse having an RF becomes. Try
> using the switch attenuator fitted to many modern RX on top band you'll need
> it all. On 20 m during the mid-day noise peak 10 to twenty dB is probably
> the setting. I would like the possibility of putting in 3, 6, 10, 20, 30, 40
> dB but I have not seen such a receiver so an external switched attenuator is
> an advantage. You want just enough attenuation to knock the noise back
> without attenuating the signal to a level below the receiver noise.
>

> > Ignoring the above is NOT a good idea, when answering a question.
>
> I stated the parameters for my example. I'm sure that many will not be
> following the maths as it is without putting a load more calculations for
> other values, however if you are prepared to accept that I won't cheat I'll
> publish a small table of results of improvement of S/N and reduction of
> dynamic range for a variety of sky temperatures.
> My aim is to assist, contrary to any differnt opinion which you may have
> formed. :)
>
> > >It would help if you could provide some AGC to the preamplifier.
> > >If that is not possible it would help to use an amplifier of less gain
> than
> > >my example. We could calculate the break even point, if you want I'll set
> up
> > >the spread sheet to calculate a table for you and you can make your
> choice
> > >to suite your conditions.
> >
> > No, that is NOT true at all. AGC to the preamplifier would only work
> > when the desired signal was into the AGC response. As a rule, overload
> > and IMD comes from signals outside the passband of the receiver.
>
> That is precisely why you don't want excess front end gain. The IMD will
> only occur when adequate levels combine in a non linear device, this is
> withing the set despite the fact that the signals originate exernal to the
> set. the object of the exercise is to keep those signals out of the set. you
> can do this best with a pre input filter with nice steep sides and a very
> large rejection ratio. Using amplification only makes those signals larger
> and more difficult to eliminate. Leakage around and saturation of the filter
> etc.
>
> > AGC would have no effect on the systems IMD performance on weak
> > signals...where it is most problematic.
>
> Here you should use a filter immediately at the aerial of at least three
> sections and 18 dB/Octave rejection to out of band signals.
>
> > More important than this, you are dictating my system works
> > differently than it actually does.
>
> I think that if you look carefully that I support some of your contentions,
> but do not completely share your conclusions.
> Take a look at my web page for my background click on the picture of me,
> (The good looking one), for a mini technical bio. with pictures.
>
> www.gary.peach.dial.pipex.com
>
> > >If you are working machine modes the fraction of a db signal to noise
> will

> > >be very helpful with rare DX but for 10 dB S/N SSB not much use to you at
> > >all.
> >
> > Nonsense.
>
> This is a table of counted errors in a known passage of text 1,000
> characters long. The relationship is
> P[E] = 1- erf(S/N)
>
> erf is a function that you can look up just like logs
> P[E] is the statistical probability that an error will occur in a noise
> environment with a signal to noise ratio S/N
> This works for speechs in parliament, trying to communicate across a noisy
> machine shop or in a railway station etc.
> It does work well and NASA use it ALL of the time for statistical analysis
> of the data from their deep space spacecraft.
>
> | ERRORS
> S/N | per 1000
> 0.1 dB | 147.85
> 0.2 dB | 138.64
> 0.3 dB | 129.68
> 0.4 dB | 120.98
> 0.5 dB | 112.56
> 0.6 dB | 104.43
> 0.7 dB | 96.60
> 0.8 dB | 89.08
> 0.9 dB | 81.88
> 1.0 dB | 75.01
> 1.1 dB | 68.48
> 1.2 dB | 62.28
> 1.3 dB | 56.43
> 1.4 dB | 50.92
> 1.5 dB | 45.76
> 1.6 dB | 40.94
> 1.7 dB | 36.46
> 1.8 dB | 32.31
> 1.9 dB | 28.50
> 2.0 dB | 25.00
> 2.1 dB | 21.81
> 2.2 dB | 18.92
> 2.3 dB | 16.32
> 2.4 dB | 13.99
> 2.5 dB | 11.91
> 2.6 dB | 10.07
> 2.7 dB | 8.45
> 2.8 dB | 7.04
> 2.9 dB | 5.82
> 3.0 dB | 4.78
> 3.1 dB | 3.88

> 3.2 dB | 3.13
> 3.3 dB | 2.50
> 3.4 dB | 1.98
> 3.5 dB | 1.55
> 3.6 dB | 1.20
> 3.7 dB | 0.92
> 3.8 dB | 0.69
> 3.9 dB | 0.52
> 4.0 dB | 0.38
>
> > >Presumably on transmit you feed your other antenna which you say is of
> > >comparable gain with 400 kW for full ERP ;)
> >
> > ?? Did I say that? Or did you imagine it?
>
> Please observe the emoticon, technical discussion can be a lot easier with a
> little humour. This may be an innovation for you but the old hands do it all
> of the time, except for a very few old stick in the muds. Their loss. :(
>
> > >> My FT-1000D barely makes that level with 10 dB internal S/N ratio
> > >> preamp on, and that is for wider-than-SSB bandwidths! On CW, forget
> > >> it. The receiver sounds stone dead and I would loose many weak signals
> > >> that would otherwise be workable without external amplification!
>
> I saw that somebody else had independently addrressed this point so I will
> not restate the excellent advice so given.
>
> > >Of course it sounds stone dead,
> > > but the S/N ratio of any CW signals that you receive will be great.
> > > Once again if you work PSK31 you will not be able to
> > >hear the signals, but they are there none the less, and if you can tune
> to
> > >them they will decode without error. HamScope is a great application for
> > >this purpose.
> >
> > Nonsense.
>
> Try it and see, you'll be pleasently surprised.
> Just look at the numbers of Hams coming up on PSK31.
> Ask some of the truthful old CW ops that have tried PSK31.
> You'll get a lot more new countries with this newly available to Hams mode
> This mode was what we were using to get the images of Mars back from
> Mariner IV in 1966. The system temperature was 40ï¿½K and the bit rate was 8
> BPS in a 2 BLo bandwidth of 8 Hz. Lots of good fun several hours per
> picture.
> The round trip light time was of the order 20 Minutes. (don't mean to blind
> you with science. The bit errors had to be less than one in 1,000 for the
> scientific analysis team to accept the data. (That's the guys that look at
> the pictures and say there are no little green men on Mars)
>

> > PSK is not as effective as the human ear on CW (assuming you know
> > morse code, and have normal CW skills) for digging signals out of the
> > noise.
>
> History will decide that debate I think.
> I would love to understand this myserious facility that CW ops claim to
> have.
> I wouldlike to see a series of experiments done in an attempt to quantify
> these claims. If they are proved significant then ther is a great deal more
> to be done with machine encoding and communication in a noisy environment.
>
> > Readability is far better on CW than on PSK, when all things (gain,
> > receiver bandwidth) are equal.
> >
> > It's better get back to consider there things by fact, not hearsay.
>
> I fear that this discourse has become so long that the content is now lost
> and anything which I have to say further to amplify the facts for you and
> those trying to follow this debate, (they probably gave up ages ago), will
> have to be in a seriously edited version of this post.
>
> I wish you luck and I am so pleased to be able to debate such technical
> issues with somebodyt as equally dedicated to learning and understanding the
> truth of nature.
> 73
> --
> Gary7SLL
> 51ï¿½ 23' 50" N 1ï¿½ 19' 58"W
> www.gary.peach.dial.pipex.com/

4740. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 21:12:37 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AAD3BC5.C086720E@cybatek.fsnet.co.uk>
Source record: 168713

No no no ... round and round and round the garden, had a great time !

:)

MT.

"M.J.Powell" wrote:

> >
> snip
>
> >The reason I have had to go for this type of antenna is because my garden is
> >only 4ft square!
>
> snip
> >
> >BTW, I do have some 300m of copper burried under the front and rear gardens
> >which I tuned the vertical
> >against.
>
> You buried 300m of copper straight down????
>
> Mike
> --
> M.J.Powell

4741. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 21:14:46 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AAD3C46.4D5A1161@cybatek.fsnet.co.uk>
Source record: 168714

BTW ... 4ft square should have read 40ft square ... slight typo ...

:)

"M.J.Powell" wrote:

> >
> snip
>
> >The reason I have had to go for this type of antenna is because my garden is
> >only 4ft square!
>
> snip
> >
> >BTW, I do have some 300m of copper burried under the front and rear gardens
> >which I tuned the vertical
> >against.
>
> You buried 300m of copper straight down????
>
> Mike
> --
> M.J.Powell

4742. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 21:34:07 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <98jfcf$7pv$1@nnrp1.phx.gblx.net>
Source record: 168718

Duncan Clark <d_clark@ntlworld.com> wrote:
: In message <3AAA1C79.779A32DC@eznec.com>, Roy Lewallen <w7el@eznec.com>
: writes
: >There's no way to find out what an applicant is even trying to patent,
: >since the application isn't public.

: Well US patent law is changing so that all patent applications will be
: published, I think, 12 months after the initial application date. This
: will then by like EU patent applications.

I was recently told that it was going to be 18 months. I would
hope that this would give USPTO an incentive to speed up the process. I
have two that were filed over a year and a half ago that I have yet to
hear about. Just had another one allowed, and it will have taken almost
two years from filing to issuance.

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-| )__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__
```

Graphics by Loek Frederiks

4743. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 21:34:19 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98jf86$3ue$1@slb6.atl.mindspring.net>
Source record: 168619

Bill:

[snip]
"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:3AAD0665.43BFCD2C@hiwaay.net...
> Peter- these comments are fine, but I would like your views on the
> "differential T" tuner, like the MFJ986. This has only two controls,
> and, supposedly, only one final setting for a given combo of load
> characteristics and tranformation.
>
> Bill-W4BSG
[snip]

I believe that antenna tuner setting are a really a simple concept explainable by elementary theory of simultaneous equations. Consider...

A ham radio antenna tuner has to accomplish only two things.

One: Cancel an arbitrary constant reactance, call it "X".

Two: Perform an arbitrary constant impedance [actually resistance] transformation ratio, call it "r".

Mathematically speaking you have just two constants, X and r and some relationships to set up with unknown adjustable element values. And when you adjust the tuner for a reflection coefficient null, [reflection coefficient null is VSWR = 1:1] you are really just manually computing the solutions to a set of two simultaneous equations. The antenna tuner and ham handed combination is really an analog computer solving two simultaneous equations so to speak...

Now if you have an adustable network with N adjustable but previously unknown element values within it, that is indeed capable of cancelling an arbitray constant reactance X and setting up an arbitray constant impedance transformation ratio r, then mathematically to find the settings for those N unknown element values in terms of the two known constants X and r, you have to set up and solve 2 equations for N unknowns.

Such a system of 2 equations in N unknowns is what mathematicians term an overdetermined system.

With exactly two equations and two unknowns the solution can be and usually is unique. This is the situation for the "L-Tuner". Nice neat uniqe answer with a setting that achieves perfectly zero reflection coefficient [VSWR is 1:1 exactly] but the inductance value you end up with may not be as low as the corresponding inductance value for a "T-Tuner". Then again it could be lower... caveat emptor.

[The one situation where two equations in two unknowns may not have a unique solution is that when the "determinant" of the equations equals zero, in that case all solutions are possible I guess. But this is a highly unusual circumstance.]

On the other hand, when there are just two equations and N elements to be set, depending upon the nature of the equations, there may be many solutions. This is what makes "T-Tuners" such fun!

In the theory of simultaneous equations, if you have 3 independently adjustable elements to set up two constant relationships represented by an arbitrary X and an arbitrary r, then there can be multiple solutions for the 3 unknown element values to satisfy the two equations to do that. This is the situation for the "T-Tuner". Generally several settings will work, and hams strive to use the one with the smallest inductance value, to reduce losses. Since inductors are lossy compared to capacitors.

Now with the "Differential T-Tuner" like the MFJ unit to which you refer, you do have three adjustable elements. However the two capacitors are ganged together on one "adjustment" knob and so can't really be set inedpendently. This represents a set of two equations with three unknowns but with a "forced" constraint or relationship between two of the unknowns.

In this situation, you might just "luck out" and hit one of the several solutions right on the nose, but the probablities of that happening are slim and none.

On the other hand you will likely only find one setting of those two knobs which "minimizez" the reflection coefficient. And in all probablility you will not be able to satisfy the two equations exactly, just approximately. And so... what happens is that often with the "Differential T-Tuner" you will not find a "perfect" zero of the reflection coefficient, i.e. you get a single "dip" in reflected voltage but it does not dip to zero. In VSWR terms you can't always reach VSWR = 1:1 with a differential T-Tuner. But they are easier to adjust when you can find a dip. There may indeed be situations when you can't even find a good enough dip to satisfy your transmitter. Even then there is not guarantee that the inductance setting is low loss either. It trades off convenience in adjustment for a lower range of adjustment and potential situations that can't be tuned which could be tuned by a T-Tuner with relative ease. And so... I personally would stay away from the differential T-Tuner. Sorry MFJ.

All that being said, if you use circuit theory techniques to set up these two equations equaling X and r for the various antenna tuner configurations, you will find that they are not "linear" equations, rather they are "multi-linear" equations and so... you will find them a little harder to solve than the ones you dealt with in high school algebra classes.

Best,

-Peter K1PO

"Bill Aycock" <baycock@hiwaay.net> wrote in message news:3AAD0665.43BFCD2C@hiwaay.net...

> Peter- these comments are fine, but I would like your views on the
> "differential T" tuner, like the MFJ986. This has only two controls,
> and, supposedly, only one final setting for a given combo of load
> characteristics and tranformation.
>
> Bill-W4BSG
>
> "Peter O. Brackett" wrote:
> >
> > Mark:
> >
> > I believe that he was asking about adjusting an "L-Tuner" and not the
> > "T-Tuner" which is what you described.
> >
> > Although I have never owned a "store bought" L-Tuner, I believe that the
> > tuning procedure is much different, than for a "T-Tuner". The "T-Tuner"
has
> > three adudjustable elements, usually two capacitors and one inductor.
While
> > the "L-Tuner" has only two adjustable elements an inductor and a
capacitor.
> >
> > There will usually be a method for, and a tuning step, of configuring
the L
> > and C into different orientations with respect to each other in the
circuit
> > to get them into the right configuration to effect the matching, which
> > complicates the process.
> >
> > When the correct orientation of the L and C are found then there will
> > subsequently only be a single setting of inductor and capacitor which
> > matches a given situation of reactance cancellation and impedance
> > transformation.
> >
> > And so the tuning procedure for the "L-Tuner" is probably quite
different
> > from that of a "T-Tuner" which often has many different settings of the
> > three components to effect an impedance transformation, and no
> > configurations to arrange.
> >
> > -Peter K1PO
> >
> > "Mark Keith" <nm5k@wt.net> wrote in message news:3AAC9042.6509@wt.net...
> > > rb wrote:
> > > >
> > > > What's the rule of thumb for initial tuning adjustment of a roller
coil
> > L
> > > > tuner into ladderline? The manual on my T tuner says to tune the
roller

> > > > coil for max rcvr noise, and then the two var caps. After that, put
low
> > pwr
> > > > carrier in for fine tuning. Does this also apply to L tuner
circuits
> > with
> > > > roller coils?
> > >
> > > About the same. Using the noise can get you pretty close as far as the
> > > coil goes. You want to use the least amount of coil to get a match. So
> > > say you peak the noise, and tweak the caps, and you have a good match.
> > > After that, I keep slowly lowering the coil turns and tweaking the
caps
> > > until I can't get a decent match. Then I go back to the point of least
> > > coil and acceptable SWR. This way you are assured of being tuned at
the
> > > most efficient point. Most of these tuners can do a match with 49
> > > different settings of coil/caps. Only the setting using the least coil
> > > is fairly efficient. So there is really only one correct setting if
you
> > > don't want to waste power. I did a test of the losses with different
> > > tuner settings on this MFJ-989c I have. I found if you use too much
> > > inductance, 20% loss is easy to come by. Of course, many will say you
> > > can't hear the difference, and they are probably right, but I still
hate
> > > to just throw away available power. If you run an amp this 20% can
build
> > > up a lot of heat. I found if you are very careful with the tuning, the
> > > loss can be almost unreadable on a normal wattmeter. MK
> > > --
> > > http://web.wt.net/~nm5k

4744. Re: The Best Wire Ant. in the Business

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 22:01:02 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98jgvg$rg2$1@slb5.atl.mindspring.net>
Source record: 168620

Are we allowed to build one of these or is it covered by a patent pending?
What???

<radiosigs@mindspring.com> wrote in message
news:98jea6$o08$1@slb7.atl.mindspring.net...
> A 20 METER "CLOUDWARMER"
> I thank you for showing an interest in my antenna which was voted theA
> number one wire antenna is North America by an independent research
> organization: AF2Y Enterprises! I did NOT invent it; the idea was given
to
> me by WB2OTK in South Carolina. He didn't invent it either. Who then did?
I
> don't know; I don't care; all I know is that it works like a BOMB!
> Furthermore the U.S. military is using it under the name N.V.I.S.(Near
> Vertical Incidence Skywave). In 30 years on the air, it is the best wire
> antenna I've ever used and can easily challege commercial beams for
> effectiveness.
>
> A few basic concepts to begin with. A "Cloudwarmer" is a MONOBAND 2
element
> wire beam. I stress MONOBAND and it can be erected for ANY BAND. Secondly
> it is based entirely on mathematics and is uncomplicated. Thirdly, all
> that's required is standard wire, 52 ohm coax of any length and five
> insulators. Also I do not recommend using a tuner because if the
> construction is correct and adjustments,if necessary are made, a tuner
will
> be unnecessary and furthermore it may mess up the mathematical
> relationships which govern this antenna. Lastly, any ham who can set up a
> standard dipole can EASILY construct a Cloudwarmer. And if any ham cannot
> construct a standard dipole, then he or she has no business being on the
> air therefore delete this information and take up basket weaving!
>
> Keep this in mind because it applies to any Cloudwarmer for any band. The
> "Warmer" consists of a driven element called a dipole with a parasitic
> called a reflector the latter of which is 6% longer and placed between
.15
> and .2 wavelengths below and parallel to the driven element or as NEARLY
> parallel as possible. THAT'S IT. It is also known as a "SCATTERBEAM"
> because the RF hits the ionosphere at high angles and then scatters all
> over the world. It is a COMPLETELY NON-DIRECTIONAL ANTENNA on the order of
> a vertical but better than one for INTENSIFIED OMNIDIRECTIVITY.
>
> Now for the mathematics. Let's talk about the numerical figures regarding
> wavelengths. Let's say a 20 meter HALF WAVE dipole is to be constructed to

> resonate with a very low SWR at 14.300. Using the formula 468/frequency ,
> we see that such a dipole must be 32.7 feet which equates to 32'8". Let's
> now convert that to inches. 32' x 12 =384 inches +8=392 inches. That's a
> HALF WAVE. Double it and we get 784 inches therefore we now know there are
> 784 inches in a FULL WAVE dipole FOR 14.300. The reflector we discussed
> which ALWAYS GOES BENEATH the dipole i.e. driven element can be between
.15
> to .2 wavelengths in distance. What then has to be the length it we place
> it, for example .15 wavelengths below? Simply multiply 784 x .15 and we
> come out with 117.6 inches and divide by twelve to convert to feet and we
> get 9.8 which is 9 feet,10 inches. That is the minimum distance the
> reflector must be placed underneath the dipole. The maximum is .2
> wavelengths and to change that to feet multiply 784 x .2=156.8 inches,
> divide by 12 and we come up with 13 feet. We now know that the reflector
> can be placed from 9 feet, 10 inches to 13 feet below. MIne is at 10 feet;
> supposedly increasing the distance will give more gain but I do just fine
> right where it is.
>
> The reflector must be 6% LONGER than the dipole. We already know the
length
> of that dipole for 14.300 is 392 inches. Multiply by .06 and we get 23.5
> inches which is 23'6" and that's the length of my reflector.
>
> So now with the math done, we proceed to erect that Cloudwarmer. Put up a
> dipole 16'4" from either side of the center insulator and feed it with any
> length of, for example, RG8U. Take an SWR reading and WRITE IT DOWN..it's
> VERY IMPORTANT.
> Next, string out a relector wire about 10 feet below and about 2 feet
> LONGER as parallel as possible. Each end should terminate in insulators.
> There is NO ELECTRICAL CONNECTION between it and the driven element
dipole
> nor is there any electrical connection between it and the coax feed. It
> just hangs there minding its own business but is nevertheless the secret
to
> success!
>
> Now take an SWR reading with everything in place. If you see ANY change
> whatsoever, good or bad, LEAVE THE INSTALLATION ALONE! It's working! If
> there's no change then either LOWER the reflector 6" at a time or LENGTHEN
> it by a few inches. What we MUST see is a change in that SWR. Once it
> happens, go work the world and YOU WILL.
>
> We know that a dipole less than a full wavelength high has a multilobular
> pattern with appreciable ground loss. Now when we use a vertical at ground
> level, we must add radials. Why? Because we must minimize ground loss. The
> radials are RF collectors meaning that the emitted RF instantaneously is
> picked up by them and RETURNED to the base of the vertical to be
RERADIATED
> at about 15 degrees to the horizon. That reflector acts just about the
same

> way. It MINIMIZES ground losses by reradiating the RF into the "clouds" at
> much higher intensity than will a standard dipole and your signal will be
> heard in places you never knew existed. The Cloudwarmer has APPRECIABLE
> gain on receive versus a standard dipole and vertical-REMARKABLE GAIN. And
> on transmit, try switching back and forth between it and another antenna
> and see what happens. The person on the other end will be STUNNED!

4745. Connector probs and IC-706MKIIG vs FT-100D

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 22:56:42 UTC
From: storkus@packard-hell.storkus.com
Message-ID: <98jk79$1c8$1@nnrp.atgi.net>
Source record: 168621
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf

Ok, the connector question first since it's the most important: I have the new IC-T81A quad-band HT from Icom. Unfortunately, they chose to stick an SMA connector on the radio instead of, say, a TNC (which is what I would have chosen, but YMMV). I've found a couple of sources so far for SMA males (including the very expensive, but also very helpful Pasternack Enterprises), but I'm having some mechanical problems. A local radio shop here has some SMAs for RG-58-style cable that they were using for a local cab company that had a computer system that could receive GPS. These connectors are crimp-style. Unfortunately--despite the fact that they swear up and down that they're using the right size for the ferrule--the connector wobbles inside the ferrule and cable, eventually losing contact (i.e., becomes intermittent) on the shield as it flexes.
Now the tech at Pasternack said to me today when I called that the connector should be rock-hard when crimped properly--no wobbling of the ferrule and cable whatsoever! And everyone's told me that clamps will break clean off when flexed repeatedly. And while the Pasternack guy had no real opinion of the solder-type connectors (looking at them, though, I'm not sure how much of a difference the solder would make mechanically, anyway), the local radio shop says that they had poor results with them.
My original idea was to use an SMA to TNC or N adapter and then put the latter connector on the cables--this becomes more important when a base setup is used, where I intend to use LMR-400 (RG-8 size and performs a LOT better than 9913 both mechanically and electrically for only a fraction more) or LMR-600 (even bigger and lower loss) and SMAs are no longer possible.
So I'm sure, in these 3 groups, there has to be a few microwave people reading or maybe some guys who work in a commercial radio shop and need to do GPS or 800 MHz land-mobile or maybe even cellular (including 1800 or 1900 MHz PCS). Remember, this needs to work at 23cm (1300 MHz) reliably!

The second question is one that seems to pop up more and more, but the answers keep changing, so I'll ask again: I'm thinking, sometime in the future (maybe this summer) of getting an HF rig. An all-mode that works up to 70 cm would be real nice: that brings in the IC-706MKIIG and the FT-100D (and maybe the 847?). Reading around, this is what I've found:

Icom IC-706 MKIIG

Advantages: microphone and headphone jacks on the faceplate
mechanically built well
electrically built well as far as the basics go
the plethora of mods
computer-controllable

Disadvantages: lack of filters
DSP sucks (better in the G model?)
poor performance with strong signals (poor IMD rejection)

Yaesu FT-100D

Advantages: Filters rock!
DSP rocks too!
Easier to use (?)

Disadvantages: sucks mechanically (knobs fall off and feel "mushy", pigtails for leads)
Loud fans that STILL don't seem to do the job!
Lots of stories out there of blown finals and drifting osc's.
Yaesu customer (dis)service

This last part in particular worries me. I've bought quite a bit of Icom stuff (in fact, I may have to send in the quad-bander for a little battery pack problem) before, and I've NEVER had a problem with their customer service regarding parts or returns. The stories I've seen floating around about people sending in FT-100's THAT ARE STILL UNDER WARRANTY and having to pay or otherwise getting lots of static really worry me, especially considering how I hear a LOT about the radio falling apart (sometimes literally!). It doesn't do any good to have "the better radio" when it doesn't work! Despite all the faults in Icom's radio design (something I've noticed on my T81A as well, piss-poor AM rejection being up near the top) at least they work, and work reliably.
Now maybe these problems have been fixed with the new "D" version. But what about Yaesu's customer service if I need to send it in for some reason anyway?
And finally, Kenwood's new TS-2k has just come out, and has a $600 module to add 23cm capability to boot--the first to do so! (Well, since Icom discontinued their IC-900 line, anyway...) Any comments on that radio? It's pricey ($3k including the 23 cm module), and I've been hearing for quite a while now (outside the 'net!) about Kenwood's growing un-reliability, but I'm curious to find out what you all think.

Thanks for any and all info, and you can e-mail me direct at storkus@storkus.com. Thanks!

Mike

4746. Mounting DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 23:21:27 UTC
From: <>
Message-ID: <XRcr6.9052$R_6.904483@newsread2.prod.itd.earthlink.net>
Source record: 168622

Any suggestions on how to mount the W6AAQ DK3 Screwdriver antenna for an apartment installation? Before you suggest mounting the antenna on the car and running coax to my apartment, I should let you know that this is not a viable solution.

Don Johnson (who makes and sells this antenna) suggested a brake drum. Unfortunately, I'm having difficulty finding a repair shop that has old brake drums.

Any other suggestions?

Free web access to newsgroups is at
http://www.freenewsland.com/

4747. Capacitance hat supports

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 23:51:20 UTC
From: <>
Message-ID: <Yhdr6.5300$6p5.485447@newsread1.prod.itd.earthlink.net>
Source record: 168623

I recently purchased the W6AAQ DK3 Screwdriver antenna.

I know that any sheet of metal can function as a capacitance hat. The capacitance hat must be at the top of the whip in order to be most effective. But how can I support the capacitance hat? Is there something I can clamp to the top whip to support the hat?

(No, I'm not operating mobile. Thus, aerodynamics are not an issue. Also, please don't suggest mounting the antenna on the car and running the coax to my apartment.)

Jason Hsu, AG4DG

Free web access to newsgroups is at
http://www.freenewsland.com/

4748. Z-match for DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-12 23:52:40 UTC
From: <>
Message-ID: <cjdr6.9144$R_6.911729@newsread2.prod.itd.earthlink.net>
Source record: 168624

Is anyone here familiar with Z-matches? The DK3
Screwdriver uses one. The Z-match is supposed to be able
to tune the Screwdriver antenna for any frequency from 10m
to 80m WITHOUT turning any knobs.

I'm curious:
1. How can the Z-match tune an antenna WITHOUT requiring
lots of knob twisting?
2. Why doesn't everyone use a Z-match and thus avoid the
need to keep tuning around to get the SWR under 2?

Free web access to newsgroups is at
http://www.freenewsland.com/

4749. Re: Mounting DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 00:26:33 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AAD6939.896D18CA@bwcc.com>
Source record: 168625

"jason_hsu"@@@@@planetmail.com wrote:
> I'm having difficulty finding a
> repair shop that has old brake drums.
That sounds odd. Get out to a country garage.
There will be a pile of them out back.
I just had my oil changed Saturday.
There must have been 20 discs and drums heaped up by the turning machine.

Or find any junked car or truck with a wheel still on it and pull it off.

4750. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 00:52:11 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AAD6F3B.3F990B9D@hiwaay.net>
Source record: 168626

Peter- THanks for the lesson on math that may or may not apply here. THe factors you expounded on may help in understanding some aspects of tuners, but are rarely delved into when the time comes to match the system. I really wanted your opinion on a different type of tuner that was not the "L" or the common "T"
One answer is clear- you did not catch the phrase "Differential-T" that I used. In the case of this type, there are three elements, but two are NOT mutually independent. THe two capacitors are linked, in series, between the source and the load, with the inductor (variable) forming the vertical leg of the "T". THe link is such that , as one cap is increased, the other decreases.

With the two caps having a mutually dependent relationship, there are still two variables and two unknowns, not three variables. THe effective capacity as well as the distribution are really one control, not two.

(BTW, you were about eight when I had my first class in differentials; the simultaneous situation came earlier, but I don't remember just when) :-)>>> (note the long, gray beard)

Bill-W4BSG

"Peter O. Brackett" wrote:
>
> Bill:
>
> [snip]
> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:3AAD0665.43BFCD2C@hiwaay.net...
> > Peter- these comments are fine, but I would like your views on the
> > "differential T" tuner, like the MFJ986. This has only two controls,
> > and, supposedly, only one final setting for a given combo of load
> > characteristics and tranformation.
> >
> > Bill-W4BSG
> [snip]
>
> I believe that antenna tuner setting are a really a simple concept
> explainable by elementary theory of simultaneous equations. Consider...
>
> A ham radio antenna tuner has to accomplish only two things.
>
> One: Cancel an arbitrary constant reactance, call it "X".
>
> Two: Perform an arbitrary constant impedance [actually resistance]

> transformation ratio, call it "r".
>
> Mathematically speaking you have just two constants, X and r and some
> relationships to set up with unknown adjustable element values. And when
> you adjust the tuner for a reflection coefficient null, [reflection
> coefficient null is VSWR = 1:1] you are really just manually computing the
> solutions to a set of two simultaneous equations. The antenna tuner and ham
> handed combination is really an analog computer solving two simultaneous
> equations so to speak...
>
> Now if you have an adustable network with N adjustable but previously
> unknown element values within it, that is indeed capable of cancelling an
> arbitray constant reactance X and setting up an arbitray constant impedance
> transformation ratio r, then mathematically to find the settings for those N
> unknown element values in terms of the two known constants X and r, you have
> to set up and solve 2 equations for N unknowns.
>
> Such a system of 2 equations in N unknowns is what mathematicians term an
> overdetermined system.
>
> With exactly two equations and two unknowns the solution can be and usually
> is unique. This is the situation for the "L-Tuner". Nice neat uniqe answer
> with a setting that achieves perfectly zero reflection coefficient [VSWR is
> 1:1 exactly] but the inductance value you end up with may not be as low as
> the corresponding inductance value for a "T-Tuner". Then again it could be
> lower... caveat emptor.
>
> [The one situation where two equations in two unknowns may not have a unique
> solution is that when the "determinant" of the equations equals zero, in
> that case all solutions are possible I guess. But this is a highly unusual
> circumstance.]
>
> On the other hand, when there are just two equations and N elements to be
> set, depending upon the nature of the equations, there may be many
> solutions. This is what makes "T-Tuners" such fun!
>
> In the theory of simultaneous equations, if you have 3 independently
> adjustable elements to set up two constant relationships represented by an
> arbitrary X and an arbitrary r, then there can be multiple solutions for the
> 3 unknown element values to satisfy the two equations to do that. This is
> the situation for the "T-Tuner". Generally several settings will work, and
> hams strive to use the one with the smallest inductance value, to reduce
> losses. Since inductors are lossy compared to capacitors.
>
> Now with the "Differential T-Tuner" like the MFJ unit to which you refer,
> you do have three adjustable elements. However the two capacitors are
> ganged together on one "adjustment" knob and so can't really be set
> inedpendently. This represents a set of two equations with three unknowns
> but with a "forced" constraint or relationship between two of the unknowns.
>

> In this situation, you might just "luck out" and hit one of the several
> solutions right on the nose, but the probablities of that happening are slim
> and none.
>
> On the other hand you will likely only find one setting of those two knobs
> which "minimizez" the reflection coefficient. And in all probablility you
> will not be able to satisfy the two equations exactly, just approximately.
> And so... what happens is that often with the "Differential T-Tuner" you
> will not find a "perfect" zero of the reflection coefficient, i.e. you get a
> single "dip" in reflected voltage but it does not dip to zero. In VSWR
> terms you can't always reach VSWR = 1:1 with a differential T-Tuner. But
> they are easier to adjust when you can find a dip. There may indeed be
> situations when you can't even find a good enough dip to satisfy your
> transmitter. Even then there is not guarantee that the inductance setting
> is low loss either. It trades off convenience in adjustment for a lower
> range of adjustment and potential situations that can't be tuned which could
> be tuned by a T-Tuner with relative ease. And so... I personally would stay
> away from the differential T-Tuner. Sorry MFJ.
>
> All that being said, if you use circuit theory techniques to set up these
> two equations equaling X and r for the various antenna tuner configurations,
> you will find that they are not "linear" equations, rather they are
> "multi-linear" equations and so... you will find them a little harder to
> solve than the ones you dealt with in high school algebra classes.
>
> Best,
>
> -Peter K1PO
>
> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:3AAD0665.43BFCD2C@hiwaay.net...
> > Peter- these comments are fine, but I would like your views on the
> > "differential T" tuner, like the MFJ986. This has only two controls,
> > and, supposedly, only one final setting for a given combo of load
> > characteristics and tranformation.
> >
> > Bill-W4BSG
> >
> > "Peter O. Brackett" wrote:
> > >
> > > Mark:
> > >
> > > I believe that he was asking about adjusting an "L-Tuner" and not the
> > > "T-Tuner" which is what you described.
> > >
> > > Although I have never owned a "store bought" L-Tuner, I believe that the
> > > tuning procedure is much different, than for a "T-Tuner". The "T-Tuner"
> has
> > > three adudjustable elements, usually two capacitors and one inductor.
> While

> > > the "L-Tuner" has only two adjustable elements an inductor and a
> capacitor.
> > >
> > > There will usually be a method for, and a tuning step, of configuring
> the L
> > > and C into different orientations with respect to each other in the
> circuit
> > > to get them into the right configuration to effect the matching, which
> > > complicates the process.
> > >
> > > When the correct orientation of the L and C are found then there will
> > > subsequently only be a single setting of inductor and capacitor which
> > > matches a given situation of reactance cancellation and impedance
> > > transformation.
> > >
> > > And so the tuning procedure for the "L-Tuner" is probably quite
> different
> > > from that of a "T-Tuner" which often has many different settings of the
> > > three components to effect an impedance transformation, and no
> > > configurations to arrange.
> > >
> > > -Peter K1PO
> > >
> > > "Mark Keith" <nm5k@wt.net> wrote in message news:3AAC9042.6509@wt.net...
> > > > rb wrote:
> > > > >
> > > > > What's the rule of thumb for initial tuning adjustment of a roller
> coil
> > > L
> > > > > tuner into ladderline? The manual on my T tuner says to tune the
> roller
> > > > > coil for max rcvr noise, and then the two var caps. After that, put
> low
> > > pwr
> > > > > carrier in for fine tuning. Does this also apply to L tuner
> circuits
> > > with
> > > > > roller coils?
> > > > >
> > > > About the same. Using the noise can get you pretty close as far as the
> > > > coil goes. You want to use the least amount of coil to get a match. So
> > > > say you peak the noise, and tweak the caps, and you have a good match.
> > > > After that, I keep slowly lowering the coil turns and tweaking the
> caps
> > > > until I can't get a decent match. Then I go back to the point of least
> > > > coil and acceptable SWR. This way you are assured of being tuned at
> the
> > > > most efficient point. Most of these tuners can do a match with 49
> > > > different settings of coil/caps. Only the setting using the least coil
> > > > is fairly efficient. So there is really only one correct setting if

> you
> > > > don't want to waste power. I did a test of the losses with different
> > > > tuner settings on this MFJ-989c I have. I found if you use too much
> > > > inductance, 20% loss is easy to come by. Of course, many will say you
> > > > can't hear the difference, and they are probably right, but I still
> hate
> > > > to just throw away available power. If you run an amp this 20% can
> build
> > > > up a lot of heat. I found if you are very careful with the tuning, the
> > > > loss can be almost unreadable on a normal wattmeter. MK
> > > > --
> > > > http://web.wt.net/~nm5k

4751. Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 01:09:38 UTC
From: jcarver@netusa1.net
Message-ID: <3aad7243.56243@news.netusa1.net>
Source record: 168627

Can anyone tell me where I can find information on Spiderweb and or
Telarana wire log periodics? Heard a mention of this on the radio
last week and have been looking ever since. Did a web search and came
up with two dead links and a bunch of pages for spiderweb software.
Thanks.
John

4752. Re: WANTED: directional 2m/70cm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 01:30:35 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <BIer6.234$mQ4.1428@newsfeed.slurp.net>
Source record: 168628
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Cushcraft has a few dual band Yagis that are not that bad to carry around on
a fox hunt. You can attach the antenna to a broom handle for stabilizing.
Type Cushcraft in the search screen. Of course other antenna manufactures
make similar products or you can role your own. 73 W9FPJ
<anonymous@freenewsland.com> wrote in message
news:sjdr6.5302$6p5.485785@newsread1.prod.itd.earthlink.net...
> I have a Yaesu FT-50R transceiver, an RD-98 17" flexible
> whip (substantial improvement over rubber duck; THE choice
> when on foot), and the SMA version of the Pocket-J antenna
> from Antennas & More (substantial improvement over RD-98).
>
> I just bought the coax and connectors I need to hook up an
> SO-239 antenna to the radio WITHOUT putting undue stress on
> the radio's connector.
>
> I'm looking for an antenna no more than a few feet long
> that will perform even better than the J-pole, and a
> directional antenna seems to be what I need. Fox hunt
> capability would be a nice added bonus.
>
> Any suggestions? Would the Cushcraft A270-6S fit the bill?
> Are there other products I should consider?
>
> Jason Hsu, AG4DG
>
> --
> Free web access to newsgroups is at
> http://www.freenewsland.com/
> --

4753. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 01:51:10 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <U%er6.247$mQ4.1979@newsfeed.slurp.net>
Source record: 168629

Hello. I have two of the HF5V Butternut V-A's. They work gang busters for me. I use one for camping and the other one sits on a six foot mast on the roof top attached to the chimney. I would put up a 100' tower but no space in my yard for it. My property sits in a hole in my town. I am at 800' above sea level. the house is about 25' and the tip of the butternut stretches to about 35' above the roof. So the whole outfit is 860' ASL. Lots of radials, ten of them spread out like a spider web. During one contest 15 meters opened up before I went to church. I got 21 contacts in 10 minutes SSB from Northern Europe, Central Europe, France, Spain, Ireland, North Africa and South Africa. By the way I live in Kokomo, Indiana, 50 miles North of Indianapolis. I also have a wire up in a flat V configuration. Each leg is 35' long from the chimney to the back edges of the yard to a MFJ-949D tuner and a Alinco DX70. I am very pleased with the performance of my rig and the HF5V on SSB and CW. 73 W9FPJ
"Patrick Croft" <mai@iquest.net> wrote in message news:3AAD13AF.E497ADE8@iquest.net...
> Look closely at BUTTERNUT HF5V (discountinued) or the replacement HF6V
> (Includes 30m). Check www.eham.com reviews for various reports. Don't
> forget to install lots of radials.
>
> Bests,
> Patrick W9GTA
>
>
>
> djohnson wrote:
> >
> > I am taking down a TH6-DXX and putting up a vertical due to space
> > limitation. Need to handle 1000 watts and work 10-15-20-40-80 meters. Been
> > looking at many manufacturers but which is the best? Anybody have input ?

4754. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 02:15:26 UTC
From: 2w8ji@akorn.net
Message-ID: <3aad7c25.39782508@news.accessunited.com>
Source record: 168630

On Mon, 12 Mar 2001 19:41:51 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

<snip>

Hi Gary

You really are having difficulty following the conversation, or you
are a person with far too much time on his hands.

Either way, there is no reason to continue. It is far beyond hope.

73 Tom

4755. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 02:23:32 UTC
From: k6mhe@arrl.net
Message-ID: <3aad83b5.10586214@news.mcn.org>
Source record: 168633

On Mon, 12 Mar 2001 14:12:16 -0600, Mark Keith <nm5k@wt.net> wrote:

>Peter O. Brackett wrote:
>
>> And so the tuning procedure for the "L-Tuner" is probably quite different
>> from that of a "T-Tuner" which often has many different settings of the
>> three components to effect an impedance transformation, and no
>> configurations to arrange.
>>
>> -Peter K1PO
>
>I still tune both the same way. The least inductance to be able to get a
>good match. MK

Hi Mark,

I don't know why everyone goes through such worries regarding tuning a tuner.. For years (read over 45) I have used a relative field strength meter and just tuned for maximum smoke.

Why everyone wants to tune an antenna tuner by measuring conditions on the transmission line is a puzzle. SWR has never shown how an antenna is performing - just if the transmission line likes it or not.

73
Danny, K6MHE

4756. Master Mobile Coil Info

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 02:25:07 UTC
From: Greg Roecker <gregroecker@mindspring.com>
Message-ID: <98k0d1$gv5$1@slb1.atl.mindspring.net>
Source record: 168631

I am looking for any information for a Master Mobile Ultra Hi "Q" coil model
156 for 80 and 40 meters. Please send information to:

gregroecker@mindspring.com

Thanks for the help, and 73,

Greg Roecker
N4OSJ

4757. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:12:17 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAD9011.33AF@wt.net>
Source record: 168632

W6RCecilA wrote:
>
> Richard Harrison wrote:
> > I notice that Terman`s drawing of a "sectionalized tower" places the
> > loading coil near the top. Wouldn`t that lengthen the high-current
> > section of the shortened tower?
>
> I think we've proven at the 75m shootouts that the longer the bottom
> section is before encountering the coil, the stronger is the signal
> (for antennas without top hats).
> --
> http://www.mindspring.com/~w6rca

No doubt about it. I carry extra solid masts just for this purpose. But of course, the results may be skewed a bit due to the extra length of the antenna. But on average on 75m, I'd guess I gain 2 s units to the others I talk to if I add a 3 ft mast to my almost 9 ft normal antenna. You see the difference just in the receiver before you even transmit. But I don't think moving the coil too near the top is good either. I think 50 to 75% a good range. Over about 75% up the antenna, and the coil losses start to outweigh the advantage in current distribution. My present 80m antenna in basic form has the coil at a fairly low 3 ft from the base. So it's only about 1/3 the way up. Thats one reason why I want to make a new one. It will be taller and the coil a good bit higher. But still probably not over 50-60% up. This antenna semms to work better on 75m on my car than my truck I think. I'm think I'm having a bit of the problem Tom refers to with the coil too near the body. I had thought being my coil still is a little over my cab that it wouldn't be too much a problem, but I'm not seeming to be doing quite as well as the same antenna used on my car trunk. The car roof is lower and more sloped forward. I have the antenna about 1 ft or so behind the back window on the front of the bed, and I think the coil is too close to the horizontal roof section right below it. I should have known better than to try it that close, but being alot is window I thought maybe I would get lucky. I think I'm going to move it back a bit. I've got it mounted on a piece of angle iron that goes across the bed. I can move it back fairly easy. I do have extra ground strapping from the antenna to the truck. So not totally relying on the angle iron for a ground connection.
MK

--
http://web.wt.net/~nm5k

4758. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:27:19 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAD9397.864@wt.net>
Source record: 168634

KB9WFK wrote:

> I don't necessarily disagree about asking for problems, just wondering where
> the problem was. From my experiences, even though the cable company rents
> you the box they still disconnect the cable when service is stopped to keep
> you from buying a "pirate" descrambler. That is what Time Warner/ AT&T does
> anyway. YMMV

Still pretty risky. Most of the cable installers just cut the connection
with a pair of dykes and leave it dangling next to the distribution box.
if you use that wire as an antenna, you could likely cause TVI problems
just from the close proximity to the box with the strong rf field. Most
of the other coaxes to other houses are still going to be bunched
together very close to your line. MK
--
http://web.wt.net/~nm5k

4759. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:29:38 UTC
From: richardharrison@webtv.net
Message-ID: <6372-3AAD9422-5@storefull-113.iap.bryant.webtv.net>
Source record: 168637

Richard Clark wrote:
"I have moved quite often in my life, at the beck and call of the U.S. Military for 26 years."

Yes, but we know it was the navy. Richard Clark told us about the tower kit stowed in a canvas bag the size and color of his seabag.

From my hitch in the navy, moving isn`t all that bad. After all, everything you have has to fit more or les into that seabag. I beat the system a little with a super-sized seabag, the kind with a detachable lid, but it did take a strong back. It was of course not government issue.

When you are at sea, you move a lot but your gear stays in your locker. That`s not tough either. It`s the other hazards that might get you.

Our radio operators rotated through a watch schedule, 24-7, while we were at sea. In port, a group of ships could usually rotate the watch and a single ship could take calls for any ship in the group, and "pass the word". It was mostly monitoring because it was wartime and radio silence was the norm. My part of the navy thought VHF was line-of-sight, so if the look-outs didn`t spot any ships outside our convoy or smoke on the horizon, chatter often ensued at VHF.

The radio operator`s job was Boring. He just sat there in front of the radio with the cans on his head copying the almost incessant BUSHIPS traffic for four solid hours while writing "no sigs" again and again in the radio log. With so many ships there is seldom any traffic for any particular ship. Thankfully, I wasn`t an operator.

Since this is an antenna group, we don`t need to swap sea stories such as "the monkey in the chain locker" or the "old salt who can`t sleep ashore unless someone is splashing the side of the house with a garden hose".

Best regards, Richard Harrison, KB5WZI

4760. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:31:29 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AAD9491.F014D410@hiwaay.net>
Source record: 168635

Peter- Sorry I did not read far enough the first time- you DID cover the differential T. However, there is still an area of puzzlement- I just got this gadjet and have been playing with it with an MFJ 259B analyzer. I have been able to tune two different dipole antennas over thew full range from their resonance to 30mHz. Both antennas used ladder line, and the tuners internal balun. 1:1, I think)
In fact, I tuned the 255 ft dipole at every 0.5 mHz point from 1.8 to 11, and every 1.0 from there to 30. in every case I made it to an SWR of 1.0. The inductance values tend to be at the low end of the range.
With the 135 ft dipole, I went from 3.5 to 9.0 by 0.5, and to 12 by 1.0 increments. At that point I stopped, because I found a problem with the tensioner on the inductor "wiper", and let myself be diverted to mechanical repair. (The unit was a used one.)
After this short set of tests, I am pretty well sold that it is a good unit. However- I am reminded that most of the tuners on the market are NOT this type- there may be a reason that I dont see.

I'll let you know.

Bill-W4BSG

"Peter O. Brackett" wrote:
>
> Bill:
>

> Now with the "Differential T-Tuner" like the MFJ unit to which you refer,
> you do have three adjustable elements. However the two capacitors are
> ganged together on one "adjustment" knob and so can't really be set
> inedpendently. This represents a set of two equations with three unknowns
> but with a "forced" constraint or relationship between two of the unknowns.
>
> In this situation, you might just "luck out" and hit one of the several
> solutions right on the nose, but the probablities of that happening are slim
> and none.
>
> On the other hand you will likely only find one setting of those two knobs
> which "minimizez" the reflection coefficient. And in all probablility you
> will not be able to satisfy the two equations exactly, just approximately.
> And so... what happens is that often with the "Differential T-Tuner" you
> will not find a "perfect" zero of the reflection coefficient, i.e. you get a
> single "dip" in reflected voltage but it does not dip to zero. In VSWR
> terms you can't always reach VSWR = 1:1 with a differential T-Tuner. But
> they are easier to adjust when you can find a dip. There may indeed be
> situations when you can't even find a good enough dip to satisfy your

> transmitter. Even then there is not guarantee that the inductance setting
> is low loss either. It trades off convenience in adjustment for a lower
> range of adjustment and potential situations that can't be tuned which could
> be tuned by a T-Tuner with relative ease. And so... I personally would stay
> away from the differential T-Tuner. Sorry MFJ.
>
> Best,
>
> -Peter K1PO
>

4761. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:40:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98k4riauf1@slb7.atl.mindspring.net>
Source record: 168636

Danny:

Hey, up until a few years ago, I always did that as well, I didn't even use a field strength meter, I just tuned for maximum brilliance of my # 47 pilot bulbs bridged across a short section of feeder, and it worked wonderfully with those older vacuum tube PA rigs. Hey I even used a 100 watt light bulb as a dummy load.

Now with my modern solid state rigs with VSWR foldback protection circuitry, etc... it's not as easy to tune for maximum brilliance. You will often get a lot of "false" things going on with those indications as the impedance presented to the PA varies and the amp folds in and out while tuning. Running at lower power would work except there's not enough output to actuate the simple field strength meter or indicator bulbs, and so... I end up using a VSWR meter, a.k.a. reflected voltmeter and tune for a 1:1 VSWR.

I've even been reduced to using a "real" 50 Ohm dummy load rather than the old light bulb.

-Peter K1PO

"Dan Richardson" <k6mhe@arrl.net> wrote in message
news:3aad83b5.10586214@news.mcn.org...
> On Mon, 12 Mar 2001 14:12:16 -0600, Mark Keith <nm5k@wt.net> wrote:
>
> >Peter O. Brackett wrote:
> >
> >> And so the tuning procedure for the "L-Tuner" is probably quite
different
> >> from that of a "T-Tuner" which often has many different settings of the
> >> three components to effect an impedance transformation, and no
> >> configurations to arrange.
> >>
> >> -Peter K1PO
> >
> >I still tune both the same way. The least inductance to be able to get a
> >good match. MK
>
>
> Hi Mark,
>
> I don't know why everyone goes through such worries regarding tuning a
> tuner.. For years (read over 45) I have used a relative field strength
> meter and just tuned for maximum smoke.
>
> Why everyone wants to tune an antenna tuner by measuring conditions on

> the transmission line is a puzzle. SWR has never shown how an antenna
> is performing - just if the transmission line likes it or not.
>
> 73
> Danny, K6MHE
>

4762. Re: Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:48:25 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <dMgr6.11$QW4.1038@news7.onvoy.net>
Source record: 168638

there is a shortened version of the G5RV that works 10-40 meters.

It is a 51 ft flat top fed with 450 ohm ladder line (Antennas West, Utah)

Also check Spi-ro Mfg for an all bander shortie.

I use the 105 ft version fed with 32 ft ladder line and have good luck with
it. It suffers
on the 10 meter band, I get some rf in the shack on that band. I found it to
be quieter
on rx than a full 80m dipole by 10 db. I have alot of noise in town.

Good luck

Rosco

Alex Malyava <alex@malyava.com> wrote in message
news:nw%g6.13180$1%2.668230@sjc-read.news.verio.net...
>
> "Rudy Marcelletti" <rudym@net-link.net> wrote in message
> news:3a6c4e6c$0$35019$44a10c7e@news.net-link.net...
> > What is the best way to make a short, multi band dipole to cover at
least
> 10
> > through 40 meters, and possibly 80 meters. I plan to feed at center
with
> > 450 window line direct to MFJ 986 line flattener.
>
> Hi guyz !
> Do you have any idea or links about short, no longer than 5+5 meters,
> multiband dipole to cover at least 10m and 20m ? The 10-15-20 solution is
> better ... What about 10-12-15-17-20 ?
> I want to use it indoor and sometime outdoor ...
> I guess it gonna be dipole with traps or set of parallel dipols or some
> wide-band dipole ...
>
> Alex US4LNE / W7
>
>
>

4763. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 03:56:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98k5pj$f9h$0@208.206.142.75>
Source record: 168639

Tom W8JI wrote:
>
> On Sun, 11 Mar 2001 06:05:03 -0800, Jim Pennino
> <jimp@mail.specsol.com> wrote:
>
> >Have to disagree with that one based on empirical experience. I've worked
> >PSK stations I couln't hear at all.
> >
> >Jim Pennino
>
> Hi Jim,
>
> I heard the same thing from K1BQT, and figured out why he thought it
> was true. There certainly is no technical reason why PSK would be more
> reliable than CW...as a matter of fact the opposite is true.
>
> Because PSK looks for a carrier drop and an abrupt reversal in
> phase...it has to be above the noise to be decoded.
>
> CW, on the other hand, can easily be copied with a zero dB S/N ratio.
> Many or most skilled CW people can copy CW with negative S/N ratios.
>
> The reason the myth that PSK allows us to work stations we "can't
> hear" exists is because most PSK ops use a wide bandwidth on the
> receiver, and move all the selectivity to the computer.
>
> By ear they are listening to a bandwidth of maybe 3 kHz, while the
> audio filter is set at perhaps 70 Hz. In this case the computer sees a
> 16 dB reduction in broadband noise compared to what the "ear" hears.
>
> If we use 250Hz selectivity on the receiver, we'll find we can plainly
> copy CW signals at level that produce very poor print on PSK.
>
> Now I certainly agree that there might be a "woooden eared" CW op who
> might not copy signals that a PSK system will decode, but that would
> be the exception rather than the rule.
>
> Because I can copy CW signals with a negative S/N ratio, as can many
> other CW ops can, the difference to me is startling. It has to be an
> absolutely solid CW signal to get any print at all on the guy on PSK.
>
> Try setting your bandwidth to 250 Hz, and see if you don't notice the
> "PSK advantage" going away. I can work DX stations perfectly solid on
> CW that I have no hope of decoding on PSK.

>
> PSK not only requires higher S/N ratio to decode, it also requires
> much higher average power than CW to deliver the same information.
> It also has exceptionally poor dynamic range. That's why PSK operators
> whine constantly about QRO operators.
>

Most interesting, Tom. It confirms my personal observations while
operating the mode for a few months early after it arrived.
One very quiet morning on 20 meters I happened upon several European
PSK31 stations, all very weak but barely audible on an otherwise dead
band. I tried for most of an hour to tune in one of them, and get it to
lock and print, without success. But- I was able to clearly copy the CW
ID of each and every one of them. When I reported this one RRAP it
drew the predictable response, ie of course there was something wrong
with my setup, probable polar phase shift, etc, yada yada. *Everyone*
knows that you can print PSK31 you can't hear.
Cecil insisted that "the playing field was not level". Yeah. That's it.

Dick W0EX

4764. Re: WANTED: directional 2m/70cm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:15:47 UTC
From: William Lawless <wrlawless@worldnet.att.net>
Message-ID: <T9hr6.6570$Rb.529821@bgtnsc05-news.ops.worldnet.att.net>
Source record: 168640
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Jason

Check out Arrow:

http://hometown.aol.com/arrow146/index.html

Bill
<anonymous@freenewsland.com> wrote in message
news:sjdr6.5302$6p5.485785@newsread1.prod.itd.earthlink.net...
> I have a Yaesu FT-50R transceiver, an RD-98 17" flexible
> whip (substantial improvement over rubber duck; THE choice
> when on foot), and the SMA version of the Pocket-J antenna
> from Antennas & More (substantial improvement over RD-98).
>
> I just bought the coax and connectors I need to hook up an
> SO-239 antenna to the radio WITHOUT putting undue stress on
> the radio's connector.
>
> I'm looking for an antenna no more than a few feet long
> that will perform even better than the J-pole, and a
> directional antenna seems to be what I need. Fox hunt
> capability would be a nice added bonus.
>
> Any suggestions? Would the Cushcraft A270-6S fit the bill?
> Are there other products I should consider?
>
> Jason Hsu, AG4DG
>
> --
> Free web access to newsgroups is at
> http://www.freenewsland.com/
> --

4765. Re: Want to build a 6m ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:17:09 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <9bhr6.1$EX4.473@news7.onvoy.net>
Source record: 168641

Here is a site with alot of 6m info.
http://www.uksmg.org/index.html

468 / freq(mhz) = length of 1/2 wave dipole.
spacing between elements of beams are usually .2 wavelengths (average)
reflector is 105% length of dipole.
director is 95% length of dipole

Quad antennas work well also, easier to build when using wire. Regular
plumbing pvc pipe can
be used to hold wire to shape. Driven element is 1 wavelength, reflector 5%
larger, director 5%
shorter, spaced 20% of wavelength. Length of driven element can be changed
to get perfect swr.
feed point can be fed direct with coax like a dipole.

you don't have to make folded driven element on yagi, you can use gamma
match or t match(hairpin).

Good Luck

JRW <johnrwells@hotmail.com> wrote in message
news:99Zh6.72$Cw2.3027@news1-hme0...
> Hi
>
> I want to build an antenna made with wire for 6m, centre freq: 51MHz (UK
6m
> band).
>
> I want to make it so I don't have to keep tuning it, i.e. cut it to the
> optimum length and I want about 50ohms. I could put up a 1/4 wave
vertical
> piece of wire with some radials or a dipole or inverted V. I would also
> like to try a Yagi with one reflector, a driven element and one director.
> How do i calculate the spacings and lengths of each element and how to I
> calculate the folded radiating element? Oh, and how about a loaded dipole,
> are they any good and what are the dimensions?
>
> Thanks,
>
> John
>
>

4766. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:19:03 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98k7f2$i4n$1@slb4.atl.mindspring.net>
Source record: 168643

--

"Mark Keith" <nm5k@wt.net> wrote in message news:3AAD9397.864@wt.net...
> KB9WFK wrote:
>
> > I don't necessarily disagree about asking for problems, just wondering
where
> > the problem was. From my experiences, even though the cable company
rents
> > you the box they still disconnect the cable when service is stopped to
keep
> > you from buying a "pirate" descrambler. That is what Time Warner/ AT&T
does
> > anyway. YMMV
>
> Still pretty risky. Most of the cable installers just cut the connection
> with a pair of dykes and leave it dangling next to the distribution box.
> if you use that wire as an antenna, you could likely cause TVI problems
> just from the close proximity to the box with the strong rf field. Most
> of the other coaxes to other houses are still going to be bunched
> together very close to your line. MK
> --
> http://web.wt.net/~nm5k

That was what I was after... thanks

4767. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:19:38 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAD9FDA.B440413E@IEEE.org>
Source record: 168644

Dan Richardson wrote:
> I don't know why everyone goes through such worries regarding tuning a
> tuner.. For years (read over 45) I have used a relative field strength
> meter and just tuned for maximum smoke.

The question I have is, exactly what are you measuring? Is the RF
you are measuring going to end up at a decent take off angle in
the far field or end up warming the ground?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4768. Re: Vehicle antenna question please. TIA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:21:40 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <ofhr6.2$EX4.466@news7.onvoy.net>
Source record: 168642

You could put a noise filter on the power line to the radio as well. That might eliminate the problem. I have seen some vehicles that have lots of alternator noise right off the show room floor. I have seen when others never have it or it shows up a year or so later.

Richard Fitzgerald <r.fitzgerald@worldnet.att.net> wrote in message news:3A95E6C5.86116428@worldnet.att.net...
> I suggest that you have an auto electrical shop check your alternator.
> Sounds like one of the diodes is defective.
>
> Rich
>
> Excalibur@camelot.net wrote:
> >
> > I want to replace the am-fm antenna in my 95 GMC pickup with a
> > different one. Could someone tell me what the coax running from the
> > antenna to the radio is? (RG-58)? Am I correct in thinking that the
> > coax end going to the radio is a motorola plug? I like to listen to
> > talk radio on the am band. The fm band works perfectly. I am replacing
> > this antenna because I have an engine noise problem. This noise
> > increases in pitch as the engine revs up. I have tried grounding the
> > antenna, coax, connections, hood, and radio every way that it can be
> > grounded. I bought an expensive silver conductivity paste to ensure a
> > good connection. I have cleaned every connection thoroughly with a
> > small stainless steel brush all to no avail. I installed an inline
> > power filter and as a last resort, I installed a new radio, thinking
> > that the other on must have had a bad filter in it. All that is left
> > is the antenna and coax. This vehicle has factory plugs and wires in
> > it and they are new and in good condition. Does anyone have any
> > recommendations for an antenna and/or coax? Or is there anything else
> > that I am overlooking? Thanks for any advice.
> >
> > Jody Sorrell
> > Eclectic, AL.

4769. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:34:10 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98k802jkp0@208.206.142.75>
Source record: 168645

Dennis Ferguson wrote:
> from U.S.C. Title 35 Chapter 28 Section 271:
>
> (a) Except as otherwise provided in this title, whoever without authority
> makes, uses, offers to sell, or sells any patented invention, within the
> United States or imports into the United States any patented invention
> during the term of the patent therefor, infringes the patent.

Gee....Now if only Frackup actually had something patentable he'd be
onto something!

4770. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:44:35 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AADA5B3.50AACA4A@bctv.com>
Source record: 168646

Richard Clark wrote:
>
> On Sun, 11 Mar 2001 23:27:51 +0000, Keith Wood <kw@bctv.com> wrote:

> >Buy your own insurance. Fix your own house. Or move.
> >
> >Don't demand MY money to cover for YOUR choices.
>
> Taking food out of your children's mouths? The Saddam plea....

Ridiculing opposition -- the politics of theft.

You still haven't provided any basis for your belief that you deserve my
money more than I do.

4771. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:44:45 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AADA5BD.32EF76A8@toast.net>
Source record: 168647
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Dwight Stewart wrote:

> TR@sky.net wrote:
>
> > Funny-0RG@arrl.org wrote:
> >
> >> I left CB radio [snip]
> >
> > 0 2 4 6 8 10
> > /
> > /
> > /
> > /
> > /
> > /
> > /
> > /
> > TROLL-O-METER
>
> You need to get your meter checked, TR. This message was way too
> transparent to rate a ten. It also lacked the style and sophistication to
> be a highly rated troll. My meter still shows it as less than a one (and
> its a generious meter).

Maybe that meter is still pegged from a previous use.

john

4772. Re: Mounting DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:50:01 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AADA6F9.6016FE05@bctv.com>
Source record: 168648

"jason_hsu"@@@@@planetmail.com wrote:
>
> Any suggestions on how to mount the W6AAQ DK3 Screwdriver
>
> antenna for an apartment installation? Before you suggest
>
> mounting the antenna on the car and running coax to my
>
> apartment, I should let you know that this is not a viable
>
> solution.
>
> Don Johnson (who makes and sells this antenna) suggested a
>
> brake drum. Unfortunately, I'm having difficulty finding a
>
> repair shop that has old brake drums.

Check the local wrecking yard.

4773. Re: Icom AH-4 antenna suggestions ???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 04:57:46 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98k9ca$p3b$0@208.206.142.75>
Source record: 168649

Brian Hemmis wrote:
>
> Nothing specific, only in the specs does it say will tune 3.5-54 mhz with an
> antenna longer than 23 feet...that's it, couple of drawings showing a whip
> and a long wire and formula to calculate undesirable lengths...I mistakenly
> figured I might find someone here who had actually used one of these in the
> fashion I'm considering- you know a helpful tip or two !!

I use an Alinco EDX-2 autotuner with my 24 ft motorhome and load a 60
ft wire that I stretch out from the top rail on the MH roof (insulated
from it) to whatever I can find to lash a collapsable 10 ft tent pole to
for the other end. I usually set the tuner unit under the MH and run the
antenna wire around the (fiberglass) outside wall to the roofline rack,
then out.
For a counterpoise I tried a 40 ft piece of 22 guage magnet wire lying
on the ground under the motor home, arranged so that it all is under the
rig. It worked so well I kept it, and the system does just fine, altho
I'm sure more efficient arrangments are possible at greater expense of
effort and detailed onsite tinkering.

Dick

4774. Re: Hams;dont be prosecuted

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:18:21 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98kaitsgk0@208.206.142.75>
Source record: 168650

Rod Marsh wrote:
>
> Ive noticed MANY CB'ers posting How to MODIFY & operate Ham equipment on the
> CB freq's [assuming its only cb they're wanting],that is how to get "general
> coverage TX".
>
> It is ILLEGAL [in VK at least] to assist ANYONE with modifications to
> equipment for unlicensed/illegal usage,This is punishable by law via the
> ACA.
> You'll notice the NG's are full of questions on HOW TO,They blatantly ask
> without ANY concern if you're caught helping them,and maybe afterwards even
> boast about how they PLASTERRED a ham.
>
> In my opinion you first should ascertain their amateur callsign,THEN CHECK
> IT.
>
> The world is full of apathy,statements like "what can i do to make any
> difference" ,WELL, you can simply by stop helping illegal activity.
>
> The majority of hams are not involved here but there are a few who either
> want to show "how clever" they are or are just apathetical.
> Ive got my "flack jacket"on because im gonna get roasted here but the short
> answer is stop helping illegal activities,there is no grey its either black
> or white.

A noble effort, Rod, but since QRZ.COM has every "mod" known to mankind
available at a touch of the keyboard your remonstances are probably for
naught.

Nice try anyway.

Dick

4775. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:22:12 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98kaq4$t2s$0@208.206.142.75>
Source record: 168651

frac wrote:
>

> In addition, Fractal Antenna Systems, Inc. has pending patents that also are
> quite likely to be infringed upon issuance by these sales.

Ol' Trollmeister surely knows that "pending" stops no one from anything
for the during of that status which can last a LONG time, even if we
stretch way out there and assume that there will ever be a patent
issued.

4776. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:35:01 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3AADB185.1C58F034@home.com>
Source record: 168652

Yes the cable system usually disconnects the connection in theory. But after 20 years in the cable biz I know there are many lazy employees who prefer to do the disconnects on paper rather than climbing the pole or putting up the ladder. Then there are the employees who do put up the ladder but disconnect in error the neighbors house. Most of the time the loose end is screwed into special terminator that locks the port on the subscriber tap to prevent theft of service. All in all this is a terrible idea and should not be attempted. What is to say one day you are transmitting away unaware that a employee is climbing that pole to connect someones service other than yours and he grabs the end of your unauthorized connection while transmitting 100 watts and he is thrown off the pole with a nasty RF burn. If he lives through the fall. I would come up to your apartment with my climbing gear on and climb up and down your back. I have been a ham for 30 years and in the cable biz for 20....Do not attempt that foolish maneuver... IMHO....K7FU

KB9WFK wrote:

> > >
> > > How do you mean 'Doc? If he currently does not have cable service then
> > the
> > > coax will run from his wall plate to a junction box where it will hang
> > > disconnected. It doesn't get connected until he subscribes to a cable
> > > service. The cable company then sends a tech out to physically connect
> > the
> > > coax to the service.
> > > Were you referring to induced signals ?
> > > And you are right about the ownership of the cable but if it doesn't
> > cause
> > > any interference and he never keys while the cable guy is hooking
> someone
> > > else up (ouch), would there really be any harm? I think that is more of
> a
> > > moral decision.
> > > Just wondering...
> > > KB9WFK
> > Not so on all cable systems.. ours though we dont subscribe is connected
> all
> > the time- they sell the desrambling box upon subscription and install
> that..
> > As Doc says it's still a poor Idea.. just asking for problems. IMHO.
> > 73 Dave
> >
> I don't necessarily disagree about asking for problems, just wondering where
> the problem was. From my experiences, even though the cable company rents
> you the box they still disconnect the cable when service is stopped to keep

> you from buying a "pirate" descrambler. That is what Time Warner/ AT&T does
> anyway. YMMV

4777. test

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:40:18 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3AADB2C2.70EDFF3A@home.com>
Source record: 168653

ignore this test......

4778. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:41:57 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <98kbv5$g1e$1@bashir.peak.org>
Source record: 168655

Dick Carroll <dixie@townsqr.com> wrote:

:> In addition, Fractal Antenna Systems, Inc. has pending patents that also are
:> quite likely to be infringed upon issuance by these sales.

: Ol' Trollmeister surely knows that "pending" stops no one from anything
: for the during of that status which can last a LONG time, even if we
: stretch way out there and assume that there will ever be a patent
: issued.

Further, if patents are issued, they are likely to be ruled invalid if
contested - as the other devices out there show that the patent idea is
not unique.

--
Bill Nelson (billn@peak.org)

4779. Re: Hams;dont be prosecuted

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:51:03 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <bzir6.1421$lm.453225@paloalto-snr1.gtei.net>
Source record: 168654

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:98kaitsgk0@208.206.142.75...
>
>
> Rod Marsh wrote:
> >
> > Ive noticed MANY CB'ers posting How to MODIFY & operate Ham equipment
on the
> > CB freq's [assuming its only cb they're wanting],that is how to get
"general
> > coverage TX".
> >
> > It is ILLEGAL [in VK at least] to assist ANYONE with modifications to
> > equipment for unlicensed/illegal usage,This is punishable by law via
the
> > ACA.
> > You'll notice the NG's are full of questions on HOW TO,They blatantly
ask
> > without ANY concern if you're caught helping them,and maybe afterwards
even
> > boast about how they PLASTERRED a ham.
> >
> > In my opinion you first should ascertain their amateur callsign,THEN
CHECK
> > IT.
> >
> > The world is full of apathy,statements like "what can i do to make any
> > difference" ,WELL, you can simply by stop helping illegal activity.
> >
> > The majority of hams are not involved here but there are a few who
either
> > want to show "how clever" they are or are just apathetical.
> > Ive got my "flack jacket"on because im gonna get roasted here but the
short
> > answer is stop helping illegal activities,there is no grey its either
black
> > or white.
>
>
>
> A noble effort, Rod, but since QRZ.COM has every "mod" known to mankind
> available at a touch of the keyboard your remonstances are probably for
> naught.
>

> Nice try anyway.
>
> Dick

True, but we don't need to advertise this fact to the general public, do we? If the person is asking for the mod info here, obviously he doesn't know about QRZ.COM (up until now... :>)

73 de W6DKN

4780. Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 05:57:34 UTC
From: audiofan@hotmail.com
Message-ID: <3aadb6b5.1758979@news.pacific.net.sg>
Source record: 168680

Hi, and a question from a newbie.
I want to build a very simple dipole for my 161.45 MHz transceiver.
According to the 234/Mhz formula, each element of the dipole would be
17.4 inches, right?
I also understand that if I extend this length at odd multiples, I
could make each element 34.8 or even 69.6 inches, right?
Would these extended lenght dipoles improve range of transmission,
other things being equal?
Am I missing anything?

Thanks
Adrian

4781. Re: stealing?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 06:11:40 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AADBA1C.36C02BF3@bwcc.com>
Source record: 168656

TR@sky.net wrote:
> TROLL-O-METER [10]
Perhaps, but only because it was posted to nine newsgroups.

If I ran a solid copper wire up the side of my house parallel to the drop feed from the electric company (I own the feed wire, the meter box, and the house), and I connect the wire to a rectifier bridge, and LED, and a capacitor placed over my toilet (which I also own, in case you are wondering) to illuminate it at night, morally speaking, am I stealing or just picking up free energy?

(Btw, the set up cost about $8 which could buy enough electricity to run the LED for say, 100 years.)

4782. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 06:20:16 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AADBC20.43C7@wt.net>
Source record: 168657

Dan Richardson wrote:

>
> Hi Mark,
>
> I don't know why everyone goes through such worries regarding tuning a
> tuner.. For years (read over 45) I have used a relative field strength
> meter and just tuned for maximum smoke.
>
> Why everyone wants to tune an antenna tuner by measuring conditions on
> the transmission line is a puzzle. SWR has never shown how an antenna
> is performing - just if the transmission line likes it or not.
>
> 73
> Danny, K6MHE

True, but if all you have is the built in SWR meter, it's nice to know if you tune using the least inductance, you will usually be tuned with about the same settings. I don't even have a FS meter anymore. I loaned my last one out, and it's still missing in action. I need to get another one. They come in handy. I built one a couple of years ago, but it's not as sensitive as my other one I had. Actually, I hardly ever use my tuner except for experimenting with ladder line fed antennas. All my everyday antennas are coax fed. MK
--
http://web.wt.net/~nm5k

4783. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 06:38:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AADC061.F4F26404@eznec.com>
Source record: 168658

Of course, a field strength meter at the ground won't tell you how much signal you're radiating at higher angles.

But if you don't make any change to your antenna, the field strength meter will tell you how much you're changing the signals at all angles when you adjust your tuner. That is, when you adjust your tuner, transmitter, or anything except the physical antenna itself, the fields in all directions -- at the horizon, along the ground, ground wave, sky wave, near and far fields -- all change in proportion. So if you adjust your tuner for maximum indication on the FS meter, you're also adjusting it for maximum sky wave signal at whatever angle you're interested in.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Dan Richardson wrote:
> > I don't know why everyone goes through such worries regarding tuning a
> > tuner.. For years (read over 45) I have used a relative field strength
> > meter and just tuned for maximum smoke.
>
> The question I have is, exactly what are you measuring? Is the RF
> you are measuring going to end up at a decent take off angle in
> the far field or end up warming the ground?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4784. Receiver Questions...any good newsgroups on same?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 06:46:49 UTC
From: Harvey Tetmeyer <k5ljm@mindspring.com>
Message-ID: <98kflc$5rq$1@slb3.atl.mindspring.net>
Source record: 168659

I have some questions on Larry's (W4QEJ) receiver articles in the February and March issues of QST. Is there a good newsgroup that would be appropriate for the discussion of receiver selectivity, noise reduction, interference reduction, etc.? This is a very learned group here but the topic is antennas. I would appreciate any suggestions you might have.

Harvey, K5LJM

4785. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 07:08:32 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3AADC769.432CAA13@home.com>
Source record: 168660

Yes the cable system usually disconnects the connection in theory. But after 20 years in the cable biz I know there are many lazy employees who prefer to do the

disconnects on paper rather than climbing the pole or putting up the ladder. Then there are the employees who do put up the ladder but disconnect in error the neighbors house. Most of the time the loose end is screwed into special terminator that locks the port on the subscriber tap to prevent theft of service. All in all this is a terrible idea and should not be attempted. What is

to say one day you are transmitting away unaware that a employee is climbing that pole to connect someones service other than yours and he grabs the end of your unauthorized connection while transmitting 100 watts and he is thrown off the pole with a nasty RF burn. If he lives through the fall. I would come up to your apartment with my climbing gear on and climb up and down your back. I have been a ham for 30 years and in the cable biz for 20....Do not attempt that foolish maneuver... IMHO....K7FU
KB9WFK wrote:

> > >
> > > How do you mean 'Doc? If he currently does not have cable service then
> > the
> > > coax will run from his wall plate to a junction box where it will hang
> > > disconnected. It doesn't get connected until he subscribes to a cable
> > > service. The cable company then sends a tech out to physically connect
> > the
> > > coax to the service.
> > > Were you referring to induced signals ?
> > > And you are right about the ownership of the cable but if it doesn't
> > cause
> > > any interference and he never keys while the cable guy is hooking
> someone
> > > else up (ouch), would there really be any harm? I think that is more of
> a
> > > moral decision.
> > > Just wondering...
> > > KB9WFK
> > Not so on all cable systems.. ours though we dont subscribe is connected
> all
> > the time- they sell the desrambling box upon subscription and install
> that..
> > As Doc says it's still a poor Idea.. just asking for problems. IMHO.
> > 73 Dave
> >
> I don't necessarily disagree about asking for problems, just wondering where
> the problem was. From my experiences, even though the cable company rents

> you the box they still disconnect the cable when service is stopped to keep
> you from buying a "pirate" descrambler. That is what Time Warner/ AT&T does
> anyway. YMMV

4786. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 07:28:14 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <4Zjr6.212306$Dd3.2733850@monolith.news.easynet.net>
Source record: 168661

You are in danger of causing havoc in Marine band VHF. Do not transmit with
that rig. It is illegal throughout the world.Join a ham-radio club and learn
about frequency allocations.
Bryan - G3GVB

Peter <audiofan@hotmail.com> wrote in message
news:3aadb6b5.1758979@news.pacific.net.sg...
> Hi, and a question from a newbie.
> I want to build a very simple dipole for my 161.45 MHz transceiver.
> According to the 234/Mhz formula, each element of the dipole would be
> 17.4 inches, right?
> I also understand that if I extend this length at odd multiples, I
> could make each element 34.8 or even 69.6 inches, right?
> Would these extended lenght dipoles improve range of transmission,
> other things being equal?
> Am I missing anything?
>
> Thanks
> Adrian
>
>

4787. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 07:41:13 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6l7$9lo$1@lure.pipex.net>
Source record: 168578

"Mike Tatum" wrote ...
> Woa there !
> I think you've got your knickers in a bit of a twist Gary!
> (And I mean it in the best possible way!)

May be, I think that I got confused as to who had the small yard

> Firstly, I'm Mike Tatum, I posted the original article.
> I live in the UK.
> I have a garden that is 40ft x 40ft.
> I have a small receving antenna for 160m that requires a preamp.
>
> Let me explain how I came to this conclusion without using any numbers at
all :
>
> I use a homebrew vertical antenna for transmitting on 160m.
> It's great, it's small in comparison to a wave length, but it works and
I've
> made contacts across
> the atlantic using it, and I'm very happy with it!
>
> I decided to look into ways of improving my _receiving_ capability on
160m, as
> this is as important
> if not more important than getting a big signal out.
> (I learnt this very quickly!)

If you can't hear em you can't worke em. Good stuff.
a simple vertical is prone to more noise and QRM so I can symathise with
your situation.

> So, having a small garden, yes just 40ft x 40ft, I had to think small!
> A rather neat antenna for receiving became available to me and I bought
it,
> paid real cash for it too!
>
> Having made it resonant on 160m I attached it to a small lightweight
rotator
> and put it in the garden.

At what height is this antenna mounted?

> The first thing I noticed was the _HUGE_ nulls off of each end, using my
> FT1000MP receiver I have measured
> the null to be around 60db.
> (No maths please!!)

Handy if you want to do some DF :)
Yes a good idea if to have a local noise source.

> So, I started to listen around 160m one evening, I often struggle with QRN
on
> the vertical,
> switching to the receive antenna I note a distinct drop in S reading but
an
> even further drop in noise,

I get the same effect by reducing the RF gain control.

> such that I can hear stations that aren't detectable on the vertical.

For many years I have listened to signals well under S1, but with excellent
S/N ratios. So I am quite familiar with this phenomenon

> Swinging the RX antenna around I am able to null out the source of the
noise
> making the
> stations fully readable, but without any S reading at all.
>
> Next I borrowed a 25db gain preamp from a good friend, Bob (G4VGO), he's
not
> into maths either, but he knows his stuff!
> (And my girlfriend thinks he looks like father christmas, but that's
another
> story :))

If you want to see Santa Claus the genuine article can be found at:
www.gary.peach.dial.pipex.com
I'm the good looking one. [Click on my picture for a mini bio]

> Anyways, I connected the preamp up and did some more tests.
> Listening to a station in the Azore Islands I tuned the best I could using
the
> vertical antenna, the guy ended up being
> about a 3/9 with +10db of QRN.
>
> Next I switched over to the RX antenna, swung it round so that the noise
source
> was in one of the deep
> nulls off the end of the antenna, immediately I noticed that I could hear
the
> Azore Islands station perfectly, no S reading
> but _perfectly_ Q5 ... I took a deep breath and switched on the preamp,
WOW!
> (Still no maths !)
>
> The noise level came up to around an S1 but the chap in the Azore Islands
was
> now 5/7-8 with me !
> PERFECT!

> At this point I pinched myself a few times to make sure I wasn't dreaming!

That all sounds good stuff, will it work on 136 kHz I ask myself? a resonant AE on that band using PSK31 or even PSK8 would permit a lot of stations, the main thing holding it up is a good AE.
However none of this negates my calculations, which are general case illustrative examples. You have here a special case. the signal to noise ratio will never the less still be about a dB worse than possible, so there is still some work to do.
Obviously the big advantage that you are using is the directional nature of the RX AE against a vertical which is notoriously noisey especially from QRM as well as the larger gathereing volume for QRN.
If you operate a beam from the UK into VK then you get a reasonable S/N however if you are at the other end the area that your beam is looking at is filled with all of the European QRM so S/N is badly degraded. Many VK ops don't bother to operate at week ends because of this problem. This is quite a different phnomonon than the one about which I started to post. If the onle inhabitants of the world were the transmitter and the AE considered such that all electrical apperatus was switched off then my example would still be valid.

> Just to prove it I switched back to the vertical, +10db of QRN and just about
> able to hear the chap, switched back to
> the rx antenna perfect 5/7-8 fully readable and indeed a pleasure to listen to,
> switched back to the vertical +10db of noise,
> back to the RX antenna 5/7-8 perfectly readable ... etc etc etc ...

Yes indeed yopu have verified just how noisy verticals are, you will never get a better S/N than that which exists in the air just around youir AE what ever it is. just how well you will be able to monitor that will depend upon the efficiency of your AE. The figures that I have produced are the target values for which you should be aiming, when you reach them ther will be no more work to do. When experimenting it is a handy idea to know wher exactly you are hoping to get and then you can take better aim for it. May you have many happy hours with your experiments.

> Now, I'm a relatively simple chap when it comes to numbers,

well I ain't no pure mathematician, much as I'd like to be.

> I work with computers all day so I let them worry about the numbers,
> but one thing I know for sure is "I need a 26db preamp" it works, it does what
> I want in my 40ft x 40ft garden in little ole England!

For a moment let us consider what the ideal would be supposing for a moment that it was possible. The real solution to your problem would be a highly directional antenna with no additional amplification because the AE would have a good efficiency and the signal would not be attenuated.
Try this for me. Insert an attenuator in the RX feed from your vertical and

tell me if you get any better S/N. a thing that I try on 20 m some times when the band appears to be absolutely flat is to put 10 or 20 dB of attenuation into the Ae line and hey presto signals, not as many as usual but signals wher previously ther were none. The ideal solution for me would be a three section tunable filter directly in the AE line instead of an attenuator. So far I do not have the components to construct such a preselector. This filter is merely the one which the manufactures of teh Receiver should have built into the box, but didn't they fitted a step attenuator as a cheap cop out (I'm running Kenwood R-5000, and R-1000 on HF) I need some top class variable caps of about 500 pF and some coils that can have the inductances switched so that the filter can be made to operate on all bands by tuning individually. three sections will give me a roll off of 18 dB/octave and should be sufficient to give me most of the noise improvement without loosing the very weak DX signals due to attenuation below the RX threshold.

> So chaps, I really appreciate all the help and good intentions, honestly I do!
> ... but please, lets not start a nuclear war over this,

I can't speak for anyone elese, but I was enjoying the discussion, that's ahy I contribute to this news group, all I need is people that can and will engage in dialogue without rancour. I have nothing to prove and even if I had I would get no pleasure from doing so.

> after all I only wanted to know where I could buy a 26db gain preamp from !

Initially I was:
a) selfishly hoping that the discussion might throw up some techniques that I could apply to 136 kHz AEs
b) I hoped to save you from unneccassary expense.

Somewhere along the way I attributed one of your remarks from poor memory to Tom.
For this I appologies profoundly.

> Thanks and I hope this was a fun read!

Yes certainly is and most instructive, thank you.

> Mike Tatum.
> (A small radio ham in a small garden in a small country with an even smaller
> receiving antenna!)

Have a small beer for me.

best 73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4788. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 07:46:21 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6l8$9lo$2@lure.pipex.net>
Source record: 168579

"Tom W8JI" wrote ...
> Gary Peach wrote: [snipped]
> You really are having difficulty following the conversation,

Not really, apart from one mistake of attributing something which somebody
else said to you, sorry, the rest of it is quite clear.

> or you are a person with far too much time on his hands.

That is true, I use the internet at times instead of taking pain killers.
I'm disabled, and mostly confined to the house.

> Either way, there is no reason to continue. It is far beyond hope.

That is your prerogative, just as I was getting up steam too.

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4789. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 08:16:08 UTC
From: audiofan@hotmail.com
Message-ID: <3aadd6a1.1743982@news.pacific.net.sg>
Source record: 168692

On Mon, 12 Mar 2001 09:01:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Peter wrote:
>>
>> Hi, and a question from a newbie.
>> I want to build a very simple dipole for my 161.45 MHz transceiver.
>> According to the 234/Mhz formula, each element of the dipole would be
>> 17.4 inches, right?
>> I also understand that if I extend this length at odd multiples, I
>> could make each element 34.8 or even 69.6 inches, right?
>> Would these extended lenght dipoles improve range of transmission,
>> other things being equal?
>> Am I missing anything?
>
>You seem to be ignoring antenna impedance. The impedance of the
>1/2WL dipole would be low. The impedance of the one WL or two WL
>dipoles would be high. What are you using for a transmission line?

Would that 1/2WL dipole be the 17.4 inches (each element) one?
I plan to use some RG 58 type coax for the TL, say about 10 feet long.
Would there be any special concerns?

Thanks for the advice.

>--
>http://www.mindspring.com/~w6rca
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4790. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 08:47:03 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6lc$9lo$3@lure.pipex.net>
Source record: 168580

"Leland C. Scott" wrote t...
> "Gary Peach" wrote
> > "Leland C. Scott" wrote ...
> > > "Gary Peach" wrote ...
> > > > Did you ever hear of a "Metrosil"?
> > > > I very high resistance to a low voltage and a low resistance to a
high
> > > > voltage.
> > > No. Any references on the WEB for more info?
> > They are an old device manufactured by Metropolitam Vickers, (GE will
> > probably have them, probably called transient suppressors),
>
> If your referring to MOVs I know about them.

MOV in the UK is the trade mark of Marconi Osram Valve,
can you tell me what your acronym stands for please?

> > Sometimes the forward resistance of a diode is too low and it sustains
> > ringing for longer than better methods where a proper disipative
> resistanace
> > of the correct value is engineered into whatever it is that you wish to
> > supress.
>
> That would be true if you wanted to stop the ringing in less than one
cycle.
> Most of the time all you want to do is clamp the voltage spike.

I was thinking of the case wher relays or other inductive devices are being
operated near sensitive receiving equipment such as the Ham shack where the
eleimination of any potentila source of RFI is a welcome step. I always feel
that it is better to design in noise suppression than try to fix it later
on.

> > LR should be such that all of the energy is disipated before the
> > second overswing, in other words critically damped instead of leaving it
> to
> > pot luck that the diode forward resistance will do the job. Also if the
> > excess energy exceeds the disipation capacity of the diode then you will
> > blow a lot of diodes and either burn out a lot of points or blow up a
lot
> of
> > control transistors.
> > Of course the hardest thing to damp and control is a DC motor wher the
> > stored mechanical energy and Lenz's Law produce a back EMF of the same
> > polarity as the original supplied voltage, here a single diode does

little
> > good and a more complex arrangement is required. Where Hams might
> encounter
> > this problem is with rotators
>
> The motor controllers I see use either regeneration, or a dump resistor,
in
> those cases.

Yes, there are many solutions to the problem I was rather proud of one original circuit that I developed after blowing up a lot of control transistors one many different machines. My boss thought that I'd been dragging my feet on the problem and didn't know what to do so he put somebody else onto the job that thought a simple diode would do the job net result evcen more transistors were blown. I hadn't given up on the problem in the mean time and eventually It dawned upon me what the source of the real problem was, from that point providing a solution was fairly straight forward. that's all so long ago now that it has become part of standard practice.

> > I suppose you never saw a solid carbon resistor filed to adjust it's
> value,
> > this was often done for meter multipliers and shunts when accurate
> > calibration was required,
>
> Oh I have. I have even done it myself once or twice. The problem is
finding
> somebody who still manufactures carbon composition resistors today. Just
> about everyone is going metal film, and or surface mount.

That regretabbly is so true, Time to go around the junk sales and flea markets and gather up a collection, some might be OK, the majority of the old ones the wires have broken away. I think that with a bit of more modern technology a better method for attaching the lead ins could be found. For some RF work they are almost mandatory.

> I had an
> application using a 2 watt 15 ohm carbon resistor, manufactured by Allen
> Bradley, which quit making them. Now try to find a replacement than will
not
> bust the bank, if you can find one. I finally switched to the metal film
> version.

What happened?

> > I take it that you have witnessed this for yourself. ;)
>
> Yup, way back as a kid when I was playing around with electrical stuff.
> Learned all about inductive ring up real fast.

Ah those were the days, kids don't seem to go that route any more.
Or is it just me?

> > Sadly not always easy to come by once you retire
>
> I got about a dozen from Caddock as free samples. Just call, or E-mail, a
> vendor. Tell them you are a consultant. ;-)

I am, at least I'm still on the books of at least one company (CalComp) as a consultant. I have all the cards and headed note paper already printed but it still doesn't help as much as I'd hoped here in the UK :(

> Many times you can get free parts as "engineering" approval samples.

Yes that's how I came by the metrosils. Amazing how being in a big company brings forth all sorts of information and bits that otherwise seems not to exist. I can remeber wanting a special Op amp for an intigrator. I rang around everywher trying to get samples and data. and a bulk price. Then I dropped a hint that ther would be at least 16 channels with at least two per channel and the sales engineers were cueing at my office door willing to laser trim them to my specs and offering prices that would blow you out of the water. The main reason is that they have to set up a production line to produce the stuff, ther is a nreak even quantity below whicvh it is a waste of time manufaturing. swinging all of the machine into action for something that they don't really want as an order cos it'd send them broke is quite understandable.

>Or if you can't get them free you
> can buy them at the 1K to 10K price, and save some money.

I'm highly unlikely to actually require anythingin those sorts of quantities. It would be nice if Hams got together to form a buying in service so that rare components for experiments could become available to the fraternity. just how it would work I'm not sure, no doubt there are Hams with the training and skills in such an area.

> > Is this a bifilar winding similar to the resistance element used on a
Post
> > Office Box?
>
> Yes it is. But this type of design is not very good when you are working
at
> MHz frequencies.

It might be with a bit oif careful engineering.
I know that this is a difficult area, one job that I was asked to do was to make a safety fuse. Rocket have to have a component to light the blue touch paper. one of the problems that they were having at the time was that when the high power RADR point at the Rocket on the p[ad it would suddenly take off all on its own. The fuse was a little copper tube with some explosive in nthe tip of it and a filament to ignite it and a couple of tinned copper wires coming out of the tube through a filling of Marco Resin. This is a resin loaded with feromagnetic and resistive materials and is often used to cast precision Waveguide loads. The fues was about half inch long and about quarter inch diameter. I tried all sorts of things but I just could not get to grips with the problem or what geometry I must use to make the fuses

intisically safe from this type of RF ignition. No doubt somebody that
followed me did solve the problem. I left for Australia at about that time
to the better weather and a little adventure.

> The flat film type is much better at high frequencies. I
> tried using some of those in a snubber circuit, they don't work for crap
at
> high dv/dts. If crummy resistors don't get you, then the capacitor will.

Yes, I wonder what would be involved in making your own compound resistors
for special RF applications, are there any chemists in the group?

> Many capacitor designs look more like an inductor at high frequency.

Sadly I have also found that to be true.

> > > > Presumably this is why they generate noise up into VHF/UHF
> > >
> > > This is maybe due to the reverse recovery effect when the diode
"snaps"
> > off.
> >
> > That may supply the stimulus, but not the resonance, that will be
> >determined entirely by the passive elements in the circuit.
>
> True. The reverse recovery blip of current is a pulse source rich in
> harmonics. This is what provides the external tuned circuit with the
energy
> to ring.

Isn't that what Americans call a "glitch" , :)
TWIX me the answer ;)

> There is also an even less talked about effect, the forward diode recovery
> effect. The PN junction must reach a certain level of concentration of
> charge carries before the junction will conduct in the forward direction.
> Until that condition is reached the forward voltage across the diode can
> easily exceed the normal forward voltage drop of a PN junction. How much
of
> a voltage rise you see depends on the diode junction size, current level,
> and how fast the current rise, di/dt, is through the diode.

Exceed the total Joules and good by Mr Chips.

> > On Octal bases?
> > Used in Railway signalling a lot?
>
> No. These are standard machine tool control relays, manufactured by either
> Allen Bradley or Square D, and mount directly on a cabinet subpanel.

Ah! I was thinking of a cabinet eight feet tall standard 19" panel size
absolutely full of realays I think tey were Potter and Brumfield to control
the big S Band Wave guide switches that changed the configurations of our

wavguide runs to produce RCP or LCP to switch the various transmitters and recevers to the various ports of the AE feed horn. These wave guide switches have a lot of stored energy when they switch. I think the person that designed the controll system had a Railway background and the entire thing was all relay logic , I can't remeber in eight years ever needing to change a relay or a switch becaise it had failed. That system really impressed me for its reliabilty. Another old reliable syatem that we had was the engineering orderwire system for engineering and ops to communicate. this was a complet telephone exchange circa 1910, the wires into the frame which was of steel Un beam construction about 25 feet long and the normal 6 foot high racks all bolted together. It was shipp from the small American town where it had operated without failure since its installation in 1910 untill it was taken out of service for us in 1966. The reliabilty had been so high that it was ideal for Apollo. Certainly a testimonial to those early telegraph engineers. It installed without trouble and I can't remember at any time that it wnet down. One of my most amusing memories of that engineering link was when an Apollo took off from the Moon's surface, one of the Astronauts had snmuggled aboard a tape of the Air Force March and as they were taking off he had played it. The ops controllers went spare ther were security people running all over the place to find the sabateurs. Of course ther was never any attempt by the Russians to sabotage use quite the contrary they were always willing to assist. I'm afraid that Astronaut got a rocket. (pun intended). Play music and golf on the Moon were frowned upon by TPTB as unneccassary trivia. Frankly my personal view is that these men showd extrodinary courage and such antics did more for PR than all of the proaganda prepared at great length by the official political machine.

>These
> relays have stackable contact heads with 4 contacts each. You can stack as
> many as two of these on a relay coil base for a total of 8 contacts. Each

Limitation the coil current I suppose.

> contact can be set for either normally open, or normally closed, by
pulling
> out the contact element itself, and flipping it over, then reinstalling it
> in the head.

Clever idea

>There are also time delay contacts too. These work by air
> flowing in, or out, of a tiny bellows coupled to a switch in the timer
head.

A 'dashpot',
A device consisting of a piston that moves within a cylinder containing oil, used to dampen and control motion.
NOT 'despot'
A device consisting of a person that moves within a cylinder containing oil, used to dampen and control money.:)

> A screw, or thumb wheel, sets the rate of air flow, thus the time delay.

Have you seen those relays with a huge iron cap on them which uses
hysteresis to do something similar?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4791. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 08:49:35 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6ld$9lo$4@lure.pipex.net>
Source record: 168581
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
"John O'Flaherty" wrote ...
> Dwight Stewart wrote:
> > TR@sky.net wrote:
> > > Funny-0RG@arrl.org wrote:
> > >> I left CB radio [snip]
> > >
> > > 0 2 4 6 8 10
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > TROLL-O-METER
> >
> Maybe that meter is still pegged from a previous use.
```

Recently my fuel gauge on the car has been sticking.
I think that there is some moisture in the pivot or spring that is freezing
and producing this effect.
Do you know of a way of freeing it without removing the dashboard?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4792. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 08:54:01 UTC
From: Michael Hart <mhart@NOSPAM.terrigal.net.au>
Message-ID: <3aade75e@turakina.six.asn.au>
Source record: 168664

>Also, readers should note that, in the U.S. at least, a "pending patent"
>(really a patent application -- there's no guarantee that a patent will
>actually issue as a result of an application) doesn't "cover" anything,
>and doesn't prevent anyone from making, using, or selling anything. (I
>think it's bizarre that Chip/Phil/Fractenna keep waving this claim
>about. Any patent attorney or even basic book on patent law explains
>this.) There's no way to find out what an applicant is even trying to
>patent, since the application isn't public. And even if you could, the
>chances of the actual patent being for exactly the same combination of
>characteristics as the application is really fairly slim. If a patent is
>issued at all.

I understand that a "Patent pending" is a warning. It is my understanding
that if the patent does get through and you have already made the invention
before the patient is issued you are still libel to the patent owner for
infrigment. I am not a lawyer either but I think this is the case -
particularly if you have been warned.

4793. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 09:59:57 UTC
From: storkus@packard-hell.storkus.com
Message-ID: <98kr2t$4i0$1@nnrp.atgi.net>
Source record: 168665

In article <3aae21df.2091928@news.clix.pt>, Bill Meara <n2cqr@clix.pt> wrote:
>Ramsey electronics is selling a "Signal Magnet Noise Reduction
>Antenna." They claim that "This antenna responds only to the
>magnetic field of the desired signal and ignores the electrostatic
>field..." Ramsey says it is a ferrite rod, varactor tuned, active
>antenna that's Faraday shielded "so it responds only to the magnetic
>field"
>
>What do you guys think of the theory behind Ramsey's antenna? Is it
>possible to use shielding to prevent the E component of the EM wave
>from reaching the antenna (while letting the M component through)?
>Sounds kind of weird to me.
>
>73 From the Azores Bill CU2JL N2CQR

The theory is sound and has been done for a long, LONG time. People do this (without the ferrite) on 160 meters (and sometimes 80 meters) all the time!
This is how it works: you take your short loop antenna (short = far less than a wavelength, definitely less than 1/10th) and shield it on all sides except one. The gap is needed because if you closed it then the magnetic field would be locked out as well by forming a complete faraday cage. But by leaving a small part open, you keep the E field out but let the H field in. In the case of regular loops like you'd see on 160 meters and long wave work (see http://www.lwca.org), the shielding does double duty to electrically balance the loop for better performance (kinda like coax). In the case of a ferrite loopstick, you stick the loop in a "can" with one end open. Coincidentally, this also makes the loopstick unidirectional.
Note that this won't get rid of ALL noise, but since the E field is much stronger typically than the H field (unless you're using a loop to transmit with, of course), a sometimes dramatic noise reduction can usually be seen, especially if you can use the loop's directional capabilities to the advantage (peaking your signal and nulling the noise source--and loops have real SHARP nulls when properly balanced and shielded!).
Hope this helps!

Mike

4794. R5 Dimensions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 10:14:36 UTC
From: "James A. Sullivan" <sja6@uswest.net>
Message-ID: <3AADF30C.9385557E@uswest.net>
Source record: 168666

I just purchased an R5 and thoughtlessly disassembled it, down to the last clamp and screw. Now it is clean and reassembled, but only working on 10 and 12 meters.

I have a copy of the instructions, but the capacitor assembly is not very detailed. I put the caps back together based on the drawings and have tried adjusting the lengths as the instructions state. SWR for 15, 17 and 20 meters is very high, with little improvement after changing length.

This is the older R5, c.1989 with a hairpin cap on the 15/17m trap.

What should I try to get this working?

Jim Sullivan N7TCF

4795. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 10:54:39 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6lf$9lo$5@lure.pipex.net>
Source record: 168582

"Fractenna" wrote :
> Radio amateurs would do well to assume that if something is not theres
they

That certainly gives your statement some credibility.
When laying down the Law, being literately correct does help.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4796. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 11:33:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAE0574.5154977@eznec.com>
Source record: 168667

Chuckle

All you have to do to eliminate the response to electrostatic fields is AC couple the antenna, or make it a short circuit at DC.

They might have meant the (time-varying) electric field (or they might not), but it's not possible to have one field in isolation from the other. You can have a static magnetic field by itself or a static electric field by itself, but whenever you create a time-varying field, you get both magnetic and electric.

Some antennas are more sensitive to one or the other when you're very close to the antenna (considerably closer than a wavelength). But the relative responses of all antennas to E vs H fields are essentially the same if the signal is coming from a wavelength or more away. (Exception: If the antenna aperture is several wavelengths, you have to get several wavelengths away before the E/H response is the same as for other antennas.)

What you have here is a phenomenon that seems to work really well in marketing departments, but not anywhere else.

Roy Lewallen, W7EL

Bill Meara wrote:
>
> Ramsey electronics is selling a "Signal Magnet Noise Reduction
> Antenna." They claim that "This antenna responds only to the
> magnetic field of the desired signal and ignores the electrostatic
> field..." Ramsey says it is a ferrite rod, varactor tuned, active
> antenna that's Faraday shielded "so it responds only to the magnetic
> field"
>
> What do you guys think of the theory behind Ramsey's antenna? Is it
> possible to use shielding to prevent the E component of the EM wave
> from reaching the antenna (while letting the M component through)?
> Sounds kind of weird to me.
>
> 73 From the Azores Bill CU2JL N2CQR

4797. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 11:37:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAE0667.99415879@eznec.com>
Source record: 168668

Any noise reduction you see is due to the directionality of the loop, not its rejection of electric fields. It'll only be less sensitive to an electric field if the field originates closer than about 1/10 wavelength to the loop, and that's because of its shape (a small loop) rather than any "shielding". The "shield" has to have a gap, which simply routes the current from the inside to the outside, so the net effect is the same as if the shield wasn't there.

Roy Lewallen, W7EL

"Mike P. Storke" wrote:
>
> The theory is sound and has been done for a long, LONG time. People do
> this (without the ferrite) on 160 meters (and sometimes 80 meters) all the
> time!
> This is how it works: you take your short loop antenna (short = far less
> than a wavelength, definitely less than 1/10th) and shield it on all sides
> except one. The gap is needed because if you closed it then the magnetic
> field would be locked out as well by forming a complete faraday cage. But
> by leaving a small part open, you keep the E field out but let the H field
> in. In the case of regular loops like you'd see on 160 meters and long wave
> work (see http://www.lwca.org), the shielding does double duty to
> electrically balance the loop for better performance (kinda like coax). In
> the case of a ferrite loopstick, you stick the loop in a "can" with one end
> open. Coincidentally, this also makes the loopstick unidirectional.
> Note that this won't get rid of ALL noise, but since the E field is much
> stronger typically than the H field (unless you're using a loop to transmit
> with, of course), a sometimes dramatic noise reduction can usually be seen,
> especially if you can use the loop's directional capabilities to the
> advantage (peaking your signal and nulling the noise source--and loops have
> real SHARP nulls when properly balanced and shielded!).
> Hope this helps!
>
> Mike

4798. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 11:49:40 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <nPnr6.86$Zj5.90@newsfeed.slurp.net>
Source record: 168569

Hi, all concerned:

This discussion of preamps reminds me that after the last time I advertised them and thought they were gone, I found another 20-odd units in a mis-labeled box ..

I have a few surplus predriver #1 boards, C 3988W, from the Drake TR7, which have 50-ohms in/out (solder posts), 20+ dB of stable adjustable gain from 100 KHz to above 50 MHz, and take 12V power. In the TR7, they were adjusted to amplify a 0.4Vpp signal to 3Vpp.

I have used several on my small loops as low-noise preamps on 160-10M. They worked fine on a very short-lived (one evening) quickie Beverage, as well.

In short, they make good small gain-blocks in places where needed.

My main rig has a 100W PA module which is driven with about 1 or 2 mW. One could use this preamp in place of the PA for QRP work.

They have gain-adjust pots in the second of 3 stages:
2N3563-SRF2281-SRF2281. Copy of schematic included.

Board is 2-3/4 X 3-3/4 in.G10, and less than 3/4-in. 'thick'. You supply 12V power, enclosure, and 2 clip-on heat sinks for the '2281s.

Any one interested at $17 ppd?

73, Dave, K3BHJ

4799. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:05:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAE0D11.A560AECB@eznec.com>
Source record: 168570

Michael Hart wrote:
>
> I understand that a "Patent pending" is a warning. It is my understanding
> that if the patent does get through and you have already made the invention
> before the patient is issued you are still libel to the patent owner for
> infrigment. I am not a lawyer either but I think this is the case -
> particularly if you have been warned.

Consider the patent application process. A person applies for a patent. The application contains a handful of claims which describe precisely what combination the patent is to cover. The patent examiner throws out a bunch of the claims, says others are too broad, and sends it back. The applicant re-writes the patent to try to satisfy the examiner, and so forth. This can go on for literally years. The result is frequently a patent that hardly resembles the original, and often no patent at all. Take for example Fractenna's most recent patent "Fractal antenna ground counterpoise, ground planes, and loading elements" (6,140,975). The "Patent Case Text" shows:

"This is a continuation of application Ser. No. 08/649,825 filed May 17, 1996 is now abandoned.

This application is a continuing application from applicant's pending patent application Ser. No. 08,609,514 entitled TUNING FRACTAL ANTENNAS AND FRACTAL RESONATORS, filed on Mar. 1, 1996, abandoned, which itself is a continuation-in-part of applicant's pending patent application Ser. No. 08/512,954 entitled FRACTAL ANTENNAS AND FRACTAL RESONATORS, filed on Aug. 9, 1995, now abandoned."

The "Fractal Antennas and Fractal Resonators" (6,104,349) shows the following history:

"This is a continuation, of application Ser. No. 08/609,514 filed Mar. 1, 1996 now abandoned, which is a continuation-in-part application of applicant's patent application Ser. No. 08/512,954 entitled FRACTAL ANTENNAS AND FRACTAL RESONATORS, filed on Aug. 9, 1995, abandoned."

So you see, there's a trail of abandoned patents leading to each of these. At one time, applications 08/649,825, 08/609,514, and 08/512,954 were "pending patents", and now they're souvenirs. Should everyone have stopped making whatever was in these applications until they were "abandoned"? There's no way of telling what was in these abandoned applications, or how much modification was done to the application from the time it was submitted until the patent was issued -- in the U.S.,

patent applications aren't public. For all we know, the original patent application was for all antennas with fractal elements, but ended up being for a much more restrictive class of antennas -- or even just a test procedure. All we know until the patent actually issues is that someone applied for a patent for something. (And for that we only have the applicant's word to take for it, but there are penalties for falsely claiming that an application has been made.)

So what should we be warned about? The content of the original application? Suppose I apply for a patent to cover all antennas. Sure, it'll be thrown out (or, more nicely put, "abandoned"), but until it is, I have a "pending patent". Should you be forbidden to make, use, or sell all antennas until it is? Ok, so I apply for a patent for a broad range of fractal antennas. By the time the patent gets through the system, I end up with a patent for a way to measure antennas having at least 8 fractal elements arranged in a star-like structure made from superconducting material and driven simultaneously with 24 sources having a precise current ratio. When I apply for the patent, I warn you that a patent for a broad range of fractal antennas is "pending". What force of law do you think that should carry?

Roy Lewallen, W7EL

4800. Re: stealing?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:12:56 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6lh$9lo$6@lure.pipex.net>
Source record: 168583

"Denver Braughler" wrote ...
> TR@sky.net wrote:
> > TROLL-O-METER [10]
> Perhaps, but only because it was posted to nine newsgroups.
>
> If I ran a solid copper wire up the side of my house parallel to the drop feed from the electric company (I own the feed wire, the meter box, and the house), and I connect the wire to a rectifier bridge, and LED, and a capacitor placed over my toilet (which I also own, in case you are wondering) to illuminate it at night, morally speaking, am I stealing or just picking up free energy?

You don't need the rectifier the LED will take AC OK all you need is a current limiting resistor or adjust the transformer coupling until the lamp lights properly.
If the drop feed is a pair or coaxial, then I doubt you will couple much energy out of it
Stick a clip on torroid such as is used with a current meter. Now let's assume that the LED takes 20 mA of current at a couple of volts and the current limiting resistor drops say 10 Volts.
The power used will be 12V * 0.02A = 0.24 Watts.
In 25 years you will have stolen 52.57 kW hours of electricity.

I don't know how much you pay for your electricity,
we pay UKP0.06 /kWH approximately
so that would be UKP3.15 in 25 years.
or about US$4.57

It takes 25 years for the company to catch you
and they demand 5% interest for late payment.

0.24 Watt = 20 mA 12 V
0.476 Yr or 173.583 or Day 4,166.667 or Hr 250,000 Min
time for 1kWH = 173 Day 14 Hr 40 Min

25 Years UKP3.15 = US$4.57 @$1.45 to the pound
52.568 kWH
annual cost US$0.18
years before getting caught, interest 5.00%
1 Yr $0.19
2 Yr $0.39
3 Yr $0.61
4 Yr $0.83
5 Yr $1.06
6 Yr $1.31
7 Yr $1.56

8 Yr $1.83
9 Yr $2.12
10 Yr $2.42
11 Yr $2.73
12 Yr $3.06
13 Yr $3.40
14 Yr $3.76
15 Yr $4.14
16 Yr $4.54
17 Yr $4.96
18 Yr $5.40
19 Yr $5.87
20 Yr $6.35
21 Yr $6.86
22 Yr $7.40
23 Yr $7.96
24 Yr $8.55
25 Yr $9.17

It is quite obvious that 5% interest rips you off far more than the
electricity that you steal.
In the UK the lecrickity companies run a scheme where you pay up front;
so that it amounts to you giving them an interest free lone for a year.
Whose the bigger crook?

The fault is great in man or woman
Who steals a goose from off the common;
But what can plead that man's excuse
Who steal a common from a goose?
The Tickler Magazine 1 Feb 1821

I heard a case of a man that had a green house very close to one of the
large broadcast transmitters. He wound a loop around the roof of the
greenhouse and from the current so derived from the transmitter he was able
to heat the green house, old flourescent tubes provided light at night.
I can't remember if he was prosecuted.
The question is, had a prosecution against him been successful would that be
precedent for him to charge rental for the passage of the waves across his
property?

> (Btw, the set up cost about $8 which could buy enough electricity to run
the LED for say, 100 years.)

Please see my table above, by the time that interest or inflation is taken
into account $8 would only buy you 23 years worth.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4801. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:19:08 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98l6lj$9lo$7@lure.pipex.net>
Source record: 168584

Yet again US demonstrates it special ability at friendly fire.
No wonder they get so good at it, they get enough practice.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4802. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:19:18 UTC
From: 2w8ji@akorn.net
Message-ID: <3aae09cb.76049308@news.accessunited.com>
Source record: 168571

Hi Dick

On 13 Mar 2001 03:56:35 GMT, Dick Carroll <dixie@townsqr.com> wrote:
>
> Most interesting, Tom. It confirms my personal observations while
>operating the mode for a few months early after it arrived.
> One very quiet morning on 20 meters I happened upon several European
>PSK31 stations, all very weak but barely audible on an otherwise dead
>band. I tried for most of an hour to tune in one of them, and get it to
>lock and print, without success. But- I was able to clearly copy the CW
>ID of each and every one of them. When I reported this one RRAP it
>drew the predictable response, ie of course there was something wrong
>with my setup, probable polar phase shift, etc, yada yada. *Everyone*
>knows that you can print PSK31 you can't hear.
> Cecil insisted that "the playing field was not level". Yeah. That's it.
>Dick W0EX

There is always a little overzealousness when a new mode comes along.

I've tried a few software packages, and get the same results. I can copy signals on CW I can't print on PSK. Many others report the same thing Dick, although it is not well received by PSK fans. Digipan seems to work as well as anything else, so that's what I mainly use.

The main argument to the contrary seems to come from people who can't work CW very well.

I especially chuckle at complaints about strong signals wiping out copy on adjacent channels. There is a misplaced notion all problems would disappear if everyone runs 30 watts, instead of nasty things like 200 watts.

This reminds me of a fellow many years ago who bought a brand new FT-101. He demanded everyone else quit running "high power" because his receiver would get totally wiped out. I remember him raising hell with a fellow who was running less than 100 watts, accusing him of having a couple kilowatts. I still picture that guy at a Hamfest, face all red and veins popping out, yelling at a guy (who actually ran 100 watts) and accusing him of running kilowatts. Of course the real problem was in his brand new FT101 had very poor dynamic range.

New things are always oversold.

Anyone who remotely understands skywave circuits would know the power stuff is a bunch of horse feathers. If the system had acceptable dynamic range, it wouldn't be bothered by 80 dB or more of signal level difference.

And you are right, factually you can not print signals that would be Q5 on CW...unless you have wooden ears.

73 Tom

4803. Re: Dipole-short multi band portable

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:22:51 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98l3oe$rm9$1@newpoisson.nosc.mil>
Source record: 168575

"Cecil" <Cecil.A.Moore@IEEE.org> wrote in message
news:3A6C52B9.B9E0DB91@IEEE.org...
Rudy Marcelletti wrote:
What is the best way to make a short, multi band dipole to cover at least 10
through 40 meters, and possibly 80 meters.

Take a look at the 40m-10m rotatable dipole on my web page.
--
http://www.mindspring.com/~w6rca

Cecil: great picture and write up on that modified ham stick. I've got a couple of 'em at home that I've been toying with doing something along the same lines. I'll probably roll my own coil with thicker wire or perhaps employ some copper tubing - increase the Q. Also thinking of mounting it on my fifth wheel hitch in the truck bed and employing a radial arrangement across the bottom of the bed. Just playing around, ya know what I mean?

Your pictures helped as well - good on ya, mate!!! Regards, Jim R.

4804. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:22:54 UTC
From: richardharrison@webtv.net
Message-ID: <3597-3AAE111E-13@storefull-113.iap.bryant.webtv.net>
Source record: 168574

Peter wrote:
"And would 34.8 inch per element be a full WL, and 69.6 inch be 2WL?"

Let`s see. The formula I remember is V=FxLambda, so Lambda = V/F

V= The velocity of the radio wave
V= 300,000 km/sec = 300,000,000 m/sec
F= the frequency in Hz
Lambda= Wavelength in meters per second

So, Lambda = V/F = 300/161.5
(million/million=1)
Lambda = 1.858 mtr = 1.858x3.28ft. = 6.1 ft.
Lambda = 6.1x12inch = 73.1 inches

Lambda/2 = 1/2-wavelength = 36.56 inches

Reduce antenna length by 5% for "end effect"
0.95x36.56 = 34.7 inches. = dipole length
Each side = 17.36 inches

Best regards, Richard Harrison, KB5WZI

4805. Re: Connector probs and IC-706MKIIG vs FT-100D

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:38:18 UTC
From: Phil Bradway <kb2hq@nycap.rr.com>
Message-ID: <_wor6.249209$o91.32273159@typhoon.nyroc.rr.com>
Source record: 168573
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,alt.ham-radio.vhf-uhf

Mike,

Probably the easiest route to take on your connection problem, would be to pick up a SMA male to BNC female adaptor and put it on the rig. Use a BNC patch cable from there to the main antenna coax, long enough to avoid strain on the rig connection when the rig is moved - maybe 2". BNCs work fine at 1296 and are more available. I'd stay away from TNCs. They are hard to come by, are generally more expensive and quality is highly variable. Large coax (RG8, etc.) directly connected to the HT is NOT a good idea! Too much strain would be introduced to the rig's SMA and it could break. The patch cable would allow you to change antennas easily, too. It's unlikely that one antenna is going to cover the four bands, anyway.

On HF rigs: I have an early "706" which works well but it's not great on the receiver end. It's handy for mobiling, though. I also have a FT 847 which I recommend highly for both base and mobile use. Three local hams have the FT 100. Two of the rigs have been great, the other has been back twice. You pays your money and takes your choice!

Phil, KB2HQ

"Mike P. Storke" <storkus@packard-hell.storkus.com> wrote in message news:98jk79$1c8$1@nnrp.atgi.net...
>
> Ok, the connector question first since it's the most important: I have the
> new IC-T81A quad-band HT from Icom. Unfortunately, they chose to stick an
> SMA connector on the radio instead of, say, a TNC (which is what I would have
> chosen, but YMMV).
snip
> My original idea was to use an SMA to TNC or N adapter and then put the
> latter connector on the cables--this becomes more important when a base
> setup is used, where I intend to use LMR-400 (RG-8 size and performs a LOT
> better than 9913 both mechanically and electrically for only a fraction more)
> or LMR-600 (even bigger and lower loss) and SMAs are no longer possible.
snip
> The second question is one that seems to pop up more and more, but the
> answers keep changing, so I'll ask again: I'm thinking, sometime in the
> future (maybe this summer) of getting an HF rig. An all-mode that works
> up to 70 cm would be real nice: that brings in the IC-706MKIIG and the
> FT-100D (and maybe the 847?). Reading around, this is what I've found:
snip

> Thanks for any and all info, and you can e-mail me direct at
> storkus@storkus.com. Thanks!
>
> Mike

4806. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:42:43 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AAE15C3.3E08A1C5@mwci.net>
Source record: 168572

Bill Meara wrote:

> Ramsey electronics is selling a "Signal Magnet Noise Reduction
> Antenna." They claim that "This antenna responds only to the
> magnetic field of the desired signal and ignores the electrostatic
> field..." Ramsey says it is a ferrite rod, varactor tuned, active
> antenna that's Faraday shielded "so it responds only to the magnetic
> field"

An active antenna can be Faraday shielded to eliminate capacitive (electrostatic) coupling between the active part of the antenna (the ferrite rod) and external nearby sources of noise.

The Faraday shield is, by definition, not short-circuited. If it is, it then becomes a short circuit for the desired electromagnetic signal. A length of coax braid that is open-circuited (grounded at one end only), is an excellent Faraday shield, which means that the desired electromagnetic wave can proceed unattenuated through the shield.

The incoming electromagnetic wave is "re-created" beyond the inner surface of the shield.

Direction finding loops have used this idea for at least 70 years.

Bill W0IYH

4807. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 12:54:27 UTC
From: 2w8ji@akorn.net
Message-ID: <3aae1116.77916770@news.accessunited.com>
Source record: 168576

On 13 Mar 2001 09:59:57 GMT, storkus@packard-hell.storkus.com (Mike P. Storke) wrote:

> The theory is sound and has been done for a long, LONG time. People do >this (without the ferrite) on 160 meters (and sometimes 80 meters) all the >time!
> This is how it works: you take your short loop antenna (short = far less >than a wavelength, definitely less than 1/10th) and shield it on all sides >except one. The gap is needed because if you closed it then the magnetic >field would be locked out as well by forming a complete faraday cage. But >by leaving a small part open, you keep the E field out but let the H field >in.

While that idea is popular, it isn't correct. The shield does not act like a shield at all, because it has a strategically placed gap. The gap allows the actions of the signals on the "shield", to spill over and drive the conductor inside the loop.

The "shield" becomes the antenna, and it responds to both electric and magnetic fields. You can not have an antenna that radiates or receives that does not respond to "both fields". They are inseparable when time-varying. If they are not time-varyng...your receiver will not hear them.

>In the case of regular loops like you'd see on 160 meters and long wave >work (see http://www.lwca.org), the shielding does double duty to >electrically balance the loop for better performance (kinda like coax).

This ONLY happens if you properly ground the "shield", so the "shield" is balanced. It also makes no difference ove the same antenna without a "shield", if the antenna is properly balanced. Unless something in the system is poorly designed, the shield does nothing at all.

If (as is often done) the gap is placed at the feedpoint, and the shield grounded at one side of the gap, you create a severe balance problem. The antenna would be better off without the "shield".

>In
>the case of a ferrite loopstick, you stick the loop in a "can" with one end >open.

The can will act like a shorted turn and kill the sensitivity of the loopstick. With a loopstick, the gap MUST run parallel with the rod the entire length of the rod and both ends must be open. You can have no "short" across the gap.

>Coincidentally, this also makes the loopstick unidirectional.

Even if in a can with one open end, the loop will not be unidirectional. It will be dead in all directions. Forcing a unidirectional pattern from the "reflection" of a can, if that was possible, would kill sensitivity of the antenna.

> Note that this won't get rid of ALL noise, but since the E field is much >stronger typically than the H field (unless you're using a loop to transmit >with, of course), a sometimes dramatic noise reduction can usually be seen,

The claim noise is an E field is a myth.

Noise is NOT predominately any field "gender". It is just like any other signal in the world. If you are close to the source, there can be a dominance of one field or the other...but either field can be dominant. As a matter of fact, it is most likely that most man-made noise sources are magnetically dominant or somehat neutral in the induction field area because most are radiated by relatively low impedance wiring, like long power lines.

As Roy Lewallen points out, move a fraction of a wavelength and the field impedance changes.

>especially if you can use the loop's directional capabilities to the >advantage (peaking your signal and nulling the noise source--and loops have >real SHARP nulls when properly balanced and shielded!).

While the peak is poorly defined, the null is very useful for nulling local noise sources. If you have local noise sources, a loop can definately help by nulling them out. If you have sky-wave noise, a loop is pretty much a waste of time.

There are a lot of myths about loops, mostly because we assume noise is somehow magically different than a desired signal in the way it radiates or propagates. Unfortunately articles, web pages and amateur publications do little to correct these myths, and are often respoonsible for keeping them alive.

Small loops can help if noise comes from one fixed direction, and nulls can be placed to attenuate noise. They also might allow you to move the antenna physically away from the noise source. Otherwise, they pretty much do nothing.

73 Tom

4808. Re: Receiver Questions...any good newsgroups on same?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 13:03:25 UTC
From: k3bu@aol.com
Message-ID: <20010313080325.12957.00001160@ng-fs1.aol.com>
Source record: 168577

rec.radio.amateur.homebrew

Yuri

4809. Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 13:37:14 UTC
From: n2cqr@clix.pt
Message-ID: <3aae21df.2091928@news.clix.pt>
Source record: 168663

Ramsey electronics is selling a "Signal Magnet Noise Reduction Antenna." They claim that "This antenna responds only to the magnetic field of the desired signal and ignores the electrostatic field..." Ramsey says it is a ferrite rod, varactor tuned, active antenna that's Faraday shielded "so it responds only to the magnetic field"

What do you guys think of the theory behind Ramsey's antenna? Is it possible to use shielding to prevent the E component of the EM wave from reaching the antenna (while letting the M component through)? Sounds kind of weird to me.

73 From the Azores Bill CU2JL N2CQR

4810. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 14:14:36 UTC
From: richardharrison@webtv.net
Message-ID: <24058-3AAE2B4C-170@storefull-111.iap.bryant.webtv.net>
Source record: 168586

Bill, CU2JL/N2CQR wrote:
"Ramsey Electronics is selling a "Signal Magnet Noise Reduction Antenna". They claim that "This antenna responds only to the magnetic field of the desired signal and ignores the electrostatic field."

Like most advertising, the case may be overstated but contains a grain of truth.

Directional loops are impaired by unbalanced capacitive coupling to their coils. That is why direction-finding loops have Faraday shields.

Terman says:
"Such a shield insures that all parts of the loop will always have the same capacity to ground irrespective of the loop orientation or of neighboring objects."

If all parts of the loop have the same capacitance to ground, they are also balanced at their null position to the traveling wave`s electric field and don`t respond. That null may be directed toward an interfering signal or noise. So, the shield can improve the signal to noise ratio.

Best regards, Richard Harrison, KB5WZI

4811. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 14:19:52 UTC
From: fractenna@aol.com
Message-ID: <20010313091952.01325.00000060@ng-fm1.aol.com>
Source record: 168585

>
>Michael Hart wrote:
>>
>> I understand that a "Patent pending" is a warning. It is my understanding
>> that if the patent does get through and you have already made the invention
>> before the patient is issued you are still libel to the patent owner for
>> infrigment. I am not a lawyer either but I think this is the case -
>> particularly if you have been warned.
>
>Consider the patent application process. A person applies for a patent.
>The application contains a handful of claims which describe precisely
>what combination the patent is to cover. The patent examiner throws out
>a bunch of the claims, says others are too broad, and sends it back. The
>applicant re-writes the patent to try to satisfy the examiner, and so
>forth. This can go on for literally years. The result is frequently a
>patent that hardly resembles the original, and often no patent at all.
>Take for example Fractenna's most recent patent "Fractal antenna ground
>counterpoise, ground planes, and loading elements" (6,140,975). The
>"Patent Case Text" shows:
>
>"This is a continuation of application Ser. No. 08/649,825 filed May 17,
>1996 is now abandoned.
>
>This application is a continuing application from applicant's pending
>patent application Ser. No. 08,609,514 entitled TUNING FRACTAL
>ANTENNAS AND FRACTAL RESONATORS, filed on Mar. 1, 1996, abandoned, which
>itself is a continuation-in-part of applicant's pending
>patent application Ser. No. 08/512,954 entitled FRACTAL ANTENNAS AND
>FRACTAL RESONATORS, filed on Aug. 9, 1995, now
>abandoned."
>
>The "Fractal Antennas and Fractal Resonators" (6,104,349) shows the
>following history:
>
>"This is a continuation, of application Ser. No. 08/609,514 filed Mar.
>1, 1996 now abandoned, which is a continuation-in-part application of
>applicant's patent application Ser. No. 08/512,954 entitled FRACTAL
>ANTENNAS AND FRACTAL RESONATORS, filed on Aug. 9, 1995,
>abandoned."
>
>So you see, there's a trail of abandoned patents leading to each of
>these. At one time, applications 08/649,825, 08/609,514, and 08/512,954
>were "pending patents", and now they're souvenirs. Should everyone have
>stopped making whatever was in these applications until they were

>"abandoned"? There's no way of telling what was in these abandoned
>applications, or how much modification was done to the application from
>the time it was submitted until the patent was issued -- in the U.S.,
>patent applications aren't public. For all we know, the original patent
>application was for all antennas with fractal elements, but ended up
>being for a much more restrictive class of antennas -- or even just a
>test procedure. All we know until the patent actually issues is that
>someone applied for a patent for something. (And for that we only have
>the applicant's word to take for it, but there are penalties for falsely
>claiming that an application has been made.)
>
>So what should we be warned about? The content of the original
>application? Suppose I apply for a patent to cover all antennas. Sure,
>it'll be thrown out (or, more nicely put, "abandoned"), but until it is,
>I have a "pending patent". Should you be forbidden to make, use, or sell
>all antennas until it is? Ok, so I apply for a patent for a broad range
>of fractal antennas. By the time the patent gets through the system, I
>end up with a patent for a way to measure antennas having at least 8
>fractal elements arranged in a star-like structure made from
>superconducting material and driven simultaneously with 24 sources
>having a precise current ratio. When I apply for the patent, I warn you
>that a patent for a broad range of fractal antennas is "pending". What
>force of law do you think that should carry?
>
>Roy Lewallen, W7EL
>
>

Dr. Cohen is the father of fractal element antenna technology and what a
wonderful and useful field that is:-)

We heard this type of Lewallen nonsense when the first patent came out.

Then the second patent came out.

(surprise!)

Then the third patent came out.

(surprise!)

3 issued patents so far.
Many,many patents pending.

I geuss you can go to a patent attorney and say golly! Cohen missed something!
Let's apply for a patent on it! It's not in this patent's claims! Sure! You can
waste your money any ol' way you want:-)

Surprise!

Smile:-)

Can't fight with success:-) But you can sure try to mislead others and even
infringe on their IP like Roy Lewallen .

Surprise!

As I said, much is happening 'offline'.

73
Phil N1ZKT

4812. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 15:13:20 UTC
From: k6mhe@arrl.net
Message-ID: <3aae389d.874771@news.mcn.org>
Source record: 168590

On Mon, 12 Mar 2001 22:19:38 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Dan Richardson wrote:
>> I don't know why everyone goes through such worries regarding tuning a
>> tuner.. For years (read over 45) I have used a relative field strength
>> meter and just tuned for maximum smoke.
>
>The question I have is, exactly what are you measuring? Is the RF
>you are measuring going to end up at a decent take off angle in
>the far field or end up warming the ground?

That's not the point. The point is getting the power to the antenna in
the first place. What the antenna does with it is another matter. A
tuner isn't going to change the takeoff angle.

Danny

4813. balun vs swr

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 15:27:00 UTC
From: ON4CLN <on4cln@qsl.net>
Message-ID: <8%qr6.12631$ou.855565@afrodite.telenet-ops.be>
Source record: 168587

Question:
Suppose I make a balun "by the book" like described in numerous ARRL publications.
Suppose I wanted to measure the SWR from 80m to 10m.

Can I just connect a 50ohm dummy between the 2 balanced terminals, or is this not the right way to go? And if not; how can I correctly measure SWR?

Waiting for help...
ON4CLN Franki
http://www.qsl.net/on4cln/

4814. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 15:34:58 UTC
From: richardharrison@webtv.net
Message-ID: <3597-3AAE3E22-25@storefull-113.iap.bryant.webtv.net>
Source record: 168588

Peter wrote:
"Since I don`t own an SWR meter, is it possible to tune the tx (it`s actually a 12-V set) and triming the antenna for peaking of the 12V current?"

If you cut the antenna as calculated, you won`t need to trim it to resonance if it is placed up and in the clear.

In tuning for max using d-c current into the radio as an indicator, the first problem is insensitivity of your indication. The second is that you may be tuning for reduced efficiency instead of increased power output.

A 1N34 or similar diode in series with a microammeter works for me as a satisfactory rf indicator. Just connect one end of the diode to the correct meter terminal and its other end to a 17-inch (more or less) piece of wire. Connect the other meter terminal to another 17-inch piece of wire. You now have a field strength indicator. Tune for maximum.

Another respondent declares the E-field much stronger than the H-field. Actually both fields contain the same energy as they beget each other in space.

Best regards, Richard Harrison, KB5WZI

4815. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 15:51:23 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <dggsat0p1c0a76p0b7u6malplibthc16q7@4ax.com>
Source record: 168589

On 13 Mar 2001 14:19:52 GMT, fractenna@aol.com (Fractenna) wrote:

>
>Dr. Cohen is the father of fractal element antenna technology and what a
>wonderful and useful field that is:-)

herr doktor,

PUBLIC NOTICE TO FRAUDTENNA, AND ITS MINIONS

In the way of pubic notice to fraudtenna, I am thinking of a design
for which I will soon submit a patent application and I hereby order
you to cease all operations in this field of endeavor and to surrender
all documents relating to my idea to me immediately. As my idea has
coverage of a patent pending status, you are hereby ordered to cease
and desist. If you fail to act in the next 3 or 4 years, I may be
forced to take the first - offline - step toward a "possible legal
action."
;->

73's
Richard Clark, KB7QHC

4816. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 15:57:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAE4354.D2AC020F@IEEE.org>
Source record: 168591

Dan Richardson wrote:
> >The question I have is, exactly what are you measuring? Is the RF
> >you are measuring going to end up at a decent take off angle in
> >the far field or end up warming the ground?
>
> That's not the point. The point is getting the power to the antenna in
> the first place. What the antenna does with it is another matter. A
> tuner isn't going to change the takeoff angle.

My question was a little more subtle than that. At the 75m mobile
antenna shootouts, we don't measure the near field. So why is a
far field strength measurement superior to a near field strength
measurement?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4817. Re: Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 16:48:44 UTC
From: "Kai-Uwe Hoefs, DL1AH" <dl1ah@agcw.de>
Message-ID: <98liua$59t$1@ac1.ewetel.de>
Source record: 168592

John H. Carver Jr. <jcarver@netusa1.net> schrieb in im Newsbeitrag:
3aad7243.56243@news.netusa1.net...
> Can anyone tell me where I can find information on Spiderweb and or
> Telarana wire log periodics?

Take a look into the ARRL Antenna Book, at least the Telarana and wire-stuff
for 80/75 and 40m are described.

73, Kai

4818. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:03:59 UTC
From: k6mhe@arrl.net
Message-ID: <3aae5277.800951@news.mcn.org>
Source record: 168598

On Tue, 13 Mar 2001 09:57:08 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Dan Richardson wrote:
>> >The question I have is, exactly what are you measuring? Is the RF
>> >you are measuring going to end up at a decent take off angle in
>> >the far field or end up warming the ground?
>>
>> That's not the point. The point is getting the power to the antenna in
>> the first place. What the antenna does with it is another matter. A
>> tuner isn't going to change the takeoff angle.
>
>My question was a little more subtle than that. At the 75m mobile
>antenna shootouts, we don't measure the near field. So why is a
>far field strength measurement superior to a near field strength
>measurement?

Cecil,

I don't know what you are smoking but I feel you are off the subject..
The subject is as I understand it is on tuning ANTENNA TUNERS and a FS
meter works very good for that purpose. Far field, near field or
inbetween field makes no difference...

Danny

4819. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:33:27 UTC
From: 2w8ji@akorn.net
Message-ID: <3aae591f.96361114@news.accessunited.com>
Source record: 168593

On Mon, 12 Mar 2001 20:51:10 -0500, "Dick Elliott"
<elliotta@netusa1.net> wrote:

>Hello. I have two of the HF5V Butternut V-A's. They work gang busters for
>me. I use one for camping and the other one sits on a six foot mast on the
>roof top attached to the chimney. I would put up a 100' tower but no space
>in my yard for it. My property sits in a hole in my town. I am at 800' above
>sea level. the house is about 25' and the tip of the butternut stretches to
>about 35' above the roof. So the whole outfit is 860' ASL.

Height above ground and average terrain matter. Height above sea
level does not.

73 Tom

4820. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:35:33 UTC
From: kb7qhc@home.com
Message-ID: <3aae59d5.950579070@news.seanet.com>
Source record: 168594

On Tue, 13 Mar 2001 08:47:03 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>> If your referring to MOVs I know about them.
>
>MOV in the UK is the trade mark of Marconi Osram Valve,
>can you tell me what your acronym stands for please?
>

Hi Gary,

Metal Oxide Varistor. A voltage variable resistor whose resistance
drops abruptly at a given voltage (or higher).

There is also a current variation of this device in which currents
above a certain level will cause a precipitous increase of resistance
(temperature derived).

73's
Richard Clark, KB7QHC

4821. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:45:35 UTC
From: kb7qhc@home.com
Message-ID: <3aaf5b64.950978695@news.seanet.com>
Source record: 168595

On Tue, 13 Mar 2001 04:44:35 +0000, Keith Wood <kw@bctv.com> wrote:

>Ridiculing opposition -- the politics of theft.
>
>You still haven't provided any basis for your belief that you deserve my
>money more than I do.

I wasn't going to point it out, but your admission is telling.

But, rest assured, the democracy I fought for was for your freedom of expression and I allow that given that the Spartan ethic is not one tradition praticed by conservatives re: Only those who served are allowed to vote.

No doubt our "compassionate" conservatives would have cut off the widow's fund of the 300 Spartans at Thermopolye.

73's
Richard Clark, KB7QHC

4822. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:50:46 UTC
From: kb7qhc@home.com
Message-ID: <3ab05cfd.951387252@news.seanet.com>
Source record: 168596

On Mon, 12 Mar 2001 21:29:38 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>Since this is an antenna group, we don`t need to swap sea stories such
>as "the monkey in the chain locker" or the "old salt who can`t sleep
>ashore unless someone is splashing the side of the house with a garden
>hose".
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Quite true.

73's
Richard Clark, KB7QHC

4823. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:54:37 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98ln6j$2td$1@newpoisson.nosc.mil>
Source record: 168602

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3aae591f.96361114@news.accessunited.com...
Height above ground and average terrain matter. Height above sea level
does not.

73 Tom

Tom: what if the antenna's location is at sea level? My yard is at sea
level, hell, it's at the edge of a tidal creek fed by the ocean and a couple
of rivers. Any concern with height then? Regards, Jim R.

4824. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:56:38 UTC
From: kb7qhc@home.com
Message-ID: <3ab15e9f.951805113@news.seanet.com>
Source record: 168600

On Tue, 13 Mar 2001 09:57:08 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Dan Richardson wrote:
>> >The question I have is, exactly what are you measuring? Is the RF
>> >you are measuring going to end up at a decent take off angle in
>> >the far field or end up warming the ground?
>>
>> That's not the point. The point is getting the power to the antenna in
>> the first place. What the antenna does with it is another matter. A
>> tuner isn't going to change the takeoff angle.
>
>My question was a little more subtle than that. At the 75m mobile
>antenna shootouts, we don't measure the near field. So why is a
>far field strength measurement superior to a near field strength
>measurement?

Hi Cecil,

If I remember correctly, you guys were typically within 10 wavelengths
or less and could have been measuring the more complex near fields
whose geometry is notably different from the typical vertically
polarized signal - as launched.

However, I also think you were far enough such that this consideration
didn't really amount to much (expect to explain some curious readings
perhaps).

73's
Richard Clark, KB7QHC

4825. Re: UltraWide Band Antenna for 3G Mobile Cells.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:56:42 UTC
From: tiziano.sala@libero.it
Message-ID: <3aae5ed8.1576090@news.libero.it>
Source record: 168599

All right i can use the news server again :-)

I have to design an antenna that has to be integrated in the future
cellular phones, for receiving also the digital television. I suppose
that the phone will have a second antenna for the >1 GHz band, or the
same antenna will be switched in some way to work in another (higher)
band. It does exist a model by samsung, SCH-M220 , a cell that can can
also be used to watch tv, but it incorporate a wire telescopic
antenna. It's not an original idea.
I was thinking of some new idea, like fractal, spiral patch
antennas,because they are broadband and compact.
Do you know some ideas, studies?

Thanks in advance,

Tiziano

On Sun, 11 Mar 2001 11:04:40 -0500, "NCS" <palitz@attglobal.net>
wrote:

>What are you talking about?
>
>The subject of your message refers to 3G Mobile Cells, but your text says
>DVB-T and 100-900 MHz. They are all completely different things. What
>exactly do you intend to do?
>
>Bob
>
>"Tiziano" <tiziano.sala@libero.it> wrote in message
>news:3aaa6cab.2552509@news.libero.it...
>> Hi, I have to design an antenna working in the 100-900 MHz band, for
>> receiving digital tv (DVB-T)using a cell. phone. it has to be very
>> small (limited by the size of a cell phone). My main problem is the
>> bandwidth (large lambda values for freq=100MHz), does someone of you
>> know some studies,ideas, or links that can help? Is there a way to get
>> ultra wideband and small dimensions by bending the wires? Thanks!
>> t.sala@tiscalinet.it
>>
>>
>
>

4826. Re: R5 Dimensions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 17:57:56 UTC
From: jack in the box <bb@ff.com>
Message-ID: <3AAE5FA4.B6838F17@ff.com>
Source record: 168597

Probably need a new trap for 15/17/20.

"James A. Sullivan" wrote:

> I just purchased an R5 and thoughtlessly disassembled it, down to the
> last clamp and screw. Now it is clean and reassembled, but only working
> on 10 and 12 meters.
>
> I have a copy of the instructions, but the capacitor assembly is not
> very detailed. I put the caps back together based on the drawings and
> have tried adjusting the lengths as the instructions state. SWR for 15,
> 17 and 20 meters is very high, with little improvement after changing
> length.
>
> This is the older R5, c.1989 with a hairpin cap on the 15/17m trap.
>
> What should I try to get this working?
>
> Jim Sullivan N7TCF

4827. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 18:02:52 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98lncc$4ba$0@208.207.71.152>
Source record: 168601
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Gary Peach wrote:
>
> Recently my fuel gauge on the car has been sticking.
> I think that there is some moisture in the pivot or spring that is freezing
> and producing this effect.
> Do you know of a way of freeing it without removing the dashboard?

More likely it's the "sending unit" located in the tank.
Overfilling-"topping off"- the tank excessively can cause this.
Sometimes it has to be replaced to correct the problem.

Dick

4828. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 18:39:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3aae5a56.96672030@news.accessunited.com>
Source record: 168603

Hi Gary,

13 Mar 2001 07:41:13 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:

>However none of this negates my calculations, which are general case
>illustrative examples. You have here a special case. the signal to noise
>ratio will never the less still be about a dB worse than possible, so there
>is still some work to do.

The calculations were negated before they were made, because they were based on incorrect data. They also ignored noise reduction by directivity, and considered the receiver much more sensitive than most are.

>Obviously the big advantage that you are using is the directional nature of
>the RX AE against a vertical which is notoriously noisey especially from QRM
>as well as the larger gathereing volume for QRN.

"Gathering volume", whatever that may be, has nothing to do with ultimate S/N on low frequencies like 160 meters.

The directivity of a small loop is such that it is mainly vertically polarized, so polarization is also not an issue. The small loop does not have significantly more directivity that the vertical, but it will allow us to null noise from a single direction (or two if you are very lucky and they are about 180 degrees apart).

The only reason a small antenna is better is because it can be moved away from a very local noise source, and can be used to null a local noise source.

>If you operate a beam from the UK into VK then you get a reasonable S/N
>however if you are at the other end the area that your beam is looking at is
>filled with all of the European QRM so S/N is badly degraded. Many VK ops

It is generally quieter looking into the UK from a distance than from the UK across a tropical region, as long as the path does not cross tropical regions.

QRM is normally not defined as "noise". Noise is normally considered to be random broadband interference. What we hear on 160 meters is a collection of many noise sources, most of which are arcs and sparks either in nature of man-made devices.

There is a several dB noise increase when I focus my arrays on the towns of Barnesville and Forsyth, both several miles away. At night time noise level increases ten or more dB, even without storms in North America. The directions with propagtion have much more noise

than others, and that noise is strongest looking into tropical zones
all other things equal.

>don't bother to operate at week ends because of this problem. This is quite
>a different phnomonon than the one about which I started to post. If the
>onle inhabitants of the world were the transmitter and the AE considered
>such that all electrical apperatus was switched off then my example would
>still be valid.

The example is not valid because the data used greatly overestimates
background noise, or you misread or misapplied the numbers.

>Yes indeed yopu have verified just how noisy verticals are, you will never
>get a better S/N than that which exists in the air just around youir AE what
>ever it is.

That simply is not true. My most effective receiving antennas are
verticals, as a matter of fact I do not have a single horizontally
polarized receiving array. My high dipole, 300 feet off the ground, is
quieter during the daytime than my transmitting vertical but it is
less effective because it has higher wave angle. At night there is no
difference in noise, they are identical.

Noise comes from many directions, signals primarily from one
direction. When you focus the antenna, the total noise power drops at
a much faster rate than the signal. It is not necessary to have gain
to see this advantage, all you need is directivity.

>For a moment let us consider what the ideal would be supposing for a moment
>that it was possible. The real solution to your problem would be a highly
>directional antenna with no additional amplification because the AE would
>have a good efficiency and the signal would not be attenuated.

Directivity is a different parameter than gain. On 160 meters,
receiving antennas are typically designed with directivity in mind
since gain is easily made up for with amplification.

Most moderately or highly directional receiving antennas and most or
all physically small receiving antennas require amplification when
used with typical amateur radio receivers or transceivers.

S/N ratio has little to do with antenna gain, but antenna directivity
is extremely important.

>Try this for me. Insert an attenuator in the RX feed from your vertical and
>tell me if you get any better S/N. a thing that I try on 20 m some times
>when the band appears to be absolutely flat is to put 10 or 20 dB of
>attenuation into the Ae line and hey presto signals, not as many as usual
>but signals wher previously ther were none.

You have a receiver problem, unless you are using a direct conversion
receiver and accept the overload inherent in such simple designs. I
can't think of a receiver in common usage today that will suddenly
have signals appear on 20 meter when a 20dB attenuator is used!

Many receivers are somewhat marginal on gain or noise floor on higher bands even when used on large antennas, unless the site is particularly noisy.

If you have a receiver that generates broadband noise and needs extra filetering, and you don't have an exceptional situation where local broadcast or communications systems are extremely strong, you b need to repair or replace the receiver.

73 Tom

4829. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 18:45:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3aae6995.100575135@news.accessunited.com>
Source record: 168604

On Tue, 13 Mar 2001 08:14:36 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Terman says:
>"Such a shield insures that all parts of the loop will always have the
>same capacity to ground irrespective of the loop orientation or of
>neighboring objects."
>
>If all parts of the loop have the same capacitance to ground, they are
>also balanced at their null position to the traveling wave`s electric
>field and don`t respond. That null may be directed toward an interfering
>signal or noise. So, the shield can improve the signal to noise ratio.

That is true ***ONLY*** if the shield is grounded at the correct spot,
that being the electrical center point of the shield, and if the
internal wires leave at that point.

If it is not grounded at the correct spot, and the internal
conductors do not exit the shield at that point, it will just as
easily make the situation worse.

73 Tom

4830. Heathkits FOR SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 18:53:20 UTC
From: docky <docky@earthlink.net>
Message-ID: <A0ur6.8021$6p5.702205@newsread1.prod.itd.earthlink.net>
Source record: 168605

I have about 30 Heathkits for sale at http://www.heathkits.com They are selling fast but I am adding more. 73 Gary

4831. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 19:25:46 UTC
From: richardharrison@webtv.net
Message-ID: <20714-3AAE743A-139@storefull-114.iap.bryant.webtv.net>
Source record: 168607

Tom, W8JI wrote:
"You have neglected capacitance from the base of the antenna to the vehicle and the lead to the base of the antenna mount."

I am not sure, but Tom may be saying that a shielded/screened coil has less circulating current or more circulating current than the same coil as a segment of the vertical antenna.

If Tom is saying displacement current doesn`t affect radiation, he is correct if the displacement current is not in the phase and direction to aid or oppose the desired radiation. But, any radiation in an undesired direction takes radiation away from the desired direction.

If Tom is saying displacement current is a loser, where is the loss in the capacitance?

If Tom is saying current in an antenna-mounted loading coil that goes no farther than the loading coil has lost some of its promise as a radiation producer, that seems correct.

Terman says: "The first tower radiators were specifically designed to have a very small capacity from the lower end to ground, since it was assumed that this capacity was highly detrimental to the behavior. However, analysis shows that the ground capacity is harmful only if the ground losses in the immediate vicinity of the tower base are high, and the self-supporting type of structure is now generally accepted as being entirely suitable."

Current distribution makes the uniform cross-section tower more desirable for some purposes, but Terman was refering to loss. Self-supporting towers are accepted and many are in broadcast service.

Best regards, Richard Harrison, KB5WZI

4832. Re: Z-match for DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 19:41:03 UTC
From: Larry Saletzki <wa9vrh@ocslink.com>
Message-ID: <98lsvb$ar0$1@news.dpc.net>
Source record: 168606

HI Jason the Z-match on the DK-3 does just what you said. Except you do have to run the DK-3 up and down to adjust for the proper frequency. I am using a DK-3 on my Jeep Cherokee with an Icom 706 works great.

To answer your second question more people have copied Don's use of the Z-match and are using it on
screwdriver antennas now.

Remember the Z-match is for matching the antenna to the feedline not to tune the antenna to lenght.
73's Larry

<jason_hsu@@@@planetmail.com> wrote in message
news:cjdr6.9144$R_6.911729@newsread2.prod.itd.earthlink.net...
> Is anyone here familiar with Z-matches? The DK3
> Screwdriver uses one. The Z-match is supposed to be able
> to tune the Screwdriver antenna for any frequency from 10m
> to 80m WITHOUT turning any knobs.
>
> I'm curious:
> 1. How can the Z-match tune an antenna WITHOUT requiring
> lots of knob twisting?
> 2. Why doesn't everyone use a Z-match and thus avoid the
> need to keep tuning around to get the SWR under 2?
>
> ----------
> Free web access to newsgroups is at
> http://www.freenewsland.com/
> ----------

4833. Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:03:11 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <q0vr6.27343$Ac5.6317822@e3500-chi1.usenetserver.com>
Source record: 168608

Sorry I missed the informative debate concerning non-dissipative resistance until now, but I would like to add the following info.

My 2nd edition of Reflections is about to go to print, and hopefully copies will be available at Dayton. I have included an Appendix dealing with this subject, and if I had been privy to the NG debate before finalizing the Appendix some of it would have worded differently, especially the more precise Newton definition of 'dissipation', in contrast to that of the IEEE.

However, in appreciation of Peter's revealing of the IEEE's error in causing the confusion over the definition, I quote a few lines from the first paragraph of my Appendix on the subject:

"The concept of a non-dissipative resistance is one of the most misunderstood concepts in all electrical engineering. There are at least two reasons for this misunderstanding. First, we learned about dissipative resistance while studying DC circuits, but when moving on to AC theory, many may have failed to notice that dissipative resistance is not the only kind of resistance. In addition, the concept was seldom, if ever, discussed by the EE professors. Second, the IEEE, in its infinite wisdom, chose to assign the same name, resistance, to both types, dissipative and non-dissipative, resulting in the present confusion."

Walt, W2DU

4834. Re: Z-match for DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:10:53 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AAE7ECD.682257B@usa.alcatel.com>
Source record: 168609

The match is an inductor in parallel with the feed point. In combination with a slightly capacitive setting of the antenna, it acts as an L network to match the feed point to 50 ohms.

Even when the inductance is not QUITE right for a perfect match, a close match may be accomplished. On higher-frequency bands, the antenna impedance increases, making this match less necessary. In practical terms, if you use an inductance correct for (say) 75 meters, you will be able to get a good enough SWR on other, higher frequency bands. And this works for me with a Texas Bug Catcher.

Cortland
ka5s@earthlink.net

"jason_hsu"@@@@planetmail.com wrote:

> Is anyone here familiar with Z-matches? The DK3
>
> Screwdriver uses one. The Z-match is supposed to be able
>
> to tune the Screwdriver antenna for any frequency from 10m
>
> to 80m WITHOUT turning any knobs.
>
> I'm curious:
>
> 1. How can the Z-match tune an antenna WITHOUT requiring
>
> lots of knob twisting?
>
> 2. Why doesn't everyone use a Z-match and thus avoid the
>
> need to keep tuning around to get the SWR under 2?
>
> ---
> Free web access to newsgroups is at
> http://www.freenewsland.com/
> ---

4835. apartment I need an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:29:01 UTC
From: "david s." <david@hedgewoodhomes.com>
Message-ID: <hqvr6.1385$%N.3327@skycache.prestige.net>
Source record: 168519

I live in an apartment (ground floor) patio faces east 6'x8'
I can put anything I want on the rail or out on the patio I can setup
something in the grass but must take it in and out when not in use. I could
put anything up with a max height of 12'.

I am getting an kenwood ts-450 in the next week and I need an antenna that
will let me use it I really don't want to put up a different antenna for
each band. rig has a built in antenna tuner.

I am willing to buy or build an antenna

I just want what ever I put up to be good and work well.

so my question is what is the best antenna I can put up, build, buy?
I know I have to compromise a bit on signal quality but I will live with
that

4836. Re: balun vs swr

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:37:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAE84F2.981A7F70@eznec.com>
Source record: 168610

I'm assuming you mean a 1:1 balun; otherwise you'll need a different load impedance.

Your test will tell you the SWR when the balun is presented with a 50 ohm balanced load. But you won't get any information at all about how well the balun is performing its intended function.

If you want to test a current balun for its ability to balance currents in worst case operation, connect the rig to one end through your SWR meter. Note that there's DC continuity through the balun, so conductor A at the input is carried through as conductor A at the output, and the same for conductor B. Call the conductor connected to your rig's coax shield conductor B. Connect the output conductor A to the input conductor B with as short a wire as possible. Connect your 50 ohms load between this junction and output conductor A. A good 1:1 current balun will show a reasonable SWR when connected this way. This represents a worst case imbalance, much worse than you're ever likely to see. A really good balun will pass this test. Some baluns that won't pass will still do an adequate job in a real application.

Don't do this test at your rig's full output power, in case the balun isn't doing a good job. And don't test voltage baluns this way -- a good voltage balun will present an RF short circuit at the input when connected like this.

Roy Lewallen, W7EL

ON4CLN wrote:
>
> Question:
> Suppose I make a balun "by the book" like described in numerous ARRL
> publications.
> Suppose I wanted to measure the SWR from 80m to 10m.
>
> Can I just connect a 50ohm dummy between the 2 balanced terminals, or is
> this not the right way to go? And if not; how can I correctly measure SWR?
>
> Waiting for help...
> ON4CLN Franki
> http://www.qsl.net/on4cln/

4837. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:44:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAE86C4.3F05C253@eznec.com>
Source record: 168611

Differently shaped or constructed antennas can have vastly different near field characteristics while having the same far field characteristics, or the other way around. A classic example is a small loop vs a short dipole. Measuring the near field wouldn't tell you much about how much energy is escaping to the far field, which is what you communicate with. So you can't use near field measurements to determine the relative far field strengths from different antennas (unless they and their surroundings are identical).

If you're comparing two different antennas and want to know how their far field strengths differ, you have to measure the far field strength. If you have one antenna and want to know the best setting for your tuner or which feedline has the least loss, you can measure either the near or far field and get the information you need.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Dan Richardson wrote:
> > >The question I have is, exactly what are you measuring? Is the RF
> > >you are measuring going to end up at a decent take off angle in
> > >the far field or end up warming the ground?
> >
> > That's not the point. The point is getting the power to the antenna in
> > the first place. What the antenna does with it is another matter. A
> > tuner isn't going to change the takeoff angle.
>
> My question was a little more subtle than that. At the 75m mobile
> antenna shootouts, we don't measure the near field. So why is a
> far field strength measurement superior to a near field strength
> measurement?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4838. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:54:32 UTC
From: kb7qhc@home.com
Message-ID: <3aaf88fd.962651990@news.seanet.com>
Source record: 168614

On Tue, 13 Mar 2001 15:03:11 -0500, "Walter Maxwell" <w2du@iag.net>
wrote:

>
>"The concept of a non-dissipative resistance is one of the most
>misunderstood concepts in all electrical engineering. There are at least two
>reasons for this misunderstanding. First, we learned about dissipative
>resistance while studying DC circuits, but when moving on to AC theory, many
>may have failed to notice that dissipative resistance is not the only kind
>of resistance. In addition, the concept was seldom, if ever, discussed by
>the EE professors. Second, the IEEE, in its infinite wisdom, chose to assign
>the same name, resistance, to both types, dissipative and non-dissipative,
>resulting in the present confusion."
>
>Walt, W2DU
>

Hi Walt,

Good to see you back and in the saddle.

As for coverage by EE professors. This was topic one of day one of EE
101 for me from a practical Engineer (from the local HP plant) serving
on the school's academic faculty. Only the academics (and we have one
doktor who never seems to quite "get it") demand these split hairs.

I would offer that the notion of "non-dissipative" resistance is like
a duck-billed platypus - except that "non-dissipative" resistance is a
barren invention of man.

What purpose does this distinction make? To answer that energy went
away without being rendered into heat (deceleration of charge)?

Saying so in so many words as above clearly does not cry for the
invention of a term and is far more understandable.

I would add that there are many more resistances that are discussed in
the trade that need no new vernacular. One bearing on this notion of
heat is found in "Thermal Resistance." It properly identifies
dissipation as the transfer of energy from source to sink and doesn't
need to prostitute language for the re-invention of a word to describe
what language already encompasses.

If everyone were to suddenly lose this expression ("dissipationless"),
the world would not collapse overnight, and in all likelihood, the
communication of what that corrupted term meant would probably occur
far more satisfactorily. This is because that communication would not

be fighting language and presenting paradoxes of half mumbled perversions of meaning to fit this term into a dialog.

73's
Richard Clark, KB7QHC

4839. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 20:55:52 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <sPvr6.7616$fw6.611295@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168613

Bill:

Interesting story, no surprise.

I would not waste my time or Chip's in complaining to Yahoo. I know why he wants to exclude me from the list, which is fine with me since its his list. I was simply interested in browsing the archives.

I think its a bit amusing that Phil and Chip keep announcing the QST to "all interested hams" but the list moderator (chip) ultimately excludes those whose opinions differ from his. In announcing the QST, they should stipulate that it is not an open forum and that it is heavily moderated and filtered to exclude opinions that differ from Chip's (at least that's the way it appears).

I also think that this recent surge of Phil posts is timed with the n1ir.com web page, soon to come on line.

Steve VE9SRB

"Bill Aycock" <baycock@hiwaay.net> wrote in message
news:3AACE54E.DE709419@hiwaay.net...
> Steve- you should try complaining to the Yahoo groups people. Once-
> Fracky cut me off the list when it was egroups, because of something I
> said here. I asked the support people to look into it (I had had no
> notice)- HIs reaction was quick and a real temper-tantrum- But- he put
> me back on the list.
>
> Apparently they told him to be good and live up to their "terms of
> service". If I remember right, keeping you off the list for something
> that did not happen on the list is a violation. It might be interesting
> to see what their reaction is.
>
> I have left the list, voluntarily, since then. I left because there was
> nothing there. No posts were published without editing by fracky to
> comply with his views.
>
>
> Bill-W4BSG
>
> VE9SRB wrote:
> >
> > QST - HA!
> >
> > I tried to join and received a polite message that the moderator would
not

> > approve my membership. I guess its a selective group of "all interested
> > hams".
> >
> > "Fractenna" <fractenna@aol.com> wrote in message
> > news:20010309221234.02033.00000704@ng-cu1.aol.com...
> > > I'd like to pass along this invitation for all interested hams to join
us
> > on
> > > the fractal antenna reflector. This is the primo forum on the web for
the
> > > discussion of fractal antennas. Moderated, lively, and filtered for
spam
> > and
> > > off topic comments this is the home of fun feedback on a ham-grown
> > technology.
> > >
> > > Dr. Cohen participates in this forum and it is the only one he
responds to
> > on
> > > the web.
> > >
> > > To join:
> > >
> > > fractalantenna-subscribe@yahoogroups.com
> > >
> > > 73
> > > Phil N1ZKT

4840. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:02:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAE8AF3.D7A7FE4E@IEEE.org>
Source record: 168615

Dan Richardson wrote:
> I don't know what you are smoking but I feel you are off the subject..
> The subject is as I understand it is on tuning ANTENNA TUNERS and a FS
> meter works very good for that purpose. Far field, near field or
> inbetween field makes no difference...

That's why they call these things threads - they may wander off in any
direction. What I'm wondering is why we go to great lengths to measure
only far fields in the mobile antenna shootouts while you are satisfied
with measureing the near field under your antenna. I am trying to learn
something from this thread. There's no criticism implied. If an FSM close
to the antenna is sufficient, why don't we do that for the mobile shootouts?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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4841. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:04:37 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAE8B65.88ED2301@IEEE.org>
Source record: 168616

Richard Clark wrote:
> However, I also think you were far enough such that this consideration
> didn't really amount to much (expect to explain some curious readings
> perhaps).

My question is: Exactly what is that consideration? If an FSM in the
near field under an antenna is sufficient, why do we go to such great
lengths to measure only the far fields during a mobile shootout?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4842. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:07:42 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAE8C1E.D634D8BB@IEEE.org>
Source record: 168617

Roy Lewallen wrote:
> If you have one antenna and want to know the best setting for your tuner
> or which feedline has the least loss, you can measure either the near or
> far field and get the information you need.

So for any single antenna, maximum near field equals maximum far field?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4843. Re: Z-match for DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:11:05 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAE8CE9.EB76CC84@IEEE.org>
Source record: 168618

Cortland Richmond wrote:
> The match is an inductor in parallel with the feed point. In combination
> with a slightly capacitive setting of the antenna, it acts as an L
> network to match the feed point to 50 ohms.

Is that called a Z-match?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4844. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:25:56 UTC
From: richardharrison@webtv.net
Message-ID: <19473-3AAE9064-1@storefull-115.iap.bryant.webtv.net>
Source record: 168520

Peter wrote:
"Thanks---"

You are welcome. Sorry I made a mistake. I wrote: "Lambda = Wavelength in meters per second". That would be a velocity, so the "per second" should be deleted.

Wavelength is the distance traveled by a wave in the time of one cycle, but it is just a distance.
The higher the frequency, the shorter the distance traveled during one cycle.

Best regards, Richard Harrison, KB5WZI

4845. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:38:01 UTC
From: Dana <dana@randomc.com>
Message-ID: <Pine.GSO.4.10.10103131637180.4371-100000@cluster2>
Source record: 168521
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I know that is right there. The 2 meter band sounds like a channel 19 cb
now.

On Sun, 11 Mar 2001, ARRL wrote:

> Date: Sun, 11 Mar 2001 07:40:46 GMT
> From: ARRL <Funny-0RG@arrl.org>
> Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.equipment,
> rec.radio.amateur.misc, rec.radio.amateur.policy,
> rec.radio.amateur.space, rec.radio.cb, rec.radio.scanner,
> rec.radio.shortwave, rec.radio.swap
> Subject: Back to 11 Meters.
>
> I left CB radio 19 years ago when I got my novice ticket. It felt good
> communicating with people that knew what they were doing and were proud of
> their accomplishments in getting licensed. Over the past year things have
> gotten shitty on the bands and operators are stupid. It sounds just like the
> CB I left 20 years ago except that the rig's readout is showing a ham
> frequency. To bad there isn't a better radio service I can go to now that the
> bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters in
> the middle of a ham band.
>
>
>
>
>

4846. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 21:57:52 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <3AAE97DB.9D6F6AA1@cybatek.fsnet.co.uk>
Source record: 168522

Hi Daivd!

US$17 inc Postage and packing, is that for international shipping too ?
If so, I'll have 3 !

Let me know ...

Cheers!

MikeT ...
M0AWS.

"David J. Windisch" wrote:

> Hi, all concerned:
>
> This discussion of preamps reminds me that after the last time I advertised
> them and thought they were gone, I found another 20-odd units in a
> mis-labeled box ..
>
> I have a few surplus predriver #1 boards, C 3988W, from the Drake TR7, which
> have 50-ohms in/out (solder posts), 20+ dB of stable adjustable gain from
> 100 KHz to above 50 MHz, and take 12V power. In the TR7, they were
> adjusted to amplify a 0.4Vpp signal to 3Vpp.
>
> I have used several on my small loops as low-noise preamps on 160-10M.
> They worked fine on a very short-lived (one evening) quickie Beverage, as
> well.
>
> In short, they make good small gain-blocks in places where needed.
>
> My main rig has a 100W PA module which is driven with about 1 or 2 mW. One
> could use this preamp in place of the PA for QRP work.
>
> They have gain-adjust pots in the second of 3 stages:
> 2N3563-SRF2281-SRF2281. Copy of schematic included.
>
> Board is 2-3/4 X 3-3/4 in.G10, and less than 3/4-in. 'thick'. You supply
> 12V power, enclosure, and 2 clip-on heat sinks for the '2281s.
>
> Any one interested at $17 ppd?
>
> 73, Dave, K3BHJ

4847. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 22:29:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAE9F33.567F3B6@eznec.com>
Source record: 168523

Bingo!

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > If you have one antenna and want to know the best setting for your tuner
> > or which feedline has the least loss, you can measure either the near or
> > far field and get the information you need.
>
> So for any single antenna, maximum near field equals maximum far field?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4848. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 22:42:12 UTC
From: h <not@aol.com>
Message-ID: <tat8e76alggt30@corp.supernews.com>
Source record: 168524
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

When a person comments on spelling they admit they have lost the argument
and are looking to salvage a savaged ego.

--
Sincerely,
Ken
pwrguy@intergrafix.net
"Jeff Mayner" <bk43@pacbellsucks.net> wrote in message
news:tanj59680kfgec@news.supernews.com...
>
> "Dwight Stewart" <stewartx@sccoast.net> wrote in message
> news:B6D0D9A5.4ED1%stewartx@sccoast.net...
> > TR@sky.net wrote:
> >
> > > Funny-0RG@arrl.org wrote:
> > >
> > >> I left CB radio [snip]
> > >
> > > 0 2 4 6 8 10
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > /
> > > TROLL-O-METER
> >
> >
> > You need to get your meter checked, TR. This message was way too
> > transparent to rate a ten. It also lacked the style and sophistication
to
> > be a highly rated troll. My meter still shows it as less than a one
(and
> > its a generious meter).
>
> Then you need to get a new meter. His meter detected a troll, period.
Don't
> you think that something as dumb as a meter would register a 10 on, as you
> say, something as transparent as "ARRL's" post? Also, try using your spell
> check. When a person flames another but in the process misspells a simple
> word as "generous", they tend to lose all credibility.

>
> Jeff
>
> >
> >
> > Dwight Stewart (W5NET)
> >
> > http://www.qsl.net/w5net
> >
>
>

4849. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 22:43:56 UTC
From: h <not@aol.com>
Message-ID: <tat8hifkhkv85f@corp.supernews.com>
Source record: 168525
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

A good troll gets people upset enough to respond. A great one gets
complaints to various organizations and federal agencies.

--
Sincerely,
Ken
pwrguy@intergrafix.net
"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6D1CB29.52D1%stewartx@sccoast.net...
> Jeff Mayner wrote:
>
> > "Dwight Stewart" wrote...
> >>
> >> TR@sky.net wrote:
> >>
> >>> Funny-0RG@arrl.org wrote:
> >>>
> >>>> I left CB radio [snip]
> >>>
> >>> 0 2 4 6 8 10
> >>> /
> >>> /
> >>> /
> >>> /
> >>> /
> >>> /
> >>> /
> >>> /
> >>> TROLL-O-METER
> >>
> >>
> >> You need to get your meter checked, TR. This
> >> message was way too transparent to rate a ten.
> >> It also lacked the style and sophistication to
> >> be a highly rated troll. My meter still shows
> >> it as less than a one (and its a generious meter).
> >
> > Then you need to get a new meter. His meter
> > detected a troll, period. Don't you think that
> > something as dumb as a meter would register a
> > 10 on, as you say, something as transparent as
> > "ARRL's" post? Also, try using your spell check.
> > When a person flames another but in the process

> > misspells a simple word as "generous", they tend
> > to lose all credibility.
>
>
> It was a joke, Jeff. There isn't a meter, and my message wasn't a
flame.
> And I certainly wasn't seeking "credibility" with nonsense such as this.
>
> As for the fake meter, it isn't an on/off meter (on for troll, off for
no
> troll). It is a meter that rates a troll on a scale from one to ten.
Since
> this troll was so obvious, it simply doesn't rate very high as a troll in
my
> opinion.
>
> However, since you control your own fake meter, you're free to rate the
> troll how you want. And I assure you that I will not hold your troll
rating
> against you. [insert big grin here]
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

4850. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 22:45:32 UTC
From: h <not@aol.com>
Message-ID: <tat8kc4mu90s8f@corp.supernews.com>
Source record: 168526
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

That's impossible. Nothing can be as bad as ch19. But then again I drive a
truck into NYC each day.

--
Sincerely,
Ken
pwrguy@intergrafix.net
"Dana" <dana@randomc.com> wrote in message
news:Pine.GSO.4.10.10103131637180.4371-100000@cluster2...
> I know that is right there. The 2 meter band sounds like a channel 19 cb
> now.
>
> On Sun, 11 Mar 2001, ARRL wrote:
>
> > Date: Sun, 11 Mar 2001 07:40:46 GMT
> > From: ARRL <Funny-0RG@arrl.org>
> > Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.equipment,
> > rec.radio.amateur.misc, rec.radio.amateur.policy,
> > rec.radio.amateur.space, rec.radio.cb, rec.radio.scanner,
> > rec.radio.shortwave, rec.radio.swap
> > Subject: Back to 11 Meters.
> >
> > I left CB radio 19 years ago when I got my novice ticket. It felt good
> > communicating with people that knew what they were doing and were proud
of
> > their accomplishments in getting licensed. Over the past year things
have
> > gotten shitty on the bands and operators are stupid. It sounds just
like the
> > CB I left 20 years ago except that the rig's readout is showing a ham
> > frequency. To bad there isn't a better radio service I can go to now
that the
> > bands are full of idiots. Thanks FCC, Thanks ARRL, I'm back to 11 meters
in
> > the middle of a ham band.
> >
> >
> >
> >
> >
>

4851. Re: Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:07:49 UTC
From: jcarver@netusa1.net
Message-ID: <3aaea83b.4416079@news.netusa1.net>
Source record: 168527

Thanks much!On Tue, 13 Mar 2001 17:48:44 +0100, "Kai-Uwe Hoefs, DL1AH"
<dl1ah@agcw.de> wrote:

>John H. Carver Jr. <jcarver@netusa1.net> schrieb in im Newsbeitrag:
>3aad7243.56243@news.netusa1.net...
>> Can anyone tell me where I can find information on Spiderweb and or
>> Telarana wire log periodics?
>
>Take a look into the ARRL Antenna Book, at least the Telarana and wire-stuff
>for 80/75 and 40m are described.
>
>73, Kai
>
>
>

4852. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:13:53 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <v8atatgmm4o2l6ar79ec6kperh9cl3g0bu@4ax.com>
Source record: 168532

On Tue, 13 Mar 2001 15:02:43 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Dan Richardson wrote:
>> I don't know what you are smoking but I feel you are off the subject..
>> The subject is as I understand it is on tuning ANTENNA TUNERS and a FS
>> meter works very good for that purpose. Far field, near field or
>> inbetween field makes no difference...
>
>That's why they call these things threads - they may wander off in any
>direction. What I'm wondering is why we go to great lengths to measure
>only far fields in the mobile antenna shootouts while you are satisfied
>with measureing the near field under your antenna. I am trying to learn
>something from this thread. There's no criticism implied. If an FSM close
>to the antenna is sufficient, why don't we do that for the mobile shootouts?

I see the threads' title as L Tuner Adjustments, that is what I had
originally comment on and am know. I said nothing about shoot outs,
antenna near fields nor antenna far fields. I had said that using a FS
for antenna turner adjustments was, in my opinion, the best way.

SK on the subject.

Danny

4853. Master Mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:25:54 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AAEAC82.7D9D@bellsouth.net>
Source record: 168533

Some of you who have been around awhile remember the Master Mobile
Antenna company. Does anyone know who owns the name, its patents, rights
and other legal stuff? I am curious if they just went out of business
or were bought out by another company.

Tnx,

Jerry
K4KWH

4854. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:31:02 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <W4yr6.2395$CW3.240679@paloalto-snr1.gtei.net>
Source record: 168528
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

"Dana" <dana@randomc.com> wrote in message
news:Pine.GSO.4.10.10103131637180.4371-100000@cluster2...
> I know that is right there. The 2 meter band sounds like a channel 19 cb
> now.
>
>
Two meter repeaters are not representative of most hams - especially in any
major city. Try working some two meter SSB, or better yet, spend some time
on HF. You will find a completely different type of operator.

73 de W6DKN

4855. Re: apartment I need an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:34:30 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <CauuOnDz3y6JZB6gtCrDKEWbhMeJ@4ax.com>
Source record: 168529

"david s." <david@hedgewoodhomes.com> wrote:

>
>so my question is what is the best antenna I can put up, build, buy?
>I know I have to compromise a bit on signal quality but I will live with
>that
>
>

You might go to the ARRL site -- http://www.arrl.org

Look in the ARRL book section. They have a number of books devoted to stealth antennas -- as well as limited-space antennas. You're going to have to be inventive, working from a ground floor apartment, and these books will give you a lot of ideas.

A couple of commercial ideas -- go to http://www.hsantennas.com//index.html and look at their screwdriver antenna with their ground-level Tripod Mount.

Or go to http://www.bwantennas.com/ and look at their portable AP-10A window-mount antenna. I used one from an apartment (3rd story) and got out well.

Good luck!

Bob
k5qwg

4856. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:47:20 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98mbh0$cb0$1@neptunium.btinternet.com>
Source record: 168530

Tom W8JI wrote -

> Unless something in
> the system is poorly designed, the shield does nothing at all.
==========

Very true. Small loops in most envirinments don't need any
shielding. They are inherently so insensitive to the electric field
relative to the magnetic field, shielding offers no advantages.
Unfortunately, radio periodical publishers and editors don't have
space for dreary, un-interesting articles about simple, unscreened
receiving loops.

As a result, it seldom occurs to fresh, young experimenters to make
a recieving loop without a shield. They are beguiled to form loops
from such materials as the inner conductors of coax cable which are
much less efficient than loops formed from the outer conductors of
the same size cables.

==========
> and loops have
> real SHARP nulls when properly balanced and shielded!).
==========

But so does a short horizontal dipole. The radiating/receiving
patterns are identical except for a 90 degrees rotation. And a
horizontal dipole is insensitive to vertically polarised noise, the
most common sort.

Reg

4857. Re: Z-match for DK3 Screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:51:35 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AAEB286.18A468B6@usa.alcatel.com>
Source record: 168531

Take a look at the antenna; there's a spiral cut in the aluminum to from an
inductor between the feedpoiint and antenna base, which is grounded. A neat
solution!

Cortland

ka5s@earthlink.net

W6RCecilA wrote:

> Cortland Richmond wrote:
> > The match is an inductor in parallel with the feed point. In combination
> > with a slightly capacitive setting of the antenna, it acts as an L
> > network to match the feed point to 50 ohms.
>
> Is that called a Z-match?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4858. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-13 23:59:43 UTC
From: audiofan@hotmail.com
Message-ID: <3aaeb44a.156327@news.pacific.net.sg>
Source record: 168662

On Mon, 12 Mar 2001 10:35:09 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>pete wrote:
>> Would that 1/2WL dipole be the 17.4 inches (each element) one?
>
>Yep.

And would 34.8 inch-per-element be a full WL, and 69.6 inch be 2WL?
Just trying to understand the math here, never done this before....

>> I plan to use some RG 58 type coax for the TL, say about 10 feet long.
>> Would there be any special concerns?
>
>If you are going to use coax, go with the 17.4" each element. You
>can obtain more gain (directivity) with a 7.25' center fed dipole

err..you mean 7.25 inch I presume :-)

>but some sort of matching network is usually required. Your first
>attempt with the dipole will probably not be resonant on exactly
>161.45 MHz.

Thank you for that reminder. Since I don't own an SWR meter, is it
possible to tune the antenna by just measuring the current to the
tranceiever during tx (its actually a 12-V set) and trimming the
antenna for a peaking of the 12V current? Are there
other ways of checking for resonance of antennae?

>--
>http://www.mindspring.com/~w6rca
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4859. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:04:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98mceu$et1$1@neptunium.btinternet.com>
Source record: 168534

Gary Peach wrote
> Yet again US demonstrates it special ability at (accurate)
friendly fire.
> No wonder they get so good at it, they get enough practice.
==========
Gary, keep your powder dry and expect invitations to attend tea
parties in Boston, Mass not Lincs.

You may also find yourself charged with the serious offence of
grosse ingratitude relating to 1942-45

Reg, G4FGQ

4860. Re: Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:12:23 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3AAEB767.D7FD9745@netdoor.com>
Source record: 168536

Have you checked out Tennadyne Log Periodics? It is probably
"tennadyne.com". for the web.

Butch

"John H. Carver Jr." wrote:

> Can anyone tell me where I can find information on Spiderweb and or
> Telarana wire log periodics? Heard a mention of this on the radio
> last week and have been looking ever since. Did a web search and came
> up with two dead links and a bunch of pages for spiderweb software.
> Thanks.
> John

4861. Re: Vertical with 4 radials

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:13:40 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98md0i$r2j$1@uranium.btinternet.com>
Source record: 168535

Roy Lewallen wrote -
> You're a clever person,
==========
Roy, how would you know ? ;o)

Reg.

4862. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:22:12 UTC
From: kb7qhc@home.com
Message-ID: <3aaeb7ed.974667918@news.seanet.com>
Source record: 168537

On Wed, 14 Mar 2001 00:04:16 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Gary Peach wrote
>> Yet again US demonstrates it special ability at (accurate)
>friendly fire.
>> No wonder they get so good at it, they get enough practice.
>============================
>Gary, keep your powder dry and expect invitations to attend tea
>parties in Boston, Mass not Lincs.
>
>You may also find yourself charged with the serious offence of
>grosse ingratitude relating to 1942-45
>---
>Reg, G4FGQ
>
>

Hi Gary,

I am sure you can tolerate your kinsman, as can we all once we
appreciate that punchinello is only trolling us - yet again. He
must've lost his first true love to an overpaid oversexed overhere
american. ;-)

73's
Richard Clark, KB7QHC

4863. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:25:37 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaeb985.121042575@news.accessunited.com>
Source record: 168538

On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch"
<rodenkir@spawar.navy.mil> wrote:

>Tom: what if the antenna's location is at sea level? My yard is at sea
>level, hell, it's at the edge of a tidal creek fed by the ocean and a couple
>of rivers. Any concern with height then? Regards, Jim R.

I think like a land-lubber. Of course it helps next to the sea,
because that is your terrain!

I couldn't resist making that comment because my neighbor always
insists he gets out well on HF because he is 950 feet ASL. Since the
sea is 250 miles east, that really doesn't matter.

73 Tom

4864. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:30:15 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaeba73.121280935@news.accessunited.com>
Source record: 168539

On Tue, 13 Mar 2001 14:29:07 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Bingo!
>
>Roy Lewallen, W7EL

The extreme of that is you can simply measure current into the
feedpoint, or voltage, and tune the tuner for maximum.

When the antenna is unchanged, you can measure FS anywhere and get a
good answer.

BTW, even 1 wl is plenty for your shootouts. I certainly wouldn't
worry about being out ten.

The exception would be if some clown brings a mobile antenna a few
wavelengths long.

73 Tom

4865. Re: Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:32:54 UTC
From: pro-2006@xxxspam.net
Message-ID: <3aaebc04.45031257@news.vnet.net>
Source record: 168540

You might want to check out www.kmaantennas.com
73
Pete

>>> Can anyone tell me where I can find information on Spiderweb and or
>>> Telarana wire log periodics?
>>
>>Take a look into the ARRL Antenna Book, at least the Telarana and wire-stuff
>>for 80/75 and 40m are described.
>>
>>73, Kai
>>
>>
>>

4866. Screwdriver mounting...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:43:01 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3AAEBD7B.CC31FD9B@netdoor.com>
Source record: 168541

I want to mount my screwdriver antenna on my 94 buick century. I would like to mount it on the bumper, but can't see screwing up the vynal (/) / plastic permantly on the thing. Has anyone cut holes for a ball mount in the side rear quarterpanel and was it (the aluminum panel) sufficient to support the antenna without overstressing the car's quarterpanal? Trunk mount with ball into the trunk top or bottm near the keyhole? My other car was no sweat for mounting hada trailer mt.

Dealers want a fortune to install a trailer hitch, Ryder's quote was near 300.00 tooooooo much!

Butch

4867. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:51:01 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaebb4d.121499126@news.accessunited.com>
Source record: 168542

On Tue, 13 Mar 2001 13:25:46 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom, W8JI wrote:
>"You have neglected capacitance from the base of the antenna to the
>vehicle and the lead to the base of the antenna mount."
>
>I am not sure, but Tom may be saying that a shielded/screened coil has
>less circulating current or more circulating current than the same coil
>as a segment of the vertical antenna.

The capacitance of the antenna base to chassis, and capaciatnce of the lead to the inductor to the chassis, and the inductor (past the winding start) to the chassis all increase the current in the inductor without contributing radiation.

Loss increases from that unnecessary current.

The antenna itself and ground system have no change in loss, only the inductor. That change is significant.

The neat thing is if you measure the input resistance of the antenna system it can actually drop as losses increase.

73 Tom

4868. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 00:54:41 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <98mfgh$i19$1@nnrp1.phx.gblx.net>
Source record: 168543

Roy Lewallen <w7el@eznec.com> wrote:
: Michael Hart wrote:
: >
: > I understand that a "Patent pending" is a warning. It is my understanding
: > that if the patent does get through and you have already made the invention
: > before the patient is issued you are still libel to the patent owner for
: > infrigment. I am not a lawyer either but I think this is the case -
: > particularly if you have been warned.

: Consider the patent application process. A person applies for a patent.
: The application contains a handful of claims which describe precisely
: what combination the patent is to cover. The patent examiner throws out
: a bunch of the claims, says others are too broad, and sends it back. The
: applicant re-writes the patent to try to satisfy the examiner, and so
: forth. This can go on for literally years. The result is frequently a
: patent that hardly resembles the original, and often no patent at all.
:

I've been very fortunate with all of mine, so far. Of the two
that have been issued, the one that is now allowed, and the one that I'm
still prosecuting, I have managed to get all of my claims. I've had to
rewrite a number of them because they were not descriptive enough as
originally filed to be patentable over prior art, but by working with the
examiners (provided that they understand that pro se applicants are
entitled to constructive assistance by law) and being fortunate to have
a patent attorney who helps me on a consultation basis, the problems are
ironed out very quickly.

I have had to combine two claims as one a couple of times in order
to make a basis claim stand on it's own, but that still counts as having
all claims granted. Before this year is over, I will have six in all and
there are three more yet to come.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \

'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4869. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 01:04:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98mg3bmjd1@neptunium.btinternet.com>
Source record: 168544

Rich wrote -
> If I remember correctly, you guys were typically within 10
wavelengths
> or less and could have been measuring the more complex near
fields
> whose geometry is notably different from the typical vertically
> polarized signal - as launched.
==========
Being inside the near field is not of great consequence when the parameter of interest is the received signal strength for a given Tx power. Provided, of course, the Tx to Rx distance is the same for all measurements it doesn't matter what the distance is. The near and far fields vary precisely in sympathy with each other. They are just two different ways of looking at one common field. The parameter being measured and compared is a simple ratio - radiating efficiency.

Taking the risk of bringing retribution down upon myself, I think a more accurate way of comparing radiating efficiencies would be to bring a simple hand-held field-strength measuring instrument well inside the near field. Then walk all round the antenna under test at a constant distance from it and take the average reading. Absolute accuracy of the meter is irrelevant since our intention is merely to compare one antenna with another. But no self-respecting amateur would accept this as a genuine shoot-out.

Reg.

4870. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 01:42:59 UTC
From: richardharrison@webtv.net
Message-ID: <3597-3AAECCA3-88@storefull-113.iap.bryant.webtv.net>
Source record: 168545

Walter Maxwell, N2DU wrote:
"My second edition of Reflections is about to go to print and hopefully copies will be available at Dayton."

It is good to hear that the long awaited new "Reflections" will soon be available. Upon visiting the "Wireman`s Web Site" some time ago, I saw that he was offering reservations or taking orders for Walter`s new book for delivery as soon as issued. The Wireman opined that if you already weren`t familiar with "Reflections", you acutely needed to be on the waiting list to get a copy of the new issue at the earliest possible date!

Best regards, Richard Harrison, KB5WZI

4871. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 02:37:41 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <VPAr6.3$t55.1070@news7.onvoy.net>
Source record: 168546

Do you use an external antenna on your field strength meter or the short whip on the meter? If the short whip on the meter, and in the shack, could there
be false readings by stray rf in the shack? I have considered using a field strength
meter but have not as of yet. (don't know why)

> I don't know why everyone goes through such worries regarding tuning a
> tuner.. For years (read over 45) I have used a relative field strength
> meter and just tuned for maximum smoke.
>

4872. Re: Screwdriver mounting...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 02:39:48 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <4SAr6.2701$sc6.63549@news3.atl>
Source record: 168547

Hi Butch,

I have my screwdriver mounted 33" off the ground on a "L" bracket we formed with "L" stock. with a welded brace to keep shaking to a minimum. It's mounted to the frame with ONE bolt and has not required ANY maintenance what so ever in over half a year AND that includes running into the garage without quick disconnecting the stinger (a definite no-no). The mount over runs the bolt, so limiting all rotational movement past vertical. Also easy off!
--
73's from W4BEN,
Benjamin Blavat

"Butch Magee" <lynyrd@netdoor.com> wrote in message
news:3AAEBD7B.CC31FD9B@netdoor.com...
> I want to mount my screwdriver antenna on my 94 buick century. I would
> like to mount it on the bumper, but can't see screwing up the vynal (/)
> / plastic permantly on the thing. Has anyone cut holes for a ball mount
> in the side rear quarterpanel and was it (the aluminum panel) sufficient
> to support the antenna without overstressing the car's quarterpanal?
> Trunk mount with ball into the trunk top or bottm near the keyhole? My
> other car was no sweat for mounting hada trailer mt.
>
> Dealers want a fortune to install a trailer hitch, Ryder's quote was
> near 300.00 tooooooo much!
>
> Butch
>

4873. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 03:08:20 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <uvntatgsicr4sc9j6o8u5ql3vjqlrsfhng@4ax.com>
Source record: 168548

On Wed, 14 Mar 2001 01:04:57 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>But no self-respecting
>amateur would accept this as a genuine shoot-out.
>----
>Reg.

Hmm,

and which side of the fence do you inhabit? :-)

73's
Richard Clark, KB7QHC

4874. the X beam

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 03:13:35 UTC
From: thompson@mindspring.com
Message-ID: <98mntgjrd1@nntp9.atl.mindspring.net>
Source record: 168549

I gave contesters and Dxers a challenge to build a G4ZU Birdcage for either 80 or 160 a couple of years ago. I don't know of anyone who has one, but I do know that many are looking for
a way to improve their signal over a four square or even a set of K8UR vertical dipoles. The G4ZU birdcage (see CQ Magazine
April 1960) is a 2 el quad folded back on itself G4ZU found that using just a portion of the birdcage (the bottom X) gave
almost the same results. He labeled this the X beam. Moxon G6XN noted the defect with the X beam was spurious radiation off the
sides. W9PNE used wireback wires to cut these side emissions (See the ARRL Antenna Compendium Vol 1). There was an excellent article in a 1991 73 magazine, too.

I have used the X beam with wirebacks on 12 meters for 6 years and have worked 306 DXCC countries. W9PNE says it performs like a 3 el beam on the design band, but its only a 2 el beam with driven element and director (very close spacing) so I feel that it has or approaches 5DBd of a 2 el beam. It does compete with the A3WS and similar beams. This could be adapted to 80 meters and since it has NO BOOM (it appears as a 64+ foot X) this appears to have reasonable probability of giving one a 5Dbd directional beam on 80. It has fairly wide 2 to 1 swr footprint but would probably require relays to switch
between CW and SSB (3505 and 3795).

This beats or exceeds most of the short beams on 80 and would be a lot less trouble to maintain. On 12 I have 10 to 15 DB front to back
and 25DB front to side with sharp nulls at several points. It is 5.5 feet below my KT34XA and does not seem to interact. I would guess
it would need to be 10 feet or more away from a 40 meter beam.

Any takers? If I can find the right materials I would put one on my tower but its at a max now.

73 Dave K4JRB

4875. FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 03:23:20 UTC
From: fractenna@aol.com
Message-ID: <20010313222320.02067.00001270@ng-cu1.aol.com>
Source record: 168550

Boston will be the scene for some fun fractal doin's in July. In addition to a special session on fractal antennas, Dr. Doug Werner will be giving a short course on fractal antennas. (There will be some very interesting 'fractal' surprises at the meeting also. Boston is the home turf of Fractal Antenna Systems, Inc.)

Here's a description from the web page

http://www.ewh.ieee.org/soc/aps/2001/workshop/WorkshopShort.htm

---

FRACTAL ANTENNAS SHORT COURSE

Course Outline: Fractal electrodynamics is a relatively new and rapidly growing field of research that deals with combining attributes of fractal geometry with Maxwell’s theory of electromagnetism. One of the newest areas of fractal electrodynamics research concerns its application to antenna engineering, which promises to yield a rich class of new designs for multiband antenna elements as well as arrays (D.H. Werner and R. Mittra, Frontiers in Electromagnetics, IEEE Press, 2000). This short course will present an overview of research in the area of fractal antennas. Recent advancements in the fundamental theory and associated design methodologies for fractal antennas will also be discussed.

Various fractal design schemes will be considered for antenna elements that, due to self-similarity in their geometrical structure, have a multiplicity of resonances over some predetermined operating bandwidth. In other words, these fractal antenna elements exhibit multiband or, in some cases, even broadband behavior which is directly linked to the fact that their main geometrical feature is repeated at many different scales within the structure. Innovative techniques for developing compact low-profile antenna elements using fractal geometric concepts will also be discussed.

Another topic that will be addressed in this short course concerns the use of fractal concepts in the design of antenna arrays. Fractal arrays offer several attractive advantages over conventional array designs including multiband/broadband properties, the availability of recursive algorithms for rapid radiation pattern computations, schemes for realizing practical low sidelobe designs, systematic approaches to thinning, and efficient design strategies for large planar arrays. Finally, the design of multiband fractal frequency selective surfaces will also be briefly discussed.

Fractal element antennas are patent and patent pending by Fractal Antenna Systems, Inc.

73
Phil
de N1ZKT

4876. Re: 800MHz+ Standard Gain Antenna for Chamber

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 03:39:46 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AAEE802.944263B6@dialpoint.net>
Source record: 168551

Look in some of the ARRL books for the standard gain antenna for the standard gain antenna. It is for 432 mhz, but you should be able to scale it for 800 mhz. It is something like a 1/2 wave dipole over a reflector/ground plane that is 1 wavelength square. They say it is from the National Burau of Standards, now called something else. It is for 7.7 db over an isotropic antenna and should be reproduciable to within about .25 db.

Ron Zancola wrote:
>
> I'm putting a basic anechoic chamber together at work and I'm looking
> for a standard gain test antenna (or design I can build in the lab).
> I've seen EMC antennas from 30MHz or 150 MHz to 1GHz and they are
> HUGE!!!! I need to handle 800MHz up (to at least 1GHz, ideally to
> 2.5GHz). After 1GHz there are some reasonably priced horns but below
> 1GHz they are bigger as well as expensive.
>
> Can anyone make any suggestions? I've looked at EMCO, AR and one or
> two other vendors but they don't have anything that starts as high as
> 800MHz.
>
> Thanks...

4877. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 03:44:33 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <t2ntat0qq0qfvh0p85v0l2iqck4l1nouem@4ax.com>
Source record: 168553

On Tue, 13 Mar 2001 15:04:37 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> However, I also think you were far enough such that this consideration
>> didn't really amount to much (expect to explain some curious readings
>> perhaps).
>
>My question is: Exactly what is that consideration? If an FSM in the
>near field under an antenna is sufficient, why do we go to such great
>lengths to measure only the far fields during a mobile shootout?

Hi Cecil,

That is a very simple question which has a very simple answer.

Variation.

In other words, there is some variation as each contestant "comes onto
the field" so to speak. If this were your shack with the FSM nearby,
you would always be making the same measurement - this may not be the
case in the shootout (the antenna configurations do vary, that's the
point of the shoot out isn't it?). And

However, as all antennas are extremely short - by enforcement - I
would allow that each and every near/far field is identical in
geometry if not amplitude. Thus this first consideration of variation
does not seem to account for much.

But the simple answer still stands with a simpler application. Each
mobile unit moves and by moving does not occupy the same place the
last unit did. Well, maybe you tried your best to hold that variable
down. If you did, you were conscious of the possible effects of one
unit being closer than another. Here, distance is your friend in that
if the FSM were a hundred feet away, you would have to hold the
radiator to one place +/- 1 foot for 1% accuracy. By moving out to
1000 feet, the variation of 1 foot is lost in the noise.

By moving out a greater distance, you can allow for more tolerance in
just what constitutes the shoot-out point of radiation. I noted that
some rigs had directionality that was observed as they turned during
transmission. If you were too close, this could have been an artifact
of variation in distance rather than radiator efficiency.

This last variation still constitutes a small percentage of error, but
is far more prone to becoming the loss leader if neglected (like my
observation of the turning unit). It has a very simple resolution:

move out further! This is cheap accuracy - you don't get many chances to shave points.

The simple resolution is not without simple problems tho'. Measuring a weaker signal is not the problem. You already bought into that cost by measuring remotely. No, more the problem is multipath where reflected signals will compete at possible greater ratios than closer in where the original signal can swamp artifacts of reflection. This may not be such a problem given that all contestants will suffer equally - except for those same units that exhibited directionality.

As for these sources of reflection, you might want to consider every contestant and that field is changing with every measurement. Are they out 10 wavelength's? There is no point in these tuned elements being anywhere near the source nor the FSM.

As a variation to your practice, Cecil, you might as well put out three FSM's, radially, at 2 waves, 5 waves, 10 waves or some variation to suit the occassion. This is insurance against the odd failure or other examples from hyper-gain inventors. Call it fractsurance. You could even pull those FSM's in to .25 wave, .5 wave, 1 wave. IFFF you can assure that what you call the radiation source is located at a specific point within the limits of accuracy you desire - n'est pas?

As for accuracy....

73's
Richard Clark, KB7QHC

4878. Re: Screwdriver mounting...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 03:51:07 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AAEEAAB.44F8@bellsouth.net>
Source record: 168552

Butch,

Look up under the bumper. There *should* be a piece that runs across the car sort of like angle iron (L-shaped with the "lip" of the "L" towards the front. There also may be some holes at various points across this piece. I have a Lumina and I was able to mount my bracket straight out from under the plactic fascia at an existing hole. This also allowed me to brace the screwdriver right under the trunk lid. I am thinking the Century *may* be similar to the Lumina. If you choose this location, you may have to re-inforce that cross piece and add a brace to another place on the same metal. This is to reduce shaking as the L piece is rather light weight and will jiggle if not braced.

If you decide to body mount the thing with a ball, I should think the sheet metal won't be heavy enough by itself. Go to a metal recycling yard and get some 1/8" metal somewhat larger than the base of the ball mount. Use the template to cut out the holes. Put this plate inside the fender and mount to this thru the body. This will spread the load out and make for a secure mount.

Not sure how to mount a screwdriver on the rear deck of a car. Screw-drivers are HEAVY, and present a good deal of wind load. You've only got that little 3/8" stud holding it (if it is mounted like most of 'em) and you're sure to need some kind of solid brace about halfway up the mast. Same if it's on the fender. On the deck, there's nowhere to attach this brace. (drill holes in the roof? YIKES!)

Good luck and hope this helps.

Jerry
K4KWH

Butch Magee wrote:
>
> I want to mount my screwdriver antenna on my 94 buick century. I would
> like to mount it on the bumper, but can't see screwing up the vynal (/)
> / plastic permantly on the thing. Has anyone cut holes for a ball mount
> in the side rear quarterpanel and was it (the aluminum panel) sufficient
> to support the antenna without overstressing the car's quarterpanal?
> Trunk mount with ball into the trunk top or bottm near the keyhole? My
> other car was no sweat for mounting hada trailer mt.
>
> Dealers want a fortune to install a trailer hitch, Ryder's quote was
> near 300.00 tooooooo much!
>
> Butch

4879. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 04:03:51 UTC
From: k6mhe@arrl.net
Message-ID: <3aaeecf0.7240638@news.mcn.org>
Source record: 168556

You're just trying to get the maximum power out of the tuner. If you have common mode problems doesn't take away from the fact that when you tune for maximum smoke (maximum reading on the FS) you've adjusted the tuner about as good as you're going to do. There are no false readings maximum out is maximum out.

Danny

On Wed, 14 Mar 2001 02:37:41 GMT, "Rosco" <rvaagen@nospam.hotmail.com> wrote:

>
>Do you use an external antenna on your field strength meter or the short
>whip on the meter? If the short whip on the meter, and in the shack, could
>there
>be false readings by stray rf in the shack? I have considered using a field
>strength
>meter but have not as of yet. (don't know why)
>
>
>> I don't know why everyone goes through such worries regarding tuning a
>> tuner.. For years (read over 45) I have used a relative field strength
>> meter and just tuned for maximum smoke.
>>
>
>

4880. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 04:18:43 UTC
From: mike.luther@ziplog.com
Message-ID: <tats93dsdoc516@corp.supernews.com>
Source record: 168554

In <3aaeb985.121042575@news.accessunited.com>, 2w8ji@akorn.net (Tom W8JI) writes:
>On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch"
><rodenkir@spawar.navy.mil> wrote:

Oh how saddly true .. Tom ..

>I think like a land-lubber. Of course it helps next to the sea,
>because that is your terrain!

>I couldn't resist making that comment because my neighbor always
>insists he gets out well on HF because he is 950 feet ASL. Since the
>sea is 250 miles east, that really doesn't matter.

>73 Tom

Wait until you are 1000 miles from etither the East or West coast on low
band and see an even greater 10 DB or worse signal!

And sand makes it even worse!

VOA never seems to put propaganda stations in the middle of the dessert
of they can avoid it and neither do the other guys.. ;)

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

4881. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 04:22:52 UTC
From: matjake@aol.comns
Message-ID: <20010313232252.06823.00000957@ng-cr1.aol.com>
Source record: 168555

>I would come up to
>your apartment with my climbing gear on and climb up and down your back.

Ooooooooooohhhhh those gaffs will leave a few nasty marks.

4882. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 04:49:03 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98mtk6lkl1@slb4.atl.mindspring.net>
Source record: 168558

"Raymond Hansmeier" <rhansmeier@home.com> wrote in message
news:3AADB185.1C58F034@home.com...
> Yes the cable system usually disconnects the connection in theory. But
after 20
> years in the cable biz I know there are many lazy employees who prefer to
do the
> disconnects on paper rather than climbing the pole or putting up the
ladder.
> Then there are the employees who do put up the ladder but disconnect in
error
> the neighbors house. Most of the time the loose end is screwed into
special
> terminator that locks the port on the subscriber tap to prevent theft of
> service. All in all this is a terrible idea and should not be attempted.
Ok...

>What is
> to say one day you are transmitting away unaware that a employee is
climbing
> that pole to connect someones service other than yours and he grabs the
end of
> your unauthorized connection while transmitting 100 watts and he is thrown
off
> the pole with a nasty RF burn. If he lives through the fall. I would come
up to
> your apartment with my climbing gear on and climb up and down your back. I
have
> been a ham for 30 years and in the cable biz for 20....Do not attempt that
> foolish maneuver... IMHO....K7FU

Now you might direct this last part to the guy that wanted to do it instead
of the guy that agreed it was probably a bad idea and simply wanted 'Doc to
explain what he meant..

>
> KB9WFK wrote:
>
> > > >
> > > > How do you mean 'Doc? If he currently does not have cable service
then
> > > the
> > > > coax will run from his wall plate to a junction box where it will
hang
> > > > disconnected. It doesn't get connected until he subscribes to a
cable

> > > > service. The cable company then sends a tech out to physically
connect
> > > the
> > > > coax to the service.
> > > > Were you referring to induced signals ?
> > > > And you are right about the ownership of the cable but if it
doesn't
> > > cause
> > > > any interference and he never keys while the cable guy is hooking
> > someone
> > > > else up (ouch), would there really be any harm? I think that is
more of
> > a
> > > > moral decision.
> > > > Just wondering...
> > > > KB9WFK
> > > Not so on all cable systems.. ours though we dont subscribe is
connected
> > all
> > > the time- they sell the desrambling box upon subscription and install
> > that..
> > > As Doc says it's still a poor Idea.. just asking for problems. IMHO.
> > > 73 Dave
> > >
> > I don't necessarily disagree about asking for problems, just wondering
where
> > the problem was. From my experiences, even though the cable company
rents
> > you the box they still disconnect the cable when service is stopped to
keep
> > you from buying a "pirate" descrambler. That is what Time Warner/ AT&T
does
> > anyway. YMMV
>

4883. WTB: MFJ-971 portable ant. tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 04:50:49 UTC
From: John Morris <moe@email.msn.com>
Message-ID: <OY5zhJErAHA.279@cpmsnbbsa07>
Source record: 168361

Subject says it all. If you've got one extra to your needs, let me know price.

Thanks

John-WB0RLD
moe@msn.com

4884. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 04:53:59 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D46397.5D2A%stewartx@sccoast.net>
Source record: 168557
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

W6DKN wrote:

> Two meter repeaters are not representative
> of most hams - especially in any major city.
> Try working some two meter SSB, or better yet,
> spend some time on HF. You will find a
> completely different type of operator.

Sure you will, W6DKN. Have you been to 3.860 MHz lately? The two-meter operators are not any better or worse than any other ham. I take that back, at least the two-meter operators don't usually go around promoting bigotry towards their fellow hams.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4885. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 05:02:43 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D465A3.5D2B%stewartx@sccoast.net>
Source record: 168559
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Dana wrote:

> I know that is right there. The 2 meter band
> sounds like a channel 19 cb now.

The entire 4 Mhz wide 2-meter band sounds like channel 19, Dana? Oh, come on, if you're going to post nonsense, at least try to stay somewhere in the realm of reality.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4886. Re: Screwdriver mounting...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 05:22:02 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAEFFFA.265E@wt.net>
Source record: 168560

Jerry Oxendine wrote:
>
> Butch,
>
> Look up under the bumper. There *should* be a piece that runs across
> the car sort of like angle iron (L-shaped with the "lip" of the "L"
> towards the front. There also may be some holes at various points
> across this piece. I have a Lumina and I was able to mount my bracket
> straight out from under the plactic fascia at an existing hole. This
> also allowed me to brace the screwdriver right under the trunk lid. I
> am thinking the Century *may* be similar to the Lumina. If you choose
> this location, you may have to re-inforce that cross piece and add a
> brace to another place on the same metal. This is to reduce shaking as
> the L piece is rather light weight and will jiggle if not braced.
>
> If you decide to body mount the thing with a ball, I should think the
> sheet metal won't be heavy enough by itself. Go to a metal recycling
> yard and get some 1/8" metal somewhat larger than the base of the ball
> mount. Use the template to cut out the holes. Put this plate inside
> the fender and mount to this thru the body. This will spread the load
> out and make for a secure mount.
>
> Not sure how to mount a screwdriver on the rear deck of a car. Screw-
> drivers are HEAVY, and present a good deal of wind load. You've only
> got that little 3/8" stud holding it (if it is mounted like most of 'em)
> and you're sure to need some kind of solid brace about halfway up the
> mast. Same if it's on the fender. On the deck, there's nowhere to
> attach this brace. (drill holes in the roof? YIKES!)

On my car I have the antenna mounted on the trunk lid. About a foot or
so behind the back window, or maybe 6 inches or so back from the front
facing trunk lip. What I had to do was get a big circular plate of real
heavy steel and place it under the trunk metal on the inside. I was able
to squeeze it in flush with the trunk metal.
This spreads the load out quite a bit. Also I have wood spacers also
pressed in between the top trunk metal, and the inside "framing" which
they add to make the trunk stronger. This keeps the plate from being
able to flex the trunk lid. I use a hustler quick disconnect as the
stub. I don't know if it would handle a screwdriver, but most likely I
think it would as long as you didn't get carried away with the weight.
I've used that mount quite a long time and have never had any trouble.
Works good rf wise too. I think it helps to have the metal under the
antenna. MK
--

http://web.wt.net/~nm5k

4887. Heathkit Collectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 05:24:35 UTC
From: Gary <gary@heathkits.com>
Message-ID: <ngDr6.9217$6p5.840924@newsread1.prod.itd.earthlink.net>
Source record: 168561

Heathkit pictures and info on all Heathkits made (some links are not up)
http://heathkits.com book mark as your reference to Heathkit

--
Gary K�IMJ 44 years of Heathkit fun http://www.heathkits.com

4888. Re: apartment I need an antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 05:44:30 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <tau15sgaudpp43@corp.supernews.com>
Source record: 168562

I'll assume that you hold a General class license or higher.

Get a small antenna tripod, a small piece of antenna masting
and a used Solarcon A-99 fibreglass CB antenna (or
equivalent).

This combination will get you on 17, 21, 24 and 10 meters
just using the auto tuner in your Kenwood TM-450/AT and can
be disassembled and stored in just a couple of minutes. Not
to mention that it is very inexpensive.

Oh, it will stand about 20' high, but others will think that
you are getting ready to go fishing. 8>)
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"david s." <david@hedgewoodhomes.com> wrote in message
news:hqvr6.1385$%N.3327@skycache.prestige.net...
> I live in an apartment (ground floor) patio faces east
6'x8'
> I can put anything I want on the rail or out on the patio
I can setup
> something in the grass but must take it in and out when
not in use. I could
> put anything up with a max height of 12'.
>
> I am getting an kenwood ts-450 in the next week and I need
an antenna that
> will let me use it I really don't want to put up a
different antenna for
> each band. rig has a built in antenna tuner.
>
> I am willing to buy or build an antenna
>
> I just want what ever I put up to be good and work well.
>
> so my question is what is the best antenna I can put up,
build, buy?
> I know I have to compromise a bit on signal quality but I
will live with
> that
>
>

>

4889. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 05:56:34 UTC
From: richardharrison@webtv.net
Message-ID: <6647-3AAF0812-13@storefull-115.iap.bryant.webtv.net>
Source record: 168565

Richard Clark wrote:
"non-dissipative" resisiance is a barren invention of man."

Nature, not man, dictates that when you put 50 volts on an almost endless transmission line, 1 ampere flows. Man used nature`s laws to make coax that has that exact voltage to current ratio, but man can`t make the laws of nature. Man can`t even break the laws of nature.

Best regards, Richard Harrison, KB5WZI

4890. Re: Capacitance hat supports

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 05:56:39 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAF0817.466@wt.net>
Source record: 168563

jason_hsu@@@@@planetmail.com wrote:
>
> I recently purchased the W6AAQ DK3 Screwdriver antenna.
>
> I know that any sheet of metal can function as a
>
> capacitance hat. The capacitance hat must be at the top of
>
> the whip in order to be most effective. But how can I
>
> support the capacitance hat? Is there something I can
>
> clamp to the top whip to support the hat?
>
> (No, I'm not operating mobile. Thus, aerodynamics are not
>
> an issue. Also, please don't suggest mounting the antenna
>
> on the car and running the coax to my apartment.)
>
> Jason Hsu, AG4DG
>
> ----------
> Free web access to newsgroups is at
> http://www.freenewsland.com/
> ----------
How bout a lightweight thin wire hat? Of course, you would need
something to tie them off to, kinda guy wires on a tower, but they would
support the whip the same as guys. I guess you could even use a single
wire , ala inv L. You would want to keep the downward slope to a minumum
I would think. MK

--
http://web.wt.net/~nm5k

4891. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 06:06:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98n1olpcq0@208.207.71.163>
Source record: 168564

Tom W8JI wrote:
>
> There is a misplaced notion all problems
> would disappear if everyone runs 30 watts, instead of nasty things
> like 200 watts.
>

You may recall several years ago when the FCC did a power survey of several ham radio stations where they actually went to hams' homes, had them put a high power signal on the air, around a KW, then drop the power down to 100 watts. Much to the surprise of all involved, very little difference was found in the level of RFI to consumer devices between a KW and 100 watts. I always believed that the survey would have resulted in decreased maximum power limits for hams had it shown a significant increase om problems caused by running high power.
This was reported in some of the ham press. One of the areas where the testing was dome was Kansas City.
And yes indeed, there are great differences in receiver responses to off- frequency signals. I still recall when I had an original Kenwood TS520, hearing a ham who lived a half mile from me and DID run a SB220 on SSB, and I could hear him several places on the 20 meter band simultaneously. Not his fault, but rather the fairly poor strong signal handling capabilities of the original TS520's reciever. Later versions improved considerably.

Dick W0EX

4892. Re: balun vs swr

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 06:33:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAF10B5.F9E71F71@eznec.com>
Source record: 168566

Roy Lewallen wrote:
>
> I'm assuming you mean a 1:1 balun; otherwise you'll need a different
> load impedance.
>
> Your test will tell you the SWR when the balun is presented with a 50
> ohm balanced load. But you won't get any information at all about how
> well the balun is performing its intended function.
>
> If you want to test a current balun for its ability to balance currents
> in worst case operation, connect the rig to one end through your SWR
> meter. Note that there's DC continuity through the balun, so conductor A
> at the input is carried through as conductor A at the output, and the
> same for conductor B. Call the conductor connected to your rig's coax
> shield conductor B. Connect the output conductor A to the input
> conductor B with as short a wire as possible. Connect your 50 ohms load
> between this junction and output conductor A.

That last sentence should read "Connect your 50 ohm load between this
junction and output conductor B."

Thanks to John, K6QQ, for spotting the error.

Roy Lewallen, W7EL

4893. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 07:05:02 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3AAF16EC.44AD2C8F@home.com>
Source record: 168567

> Sorry I just hit the reply key. I am assuming the fellow who is interested in
> using the CATV drop for a long wire would read the threads. My comments are
> only for the fellow who wishes to use the coaxial drop. I will take more care
> the next posting.

Ray Hansmeier
K7FU

>
>
> Now you might direct this last part to the guy that wanted to do it instead
> of the guy that agreed it was probably a bad idea and simply wanted 'Doc to
> explain what he meant..
>
>

4894. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 07:07:56 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3AAF179A.90B3CDAA@home.com>
Source record: 168568

Yes the cable system usually disconnects the connection in theory. But after
20
years in the cable biz I know there are many lazy employees who prefer to do
the

disconnects on paper rather than climbing the pole or putting up the ladder.

Then there are the employees who do put up the ladder but disconnect in
error
the neighbors house. Most of the time the loose end is screwed into special
terminator that locks the port on the subscriber tap to prevent theft of
service. All in all this is a terrible idea and should not be attempted.
What is

to say one day you are transmitting away unaware that a employee is climbing

that pole to connect someones service other than yours and he grabs the end
of
your unauthorized connection while transmitting 100 watts and he is thrown
off
the pole with a nasty RF burn. If he lives through the fall. I would come up
to
your apartment with my climbing gear on and climb up and down your back. I
have
been a ham for 30 years and in the cable biz for 20....Do not attempt that
foolish maneuver... IMHO....K7FU

Keith Wood wrote:

> I'm in an condo, can't put up a wire, but there IS an unused CATV
> lead-in (75-ohm coax) running right to the room where my HF rig will be.
>
> Has anyone ever tried and had success with using the cable shielding as
> an antenna in such a case? It's disconnected at the pole, runs 25 - 30
> feet (NW - SE, dropping 10 feet) to the corner of the house, then 14
> feet along the eaves (N-S), then 9 feet vertical drop to the feed
> through.

4895. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 07:55:38 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <_tFr6.2086$Wg7.492777@dfiatx1-snr1.gtei.net>
Source record: 168469
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

So, if you know where the jerks are, why waste your time there? At least they occupy a small, known piece of the band so the trash is easy to avoid - unless you're the type that likes this stuff. (Yes, I have heard about the crap on 3.860, but I have no desire to waste my time with it)

Personally I prefer to work DX and do very little stateside work (which seems to be where most of the problem operators are on HF). I work 12, 17, 20, and 40 almost every day and I have never had anything but great QSO's. I do work VHF/UHF also, but I only do SSB or FM simplex and SATS. There are very few "garbage operators" in these modes.

At least on HF, the jerks stay in a small, relatively consistent spot and it is fairly common knowledge where they are, so they are very easy to avoid. Very different than the VHF repeaters in the big cities, where the jerks get their kicks from going from machine to machine to see what trouble they can cause (just like 11 meters).

73 de W6DKN

"Dwight Stewart" <stewartx@sccoast.net> wrote in message news:B6D46397.5D2A%stewartx@sccoast.net...
> W6DKN wrote:
>
> > Two meter repeaters are not representative
> > of most hams - especially in any major city.
> > Try working some two meter SSB, or better yet,
> > spend some time on HF. You will find a
> > completely different type of operator.
>
>
> Sure you will, W6DKN. Have you been to 3.860 MHz lately? The two-meter
> operators are not any better or worse than any other ham. I take that back,
> at least the two-meter operators don't usually go around promoting bigotry
> towards their fellow hams.
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

4896. SKY TEMPERATURE FOR HAMS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 08:19:59 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98n9gabgg1@lure.pipex.net>
Source record: 168470

It has long been a pain for me to find a simple reference that can be used by Hams to calculate the thresholds that they may expect upon each band when the receiver is connected to an antenna.
Her I have produced this important work a precis and translation of the theoretical and experimental work of David Hogg and W W Mumford of Bell Labs into a form readily useable by Hams, I know that most Hams have few if any Mathematical skills, and thsoe that do attempt a few elementary calculations are often unsure of their results. I hope that this posting will fill one gap for many.
The text and the calculations are my original work and I accept the responsibilty for any errors found.

SKY TEMPERATURE FOR HAMS
Sky Temperature Hogg and Mumford

frequency| Tsky | Min Tsky | Max Tsky | Tsun
136 kHz| 3.67E+09 K| 2.82E+08 K| 7.06E+09 K|4.96E+06 K
1.75 MHz|22,158,367 K|1,704,490 K|42,612,245 K|385,714 K
3.5 MHz| 5,539,592 K| 426,122 K|10,653,061 K|192,857 K
7 MHz| 1,384,898 K| 106,531 K| 2,663,265 K| 96,429 K
10 MHz| 678,600 K| 52,200 K| 1,305,000 K| 67,500 K
14 MHz| 346,224 K| 26,633 K| 665,816 K| 48,214 K
18 MHz| 209,444 K| 16,111 K| 402,778 K| 37,500 K
21 MHz| 153,878 K| 11,837 K| 295,918 K| 32,143 K
24 MHz| 117,813 K| 9,063 K| 226,563 K| 28,125 K
28 MHz| 86,556 K| 6,658 K| 166,454 K| 24,107 K
29 MHz| 80,690 K| 6,207 K| 155,172 K| 23,276 K
50 MHz| 27,144 K| 2,088 K| 52,200 K| 13,500 K
144 MHz| 3,273 K| 252 K| 6,293 K| 4,688 K
434 MHz| 360 K| 28 K| 693 K| 1,555 K

The first work on Sky Temperature was by Jansky,
this work was followed by
Cottony & Johler; Brown & Hazard; and a whole string of investigators.

Hogg & Mumford produced a paper for Bell Telephone Laboratories, Whippany New Jersey.

"The Effective Noise Temperature of the Sky"

In this paper they propose a formula that nearly describes the Sky Temperature Noise as a function of frequency.

Their work was checked by a number of independent investigators and observed sky noise temperatures showed close agreement to the predicted values.

Whilst reading their paper I felt that their more exact formulae could be modified to produce some simple rule of thumb work horse that many Hams would be able to use in their day to day experimentation.

As there is a variation of Sky Noise Temperature the upper and lower limits to be expected are given by the formulae:

Max Tsky = (1.305 x 10^20) / f^2

Min Tsky = (5.22 x 10^18) / f^2

You will note that there is approximately 14 dB spread between the upper and lower Sky Temperatures.

In order to avoid calculating every time that you want to have an idea of the noise temperature within a particular Ham Band refer to the table above.

For completeness I have added a column for the noise temperature of the Sun. As you will see at the low frequencies the Sun is not a great contributor to Sky Temperature and it is directional on the higher frequencies. The temperature given for Tsun is what would be seen by an antenna with 0.5 degree beam-width pointed directly at the sun. In order to adjust the Sun Temperature to your particular antenna you must divide the given temperature by: 4 x beam-width squared.

Sun Temperature is about equal to Galactic Sky Temperature at around 2 m and predominates at 70 cm, so keep that AE pointing away from the Sun for best S/N ratios and thresholds on this and bands above.

Most of the Sky Temperature is of Galactic origin and there is an increase when looking directly at the galactic centre.
With the sorts of antenna commonly encountered amongst Hams this effect will be minimal because of the wide beam widths of HF antennae. At VHF the effect will begin to become noticeable.

Straight line graphs result if this table is plotted on Log Log graph paper. You may therefore take the upper and lower point for each column plot them and join with a straight line.

At the lower HF frequencies local and distant lightening will increase the Sky Temperature occassionally, but you will notice a difference in the character of the noise sound, there are distinct pops and bangs producing noise peaks as well as an increase in the average Sky Noise Temperature.

The graph in the "RSGB Communications Handbook" Fig 15.6 is pretty well spot on. However it would be useful to see the vertical scale also calibrated in temperature.

Gary Peach G7SLL Wednesday, 14 March 2001

4897. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 09:43:10 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98od8hrgn1@lure.pipex.net>
Source record: 168497

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >However none of this negates my calculations, which are general case
> >illustrative examples. You have here a special case. the signal to noise
> >ratio will never the less still be about a dB worse than possible, so
there
> >is still some work to do.
>
> The calculations were negated before they were made, because they were
> based on incorrect data.

I really must protest at that statement, if ther has been any incorrect data then I presume that you will be claiming responsibility for it. I bend over backwards to be truthful and accurate, I never knowingly and deliberately propagate rubbish, dealing with the truth in this world is a full time job without wasting time on spurious nonsense.

>They also ignored noise reduction by
> directivity, and considered the receiver much more sensitive than most
> are.

I think that I qualified my statements as a generality and as such the calculations define the absolute best conditions that may be expected. See another posting by me just released in this news group. Your quite correct jib that I should not rely upon an illustration if a Ham publication for my authority I have traced the source, (looked back into my old files), and clarified the Sky Noise Temperature for All Ham Bands from 136 kHz to 434 MHz in tabular form showing maximum and minimum Sky Temperatures for each band. Thank you for prompting me to finally get off my fat arse and do something about it.

> >Obviously the big advantage that you are using is the directional nature
of
> >the RX AE against a vertical which is notoriously noisey especially from
QRM
> >as well as the larger gathereing volume for QRN.
>
> "Gathering volume", whatever that may be, has nothing to do with
> ultimate S/N on low frequencies like 160 meters.

If it has nothing to do with it then why go to such lengths to acheive a directional receiving antenna if it will make no difference?

> The directivity of a small loop is such that it is mainly vertically
> polarized, so polarization is also not an issue.

I think a search of the literature will not substantiate that statement.

> The small loop does
> not have significantly more directivity that the vertical, but it will
> allow us to null noise from a single direction (or two if you are very
> lucky and they are about 180 degrees apart).

Surly the abilty to null implies directivity,
your statement is a blatent contradiction.

> The only reason a small antenna is better is because it can be moved
> away from a very local noise source, and can be used to null a local
> noise source.

When you say that it can be moved away, do you mean that it may be rotated
or that it is physicaly repositioned at another place?
If you mean that it is rotated then you are relying upon the directivity of
the antenna to position a local noise source into a null.

> >If you operate a beam from the UK into VK then you get a reasonable S/N
> >however if you are at the other end the area that your beam is looking at
is
> >filled with all of the European QRM so S/N is badly degraded. Many VK ops
>
> It is generally quieter looking into the UK from a distance than from
> the UK across a tropical region, as long as the path does not cross
> tropical regions.

I suggest that you take a trip to VK and listen during the week and at the
week end with your beam pointing into Europe. As somebody that like
empirical work this exercise should apeal to you. I have done it, the effect
is quite noticable.

> QRM is normally not defined as "noise". Noise is normally considered
> to be random broadband interference.

That good buddy is QRN

N for Natural
M for Man made
both are defined as noise though differewnt in character they are both
random and both degrade the threshold of a receiving system.

>What we hear on 160 meters is a
> collection of many noise sources, most of which are arcs and sparks
> either in nature of man-made devices.

The background noise is Galactic noise peaking slightly towards the galactic
centre.
Superimposed upon this in our modern world is the arcs and sparks of
civilistation. another reason that top band is generally a rich man's sport.
Those of use condemned to the urban environment work between the noise
bursts. Attempting original work on sky temperature measurements is as much
an art as a science taking readings between the neighbours thermostat. I do
do quite a bit of that, however my AE efficiency at the lower frequencies is

in sufficient for results that satisfy me. By taking a large number of readings of a long time period (years) and comparing these to the accepted values for sky temperature it is possible to calibrate the AE efficiency and then normalise the results retrospectively. Not recomended unless like me you are totally obsessed by getting a result. ;)

> There is a several dB noise increase when I focus my arrays on the
> towns of Barnesville and Forsyth, both several miles away. At night
> time noise level increases ten or more dB, even without storms in
> North America. The directions with propagtion have much more noise
> than others, and that noise is strongest looking into tropical zones
> all other things equal.

That is interesting have you attempted making a radio noise map?
That would be a significant and interesting contribution, especially if you can get it independently verified. Which bands have you done this most interesting work on?

> >don't bother to operate at week ends because of this problem. This is quite
> >a different phnomonon than the one about which I started to post. If the
> >only inhabitants of the world were the transmitter and the AE considered
> >such that all electrical apperatus was switched off then my example would
> >still be valid.
>
> The example is not valid because the data used greatly overestimates
> background noise, or you misread or misapplied the numbers.

I am sorry to keep labouring the point but I prefer to take the word of the established scientific community in this respect they tear one another to pieces in an endevour to reach the truth. If your measurements are consistently returning much lower temperatures then I suggest that you have not taken your Antenna efficiency into account. None will be 100% efficient. If you divide the values that you measure by the values from my table in another post in this news group you will derive the correct antenna efficiency figures for your antenna This will be very useful information as you will then have some idea of just how much you might expect to be able to improve the efficiency and you will also be able to calibrate the actual received signal levels in free space around your AE.

> >Yes indeed yopu have verified just how noisy verticals are, you will never
> >get a better S/N than that which exists in the air just around your AE what
> >ever it is.
>
> That simply is not true.

I'm sorry old man, but that is flying in the face of reality, or you have misunderstood my statement in your eagreness to refute everything that I say. If we continue in this vane then the discussion will like Tweedle Dee and Tweedle Dum decline into a reductio ad absurdum.

> My most effective receiving antennas are
> verticals, as a matter of fact I do not have a single horizontally
> polarized receiving array. My high dipole, 300 feet off the ground, is

What holds that up?

> quieter during the daytime than my transmitting vertical but it is
> less effective because it has higher wave angle. At night there is no
> difference in noise, they are identical.
>
> Noise comes from many directions, signals primarily from one
> direction. When you focus the antenna, the total noise power drops at
> a much faster rate than the signal. It is not necessary to have gain
> to see this advantage, all you need is directivity.

Ah! do I detect a chink in your armour?
Incidentally how do you focus your AE on 160 m?

> >For a moment let us consider what the ideal would be supposing for a
moment
> >that it was possible. The real solution to your problem would be a highly
> >directional antenna with no additional amplification because the AE would
> >have a good efficiency and the signal would not be attenuated.
>
> Directivity is a different parameter than gain.

Quite so, directivity is a reduction from unity gain in all directions other than the direction desired for optimum reception of a signal. It is of course this factor that improves the signal to noise ratio without actuall receiving a stronger signal. the improvement is all due to noise reduction. This effect was most noticable when taking the very first Lunar Surface poictures from Surveyor III. during the flight the spacecraft signal was viewed by an antenna with 0.3 degres beam width mainly illuminated by the background sky noise of 4�K.
Once the space craft had soft landed the aperature of the antenna was completly filled by the disc of the Moon 0.5 degree diameter at a temperature of 150�K (I made the first measurement of this phenomenon. It was neccassary to command the spacecraft signal off in order to make the measurement. The additional noise came as a bit of a surprise to the analysis team it was afctor that had not been considered at the planning stage. Fortunately I was able to design a high sided filter to restore 3 dB of signal to noise but obviously I could not reclaim the 15.7 dB loss without an increase in the transmitter power of the spacecraft or antenna gain. This power and antenna size limit are set by rocket launch considerations, (bigger transmitter, bigger solar array, more fuel to carry it more fuel to carry the extra fuel and the bigger tank to carry it etc amount to a factor of 19, (i.e. add a lb to the weight of the payload means adding 19 lbs to the launch weight), multiply that out by the distance and escape velocity required then ten Watts on board becomes a practical launch restraint).
Thus any of the Surveyor Pictures including Rock 'A' per the scientific magazine 'Nature' have a signal to noise ratio of about 13 dB, not very good

for imaging, but for a world first bloody excellent. I can still remember
the stunned faces when the bird actually got down safely, I can still see
the spacecraft pilot risng on his stool as he guided it down to the surface,
I swear that by the time that it touched down Frank was levitating. A pause
ensued and then the question from the team leader, " well what shall we do
now, take some pictures I suppose." Thus started an intensive session where
10,000 polaroid images of the slow scan TV were taken the whole were then
trimmed and mounted on the wall above the stairs coming into the tracking
station, one huge panoramic image of the Moon's surface about 15 feet
across. 13 dB S/N
But I digress, silly old fart, The point that I am trying to make is that
you can not improve upon the S/N Ratio that comes into your AE, every thing
that you do from then on degrades that S/N Ratio.

>On 160 meters,
> receiving antennas are typically designed with directivity in mind
> since gain is easily made up for with amplification.

Gain is merely attempting to bring the low siganl level from an inefficient
antenna up to the levels normally used by the commonly available Ham
communications receiver. I would expect thes considerably less than a
wavelength AEs to be inefficient, wouldn't you?

> Most moderately or highly directional receiving antennas and most or
> all physically small receiving antennas require amplification when
> used with typical amateur radio receivers or transceivers.

To over come their inefficiency, however using this technique does not
acheive the S/N that is present in the space surrounding the AE.

> S/N ratio has little to do with antenna gain, but antenna directivity
> is extremely important.

I suppose if your antenna is already so inefficient then anything that you
can do with the attenuated signal will appear to be an improvement in S/N.
The improvement that you are observing is raising the small signal above the
noise figure threshold of the receiver that is being used.

> >Try this for me. Insert an attenuator in the RX feed from your vertical
and
> >tell me if you get any better S/N. a thing that I try on 20 m some times
> >when the band appears to be absolutely flat is to put 10 or 20 dB of
> >attenuation into the Ae line and hey presto signals, not as many as usual
> >but signals wher previously ther were none.
>
> You have a receiver problem, unless you are using a direct conversion
> receiver and accept the overload inherent in such simple designs. I
> can't think of a receiver in common usage today that will suddenly
> have signals appear on 20 meter when a 20dB attenuator is used!

Well unfortunately for you this effect will be observed on any number of
receivers of the black box variety because the front ends are wide open.

There is no fault on my Rx (Kenwood R-5000 and R-1000, others various including valve sets)
You will have to wait for a high noise day to observe this effect.

> Many receivers are somewhat marginal on gain or noise floor on higher
> bands even when used on large antennas, unless the site is
> particularly noisy.

Not a problem with any of my Rx, apart from those that are untouched to manufactures specs I do calibrate my receivers before commisioning them. I don't use them much for collecting bus numbers my interests are mainly scientific. I get more kick from measuring the sky temperature than scoring rare DX. Too many other factors such as when the op goes to bed or work figure in the serendipitous reception of DX. The transmitting stations are mainly uncalibrated or not calibrated to an accuracy for my purposes. I would like to see a big improvement in this direction by all Hams in order that short term and long term variations in propagation might be studied more carefully.

> If you have a receiver that generates broadband noise and needs extra
> filetering, and you don't have an exceptional situation where local
> broadcast or communications systems are extremely strong, you b need
> to repair or replace the receiver.

I'm sorry if I want to generate broad band noise I use a noise source, which at best will produce pink noise not the white variety that I would prefer.

Do try to get a grasp of Noise Temperature it will enhance your understanding of the subject.

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4898. Gamma match cap

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 09:55:58 UTC
From: DL7JSK <tansorg@cs.tu-berlin.de>
Message-ID: <98nf9apqb06$1@news.t-online.com>
Source record: 168471

How should the cap of a gamma match be rated,for a HF yagi.Are 400 pF enough
?

73
Tom

4899. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 10:44:14 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98od8jrgn2@lure.pipex.net>
Source record: 168498

"Richard Clark" wrote ...
> Reg Edwards wrote:
> >Gary Peach wrote
> >> Yet again US demonstrates it special ability at (accurate)
> >> friendly fire.
> >> No wonder they get so good at it, they get enough practice.
> >==========
> >Gary, keep your powder dry and expect invitations to attend tea
> >parties in Boston, Mass not Lincs.
> >
> >You may also find yourself charged with the serious offence of
> >grosse ingratitude relating to 1942-45
>
> I am sure you can tolerate your kinsman, as can we all once we
> appreciate that punchinello is only trolling us - yet again. He
> must've lost his first true love to an overpaid oversexed overhere
> american. ;-)

Hi Richard et al. my remarks are despite the appearance otherwise are not anti American.
There seems to be something; lacking in the training of the American Serviceman when you consider the number of friendly fire incidents; particularly as this is the second time that US troops have wiped out a number of Kiwis.
It is important not to kill your own troops, but more so not to kill your allies.
One can understand the pressure on the individual in a battle situation or the hot pursuit of an exercise however I suggest that there is an element missing from the training and culture of American troops considering the now quite large number of such incidents. Any one that has done time in the military will have witnessed the gung ho of certain individuals, there is probably a place for that, but it must be disciplined and controlled.
If your friends can't tell you that you have BO, who can? :)

It was nice to see the naming of USS WS Churchill, of course many will not know or have forgotten that VVinnie had an American Mum, (sorry, Mom), and as such probably had residential rights in the US.
I am sure that we will continue to work together despite this recent unfortunate incident. Hopefully it will precipitate a review at the very least of training and discipline amongst the US forces. Of course there will be further incidents statistically they are impossible to avoid completely, however in Vietnam certain of the allied troops did not wish to fight with the Americans because of their indiscipline, and going on patrol high on drugs and transistor radios blaring out in the hostile jungles. (That is from the horse's mouth, not newspaper reports or enemy propaganda.)

I suppose the polite thing is to not comment and ignore the problem, but that would be not only cowardly but irresponsible, it was the silence of the good people that permitted such excesses as NAZI Germany 1920 -1945, not that I am comparing this incident to such deliberate mal-practice. The fault if any is the laid back attitude of the American military culture. Firing from the hip seems to be the accepted practice. Clint Eastwood has a lot to answer for. (BTW I am an Eastwood Fan, so perhaps The Duke contributed too:)

Please ignore Reg's editing of what I actually posted, it annoys me, but in this medium there is little that can be done about it. He does get a bit OTT once he climbs onto his partisan soap box. You can detect the stilted phraseology, hopefully so can many others.

The references to 1942 are due to remarks of gratitude by me made in another news group.
73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4900. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 10:52:35 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <98od8krgn3@lure.pipex.net>
Source record: 168496
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

"Dick Carroll" wrote
> Gary Peach wrote:
> > Recently my fuel gauge on the car has been sticking.
> > I think that there is some moisture in the pivot or spring that is
freezing
> > and producing this effect.
> > Do you know of a way of freeing it without removing the dashboard?
>
>
> More likely it's the "sending unit" located in the tank.
> Overfilling-"topping off"- the tank excessively can cause this.
> Sometimes it has to be replaced to correct the problem.

That thought had not eluded me, however the gauge remains pegged when the
ignition is switched off and thus power is removed from the instrumentation.

Thank you for you response.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4901. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 11:18:54 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D4BDCB.6A95%stewartx@sccoast.net>
Source record: 168472
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

W6DKN wrote:

> So, if you know where the jerks are,
> why waste your time there? [snip] (Yes,
> I have heard about the crap on 3.860,
> but I have no desire to waste my time
> with it)

Like you, I've heard about it, but have never listened.

> [snip] Very different than the VHF
> repeaters in the big cities, where the
> jerks get their kicks from going from
> machine to machine to see what
> trouble they can cause (just like 11
> meters)

The point is that the 2-meter versus HF operator nonsense you mentioned earlier has absolutely nothing to do with it - the "jerks" are the same on both (the only difference between 2-meters and HF is the limited number of repeaters on 2-meters - harder to avoid the "jerks" if you stay mainly on the repeaters).

Therefore, you should not have said earlier that the "two meter repeaters are not representative of most hams" (you said "hams" here) and that he should "spend some time on HF" because he "will find a completely different type of operator." That is not true. There are no more "jerks" on 2 meters than on HF - they're only a little more difficult to avoid because of the limited number of repeaters.

If the "jerks" really disturb you, then I agree with your suggestion - simply avoid the repeaters. Its far easier to avoid them on the SSB frequencies (just like on HF).

Take care, W6DKN.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

4902. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 11:48:33 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98nm64ipa1@slb0.atl.mindspring.net>
Source record: 168473

It's ok...I figured they probably were, but since his post wasn't quoted at
all I wasn't sure. Thanks
Joe
KB9WFK
--

"Raymond Hansmeier" <rhansmeier@home.com> wrote in message
news:3AAF16EC.44AD2C8F@home.com...
> > Sorry I just hit the reply key. I am assuming the fellow who is
interested in
> > using the CATV drop for a long wire would read the threads. My comments
are
> > only for the fellow who wishes to use the coaxial drop. I will take more
care
> > the next posting.
>
> Ray Hansmeier
> K7FU
>
> >
> >
> > Now you might direct this last part to the guy that wanted to do it
instead
> > of the guy that agreed it was probably a bad idea and simply wanted 'Doc
to
> > explain what he meant..
> >
> >
>

4903. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 12:05:07 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98nn3fhmi1@newpoisson.nosc.mil>
Source record: 168475

Actually, I worded that reply wrong, Tom as it could appear as if I was baiting you. I should have queried differently - instead of "concern with height" perhaps along the lines of "Any interest in less concern with height."

I read often of folks elevating their verticals as high as possible because of the lousy soil conditions they face. Since I'm close to and on top of moist soil and water, can I be less concerned with the height of the antenna? Regards, Jim R.

"Tom W8JI" <2w8ji@akorn.net> wrote in message news:3aaeb985.121042575@news.accessunited.com...
On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch" rodenkir@spawar.navy.mil wrote:

Tom: what if the antenna's location is at sea level? My yard is at sea level, hell, it's at the edge of a tidal creek fed by the ocean and a coupleof rivers. Any concern with height then? Regards, Jim R.

I think like a land-lubber. Of course it helps next to the sea, because that is your terrain!

I couldn't resist making that comment because my neighbor always insists he gets out well on HF because he is 950 feet ASL. Since the sea is 250 miles east, that really doesn't matter.

73 Tom

4904. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 12:06:19 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <%8Jr6.707$5c.17332@paloalto-snr1.gtei.net>
Source record: 168474
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6D4BDCB.6A95%stewartx@sccoast.net...
> W6DKN wrote:
>
> > So, if you know where the jerks are,
> > why waste your time there? [snip] (Yes,
> > I have heard about the crap on 3.860,
> > but I have no desire to waste my time
> > with it)
>
>
> Like you, I've heard about it, but have never listened.
>
>
> > [snip] Very different than the VHF
> > repeaters in the big cities, where the
> > jerks get their kicks from going from
> > machine to machine to see what
> > trouble they can cause (just like 11
> > meters)
>
>
> The point is that the 2-meter versus HF operator nonsense you mentioned
> earlier has absolutely nothing to do with it - the "jerks" are the same
on
> both (the only difference between 2-meters and HF is the limited number
of
> repeaters on 2-meters - harder to avoid the "jerks" if you stay mainly on
> the repeaters).
>

Lets take a survey of the number of jerks and lids out of 1000 QSO's on the
2 meter repeaters in Los Angeles, and do the same with 1000 HF QSO's on 17
meters. If you are correct, the ratios should be about the same...

> Therefore, you should not have said earlier that the "two meter
repeaters
> are not representative of most hams" (you said "hams" here) and that he
> should "spend some time on HF" because he "will find a completely
different
> type of operator." That is not true. There are no more "jerks" on 2
meters
> than on HF - they're only a little more difficult to avoid because of the

> limited number of repeaters.
>

It has certainly been my experience over the last several years in/around the Los Angeles area of So CA. Maybe in your area things are different. But, like most people, we base our opinions on our personal experiences.

And let's not forget that my original response was to a post stating that from listening to 2 meters, the poster concluded that ham radio in general was just like 11 meters.

> If the "jerks" really disturb you, then I agree with your suggestion -
> simply avoid the repeaters. Its far easier to avoid them on the SSB
> frequencies (just like on HF).

They don't disturb me - in fact they have no effect on me one way or the other - because I choose not to pay any attention to them.

>
> Take care, W6DKN.
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net

73 de W6DKN

4905. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 12:23:01 UTC
From: richardharrison@webtv.net
Message-ID: <22320-3AAF62A5-2@storefull-115.iap.bryant.webtv.net>
Source record: 168476

Mike Luther wrote:
"Wait until you are 1000 miles from either the East or West coast on low band and see an even greater 10 DB or worse signal!"

Complete loss of an in-phase reflection of signal from the lossy soil will reduce the sky-wave by 3 db.

Best regards, Richard Harrison, KB5WZI

4906. Re: Dipole for a 161 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 12:47:45 UTC
From: audiofan@hotmail.com
Message-ID: <3aaf6833.549365@news.pacific.net.sg>
Source record: 168612

Thanks Richard!

On Tue, 13 Mar 2001 06:22:54 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Peter wrote:
>"And would 34.8 inch per element be a full WL, and 69.6 inch be 2WL?"
>
>Let`s see. The formula I remember is V=FxLambda, so Lambda = V/F
>
>V= The velocity of the radio wave
>V= 300,000 km/sec = 300,000,000 m/sec
>F= the frequency in Hz
>Lambda= Wavelength in meters per second
>
>So, Lambda = V/F = 300/161.5
> (million/million=1)
>Lambda = 1.858 mtr = 1.858x3.28ft. = 6.1 ft.
>Lambda = 6.1x12inch = 73.1 inches
>
>Lambda/2 = 1/2-wavelength = 36.56 inches
>
>Reduce antenna length by 5% for "end effect"
>0.95x36.56 = 34.7 inches. = dipole length
>Each side = 17.36 inches
>
>Best regards, Richard Harrison, KB5WZI
>
>

4907. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 13:31:46 UTC
From: richardharrison@webtv.net
Message-ID: <12560-3AAF72C2-15@storefull-118.iap.bryant.webtv.net>
Source record: 168477

Tom, W8JI wrote:
"That is true ***ONLY*** if the shield is grounded at the correct spot,
that being the electrical center point of the shield, and if the
internal wires leave at that point."

Good point! The shield is added to get capacitive balance. If currents
into and out of the loop aren`t balanced in the shield, the unbalanced
current is coupled into the loop wires.

Best regards, Richard Harrison, KB5WZI

4908. Re: 102" Whip vs. Bug Catcher - some measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 13:57:03 UTC
From: richardharrison@webtv.net
Message-ID: <5262-3AAF78AF-8@storefull-114.iap.bryant.webtv.net>
Source record: 168478

Tom, W8JI wrote:
"Loss increases from that unnecessary current."

I infer that the capacitance loss of the antenna`s proximity to grounded objects is analogous to parasitic capacitance produced coil loss in a series-resonant circuit?

Best regards, Richard Harrison, KB5WZI

4909. Diamond CP5/CP6 HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 14:24:59 UTC
From: kd5ngd <kd5ngd@arrl.org>
Message-ID: <98nuvr$9b8$1@sass1828.sandia.gov>
Source record: 168479

I'm looking for information on the Diamond CP5/CP6 vertical HF antennas, and I haven't found anything in the product reviews or comments on the more common amateur websites (eham, qrz, arrl, etc.). Anyone have any experience with these that they'd like to share? Thanks

4910. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 14:44:03 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AAF83B3.1390@pacbell.net>
Source record: 168486

Richard Harrison wrote:
>
> Richard Clark wrote:
> "non-dissipative" resisiance is a barren invention of man."
>
> Nature, not man, dictates that when you put 50 volts on an almost
> endless transmission line, 1 ampere flows. Man used nature`s laws to
> make coax that has that exact voltage to current ratio, but man can`t
> make the laws of nature. Man can`t even break the laws of nature.
>
> Best regards, Richard Harrison, KB5WZI

Hi Richard,
an infinite, or even an almost infinite transmission
line, is an abstraction. Real transmission lines, of any sort,
have losses that would make them unsuitable for demonstrating the
non-dissipative resistance effect if their length was made infinite,
because any infinite length of transmission line with an
attenuation constant greater than zero would have infinite
attenuation over its length as well. Your conclusion is correct,
however, humans can't break natural laws. The trick is to find
out what they are and how they apply to the real world.

Tom Donaly KA6RUH

4911. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 15:23:38 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaf8a03.174424650@news.accessunited.com>
Source record: 168480

On Wed, 14 Mar 2001 03:44:33 GMT, Richard Clark <kb7qhc@home.com>

>That is a very simple question which has a very simple answer.
>
>Variation.
>
>In other words, there is some variation as each contestant "comes onto
>the field" so to speak. If this were your shack with the FSM nearby,
>you would always be making the same measurement - this may not be the
>case in the shootout (the antenna configurations do vary, that's the
>point of the shoot out isn't it?). And

Hi Richard.

The antennas are less than 15 feet tall.

The distance to the measurement point is maybe 2500 feet, and is much greater than 1 wl, where field impedances settle down on small antennas.

The sense antenna is certainly much smaller than the test antennas.

The antennas are all basically the same configuration.

There is absolutely no way a sense antenna with these physical and electrical limits would "know" the induction field geometry of the antenna being tested changed.

They are well beyond the distance they need be at to make these measurements. Even 1 wl out would be acceptable with small antennas in the most critical appplications.

The certainly can hold physical errors within a much tighter tolerance than the measurement instrument errors.

Cecil, what they do is perfectly fine.

73 Tom

4912. Re: SKY TEMPERATURE FOR HAMS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 15:58:18 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaf8d27.175228926@news.accessunited.com>
Source record: 168481

Hi Gary,

Only an very inexperience beginner would think local noise is originated in space on HF bands, with the possible exception of bands above 20 meters at night or times when the ionosphere is so thin as to have little effect on signals.

Galactic temperature is virtually meaningless over all of HF, and certainly should never be used on bands below 10 MHz unless there are extreme exception to the normal application.

On Wed, 14 Mar 2001 08:19:59 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:

>The text and the calculations are my original work and I accept the
>responsibilty for any errors found.

OK, that's good enough for me.

<SNIP>

>Most of the Sky Temperature is of Galactic origin and there is an increase
>when looking directly at the galactic centre.
>With the sorts of antenna commonly encountered amongst Hams this effect will
>be minimal because of the wide beam widths of HF antennae. At VHF the effect
>will begin to become noticeable.

Even with a narrow beamwidth antenna, galactic temperature is meaningless at HF and lower. The ionosphere acts like a shield or attenuator, and also conveys distant terrestrial noise sources, both man-made and by nature, to the antenna. By far this is the dominant source of noise where the ionosphere plays a role in propagation.

>At the lower HF frequencies local and distant lightening will increase the
>Sky Temperature occassionally, but you will notice a difference in the
>character of the noise sound, there are distinct pops and bangs producing
>noise peaks as well as an increase in the average Sky Noise Temperature.

You will NOT notice a difference in the "noise sound" because you will virtually never be able to hear galactic noise below 15 MHz on any antenna system at any time. It will be attenuated by the ionosphere to the point where its level is lower than propagated terrestrial noises, which often also sound "white" because the noise is from many thousands of random sources.

Galactic-noise is only a dominant factor in receiving systems operating above 40 MHz. in noise-free locations. On 160 meters, as well as six meters, I can hear a substantial noise increase (I'm in a

very quiet rural location with few houses and power lines around me) when I aim my antennas at two neighboring town about 5-7 miles away.

When the bands are "open" and I am receiving distant signals the propagated noise even on the most quiet days "swaps out" the noise from the population centers around me (both towns of 7000 people).

There is a 10-15 dB noise increase at night on 160 meters, because of propagated noise, even on the most quiet winter days. On twenty meters, as well as 160, I can tell what direction the band is open by listening for a noise increase.

Now I'm sure if my antennas were above the ionosphere, galactic noise would be important. But I simply can't manage that height and even if I did I wouldn't be able to work many people below ten MHz because of the attenuation of the ionosphere.

>The graph in the "RSGB Communications Handbook" Fig 15.6 is pretty well spot
>on. However it would be useful to see the vertical scale also calibrated in
>temperature.

It may be "spot on", but it is also useless unless you know how it applies to the real world we live in. Almost anyone can learn to read, write, copy data, add, and subtract..... the real problem is understanding how to use data correctly. That's what takes time and effort.

73 Tom

4913. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 15:59:40 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaf94bb.177168742@news.accessunited.com>
Source record: 168483

On Wed, 14 Mar 2001 07:31:46 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Tom, W8JI wrote:
>"That is true ***ONLY*** if the shield is grounded at the correct spot,
>that being the electrical center point of the shield, and if the
>internal wires leave at that point."
>
>Good point! The shield is added to get capacitive balance. If currents
>into and out of the loop aren`t balanced in the shield, the unbalanced
>current is coupled into the loop wires.

To carry that point one step futher, if you properly balance an
UNshielded loop it is just as immune to ill effects as a shielded
loop.

73 Tom

4914. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 15:59:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98o4hl$4op$0@208.207.71.139>
Source record: 168484

Reg Edwards wrote:
>
> Gary Peach wrote
> > Yet again US demonstrates it special ability at (accurate)
> friendly fire.
> > No wonder they get so good at it, they get enough practice.
> ============================
> Gary, keep your powder dry and expect invitations to attend tea
> parties in Boston, Mass not Lincs.
>
> You may also find yourself charged with the serious offence of
> grosse ingratitude relating to 1942-45

Disregard the above, Gary, actually we like your powrder wet. :-0

4915. Re: Gamma match cap

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 16:00:04 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <pAMr6.7056$Gv.63435@news.inreach.com>
Source record: 168485

Tom:

A general rule is 7 times the wavelength, 70 pf for 10 meters, 140 for 20 meters, etc...of course you want to be able to vary it over enough of a range to compensate for other variables at the feed.

The voltage at a gamma match feed is pretty low, even when running high power, so you don't need an expensive high voltage cap.

Roger K6XQ

4916. Heathkits F.S.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 16:02:13 UTC
From: Gary <gary@heathkits.com>
Message-ID: <9CMr6.10663$6p5.958160@newsread1.prod.itd.earthlink.net>
Source record: 168482

Heathkit Apache TX-1, for sale also SB-10, SSB adaptor for the
TX-1 see at http://www.heathkits.com

--
Gary K�IMJ 44 years of Heathkit fun http://www.heathkits.com

4917. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 17:14:48 UTC
From: kb7qhc@home.com
Message-ID: <3ab2a58d.1035499830@news.seanet.com>
Source record: 168487

On Wed, 14 Mar 2001 15:23:38 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:

>On Wed, 14 Mar 2001 03:44:33 GMT, Richard Clark <kb7qhc@home.com>
>
>>That is a very simple question which has a very simple answer.
>>
>>Variation.
>>
>>In other words, there is some variation as each contestant "comes onto
>>the field" so to speak. If this were your shack with the FSM nearby,
>>you would always be making the same measurement - this may not be the
>>case in the shootout (the antenna configurations do vary, that's the
>>point of the shoot out isn't it?). And
>
>Hi Richard.
>
>The antennas are less than 15 feet tall.
>
which is in the portion that followed immediately :-)

However, as all antennas are extremely short - by enforcement - I
would allow that each and every near/far field is identical in
geometry if not amplitude. Thus this first consideration of variation
does not seem to account for much.

>The distance to the measurement point is maybe 2500 feet, and is much
>greater than 1 wl, where field impedances settle down on small
>antennas.
>
which is in the portion that followed immediately :-)

By moving out to 1000 feet, the variation of 1 foot is lost in the
noise.
>The sense antenna is certainly much smaller than the test antennas.
>
Thank you for sharing.

>The antennas are all basically the same configuration.
>
which is in the portion that followed immediately :-)

However, as all antennas are extremely short - by enforcement - I
would allow that each and every near/far field is identical in
geometry if not amplitude. Thus this first consideration of variation
does not seem to account for much.

>There is absolutely no way a sense antenna with these physical and
>electrical limits would "know" the induction field geometry of the
>antenna being tested changed.
>
which is in the portion that followed immediately :-)

However, as all antennas are extremely short - by enforcement - I
would allow that each and every near/far field is identical in
geometry if not amplitude. Thus this first consideration of variation
does not seem to account for much.

>They are well beyond the distance they need be at to make these
>measurements. Even 1 wl out would be acceptable with small antennas in
>the most critical appplications.
>
>The certainly can hold physical errors within a much tighter tolerance
>than the measurement instrument errors.
which is in the portion that followed immediately :-)

This last variation still constitutes a small percentage of error
>
>Cecil, what they do is perfectly fine.
>
>73 Tom

Hi Tom,

Thank you for your input.

73's
Richard Clark, KB7QHC

4918. RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 17:27:13 UTC
From: Steve Sawicki <ab2et@MailAndNews.com>
Message-ID: <3ABFC9F1@MailAndNews.com>
Source record: 168488

Well I guess I know where and what I will be doing on Friday, July 13, 2001, just imagine the frenetic activity that will lead on to this gala event?

But lets lok at the practical side of thing :
After examining all of the offerings at
http://www.ewh.ieee.org/soc/aps/2001/workshop/WorkshopShort.htm

SC-3: Practical Consideration in the Design of Antennas for Wireless Communication Course fee: $200 a Full Day courses sure looks like the better deal unlike the 1/2 Day Courses SC-7: Fractal Antennas Course fee: $120

SC-3:
Course Outline: This short course will address specific topics related to the
design and fabrication of antennas for wireless communication. In the first part, we will discuss the types of antennas used in this industry, as well as
strategies for choosing the right antenna for a system. A short historical background will follow the evolution of the antenna industry from the military
technology to the emerging commercial applications of the late 90s.
The second part will focus on antennas used in the wireless communication industry: microstrip antennas and arrays, wire antennas and MMwave antennas.

In the third part of the course we will design different types of antennas using an electromagnetic simulator (IE3D by Zeland Software) and compare the results with those obtained using different software packages: NECWINPro by Paragon Technology, The Antenna Optimizer and The Yagi Optimizer by Brian Beezley, and The Antenna Radiation Pattern Software by Far Field Corp. We will
conclude with an interactive design session.

I am faced with a true Dilemma, SC-3 or go for the "gusto" I think that unlike
the Florida situation I know which is the correct Chad to punch.

73's
Steve
AB2ET

Just remember:
"Please register early! This helps you and us, since courses with too few advance registrations will be cancelled".

>===== Original Message From fractenna@aol.com (Fractenna) =====
>Boston will be the scene for some fun fractal doin's in July. In addition to a

>special session on fractal antennas, Dr. Doug Werner will be giving a short
>course on fractal antennas. (There will be some very interesting 'fractal'
>surprises at the meeting also. Boston is the home turf of Fractal Antenna
>Systems, Inc.)
>
>Here's a description from the web page
>
>http://www.ewh.ieee.org/soc/aps/2001/workshop/WorkshopShort.htm
>

Get your FREE web-based e-mail and newsgroup access at:
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POP3 mailbox from anywhere with just a web browser.

4919. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 17:32:57 UTC
From: richardharrison@webtv.net
Message-ID: <22741-3AAFAB49-14@storefull-117.iap.bryant.webtv.net>
Source record: 168490

Donaly wrote:
"An infinite, or even an almost infinite transmission line is an abstraction."

Yes, but Reg could tell you about some undersea cables that are very long indeed.

I did not mean to stir a dispute over the validity of the "lossless line" as a simplification and as a convenience. The lossless line idea works well enough in many situations. RG-8 has a loss of about 0.1 db/100 ft at 1 MHz. For engineering purposes, the loss at shorter lengths and lower frequencies is insignificant.

I was using 50-ohm coax as an example of dissipationless resistance. If we had 100 feet of RG-8 carrying 100 watts at 1 MHz to a matched load, the 0.1 db loss in the coax would be hard to measure. Most instruments don`t have 0.1 db resolution.

In the example used in my previous posting, I used an almost endless line just as a short-hand for no reflected energy to vary the line impedance. I was giving an example of an almost dissipationless resistance, that of the coax surge resistance.

The main idea is that resistance is the name given to an in-phase voltage-to-current ratio. This ratio indicates an impedance to current which is a resistance, but it does not necessarily eat any energy. You who were taught that there is no such animal were simply misinformed.

Best regards, Richard Harrison, KB5WZI

4920. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 17:34:59 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <98oa5vogu1@nnrp1.phx.gblx.net>
Source record: 168489

Richard Harrison, KB5WZI wrote:

> Terman says:
> "Such a shield insures that all parts of the loop will always have the
> same capacity to ground irrespective of the loop orientation or of
> neighboring objects."
>
> If all parts of the loop have the same capacitance to ground, they are
> also balanced at their null position to the traveling wave`s electric
> field and don`t respond. That null may be directed toward an interfering
> signal or noise. So, the shield can improve the signal to noise ratio.

There might be a historical factor that's being overlooked in this
discussion: A very important application of the small loop antenna
in Terman's era was LF/MF radio direction finding, particularly in
aircraft. One of the problems with this, as I remember, was the
discrepancies between null directions and true bearings as the loop was
rotated. This was traced to variations in stray E-field pickup due
to wing, tail and fuselage surfaces. Loop shielding would help
minimize that pickup, as would carefully designed, fully differential
receiver input circuitry. Some noise reduction might occur, but
the primary aim was a geometrically accurate, magnetic-only response.

--

Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

4921. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 17:52:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98ob5q$7qc$1@slb0.atl.mindspring.net>
Source record: 168491

Richard:

What do those charges moving along your infinite transmission line [constituting your 1 Ampere current] do when they "reach the end of the Universe"?

I believe that Douglas Adams may be waiting there at his special table in the "Restaurant at the end of the Universe" ready to count the charges as they pass by, just to make sure they still have the same number of Joules per Couloumb!

I wonder if the IEEE Dictionary editor/cum lexicographer has a table there as well? Probably next to Sadi Carnot's table! Heh, heh.

Dissipationless Resistance indeed! The answer is 42 [Joules per Couloumb?] no more no less.

Best,

-Peter K1PO

"Donaly" <dtdonaly@pacbell.net> wrote in message news:3AAF83B3.1390@pacbell.net...
> Richard Harrison wrote:
> >
> > Richard Clark wrote:
> > "non-dissipative" resisiance is a barren invention of man."
> >
> > Nature, not man, dictates that when you put 50 volts on an almost
> > endless transmission line, 1 ampere flows. Man used nature`s laws to
> > make coax that has that exact voltage to current ratio, but man can`t
> > make the laws of nature. Man can`t even break the laws of nature.
> >
> > Best regards, Richard Harrison, KB5WZI
>
> Hi Richard,
> an infinite, or even an almost infinite transmission
> line, is an abstraction. Real transmission lines, of any sort,
> have losses that would make them unsuitable for demonstrating the
> non-dissipative resistance effect if their length was made infinite,
> because any infinite length of transmission line with an
> attenuation constant greater than zero would have infinite
> attenuation over its length as well. Your conclusion is correct,
> however, humans can't break natural laws. The trick is to find
> out what they are and how they apply to the real world.
>

> Tom Donaly KA6RUH
>

4922. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 18:01:01 UTC
From: 2w8ji@akorn.net
Message-ID: <3aafb109.184416216@news.accessunited.com>
Source record: 168492

On Wed, 14 Mar 2001 17:14:48 GMT, kb7qhc@home.com (Richard Clark)
wrote:

>Hi Tom,
>
>Thank you for your input.
>
>73's
>Richard Clark, KB7QHC

There is no reason to measure at multiple points, if you really
believe in all that you said. Soo many words, so little substance.

73 Tom

4923. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 18:12:31 UTC
From: 2w8ji@akorn.net
Message-ID: <3aafb218.184687046@news.accessunited.com>
Source record: 168493

On Wed, 14 Mar 2001 10:34:59 -0700, "Jim Bromley, K7JEB"
<w5gyj@primenet.com> wrote:

>rotated. This was traced to variations in stray E-field pickup due
>to wing, tail and fuselage surfaces. Loop shielding would help
>minimize that pickup, as would carefully designed, fully differential
>receiver input circuitry. Some noise reduction might occur, but
>the primary aim was a geometrically accurate, magnetic-only response.

Loop shielding does not minimize that effect, except as it might be
used to improve balance or unbalance.

The shield is a tool for improving balance, but there are many ways to
skin that cat. If the shield is installed incorrectly, such as by
being non-symmetrical in grounding, it can actually hurt balance.

The "shield" is the **actual** antenna that receives the signal,
nothing more and nothing less. It behaves like any other antenna of
similar physical size, there is no magic. We simply can NOT filter
time-varing electric fields from magnetic fields, and so we can NOT
decouple the loop from the rest of the aircraft at the operating
frequency of the loop by adding a shield.

73 Tom

4924. Re: balun vs swr

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 18:16:27 UTC
From: ON4CLN <on4cln@qsl.net>
Message-ID: <%zOr6.14145$ou.1270298@afrodite.telenet-ops.be>
Source record: 168494

Roy

Thanks for your enlightening reply!

"Roy Lewallen" <w7el@eznec.com> wrote:

> I'm assuming you mean a 1:1 balun; otherwise you'll need a different
> load impedance.
==>> yes, that goes without saying... other ratio = other test load...

> If you want to test a current balun ...
==>> thanks also for posting the correction on your description.

> Don't do this test at your rig's full output power
==>> I guess 5W to 10W will do, the SWR is measured with the TS-850's
build-in SWR meter.

Thanks for your reply!
73 de ON4CLN - Franki

4925. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 18:18:01 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <TzOr6.36838$Ac5.7380151@e3500-chi1.usenetserver.com>
Source record: 168495

Please delete 'N2DU' and replace it with 'W2DU'.

Walt

4926. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 18:56:47 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <87Pr6.198$w46.2363@newsfeed.slurp.net>
Source record: 168499

I tried the "soil the salt trick" when I had my Butternut vertical 6" above the gound. I saturated the ground in a three foot circle. That did help a little. Putting it on the roof top of my house with a 6' mast and lots of radials was the answer to my problems. The reason it helped in my case, I believe, is that the antenna is now above the main power lines for the city park and my neighborhood. I have four main feed lines running North and South over my back yard along the East edge of the city park. I knew when I bought the house that would be a problem. But I am baseball nut and I have a Little League ball diamond right next to my property line and love to sit out there and watch the kids play ball. So in my case height was the answer to overcome the power line problem.

"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
news:98nn3fhmi1@newpoisson.nosc.mil...
> Actually, I worded that reply wrong, Tom as it could appear as if I was
> baiting you. I should have queried differently - instead of "concern with
> height" perhaps along the lines of "Any interest in less concern with
> height."
>
> I read often of folks elevating their verticals as high as possible
because
> of the lousy soil conditions they face. Since I'm close to and on top of
> moist soil and water, can I be less concerned with the height of the
> antenna? Regards, Jim R.
>
> "Tom W8JI" <2w8ji@akorn.net> wrote in message
> news:3aaeb985.121042575@news.accessunited.com...
> On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch"
> rodenkir@spawar.navy.mil wrote:
>
> Tom: what if the antenna's location is at sea level? My yard is at sea
> level, hell, it's at the edge of a tidal creek fed by the ocean and a
> coupleof rivers. Any concern with height then? Regards, Jim R.
>
>
> I think like a land-lubber. Of course it helps next to the sea, because
> that is your terrain!
>
> I couldn't resist making that comment because my neighbor always insists
he
> gets out well on HF because he is 950 feet ASL. Since the sea is 250 miles
> east, that really doesn't matter.
>
> 73 Tom

>
>

4927. FERRITE ANT FOR THE AM BROADCAST BAND

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 18:57:40 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <98of1q$4h8$1@bob.news.rcn.net>
Source record: 168500

i need info on how to make a ferrite rod antenna for the am broadcast band

4928. antenna for 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:12:38 UTC
From: KB9YXM <kb9yxmNOSPAM@arrl.net>
Message-ID: <98ofv7$t0a$1@ousrvr3.oulu.fi>
Source record: 168501

Hello everyone.
Kb9YXM here.
I would like to start to build my own antennas for VHF/UHF. To start, I would like to build what might be a strange 6 meter antenna design.
I am trying to build a 6 meter 2 element phased array.
I was hoping someone could send me some idiot proof instructions or direct me to a website that they know fdirst hand might have information on this type of antenna.
The other quesiton is a simple one. When building an antenna, why must one use a gamma match, isnmt it possible just to use a ballun as with a di-pole?

Thanks and73's in advance.
oh8/kb9yxm

--
Julian White KB9YXM
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JW IT-Consultants
Sepp&#65533;senkuja 5 Oulu, Finland 90800

4929. Re: CORRECTION Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:21:21 UTC
From: richardharrison@webtv.net
Message-ID: <22740-3AAFC4B1-42@storefull-117.iap.bryant.webtv.net>
Source record: 168506

I wrote:
"Complete loss of an in-phase reflection of signal from lossy soil will reduce the sky-wave by 3 db."

Bart, WB6HQK showed me the mistake I made. The maximum gain from an earth reflection is 6db.

Just to check before making another mistake, I checked the ARRL Antenna Book, and Ed Laport`s "Radio Antenna Engineering".

The 19th edition of the ARRL antenna book agrees with Bart. On page 3-11:
"Thus the resultant field strength at a distant point may be either 6 dB greater than the free-space pattern (twice the field strength), or zero, in the limiting cases."

Ed Laport in "Radio Antenna Engineering" says on page 515:
"The simplest case to study is that of a single elevated wire parallel to ground. The total potential on the wire is the sum of these direct and induced potentials." (directed and reflected) Reciprocity rules so it makes no difference that Ed is analyzing a receving antenna.

Since in the ideal case the direct and reflected signals can be equal in amplitude and phase, Ed`s improvement due to the reflection from ground is 6db.

Best regards, Richard Harrison, KB5WZI

4930. Re: FERRITE ANT FOR THE AM BROADCAST BAND

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:25:26 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAFC5A6.62BF228B@IEEE.org>
Source record: 168502

marvin rosen wrote:
> i need info on how to make a ferrite rod antenna for the am broadcast band

An Amidon R61-050-750 ferrite rod. The Al value is 49 mh/1000t.
About 400 microhenries is what you need to resonate with a
365pf variable cap. That's what I use for my AM/FM receiver which
doesn't have a built-in AM antenna. I didn't count the turns. I
just resonated it to .5 MHz with a 365pf cap fully meshed.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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4931. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:26:21 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98ogutnke1@newpoisson.nosc.mil>
Source record: 168508

Dick: You didn't say why you salted the soil, e.g., improve SWR, decrease radiation resistance, see if it made any difference as far as reported signal strength, etc.

For whatever reason, I'd be interested in what you were attempting to improve and how that improvement was measured.

I'm querying Tom because I'm interested in whether modeling or history would indicate that raising my vertical, given the extremely moist soil/water conditions I have, does any good. Don't know what "good" means so I'll await some comments from Tom.

Regards, Jim R.

"Dick Elliott" <elliotta@netusa1.net> wrote in message news:87Pr6.198$w46.2363@newsfeed.slurp.net...
I tried the "soil the salt trick" when I had my Butternut vertical 6" above the gound. I saturated the ground in a three foot circle. That did help a little. Putting it on the roof top of my house with a 6' mast and lots of radials was the answer to my problems. The reason it helped in my case, I believe, is that the antenna is now above the main power lines for the city park and my neighborhood. I have four main feed lines running North and South over my back yard along the East edge of the city park. I knew when I bought the house that would be a problem. But I am baseball nut and I have a Little League ball diamond right next to my property line and love to sit out there and watch the kids play ball. So in my case height was the answer to overcome the power line problem.

"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message news:98nn3fhmi1@newpoisson.nosc.mil...
Actually, I worded that reply wrong, Tom as it could appear as if I was baiting you. I should have queried differently - instead of "concern with height" perhaps along the lines of "Any interest in less concern with height."

I read often of folks elevating their verticals as high as possible because of the lousy soil conditions they face. Since I'm close to and on top of moist soil and water, can I be less concerned with the height of the antenna? Regards, Jim R.

"Tom W8JI" <2w8ji@akorn.net> wrote in message news:3aaeb985.121042575@news.accessunited.com...
On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch" rodenkir@spawar.navy.mil wrote:

Tom: what if the antenna's location is at sea level? My yard is at sea level, hell, it's at the edge of a tidal creek fed by the ocean and a

coupleof rivers. Any concern with height then? Regards, Jim R.

I think like a land-lubber. Of course it helps next to the sea, because
that is your terrain!

I couldn't resist making that comment because my neighbor always insists he
gets out well on HF because he is 950 feet ASL. Since the sea is 250 miles>
east, that really doesn't matter.

73 Tom
> >
> >
>
>

4932. Re: antenna for 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:28:22 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAFC656.94DC9DE2@IEEE.org>
Source record: 168503

KB9YXM wrote:
> The other quesiton is a simple one. When building an antenna, why must one
> use a gamma match, isnmt it possible just to use a ballun as with a di-pole?

It is mechanically easier to make the driven element one piece of
aluminum so there is no center insulator. That's when one needs
a gamma match. If you want to go to the trouble of insulating
the two elements of the dipole driven elements from each other,
then the gamma match is not needed.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4933. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:37:51 UTC
From: richardharrison@webtv.net
Message-ID: <22740-3AAFC88F-44@storefull-117.iap.bryant.webtv.net>
Source record: 168507

Walt wrote:
"Please delete "N2DU" and replace it with "W2DU".

Can you imagine an "N2DU Balun"? I can`t.

Sorry, Walter. I need to retire to the sidelines and lurk for awhile.

Best regards, Richard Harrison, KB5WZI

4934. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:40:19 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AAFC923.D79D0A44@oio.net>
Source record: 168504

KB9WFK,
What you say is true, but since any signal he put into
the cable would be orders of magnitude stronger than the
signals on the cable, it's almost a 'lead-pipe' cinch that
his signals are going to cause RFI. Depending on how much
signal is 'induced' in the CATV system, he may also be
responcible for fixing other people's TVs if they're affected,
not to mention the cable company's equipment. Sort of like
petting an alligator, just hope it doesn't turn around and
bite you...
'Doc

4935. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:45:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAFCA59.75D7682E@eznec.com>
Source record: 168505

Richard Clark wrote:

> . . .

> However, as all antennas are extremely short - by enforcement - I
> would allow that each and every near/far field is identical in
> geometry if not amplitude. Thus this first consideration of variation
> does not seem to account for much.
> . . .

I'm not convinced that the near field of a plain whip on a small sedan is identical to a whip with a large capacity hat mounted on a pickup truck. Certainly the current distribution would be different on both the antenna and the vehicle. (And remember, the vehicle is very much a part of the radiator.) I'd think this would lead to different near fields. On what basis do you claim that the near fields of all short antennas are identical regardless of current distribution or antenna length and size?

Roy Lewallen, W7EL

4936. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 19:54:40 UTC
From: mike.luther@ziplog.com
Message-ID: <tavj40qfmhsn59@corp.supernews.com>
Source record: 168509

In <22320-3AAF62A5-2@storefull-115.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:

>Mike Luther wrote:
>"Wait until you are 1000 miles from either the East or West coast on low
>band and see an even greater 10 DB or worse signal!"
>
>Complete loss of an in-phase reflection of signal from the lossy soil
>will reduce the sky-wave by 3 db.
>
>Best regards, Richard Harrison, KB5WZI

Absolutely correct!

The other loss is that extra hop, from whence that last 3 db can be a big chunk! That's what I was addressing too!

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

4937. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 20:27:11 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98okgtoeg1@newpoisson.nosc.mil>
Source record: 168512

Gary: my response (in the form, principally, of queries) below should be taken in the context of my wariness for/of folks who start inferring horror, pestilence, and out right crisis through the disingenuous use of "numbers." Understand this wariness comes primarily from the constant barrage, via the news here in the U.S., of liberal views.

You'll find my queries below between the "<..>s." By-the-bye: I consider this an exercise in communicating with someone of a different culture (from the U.K. and, at first blush, of a liberal mindset - but I could be wrong about that last part so don't go off on me for that "first blush" take. This conversation is/will be a good thing, O.K.???

"Gary Peach" <xcg34@dial.pipex.com> wrote in message news:98od8jrgn2@lure.pipex.net...
Hi Richard et al. my remarks are despite the appearance otherwise are not anti American.
There seems to be something; lacking in the training of the American Serviceman when you consider the number of friendly fire incidents; particularly as this is the second time that US troops have wiped out a number of Kiwis.

<What is that "number," Gary? And why do you use the word "number"? Are you intimating there are significants occurances of friendly fire? That's what I'm inferring; e.g., two incidents out of five events would be significant - two incidents out of 10,000 events might not be significant, from a numbers standpoint. When you come up with a number of friendly fire incidents, I suspect that another number is of interest as well - how many exercises or events were conducted. That way we can quantify all of this in a probability/statistical kind of way. Do not infer that I'm trivializing the incident, Gary. People dying is not to be treated lightly. Just want to put this thread in the correct context; how many attempts, how many failures. >

It is important not to kill your own troops, but more so not to kill your allies. <Yep!>

One can understand the pressure on the individual in a battle situation or the hot pursuit of an exercise however I suggest that there is an element missing from the training and culture of American troops considering the now quite large number of such incidents.

<Here you go with that "number" thing again. I'll be interested in your count of incidents vs the number of exercises attempted. Most importantly, what "element" is missing? You appear to have the answer when I'm not certain you've quantified the problem.>

Any one that has done time in the
military will have witnessed the gung ho of certain individuals, there is probably a place for that, but it must be disciplined and controlled.

<Guess what???? That will factor in to the probability of something like this happening.>

If your friends can't tell you that you have BO, who can? :)

It was nice to see the naming of USS WS Churchill, of course many will not know or have forgotten that VVinnie had an American Mum, (sorry, Mom), and as such probably had residential rights in the US. <The realtiveness of that would be......what?>

I am sure that we will continue to work together despite this recent unfortunate incident. <The sheer economics and political surroundings between our two countries, the EU, ANZUK, the Rooskies, the "fill in the blank with any political entity or whatever," make that statement, like, weak, doncha think?>

Hopefully it will precipitate a review at the very least of training and discipline amongst the US forces.

< I spent 21 years in the military and 13 years in Federal Civil Service - it's guaranteed there is, will be, or always is planned to have a review of the training, the process employed, the color the participant's underware - you name it, it'll be dissected and evaluated - associated with these kinds of incidents!>

Of course there will be further incidents statistically they are impossible to avoid completely,

<Hey, you're stealing my thunder here>

however in Vietnam certain of the allied troops did not wish to fight with the Americans because of their indiscipline, and going on patrol high on drugs and transistor radios blaring out in the hostile jungles. (That is from the horse's mouth, not newspaper reports or enemy propaganda.)

<Has no relevance to this discussion!!! If you want to debate going out on patrol high on drugs, let's discuss that in a separate posting - no value in the setting we're establishing, I believe; "X" number of training exercises or events, "Y" number of incidents where friendlies were killed. No transistor radios blaring, no "indiscipline" quantified yet, etc. >

I suppose the polite thing is to not comment and ignore the problem, but that would be not only cowardly but irresponsible,

< It's irresponsible if the comments are slanted incorrectly or quantified disingenuously. The polite thing to do is prepare the case before presenting the findings or results. >

it was the silence of the good people that permitted such excesses as NAZI Germany 1920 -1945, not that I am comparing this incident to such deliberate mal-practice. < If you're not comparing this to that, then why did you

mention it? A liberal bent if I've ever seen one, Gary >

The fault if any is the laid back attitude of the American military culture.
< Nope!!! You can't make that assessment yet. You don't have the facts in
front of you, I suspect. Remember, figures lie, liars figure! >

Firing from the hip seems to be the accepted practice. Clint Eastwood has a
lot to
answer for. (BTW I am an Eastwood Fan, so perhaps The Duke contributed too:)
< "Firing from the hip"? Cmon, Gary - that's a metaphorical trick employed,
often, for any scenario other than the actual firing of a weapon.>

Please ignore Reg's editing of what I actually posted, it annoys me, but in
this medium there is little that can be done about it. He does get a bit OTT
once he climbs onto his partisan soap box. You can detect the stilted
phraseology, hopefully so can many others. < Stilted also means pompous or
lofty, doesn't it? I'd be inclined to place your post in that same light,
Gary. >

The references to 1942 are due to remarks of gratitude by me made in
another news group.
73
-
Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> www.gary.peach.dial.pipex.com/
>
>
>
>

4938. Icom AH-2b antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 20:42:59 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aafd7d7$0$62148$bbae4d71@news.net-link.net>
Source record: 168510

Anyone using one? Icom specs say the antenna is 8.2 feet long, but what is the exact length of the spring and whip? Is the whip 8.2 feet? Is the spring length included in the overall 8.2 feet?

In using my AH-4 antenna coupler with a 6" spring and 102" or 112" whip, I do not get full output from rig on 6 meters (the rig folds back) but acceptable performance on lower bands. I am thinking a slightly shorter whip would do the trick on 6, although performance would decrease even more on the lowest bands. I am mainly interested in 17, 15, 12, 10 and 6 with this setup.

4939. Re: Isloop antenna in attic - advice??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 20:47:46 UTC
From: temporary0191398@aol.com
Message-ID: <20010314154746.02267.00002435@ng-cg1.aol.com>
Source record: 168511

Tom--
Another thing to watch for: My attic antenna coupled enough energy into the solid state thermostat for the central heat/air system to wipe out the thermostat. On the new thermostat, I wound the incoming control wires around a toroid, and everything seems fine.

--Wayne
W5GIE

4940. Re: Fraccky's at it again

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 20:57:15 UTC
From: kb7qhc@home.com
Message-ID: <3aafd559.1047735604@news.seanet.com>
Source record: 168513

On Wed, 14 Mar 2001 10:44:14 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>Please ignore Reg's editing of what I actually posted, it annoys me, but in
>this medium there is little that can be done about it. He does get a bit OTT
>once he climbs onto his partisan soap box. You can detect the stilted
>phraseology, hopefully so can many others.

Hi Gary,

You mean there's a difference? :-)

As for friendly fire, such is the risk of service that our
conservatives so put us up to, but seem so shy of sharing. I
volunteered knowing full well the problems of 'Nam and the sham it
presented the rest of the world, and that the "silent majority" (the
artifice invented by our "hawks" to bolster their failed logic) was
willing to look the other way.

You may observe that since then our politics have descended to the
gutter with drug using, draft evading, whoremongers now running our
country. They were elected by the "silent majority" and their kids
who obviously find this new low in morality suitable to their
politics.

And yet you (or others) may challenge me as to why I volunteered, or
how I hold my faith in light of such depravity in politics. Simple, I
come from the traditional school of conservatism established by
Senator Barry Goldwater (a ham) and so prostituted by his party as
they sold their birthright to plant their faces in the public trough.
This new crowd is an emasculated bunch of wimps struggling to fill
their pockets while crying about standards. If you posed this
question of Friendly Fire to them, I hope you don't expect any
component of compassion that isn't linked to an election rally.

They will pass, and we will some day return to the higher standards I
volunteered to fight for.

But enough of politics, John Donne expressed EVERYONE's problem
succinctly in:
>Meditation XVII
>Nunc lento sonitu dicunt, moricris
>Now this bell tolling softly for another, says to me, Thou must die.
>... No man is an island, entire of himself; every man is a piece of
>the continent, a part of the main.
>... never send to know who for whom the bell tolls; it tolls for thee.

73's
Richard Clark, KB7QHC

4941. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 20:59:43 UTC
From: kb7qhc@home.com
Message-ID: <3ab0db5e.1049276599@news.seanet.com>
Source record: 168514

On Wed, 14 Mar 2001 18:01:01 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:

>On Wed, 14 Mar 2001 17:14:48 GMT, kb7qhc@home.com (Richard Clark)
>wrote:
>
>>Hi Tom,
>>
>>Thank you for your input.
>>
>>73's
>>Richard Clark, KB7QHC
>
>There is no reason to measure at multiple points, if you really
>believe in all that you said. Soo many words, so little substance.
>
>73 Tom

Hi Tom,

Thank you for your input. Yes you did contribute a lot of
duplication, but I find no fault.

73's
Richard Clark, KB7QHC

4942. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:11:32 UTC
From: "Jim Bromley, K7JEB" <w5gyj@primenet.com>
Message-ID: <98oms5t1@nnrp2.phx.gblx.net>
Source record: 168518

I wrote:

>> ... A very important application of the small loop antenna
>> in Terman's era was LF/MF radio direction finding, particularly in
>> aircraft. One of the problems with this, as I remember, was the
>> discrepancies between null directions and true bearings as the loop was
>> rotated. This was traced to variations in stray E-field pickup due
>> to wing, tail and fuselage surfaces. Loop shielding would help
>> minimize that pickup, as would carefully designed, fully differential
>> receiver input circuitry. Some noise reduction might occur, but
>> the primary aim was a geometrically accurate, magnetic-only response.

Tom, W8JI, wrote:

> Loop shielding does not minimize that effect, except as it might be
> used to improve balance or unbalance.
>
> The shield is a tool for improving balance, but there are many ways to
> skin that cat. If the shield is installed incorrectly, such as by
> being non-symmetrical in grounding, it can actually hurt balance.

The balance issue in DF was what I was trying to raise in regards to loop shielding. That is what determines bearing accuracy and that's why the early, air-core receiving loops were shielded - because they were considerably used for DF. I probably misstated the E-field pickup effect. Avery G. Richardson says it much better in Chap.28 of _Jasik_, 1st ed.:

Shielded Loop. When a loop is used in practical circuits, it is generally near grounded surfaces as shown in Fig.28-5a and is often connected to the receiver through a center-tapped transformer T. If the distributed capacities C1 and C2 between ground and opposite sides of the loop are unequal, the voltages of the loop sides with respect to ground will cause unequal currents to flow through C1, C2 and transformer T primary, with a resulting distortion of the pattern. To avoid this condition, the loop is enclosed with a metal shield as in Fig 28-5b, thus providing equal capacities to ground. The gap prevents the shield from behaving as a short-circuited turn. The shield also reduces effects of electrostatic induction fields due to precipitation static or nearby conductors.

(Fig 28-5a shows an unshielded loop over a ground plane that slants upward to the right, and Fig 28-5b shows the usual shielded loop configuration).

> The shield is a tool for improving balance, but there are many ways to
> skin that cat. If the shield is installed incorrectly, such as by

> being non-symmetrical in grounding, it can actually hurt balance.

Indeed, and most of these old articles on shielded receiving loops showed
them feeding a carefully balanced, push-pull input circuit on the receiver's
first RF amplifier.

> The "shield" is the **actual** antenna that receives the signal,
> nothing more and nothing less. It behaves like any other antenna of
> similar physical size, there is no magic. We simply can NOT filter
> time-varing electric fields from magnetic fields, and so we can NOT
> decouple the loop from the rest of the aircraft at the operating
> frequency of the loop by adding a shield.

The bit about time-varying fields is true by Maxwell's equations, of course.
However, given a loop that is very small compared to wavelength, the
time-varying E field that is intimately coupled to the time-varying
magnetic field in the vicinity of the antenna is curled around those
magnetic lines. The only way this curled E-field can produce a current
flow is through a conductor parallel to it everywhere, ie: through a
closed loop. The time-varying E-field associated with the time-varying
magnetic field by virture of both being components of an incident TEM
wave is always oriented so as to induce equal-and-opposite currents in
such a loop. By producing no net current flow, it is effectively uncoupled
from its magnetic companion at the boundary of the loop.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

4943. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:12:43 UTC
From: kb7qhc@home.com
Message-ID: <3ab1dbce.1049388040@news.seanet.com>
Source record: 168515

On Wed, 14 Mar 2001 11:45:29 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Richard Clark wrote:
>
>> . . .
>
>> However, as all antennas are extremely short - by enforcement - I
>> would allow that each and every near/far field is identical in
>> geometry if not amplitude. Thus this first consideration of variation
>> does not seem to account for much.
>> . . .
>
>I'm not convinced that the near field of a plain whip on a small sedan
>is identical to a whip with a large capacity hat mounted on a pickup
>truck. Certainly the current distribution would be different on both the
>antenna and the vehicle. (And remember, the vehicle is very much a part
>of the radiator.) I'd think this would lead to different near fields. On
>what basis do you claim that the near fields of all short antennas are
>identical regardless of current distribution or antenna length and size?
>
>Roy Lewallen, W7EL

Hi Roy,

Well it's difficult to tell if Tom agrees or disagrees or simply is
restating what I said to fill air time.

To respond directly to your question: I would speculate that being
very small in relation to the wavelength does not allow much variation
in near field geometry. However, just what constitutes near field is
obviously debatable such that it may be differentiable as you suggest.

This I can allow, and it would add difficulties to the measure in the
field. Employing three FSM's could resolve that, one would not.

As these were suggestions of a scenario, it is incumbent upon the
testers to calibrate their range and to anticipate these issues of
variation before an event occurs. Such was Cecil's agenda (I suppose)
that I was responding to. If there is variation, the solution is
simple and already discussed.

However, as this variation (of radiators) is a side issue to the goal
of a shoot-out, it would take a good crafter of testing to separate
the two while preserving the goal. I would like to see my statement
above challenged with real data (and anticipated so that it does not

confound the shoot-out). Modeled data would serve for discussion's sake too.

73's
Richard Clark, KB7QHC

4944. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:23:13 UTC
From: kb7qhc@home.com
Message-ID: <3ab2df5e.1050300231@news.seanet.com>
Source record: 168516

On Tue, 13 Mar 2001 23:56:34 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"non-dissipative" resisiance is a barren invention of man."
>
>Nature, not man, dictates that when you put 50 volts on an almost
>endless transmission line, 1 ampere flows. Man used nature`s laws to
>make coax that has that exact voltage to current ratio, but man can`t
>make the laws of nature. Man can`t even break the laws of nature.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

You have simply substituted one artifice for another to explain the first. This is called circular reasoning and is generally reserved for political debate.

If I put energy into an infinite line, I am entirely given to faith as to where it went. My professor stated simply "it never returns" and that was enough. We had a source, we had a sink, and we met the conventional meaning of dissipation whereby energy moves from one to the other.

And yet those who pray at the alter of dissipationlessness have yet to offer a reason for their benedictions (they are already without faith). So what? is the question.

It seems this hinge of dissipationlessness is the grist of a future argument so lame it cannot turn without it.

73's
Richard Clark, KB7QHC

4945. FS: Dentron super tuner instructions

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:25:08 UTC
From: k9sqg@aol.com
Message-ID: <20010314162508.07647.00001131@ng-fk1.aol.com>
Source record: 168517

Have instruction sheet for tuner, appears original since cover is blue and black. Only two sheets, not much there. $5 shipped priority mail.

73s,

Evan

4946. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:28:48 UTC
From: kb7qhc@home.com
Message-ID: <3ab3e17b.1050841990@news.seanet.com>
Source record: 168319

On 14 Mar 2001 03:23:20 GMT, fractenna@aol.com (Fractenna) wrote:

>Boston will be the scene for some fun fractal doin's in July. In addition to a
>special session on fractal antennas, Dr. Doug Werner will be giving a short
>course on fractal antennas. (There will be some very interesting 'fractal'
>surprises at the meeting also. Boston is the home turf of Fractal Antenna
>Systems, Inc.)
>

herr doktor,

It is obvious that you intend to pursue lines of discussion in
contravention to my announcement of your violation of my protections
offered me under the laws of Patent and Copyright. Be advised that
you must immediately surrender all documents relating to those ideas
of mine so protected and to cease and desist in their dissemination or
you will held in contempt of copyright laws and may face possible
legal action. ;->

73's
Richard Clark, KB7QHC

4947. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:33:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAFE39D.EC0DBCD1@eznec.com>
Source record: 168320

The shape of the near field isn't of any consequence for the "shootouts", since the field strength meter is placed well beyond the near field. No number of field strength meters in the near field would tell you much about what's getting to the far field unless the antennas are identical. And they certainly aren't.

I continue to maintain that simply being electrically small doesn't guarantee a particular near field. Consider, for example, a small loop and a small dipole. These have identical far field patterns, but the near fields are quite different. Then consider the intermediate antennas you could make by breaking the loop and putting plates at the gap to provide capacitance, then gradually opening it to a dipole. The near field would change a lot as you did this. And the variations of antennas being measured in the shootouts resemble these intermediate antennas in a number of ways.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Wed, 14 Mar 2001 11:45:29 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >Richard Clark wrote:
> >
> >> . . .
> >
> >> However, as all antennas are extremely short - by enforcement - I
> >> would allow that each and every near/far field is identical in
> >> geometry if not amplitude. Thus this first consideration of variation
> >> does not seem to account for much.
> >> . . .
> >
> >I'm not convinced that the near field of a plain whip on a small sedan
> >is identical to a whip with a large capacity hat mounted on a pickup
> >truck. Certainly the current distribution would be different on both the
> >antenna and the vehicle. (And remember, the vehicle is very much a part
> >of the radiator.) I'd think this would lead to different near fields. On
> >what basis do you claim that the near fields of all short antennas are
> >identical regardless of current distribution or antenna length and size?
> >
> >Roy Lewallen, W7EL
>
> Hi Roy,
>

> Well it's difficult to tell if Tom agrees or disagrees or simply is
> restating what I said to fill air time.
>
> To respond directly to your question: I would speculate that being
> very small in relation to the wavelength does not allow much variation
> in near field geometry. However, just what constitutes near field is
> obviously debatable such that it may be differentiable as you suggest.
>
> This I can allow, and it would add difficulties to the measure in the
> field. Employing three FSM's could resolve that, one would not.
>
> As these were suggestions of a scenario, it is incumbent upon the
> testers to calibrate their range and to anticipate these issues of
> variation before an event occurs. Such was Cecil's agenda (I suppose)
> that I was responding to. If there is variation, the solution is
> simple and already discussed.
>
> However, as this variation (of radiators) is a side issue to the goal
> of a shoot-out, it would take a good crafter of testing to separate
> the two while preserving the goal. I would like to see my statement
> above challenged with real data (and anticipated so that it does not
> confound the shoot-out). Modeled data would serve for discussion's
> sake too.
>
> 73's
> Richard Clark, KB7QHC

4948. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:40:48 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AAFE560.3776A8C4@usa.alcatel.com>
Source record: 168321

This may easily be disproven. Faraday shields DO work. Carry a receiver with a short E-field antenna under a grounded metal structure and see.

Cortland
ka5s@earthlink.net

Roy Lewallen wrote:

> Any noise reduction you see is due to the directionality of the loop,
> not its rejection of electric fields. It'll only be less sensitive to an
> electric field if the field originates closer than about 1/10 wavelength
> to the loop, and that's because of its shape (a small loop) rather than
> any "shielding". The "shield" has to have a gap, which simply routes the
> current from the inside to the outside, so the net effect is the same as
> if the shield wasn't there.
>
> Roy Lewallen, W7EL

4949. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:47:00 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AAFE6D4.43403D25@usa.alcatel.com>
Source record: 168322

It's not necessary, of course, to have a shield to have a balanced loop. And a balanced loop is, as you note, is inherently insensitive to an incident electric field. Shielding a loop may be a disadvantage, too, as the fixed capacitance of a shield reduces the frequency range over which it may be resonated.

Cortland

Richard Harrison wrote:

> Bill, CU2JL/N2CQR wrote:
> "Ramsey Electronics is selling a "Signal Magnet Noise Reduction
> Antenna". They claim that "This antenna responds only to the magnetic
> field of the desired signal and ignores the electrostatic field."
>
> Like most advertising, the case may be overstated but contains a grain
> of truth.
>
> Directional loops are impaired by unbalanced capacitive coupling to
> their coils. That is why direction-finding loops have Faraday shields.
>
> Terman says:
> "Such a shield insures that all parts of the loop will always have the
> same capacity to ground irrespective of the loop orientation or of
> neighboring objects."
>
> If all parts of the loop have the same capacitance to ground, they are
> also balanced at their null position to the traveling wave`s electric
> field and don`t respond. That null may be directed toward an interfering
> signal or noise. So, the shield can improve the signal to noise ratio.
>
> Best regards, Richard Harrison, KB5WZI

4950. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:49:17 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAFE75D.FEC31B4F@IEEE.org>
Source record: 168324

Richard Clark wrote:
> Such was Cecil's agenda (I suppose) that I was responding to.

My agenda was to try to learn something new. My learning method
is to think the unthinkable. If a near-field strength meter is
all that is needed for optimum performance, why bother with
far-field measurements?
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4951. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:51:55 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AAFE7FB.9E6FCDAD@IEEE.org>
Source record: 168325

Roy Lewallen wrote:
>
> The shape of the near field isn't of any consequence for the
> "shootouts", since the field strength meter is placed well beyond the
> near field. No number of field strength meters in the near field would
> tell you much about what's getting to the far field unless the antennas
> are identical. And they certainly aren't.
>
> I continue to maintain that simply being electrically small doesn't
> guarantee a particular near field. Consider, for example, a small loop
> and a small dipole. These have identical far field patterns, but the
> near fields are quite different. Then consider the intermediate antennas
> you could make by breaking the loop and putting plates at the gap to
> provide capacitance, then gradually opening it to a dipole. The near
> field would change a lot as you did this. And the variations of antennas
> being measured in the shootouts resemble these intermediate antennas in
> a number of ways.

Thanks Roy, this resembles the information I was seeking.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4952. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 21:58:26 UTC
From: 2w8ji@akorn.net
Message-ID: <3aafe6ba.198162706@news.accessunited.com>
Source record: 168323

On Wed, 14 Mar 2001 21:12:43 GMT, kb7qhc@home.com (Richard Clark) wrote:

>Hi Roy,
>
>Well it's difficult to tell if Tom agrees or disagrees or simply is
>restating what I said to fill air time.

Actually I have a similar problem when I read what you write Richard.

I'm unclear as to how large a problem you think the near field differences are. When I read what you write, it looks like you are saying the antennas are all very similar close to the antenna (which they are not) and it appears you conclude changes don't matter.

Then after concluding changes in antennas don't matter (or at least that is what I think you are saying), you close by suggesting measuring at three points.

I would hate for people to think the results aren't accurate because the distance is too close, or they really need to measure at three distances. That wouldn't be correct.

That's what is important, and that is where I disagree with you.

73 Tom

4953. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:03:44 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tavqlleh63ir33@corp.supernews.com>
Source record: 168326

"Gary Peach" <xcg34@dial.pipex.com> wrote in message
news:98l6lc$9lo$3@lure.pipex.net...
> MOV in the UK is the trade mark of Marconi Osram Valve,
> can you tell me what your acronym stands for please?

On this side MOVs are called Metal Oxide Varsistors.

> That regretabbly is so true, Time to go around the junk sales and flea
> markets and gather up a collection, some might be OK, the majority of the
> old ones the wires have broken away. I think that with a bit of more
modern
> technology a better method for attaching the lead ins could be found. For
> some RF work they are almost mandatory.

What is even more fun is when you "discover" the component lead is really a copper, or gold, plated steel wire! Use those in a circuit exposed to even a small amout of moisture, and the leads soon bust off. 8-((All you need is a small nick in the plating for that to happen. I can see why some companies spray a clear coat sealer over their boards now.

> What happened?

They seemed to work OK. I was using them in a MOSFET gate drive circuit so I did not want any extra inductance slowing the drive down.

> Ah those were the days, kids don't seem to go that route any more.
> Or is it just me?

I don't think so. If you think about it now, with the growing commercial use of surface mount parts, there is less for kids to get their hands on to play with, and learn from. The same goes when most of the guts of consumer electronics are inside of one or two uninteresting black blobs of plastic called an IC.

> I am, at least I'm still on the books of at least one company (CalComp) as
a
> consultant. I have all the cards and headed note paper already printed but
> it still doesn't help as much as I'd hoped here in the UK :(

Bummer!!

>
> Yes that's how I came by the metrosils. Amazing how being in a big company
> brings forth all sorts of information and bits that otherwise seems not to
> exist. I can remeber wanting a special Op amp for an intigrator. I rang
> around everywher trying to get samples and data. and a bulk price. Then I
> dropped a hint that ther would be at least 16 channels with at least two

per
> channel and the sales engineers were cueing at my office door willing to
> laser trim them to my specs and offering prices that would blow you out of
> the water. The main reason is that they have to set up a production line
to
> produce the stuff, ther is a nreak even quantity below whicvh it is a
waste
> of time manufaturing. swinging all of the machine into action for
something
> that they don't really want as an order cos it'd send them broke is quite
> understandable.

That's how most companies tell a potential customer their order is to small
to brother with. 8-) The price quoted says it all.

> >Or if you can't get them free you
> > can buy them at the 1K to 10K price, and save some money.
>
> I'm highly unlikely to actually require anythingin those sorts of
> quantities.

I was not suggesting buying that many. Some companies are willing to sell a
few "samples" at the large quantity price when they don't give away "free
samples".

> It might be with a bit oif careful engineering.

To squeeze to inductance out requires the area between the wires to trend to
zero in the "hair pin" low inductance resistor design. Of course this then
increases the capactive coupling between the wires. So you gain in one area,
and lose in another. At some point the hair pin" low inductance resistor
design just does not work that good.

> I know that this is a difficult area, one job that I was asked to do was
to
> make a safety fuse. Rocket have to have a component to light the blue
touch
> paper. one of the problems that they were having at the time was that when
> the high power RADR point at the Rocket on the p[ad it would suddenly take
> off all on its own. The fuse was a little copper tube with some explosive
in
> nthe tip of it and a filament to ignite it and a couple of tinned copper
> wires coming out of the tube through a filling of Marco Resin. This is a
> resin loaded with feromagnetic and resistive materials and is often used
to
> cast precision Waveguide loads. The fues was about half inch long and
about
> quarter inch diameter. I tried all sorts of things but I just could not
get
> to grips with the problem or what geometry I must use to make the fuses
> intisically safe from this type of RF ignition. No doubt somebody that
> followed me did solve the problem. I left for Australia at about that time

> to the better weather and a little adventure.

That was interesting.

> Ah! I was thinking of a cabinet eight feet tall standard 19" panel size
> absolutely full of realays I think tey were Potter and Brumfield to
control
> the big S Band Wave guide switches that changed the configurations of our
> wavguide runs to produce RCP or LCP to switch the various transmitters and
> recevers to the various ports of the AE feed horn. These wave guide
switches
> have a lot of stored energy when they switch. I think the person that
> designed the controll system had a Railway background and the entire thing
> was all relay logic , I can't remeber in eight years ever needing to
change
> a relay or a switch becaise it had failed. That system really impressed me
> for its reliabilty. Another old reliable syatem that we had was the
> engineering orderwire system for engineering and ops to communicate. this
> was a complet telephone exchange circa 1910, the wires into the frame
which
> was of steel Un beam construction about 25 feet long and the normal 6 foot
> high racks all bolted together. It was shipp from the small American town
> where it had operated without failure since its installation in 1910
untill
> it was taken out of service for us in 1966. The reliabilty had been so
high
> that it was ideal for Apollo. Certainly a testimonial to those early
> telegraph engineers. It installed without trouble and I can't remember at
> any time that it wnet down. One of my most amusing memories of that
> engineering link was when an Apollo took off from the Moon's surface, one
of
> the Astronauts had snmuggled aboard a tape of the Air Force March and as
> they were taking off he had played it. The ops controllers went spare ther
> were security people running all over the place to find the sabateurs. Of
> course ther was never any attempt by the Russians to sabotage use quite
the
> contrary they were always willing to assist. I'm afraid that Astronaut got
a
> rocket. (pun intended). Play music and golf on the Moon were frowned upon
by
> TPTB as unneccassary trivia. Frankly my personal view is that these men
> showd extrodinary courage and such antics did more for PR than all of the
> proaganda prepared at great length by the official political machine.

No kidding! And 3 almost never made it back either on Apollo 13.

> Have you seen those relays with a huge iron cap on them which uses
> hysteresis to do something similar?

Nope. Where were they used normally?

--
Leland C. Scott
KC8LDO

4954. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:31:47 UTC
From: 2w8ji@akorn.net
Message-ID: <3aafe93e.198807177@news.accessunited.com>
Source record: 168327

On Wed, 14 Mar 2001 09:43:10 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>"Tom W8JI" wrote ...
>> Gary Peach wrote:
>> >However none of this negates my calculations, which are general case
>> >illustrative examples. You have here a special case. the signal to noise
>> >ratio will never the less still be about a dB worse than possible, so
>there
>> >is still some work to do.
>>
>> The calculations were negated before they were made, because they were
>> based on incorrect data.
>
>I really must protest at that statement, if ther has been any incorrect data

Protest all you like, the information about the noise level is
incorrect. It is very well known the ionosphere shields the earth from
galactic noise below 20 MHz or so.

Anyone who has had a working system outside of a noisy local
environment also knows the conclusion was incorrect.

When the results are wrong, the data is either wrong or being
misapplied.

73 Tom

4955. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:37:55 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaff142.200860061@news.accessunited.com>
Source record: 168330

On Wed, 14 Mar 2001 13:40:48 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>This may easily be disproven. Faraday shields DO work. Carry a receiver with a
>short E-field antenna under a grounded metal structure and see.
>
>Cortland
>ka5s@earthlink.net

I'm missing something.

Can you tell me how that proves Roy's statement was incorrect?

What if I carried a closed loop of wire inside that structure?

Why does my AM radio, with a loopstick, go dead inside a metal
building? Why does a radio with a short whip work under the metal roof
of my barn, just as a loopstick does?

73 Tom

4956. Re: Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:41:35 UTC
From: jcarver@netusa1.net
Message-ID: <3aaff390.1658899@news.netusa1.net>
Source record: 168329

Thank you very much.
John
On Wed, 14 Mar 2001 00:32:54 GMT, pro-2006@xxxspam.net wrote:

>You might want to check out www.kmaantennas.com
>73
>Pete
>
>
>>>> Can anyone tell me where I can find information on Spiderweb and or
>>>> Telarana wire log periodics?
>>>
>>>Take a look into the ARRL Antenna Book, at least the Telarana and wire-stuff
>>>for 80/75 and 40m are described.
>>>
>>>73, Kai
>>>
>>>
>>>
>

4957. Re: Log Periodics

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:42:03 UTC
From: jcarver@netusa1.net
Message-ID: <3aaff3aa.1684879@news.netusa1.net>
Source record: 168328

Thank you very much. I'll follow up on that.
John
On Tue, 13 Mar 2001 18:12:23 -0600, Butch Magee <lynyrd@netdoor.com>
wrote:

>Have you checked out Tennadyne Log Periodics? It is probably
>"tennadyne.com". for the web.
>
>Butch
>
>"John H. Carver Jr." wrote:
>
>> Can anyone tell me where I can find information on Spiderweb and or
>> Telarana wire log periodics? Heard a mention of this on the radio
>> last week and have been looking ever since. Did a web search and came
>> up with two dead links and a bunch of pages for spiderweb software.
>> Thanks.
>> John
>

4958. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:44:10 UTC
From: 2w8ji@akorn.net
Message-ID: <3aaff298.201201805@news.accessunited.com>
Source record: 168331

On Wed, 14 Mar 2001 07:05:07 -0500, "Jim Rodenkirch"
<rodenkir@spawar.navy.mil> wrote:

>I read often of folks elevating their verticals as high as possible because
>of the lousy soil conditions they face. Since I'm close to and on top of
>moist soil and water, can I be less concerned with the height of the
>antenna? Regards, Jim R.

Roy would be a better person to address this, but as I understand it
there will be a certain soil condition where loss peaks.

When it is a perfect insulator, it looks like it is "not there". When
it is perfect, conductor it again lossless.

But I would expect in all normal cases we run into soil just isn't
that good...or rock that bad.

I'd get the antenna up in the air if I could, especially above 80
meters for a number of reasons. Ground clutter being one, earth losses
being another.

73 Tom

4959. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:49:36 UTC
From: kb7qhc@home.com
Message-ID: <3aafefb5.1054483186@news.seanet.com>
Source record: 168332

On Wed, 14 Mar 2001 21:58:26 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:

>On Wed, 14 Mar 2001 21:12:43 GMT, kb7qhc@home.com (Richard Clark)
>wrote:
>
>>Hi Roy,
>>
>>Well it's difficult to tell if Tom agrees or disagrees or simply is
>>restating what I said to fill air time.
>
>Actually I have a similar problem when I read what you write Richard.
>
>I'm unclear as to how large a problem you think the near field
>differences are. When I read what you write, it looks like you are
>saying the antennas are all very similar close to the antenna (which
>they are not) and it appears you conclude changes don't matter.
>
>Then after concluding changes in antennas don't matter (or at least
>that is what I think you are saying), you close by suggesting
>measuring at three points.
>
>I would hate for people to think the results aren't accurate because
>the distance is too close, or they really need to measure at three
>distances. That wouldn't be correct.
>
>That's what is important, and that is where I disagree with you.
>
>73 Tom

Hi Tom,

The matter is one of how to resolve anticipated problems. I care not a whit about expectations failed or otherwise.

The suggestion of three FSM's was just that. Two would do, one is leaving open the opportunity for what variation can do to upset the testing. I offered two scenarios, one close, one far. They each have their merit and they each have their cost. My style may have been over-balanced, but it was as complete as I could imagine. Choice is driven by a balance between these considerations.

Testing should be preceeded by field calibration and the observation and separation of sources of error. No amount of cogitation and hand wringing can replace real measurement and the reduction of variables.

As to how large the problem is, that falls into the category of reading tea leaves and then proclaiming the winner of a shoot-out. There is no answer without that concomitant field calibration. I offered scenarios that presented options in regard to how big the problem reveals itself in place, not in the void of the mind. If Cecil requires 1% accuracy that is easily related to geometry with little more math than stepping off the distance between the source and the sink. This one suggestion is a fundamental requirement, although not alone in the field of problems and solutions. It does not solve a problem not found, it does not solve a problem if the source of the problem is of greater scope (hence Roy's consideration). It represents a minimum standard of measurement. You can ignore it if you are satisfied that the 10% error that eclipses it is suitable for determining the shoot-off winner.

As for the angst wrought between choosing to place the FSM closer or further away - that, again, is best left to that field calibration. I offer choices, I am not making them.

73's
Richard Clark, KB7QHC

4960. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:56:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98ossf$o4e$1@plutonium.btinternet.com>
Source record: 168333

Richard Clark wrote -
> "Reg Edwards" wrote -
>
> >But no self-respecting
> >amateur would accept this as a genuine shoot-out.
>
> Hmm,
>
> and which side of the fence do you inhabit? :-)
>
Ric, I have a split personality on this subject. The left mathematical, logical, hemisphere is biassed towards measurements within the near field. The emotional right hemisphere, which yearns to hear once again the music-of-the-spheres, calls for a REAL shoot-out over a 200-mile, one-hop path, via the E-layer, on 3.75 MHz, plus or minus qrm.

Do you think that would end the arguments about how high up the antenna the coil should be ? But in how many years out of 11 could the contest be held ?

Reg

4961. Re: antenna for 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 22:59:20 UTC
From: KB9YXM <kb9yxmNOSPAM@arrl.net>
Message-ID: <98ot7e$862$1@ousrvr3.oulu.fi>
Source record: 168336

Thank you.
Julian

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AAFC656.94DC9DE2@IEEE.org...
> KB9YXM wrote:
> > The other quesiton is a simple one. When building an antenna, why must
one
> > use a gamma match, isnmt it possible just to use a ballun as with a
di-pole?
>
> It is mechanically easier to make the driven element one piece of
> aluminum so there is no center insulator. That's when one needs
> a gamma match. If you want to go to the trouble of insulating
> the two elements of the dipole driven elements from each other,
> then the gamma match is not needed.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4962. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 23:01:37 UTC
From: kb7qhc@home.com
Message-ID: <3ab0f62e.1056140029@news.seanet.com>
Source record: 168334

On Wed, 14 Mar 2001 13:33:17 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>The shape of the near field isn't of any consequence for the
>"shootouts", since the field strength meter is placed well beyond the
>near field. No number of field strength meters in the near field would
>tell you much about what's getting to the far field unless the antennas
>are identical. And they certainly aren't.
>
>I continue to maintain that simply being electrically small doesn't
>guarantee a particular near field. Consider, for example, a small loop
>and a small dipole. These have identical far field patterns, but the
>near fields are quite different. Then consider the intermediate antennas
>you could make by breaking the loop and putting plates at the gap to
>provide capacitance, then gradually opening it to a dipole. The near
>field would change a lot as you did this. And the variations of antennas
>being measured in the shootouts resemble these intermediate antennas in
>a number of ways.
>
>Roy Lewallen, W7EL

Hi Roy,

It's hard to correlate your statement that near fields aren't of any
consequence in one breath and to follow that with glaring differences
between a loop and dipole in that same near field.

My proposals simply offer if you do find variation, fix it with
distance.

I would dearly love to have a package that displays those near fields
to appreciate your concern. I share it too, but visualizing it
(through a display package rather than a near field table) is not
currently an option. I have attempted to portray them in Mathcad, but
this too has not been very satisfactory.

These differences, variation, occur in the near field as you say (and
I have no arguement), but this says nothing of what near field means
in this regard. Half a wave? 5 waves? We can all quote the math in
its generality, but I need a visual correlative of the reality
(modeled or measured).

73's
Richard Clark, KB7QHC

4963. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 23:12:53 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AAFFAF5.16B7@wt.net>
Source record: 168337

W6RCecilA wrote:
>
> Richard Clark wrote:
> > Such was Cecil's agenda (I suppose) that I was responding to.
>
> My agenda was to try to learn something new. My learning method
> is to think the unthinkable.

Hey, I resemble that remark...

If a near-field strength meter is
> all that is needed for optimum performance, why bother with
> far-field measurements?
> --

Myself, I think as long as you get at least 20 ft away from the cars to be tested, it's going to be fairly accurate as far as determining the best of two vehicles. IE: the winner of the contest at 20 ft, will most likely also be the winner a 1 WL. But I also think the farther away you get, the more accurate in general. You can tell finer differences in strength. I think really you might as well just stick with 1 wl as you are doing. I sure don't think moving closer would add to the accuracy.
MK
--
http://web.wt.net/~nm5k

4964. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 23:13:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAFFB12.735AE581@eznec.com>
Source record: 168335

Depends on what you're adjusting for optimum performance. If all you're adjusting is your tuner, you can adjust it equally well by measuring the far field, measuring the near field, putting an RF ammeter in the output lead, or, like we did in the misty distant past, touching an NE-2 to the output wire and tuning for maximum brightness. No one of these methods will give you any better results than the other for determining the best tuner adjustment.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Richard Clark wrote:
> > Such was Cecil's agenda (I suppose) that I was responding to.
>
> My agenda was to try to learn something new. My learning method
> is to think the unthinkable. If a near-field strength meter is
> all that is needed for optimum performance, why bother with
> far-field measurements?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4965. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 23:22:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AAFFD52.43E8D706@eznec.com>
Source record: 168338

The organizers of the shootouts should take to heart the words of
Jonathan Swift, penned in 1733(*):

So, naturalists observe, a flea
Hath smaller fleas that on him prey;
And these have smaller still to bite 'em;
And so proceed ad infinitum.
Thus every poet, in his kind,
Is bit by him that comes behind.

Armchair quarterbacks have been with us since well before football was
conceived.

Roy Lewallen, W7EL

(*) On Poetry. A Rhapsody

4966. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 23:39:36 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98ovcl$s5$1@plutonium.btinternet.com>
Source record: 168339

Richard, I've never found the concept of dissipationless resistance to be of the slightest practical value. I can't imagine that anyone else has ever done so either. I had never even heard of the stuff till I came across it in this newsgroup. From what I read here it appears only to be an endless source of light academic argument.

Just a suggestion - if anyone should object to the introduction of an infinitely long, very low loss line into an argument, don't have an infinitely long line, just have a very long line and limit attention-spans to the period before the first echo arrives back at the near end. That period can be made as long or as short as anyone could wish for.

Unfortunately, attention-spans in this modern age are a little less than the intervals between TV adverts which get shorter by the month.

Reg
==========
Richard Harrison wrote
> Donaly wrote:
> "An infinite, or even an almost infinite transmission line is an
> abstraction."
>
> Yes, but Reg could tell you about some undersea cables that are
very
> long indeed.
>
> I did not mean to stir a dispute over the validity of the
"lossless
> line" as a simplification and as a convenience. The lossless line
idea
> works well enough in many situations. RG-8 has a loss of about
0.1
> db/100 ft at 1 MHz. For engineering purposes, the loss at shorter
> lengths and lower frequencies is insignificant.
>
> I was using 50-ohm coax as an example of dissipationless
resistance. If
> we had 100 feet of RG-8 carrying 100 watts at 1 MHz to a matched
load,
> the 0.1 db loss in the coax would be hard to measure. Most
instruments
> don`t have 0.1 db resolution.
>

> In the example used in my previous posting, I used an almost
endless
> line just as a short-hand for no reflected energy to vary the
line
> impedance. I was giving an example of an almost dissipationless
> resistance, that of the coax surge resistance.
>
> The main idea is that resistance is the name given to an in-phase
> voltage-to-current ratio. This ratio indicates an impedance to
current
> which is a resistance, but it does not necessarily eat any
energy. You
> who were taught that there is no such animal were simply
misinformed.
>
> Best regards, Richard Harrison, KB5WZI
>

4967. Re: Back to 9 newgroups

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-14 23:49:13 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AB00379.F421731A@bwcc.com>
Source record: 168340

Gary Peach wrote:
> "Dick Carroll" wrote
> > Gary Peach wrote:
> > > Recently my fuel gauge on the car has been sticking.
> > More likely it's the "sending unit" located in the tank.
> That thought had not eluded me, however the gauge remains pegged when the
> ignition is switched off and thus power is removed from the instrumentation.

I am not sure that is sufficient information to deduce that it is the gauge in the dashboard.
Some gauges have a memory that holds the last position when turned off.
If the car is off and you fill the tank, you won't see the new reading until the ignition is turned back on.

So what I need to know is whether your gauge used to drop below empty when you shut off the ignition.

Did you try to locate the sender and apply a reversed polarity voltage to it?

4968. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 00:15:53 UTC
From: kb7qhc@home.com
Message-ID: <3ab0094a.1061032443@news.seanet.com>
Source record: 168341

On Wed, 14 Mar 2001 22:56:00 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Richard Clark wrote -
>> "Reg Edwards" wrote -
>>
>> >But no self-respecting
>> >amateur would accept this as a genuine shoot-out.
>>
>> Hmm,
>>
>> and which side of the fence do you inhabit? :-)
>>
>Ric, I have a split personality on this subject. The left
>mathematical, logical, hemisphere is biassed towards measurements
>within the near field. The emotional right hemisphere, which yearns
>to hear once again the music-of-the-spheres, calls for a REAL
>shoot-out over a 200-mile, one-hop path, via the E-layer, on 3.75
>MHz, plus or minus qrm.
>
>Do you think that would end the arguments about how high up the
>antenna the coil should be ? But in how many years out of 11 could
>the contest be held ?
>----
>Reg
>

Hmm,

Sitting on the edge of Occam's razor. Unfortunately the crowd does
not see any virtue in having more than one FSM as a source of error.
;-)

73's
Richard Clark, KB7QHC

4969. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 00:22:50 UTC
From: kb7qhc@home.com
Message-ID: <3ab10a51.1061295742@news.seanet.com>
Source record: 168342

On Wed, 14 Mar 2001 17:12:53 -0600, Mark Keith <nm5k@wt.net> wrote:

>W6RCecilA wrote:
>>
>> Richard Clark wrote:
>> > Such was Cecil's agenda (I suppose) that I was responding to.
>>
>> My agenda was to try to learn something new. My learning method
>> is to think the unthinkable.
>
>Hey, I resemble that remark...
>
> If a near-field strength meter is
>> all that is needed for optimum performance, why bother with
>> far-field measurements?
>> --
>
>Myself, I think as long as you get at least 20 ft away from the cars to
>be tested, it's going to be fairly accurate as far as determining the
>best of two vehicles. IE: the winner of the contest at 20 ft, will most
>likely also be the winner a 1 WL. But I also think the farther away you
>get, the more accurate in general. You can tell finer differences in
>strength. I think really you might as well just stick with 1 wl as you
>are doing. I sure don't think moving closer would add to the accuracy.
>MK

Hi Mark,

You can do this at 20 feet, IFFF you can assure the next guy that his point of radiation is at the same, exact point as the last.

This is not a simple condition. As pointed out numerous times, the antenna is not solely responsible for what is radiated and taking it for granted that if fellow B's antenna is in the same place as fellow A's antenna, that actually says nothing about the source of radiation.

If the sources vary by 10 feet at a distance of 20 feet, you are in a world of hurt. If you push that FSM out to 2000 feet, it matters only to the degree that mulitpath might contribute error beyond the 0.5% variation.

73's
Richard Clark, KB7QHC

4970. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 00:26:12 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB00C24.1A72B958@toast.net>
Source record: 168343

Reg Edwards wrote:

> Tom W8JI wrote -
>
> > Unless something in
> > the system is poorly designed, the shield does nothing at all.
> ==========
>
> Very true. Small loops in most envirinments don't need any
> shielding. They are inherently so insensitive to the electric field
> relative to the magnetic field, shielding offers no advantages.
> Unfortunately, radio periodical publishers and editors don't have
> space for dreary, un-interesting articles about simple, unscreened
> receiving loops.
>
> As a result, it seldom occurs to fresh, young experimenters to make
> a recieving loop without a shield. They are beguiled to form loops
> from such materials as the inner conductors of coax cable which are
> much less efficient than loops formed from the outer conductors of
> the same size cables.
>
> ==========
> > and loops have
> > real SHARP nulls when properly balanced and shielded!).
> ==========
>
> But so does a short horizontal dipole. The radiating/receiving
> patterns are identical except for a 90 degrees rotation. And a
> horizontal dipole is insensitive to vertically polarised noise, the
> most common sort.

Why is noise usually vertically polarized?

john

4971. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 00:28:09 UTC
From: dennis@wawa.juniper.net
Message-ID: <98p2ap$1f7u$1@heap.juniper.net>
Source record: 168344

Tom W8JI <2w8ji@akorn.net> wrote:
>On Wed, 14 Mar 2001 09:43:10 -0000, "Gary Peach"
><xcg34@dial.pipex.com> wrote:
>
>>"Tom W8JI" wrote ...
>>> Gary Peach wrote:
>>> >However none of this negates my calculations, which are general case
>>> >illustrative examples. You have here a special case. the signal to noise
>>> >ratio will never the less still be about a dB worse than possible, so
>>there
>>> >is still some work to do.
>>>
>>> The calculations were negated before they were made, because they were
>>> based on incorrect data.
>>
>>I really must protest at that statement, if ther has been any incorrect data
>
>Protest all you like, the information about the noise level is
>incorrect. It is very well known the ionosphere shields the earth from
>galactic noise below 20 MHz or so.

I didn't know that, though this doesn't surprise me since there is
a lot of stuff I don't know. It does make sense that the ionosphere
would operate the same way whether the RF comes from the top or the
bottom, however, so the notion is intuitively satisfying.

Since at least part of the shielding would come from diffraction, with
the effectiveness varying with the angle of incidence, would this not
also imply that the shielding is better at the horizon than it is
vertically? And, if so, would this mean that horizontal dipoles
which have significant sensitivity in the near-vertical direction
might sometimes be noisier than vertical antennas which are relatively
deaf straight up? Particularly at night when the ionospheric absorption
of sky noise should be at a minimum?

That would defy common expectations. It would also explain how those
pre-satellite Bell Labs guys he quoted might have managed to measure such
huge sky noise temperatures (by measuring in the vertical direction?) that
you don't hear on your radio.

Dennis Ferguson

4972. Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 00:47:13 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB01111.D6BF83BD@toast.net>
Source record: 168345

I am a new ham. I have an antenna consisting of a wire about 50 feet long, fed through a piece of RG8-X and an AH-4 remote automatic antenna tuner. I want to increase my signal strength, and I'd like to try making my wire a dipole by adding another wire extending 50 feet in the other direction. I've been told that I can just extend the other wire from the ground side of the tuner to make a dipole.
Ok, I'll try that. But it occurs to me that it may not make a true dipole, since the currents through the ungrounded wing and the grounded wing may not be balanced- especially since there is also a grounding wire extending straight down from the tuner to a ground rod.
What I'd like to try is connecting a choke balun consisting of 10 feet of RG8-X wound up in about a 10-inch diameter circle (as described in the ARRL handbook), between the AH-4 tuner and the two wings of the dipole. Now, would that force the dipole to be a dipole, and would the tuner still be able to meaningfully tune the antenna through that balun?

In other words, the antenna won't be resonant, and whatever properties it exhibits at a particular frequency will be presented to the remote tuner through the choke balun. Will it still tune? Will it arc and explode, electrocute the valuable operator, or worse, wreck the antenna tuner?

Any and all comments appreciated. Thanks.

john

4973. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 00:53:23 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB01283.1AA4590B@usa.alcatel.com>
Source record: 168346

Roy was saying that the same E-field exists inside the shield as outside. This is demonstrably incorrect. The shunting impedance of a the shield is so low that very little E-field exists inside it.

As proof, try the experiment: A magnetic field antenna such as a loop continues to operate in the vicinity of an E-field short, while an E-field antenna does not. Merely walking under a porch roof or service station canopy with a short E-field probe (such as on some wide band receivers) can drop a formerly strong signal below audibility, but a ten dollar, loopstick-equipped AM portable continues to receive. This demonstrates a shield need NOT have the same field outside and inside. If the E-field is attenuated in this manner for a largely open structure then for a much smaller one such as a loop shield, with smaller openings, it will be more so.

Cortland
ka5s@earthlink.net

Tom W8JI wrote:

> On Wed, 14 Mar 2001 13:40:48 -0800, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >This may easily be disproven. Faraday shields DO work. Carry a receiver with a
> >short E-field antenna under a grounded metal structure and see.
> >
> >Cortland
> >ka5s@earthlink.net
>
> I'm missing something.
>
> Can you tell me how that proves Roy's statement was incorrect?
>
> What if I carried a closed loop of wire inside that structure?
>
> Why does my AM radio, with a loopstick, go dead inside a metal
> building? Why does a radio with a short whip work under the metal roof
> of my barn, just as a loopstick does?
>
> 73 Tom

4974. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 01:19:31 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3ab00b46.4102055@news.aepnet.com>
Source record: 168347

On Wed, 14 Mar 2001 09:43:10 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:

[snip]
>

>Once the space craft had soft landed the aperature of the antenna was
>completly filled by the disc of the Moon 0.5 degree diameter at a
>temperature of 150K (I made the first measurement of this phenomenon. It
>was neccassary to command the spacecraft signal off in order to make the
>measurement. The additional noise came as a bit of a surprise to the
>analysis team it was afctor that had not been considered at the planning
>stage.

Too bad the analysis team didn't have a competent ham EME operator on board; he could have told you this would happen.

By the way, what frequency were you using? Your temperature seems a bit lower than is given in some of my references, although if your frequency was high enough and the moon was less than full the average temp is lower.

In the chapter, "Microwave System Calibration Using the Sun and Moon", (ARRL UHF/Microwave Experimenter's Manual) author David Shaffer gives the radio temperature of the moon as 225K.

The chapter, "EME Communications" in the same publication gives the moon temperature as about 210K , referencing, Zheleznyakov, "Radio Emission of the Sun and the Planets."

Wes Stewart N7WS

4975. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 01:25:36 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <EPUr6.380$w46.3742@newsfeed.slurp.net>
Source record: 168348

Hello Jim. Be glad to help you out if I can. That was some time ago that I tried salting the heck out of my yard in a three foot circle and mixed it with the clay. My yard is 99% clay, some fill from an old steel mill down about two feet, (found that out when I put up security fence), and now all the yard, 60' X 60' is all a paving "brick yard". But that is another yarn for another day. I was trying to increase all three points you mentioned in your post. When I bought my home ten years ago I was just a brand new General Class, and was trying out different tips I got from my fellow hams who got much better results than I did using the "salt" trick. At first I thought it was my sea level that kept me from receiving and transmitting. But the more I studied about antennas I soon realized it was not so much the soil but my lack of understanding of the "ground system". Once that issue was solved I began to experiment with radials. The main reason I put my antenna up on the roof top was not for height but for a radial system that would compliment the antenna. I am not a whiz at math so a calculator helped me with the system. I have four radials per band cut to the middle of the bands. What a difference that made in all around performance of my rigs. That was four years ago. When I tune up and call CQ I usually get a quick reply. Hope this has helped you.
"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
news:98ogutnke1@newpoisson.nosc.mil...
> Dick: You didn't say why you salted the soil, e.g., improve SWR, decrease
> radiation resistance, see if it made any difference as far as reported
> signal strength, etc.
>
> For whatever reason, I'd be interested in what you were attempting to
> improve and how that improvement was measured.
>
> I'm querying Tom because I'm interested in whether modeling or history
would
> indicate that raising my vertical, given the extremely moist soil/water
> conditions I have, does any good. Don't know what "good" means so I'll
> await some comments from Tom.
>
> Regards, Jim R.
>
> "Dick Elliott" <elliotta@netusa1.net> wrote in message
> news:87Pr6.198$w46.2363@newsfeed.slurp.net...
> I tried the "soil the salt trick" when I had my Butternut vertical 6"
above
> the gound. I saturated the ground in a three foot circle. That did help a
> little. Putting it on the roof top of my house with a 6' mast and lots of
> radials was the answer to my problems. The reason it helped in my case, I
> believe, is that the antenna is now above the main power lines for the

city
> park and my neighborhood. I have four main feed lines running North and
> South over my back yard along the East edge of the city park. I knew when
I
> bought the house that would be a problem. But I am baseball nut and I have
a
> Little League ball diamond right next to my property line and love to sit
> out there and watch the kids play ball. So in my case height was the
answer
> to overcome the power line problem.
>
> "Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
> news:98nn3fhmi1@newpoisson.nosc.mil...
> Actually, I worded that reply wrong, Tom as it could appear as if I was
> baiting you. I should have queried differently - instead of "concern with
> height" perhaps along the lines of "Any interest in less concern with
> height."
>
> I read often of folks elevating their verticals as high as possible
because
> of the lousy soil conditions they face. Since I'm close to and on top of
> moist soil and water, can I be less concerned with the height of the
> antenna? Regards, Jim R.
>
> "Tom W8JI" <2w8ji@akorn.net> wrote in message
> news:3aaeb985.121042575@news.accessunited.com...
> On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch"
> rodenkir@spawar.navy.mil wrote:
>
> Tom: what if the antenna's location is at sea level? My yard is at sea
> level, hell, it's at the edge of a tidal creek fed by the ocean and a
> coupleof rivers. Any concern with height then? Regards, Jim R.
>
>
> I think like a land-lubber. Of course it helps next to the sea, because
> that is your terrain!
>
> I couldn't resist making that comment because my neighbor always insists
he
> gets out well on HF because he is 950 feet ASL. Since the sea is 250
miles>
> east, that really doesn't matter.
>
> 73 Tom
> > >
> > >
> >
> >
>
>

4976. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 01:32:51 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98p657$29g$1@slb4.atl.mindspring.net>
Source record: 168349

Roy:

I broke my last NE2, you know where to get new ones?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AAFFB12.735AE581@eznec.com...
> Depends on what you're adjusting for optimum performance. If all you're
> adjusting is your tuner, you can adjust it equally well by measuring the
> far field, measuring the near field, putting an RF ammeter in the output
> lead, or, like we did in the misty distant past, touching an NE-2 to the
> output wire and tuning for maximum brightness. No one of these methods
> will give you any better results than the other for determining the best
> tuner adjustment.
>
> Roy Lewallen, W7EL
>
> W6RCecilA wrote:
> >
> > Richard Clark wrote:
> > > Such was Cecil's agenda (I suppose) that I was responding to.
> >
> > My agenda was to try to learn something new. My learning method
> > is to think the unthinkable. If a near-field strength meter is
> > all that is needed for optimum performance, why bother with
> > far-field measurements?
> > --
> > http://www.mindspring.com/~w6rca
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

4977. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 01:33:40 UTC
From: richardharrison@webtv.net
Message-ID: <12564-3AB01BF4-7@storefull-118.iap.bryant.webtv.net>
Source record: 168351

Richard Clark wrote:
"So what? is the question."

It is significant, that`s what. It is meaningful that opposition can be offered to electrical flow and it does not alter the in-phase relationship between voltage and current, nor does this opposition consume power. How can it? In a transmission line, opposition is produced by a combination of purely reactive components. These are the pure series inductance and the pure shunt capacitance distributed within the wires. Pure reactances don`t consume power.

The problem is that many have been misinformed that resistance is defined as something that consumes energy while opposing current. That is the definition of a resistor. That is not the definition of a resistance. The resistor is just one of at least two types of resistance.

IEEE is correct.

Best regards, Richard Harrison, KB5WZI

4978. Re: Back to 9 newgroups

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 01:37:08 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <s_Ur6.387$w46.5982@newsfeed.slurp.net>
Source record: 168350

Disconect the battery. Wait about three minutes. This allows the cars
computer to reset. Hook the battery back up and see if the gauge will work.
Good luck.....W9FPJ
"Denver Braughler" <Braughler@bwcc.com> wrote in message
news:3AB00379.F421731A@bwcc.com...
> Gary Peach wrote:
> > "Dick Carroll" wrote
> > > Gary Peach wrote:
> > > > Recently my fuel gauge on the car has been sticking.
> > > More likely it's the "sending unit" located in the tank.
> > That thought had not eluded me, however the gauge remains pegged when
the
> > ignition is switched off and thus power is removed from the
instrumentation.
>
> I am not sure that is sufficient information to deduce that it is the
gauge in the dashboard.
> Some gauges have a memory that holds the last position when turned off.
> If the car is off and you fill the tank, you won't see the new reading
until the ignition is turned back on.
>
> So what I need to know is whether your gauge used to drop below empty when
you shut off the ignition.
>
> Did you try to locate the sender and apply a reversed polarity voltage to
it?

4979. DDRR VHF WHO HAVE THE DIAGRAMM???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 02:04:14 UTC
From: gervais <gfillio1@globetrotter.qc.ca>
Message-ID: <xoWr6.1799$Me7.56696@news.globetrotter.net>
Source record: 168355

hi All,
well i am looking for the diagramm to built a DDRR VHF antenna,is there
anyone that have that shemati cor plan??

For base use

gervais
ve2ckn@rac.ca

thanks for your help

4980. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 02:14:52 UTC
From: richardharrison@webtv.net
Message-ID: <22741-3AB0259C-36@storefull-117.iap.bryant.webtv.net>
Source record: 168352

Reg offered what should be sound advice:
"---just have a very long line and limit the attention-spans to the period before the first echo arrives back at the near end."

Yes, I did something akin to that while trying to explain surge impedance in an earlier posting. Alas, the initial ignition never made a sustained fire.

I also remember the countless attempts Cecil made trying to send pulses to and fro in earlier discussions trying to illuminate the gloom, but to little avail.

But, it is never hopeless. Time is required for these things to sink in and for the pieces to come together. At least, that`s how it works for me. Dr. Paul Joseph Goebbels was a devil, but there is something to be learned from clever devils. His motto was: "Repetition, Repetition, Repetition".

Best regards, Richard Harrison, KB5WZI

4981. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 02:50:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB02DFE.45112868@eznec.com>
Source record: 168353

I'm obviously failing to communicate. I said that the near field isn't of any consequence for the shootouts. That's because the near field isn't being measured in the shootouts. The example of the dipole and loop were to illustrate that the near fields of various small antennas can be very different, and why it would therefore be a poor idea to use near field measurements for shootouts (or any other time you want to compare two antennas that aren't identical). These don't seem contradictory to me.

"Near field" can have a number of definitions, since there's no abrupt boundary. But from a half wavelength dipole, the field gets very close to having the characteristics of the far field (wave nearly planar, E/H nearly 377 ohms, attenuation proportional to distance) in well under a wavelength away from the antenna. Kraus, in Antennas, says "the boundary beween the two [regions] may be arbitrarily taken to be at a radius of R = 2L^2/lambda", where L is the maximum dimension of the antenna and lambda is the wavelength, both in the same units as R. (Note the use of "arbitrary".) This gives a boundary of a half wavelength for a half wavelength dipole. For an 11 foot whip plus a 6 foot radiating vehicle on 3.8 MHz, the boundary using this equation works out to a little over two feet, although I'd want to get a bit farther away to make sure. But there's no question that the shootout measurements are being made in the far field.

There are some software packages that'll give you really nice graphical near field plots. Most of the ones I've heard about are in the $20,000 category, but as far as I know they're readily available if you really need this capability.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Wed, 14 Mar 2001 13:33:17 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >The shape of the near field isn't of any consequence for the
> >"shootouts", since the field strength meter is placed well beyond the
> >near field. No number of field strength meters in the near field would
> >tell you much about what's getting to the far field unless the antennas
> >are identical. And they certainly aren't.
> >
> >I continue to maintain that simply being electrically small doesn't
> >guarantee a particular near field. Consider, for example, a small loop
> >and a small dipole. These have identical far field patterns, but the

> >near fields are quite different. Then consider the intermediate antennas
> >you could make by breaking the loop and putting plates at the gap to
> >provide capacitance, then gradually opening it to a dipole. The near
> >field would change a lot as you did this. And the variations of antennas
> >being measured in the shootouts resemble these intermediate antennas in
> >a number of ways.
> >
> >Roy Lewallen, W7EL
>
> Hi Roy,
>
> It's hard to correlate your statement that near fields aren't of any
> consequence in one breath and to follow that with glaring differences
> between a loop and dipole in that same near field.
>
> My proposals simply offer if you do find variation, fix it with
> distance.
>
> I would dearly love to have a package that displays those near fields
> to appreciate your concern. I share it too, but visualizing it
> (through a display package rather than a near field table) is not
> currently an option. I have attempted to portray them in Mathcad, but
> this too has not been very satisfactory.
>
> These differences, variation, occur in the near field as you say (and
> I have no arguement), but this says nothing of what near field means
> in this regard. Half a wave? 5 waves? We can all quote the math in
> its generality, but I need a visual correlative of the reality
> (modeled or measured).
>
> 73's
> Richard Clark, KB7QHC

4982. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 02:56:13 UTC
From: Raymond Hansmeier <rhansmeier@home.com>
Message-ID: <3AB02F4B.144338E4@home.com>
Source record: 168354

Your absolutly right Doc, I did'nt even go into the RFI on both the down and upstream signals. I know that most of you understand that the CATV plant now days has both forward sigs in the vhf to uhf range and their return path is in the 3-30 mhz range. I am sure when he keyed up that it would have dire concequences for the return path portion of the plant, causing many problems with pay per view, video on demand, cable modems, and IP telephony and any assorted array of services, not to mention any harmonics that his transmitter may have..so all in all not a good thing to do... Ray K7FU

'Doc wrote:

> KB9WFK,
> What you say is true, but since any signal he put into
> the cable would be orders of magnitude stronger than the
> signals on the cable, it's almost a 'lead-pipe' cinch that
> his signals are going to cause RFI. Depending on how much
> signal is 'induced' in the CATV system, he may also be
> responcible for fixing other people's TVs if they're affected,
> not to mention the cable company's equipment. Sort of like
> petting an alligator, just hope it doesn't turn around and
> bite you...
> 'Doc

4983. Re: SKY TEMPERATURE FOR HAMS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 03:21:44 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ab27a9e$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 168431

"Tom W8JI wrote
> Only an very inexperience beginner would think local noise is
> originated in space on HF bands, with the possible exception of bands
> above 20 meters at night or times when the ionosphere is so thin as to
> have little effect on signals.

I am always willing to learn Tom perhaps you would be so kind as to instruct me in the exact nature of HF noise and wher it originates. But more importantly what is the magnitude of the noise on HF, how is it measured and a description of the Antennas used and their efficiency and pattern. This information will be useful to facilitate the calculation of anticipated thresholds and signal to noise considerations on eacdh of the Amateur bands. If ther is only good data for one band then that will be a good start to collecting and colating an accepted standard and a basis for future obervations and calculations. Ther is no garauntee that the noise will remain constant we have not been around for long enough yet to know.

> Galactic temperature is virtually meaningless over all of HF, and
> certainly should never be used on bands below 10 MHz unless there are
> extreme exception to the normal application.

Where do you get your values for sky temperature and what are they for these bands?

> Gary Peach wrote:
>
> >The text and the calculations are my original work and I accept the
> >responsibilty for any errors found.
>
> OK, that's good enough for me.

At least we have a starting point.

> <SNIP>
>
> >Most of the Sky Temperature is of Galactic origin and there is an
increase
> >when looking directly at the galactic centre.
> >With the sorts of antenna commonly encountered amongst Hams this effect
will
> >be minimal because of the wide beam widths of HF antennae. At VHF the
effect
> >will begin to become noticeable.
>
> Even with a narrow beamwidth antenna, galactic temperature is
> meaningless at HF and lower. The ionosphere acts like a shield or

> attenuator, and also conveys distant terrestrial noise sources, both
> man-made and by nature, to the antenna. By far this is the dominant
> source of noise where the ionosphere plays a role in propagation.

What is the magnitude of this noise and how does it change with frequency?
How is it modified by antenna efficiency?

> >At the lower HF frequencies local and distant lightening will increase
the
> >Sky Temperature occassionally, but you will notice a difference in the
> >character of the noise sound, there are distinct pops and bangs producing
> >noise peaks as well as an increase in the average Sky Noise Temperature.
>
> You will NOT notice a difference in the "noise sound" because you will
> virtually never be able to hear galactic noise below 15 MHz on any
> antenna system at any time. It will be attenuated by the ionosphere to
> the point where its level is lower than propagated terrestrial noises,
> which often also sound "white" because the noise is from many
> thousands of random sources.

This surely must form the basis of an experiment with an HF receiver mounted
in a space craft above the ionosphere and a series of stations at the
earth's surface making simulteneous measurements of the noise. Has the
experiment been done? if yes where can I see the results?

> Galactic-noise is only a dominant factor in receiving systems
> operating above 40 MHz. in noise-free locations. On 160 meters, as
> well as six meters, I can hear a substantial noise increase (I'm in a
> very quiet rural location with few houses and power lines around me)
> when I aim my antennas at two neighboring town about 5-7 miles away.

Can you describe your antennae and their characteristics and the effective
sky noise temperatures that you measure?

> When the bands are "open" and I am receiving distant signals the
> propagated noise even on the most quiet days "swaps out" the noise
> from the population centers around me (both towns of 7000 people).

?? I think that my understanding of this paragraph is ambiguous can you
expand upon it for me please Tom?

> There is a 10-15 dB noise increase at night on 160 meters, because of
> propagated noise, even on the most quiet winter days. On twenty
> meters, as well as 160, I can tell what direction the band is open by
> listening for a noise increase.

Wher is this noise generated and more iimportantly what is the magnitude of
the noise at your antenna?

> Now I'm sure if my antennas were above the ionosphere, galactic noise
> would be important. But I simply can't manage that height and even if
> I did I wouldn't be able to work many people below ten MHz because of
> the attenuation of the ionosphere.

Are you suggesting that HF noise originates in the effective terminating load formed by the high attenuation of the Ionosphere? If so what is the driving force, where does the energy come from to produce the noise?

> >The graph in the "RSGB Communications Handbook" Fig 15.6 is pretty well spot
> >on. However it would be useful to see the vertical scale also calibrated in
> >temperature.
>
> It may be "spot on", but it is also useless unless you know how it
> applies to the real world we live in. Almost anyone can learn to read,
> write, copy data, add, and subtract..... the real problem is
> understanding how to use data correctly. That's what takes time and
> effort.

I think as a first step it would be a good idea to see how the data was collected and whether it has been independently corroborated. Perhaps as you have such an excellent location and an antenna farm of some magnitude you would be in a position to supply some measured data and where possible independent verification would be useful.
Perhaps you know a source of information for the sky temperatures on HF, the main consideration for the Ham community is to be able to anticipate what signals they will be able to receive on each of the bands which they are likely to be able to use. This will to a large extent determine what equipment they will require to accomplish the task. You could be instrumental (forgive the pun) in providing this vital source data.
73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

4984. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 03:46:00 UTC
From: richardharrison@webtv.net
Message-ID: <22741-3AB03AF8-42@storefull-117.iap.bryant.webtv.net>
Source record: 168356

John wrote:
"Why is noise usually vertically polarized?"

First, when we are concerned with amateur frequencies in the shortwave bands, most of the groundwave is exhausted in a short distance from its source. This is true for desired and undesired radiation alike. Attenuation increases with frequency. You may recall that hams were relegated to "200m and down" because shortwaves seemed useless for groundwaves, and that was the propagation in use at the time.

Second, The worst noise is usually produced within groundwave distance of the receiver.

Third, the horizontal antenna above ground is ineffective for groundwave production or reception. Its "mirror image" in its ground reflection is 180-degrees out of phase with the radiator. So is radiation from the two sources.
If the ground is a very good reflector, a distant receiver will receive two nearly equal and opposite signals that tend to cancel. If the ground in the path is a poor reflector, the out of phase reflected energy will be weak but so will the direct groundwave signal. Ground that is a poor reflector is also a poor propagation medium for groundwaves. So, either way, good ground or poor, the signal communications of groundwaves from a horizontal antenna is no good.

The vertical antenna launches and receives vertically polarized waves, both direct and reflected, which are in-phase. Over good soil, these travel much longer distances than horizontally polarized waves. Noise is launched and propagates just like signals. Thus, most noise is usually vertically polarized.

Best regards, Richard Harrison, KB5WZI

4985. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 04:19:34 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98pfsmqon0@208.206.142.72>
Source record: 168357

Fractenna wrote:
>
> >
> >Michael Hart wrote:
> >>
> >> I understand that a "Patent pending" is a warning. It is my understanding
> >> that if the patent does get through and you have already made the invention
> >> before the patient is issued you are still libel to the patent owner for
> >> infrigment. I am not a lawyer either but I think this is the case -
> >> particularly if you have been warned.
> >
> >Consider the patent application process. A person applies for a patent.
> >The application contains a handful of claims which describe precisely
> >what combination the patent is to cover. The patent examiner throws out
> >a bunch of the claims, says others are too broad, and sends it back. The
> >applicant re-writes the patent to try to satisfy the examiner, and so
> >forth. This can go on for literally years. The result is frequently a
> >patent that hardly resembles the original, and often no patent at all.
> >Take for example Fractenna's most recent patent "Fractal antenna ground
> >counterpoise, ground planes, and loading elements" (6,140,975). The
> >"Patent Case Text" shows:
> >
> >"This is a continuation of application Ser. No. 08/649,825 filed May 17,
> >1996 is now abandoned.
> >
> >This application is a continuing application from applicant's pending
> >patent application Ser. No. 08,609,514 entitled TUNING FRACTAL
> >ANTENNAS AND FRACTAL RESONATORS, filed on Mar. 1, 1996, abandoned, which
> >itself is a continuation-in-part of applicant's pending
> >patent application Ser. No. 08/512,954 entitled FRACTAL ANTENNAS AND
> >FRACTAL RESONATORS, filed on Aug. 9, 1995, now
> >abandoned."
> >
> >The "Fractal Antennas and Fractal Resonators" (6,104,349) shows the
> >following history:
> >
> >"This is a continuation, of application Ser. No. 08/609,514 filed Mar.
> >1, 1996 now abandoned, which is a continuation-in-part application of
> >applicant's patent application Ser. No. 08/512,954 entitled FRACTAL
> >ANTENNAS AND FRACTAL RESONATORS, filed on Aug. 9, 1995,
> >abandoned."
> >
> >So you see, there's a trail of abandoned patents leading to each of
> >these. At one time, applications 08/649,825, 08/609,514, and 08/512,954

> >were "pending patents", and now they're souvenirs. Should everyone have
> >stopped making whatever was in these applications until they were
> >"abandoned"? There's no way of telling what was in these abandoned
> >applications, or how much modification was done to the application from
> >the time it was submitted until the patent was issued -- in the U.S.,
> >patent applications aren't public. For all we know, the original patent
> >application was for all antennas with fractal elements, but ended up
> >being for a much more restrictive class of antennas -- or even just a
> >test procedure. All we know until the patent actually issues is that
> >someone applied for a patent for something. (And for that we only have
> >the applicant's word to take for it, but there are penalties for falsely
> >claiming that an application has been made.)
> >
> >So what should we be warned about? The content of the original
> >application? Suppose I apply for a patent to cover all antennas. Sure,
> >it'll be thrown out (or, more nicely put, "abandoned"), but until it is,
> >I have a "pending patent". Should you be forbidden to make, use, or sell
> >all antennas until it is? Ok, so I apply for a patent for a broad range
> >of fractal antennas. By the time the patent gets through the system, I
> >end up with a patent for a way to measure antennas having at least 8
> >fractal elements arranged in a star-like structure made from
> >superconducting material and driven simultaneously with 24 sources
> >having a precise current ratio. When I apply for the patent, I warn you
> >that a patent for a broad range of fractal antennas is "pending". What
> >force of law do you think that should carry?
> >
> >Roy Lewallen, W7EL
> >
> >
>
> Dr. Cohen is the father of fractal element antenna technology and what a
> wonderful and useful field that is:-)
>
> We heard this type of Lewallen nonsense when the first patent came out.
>
> Then the second patent came out.
>
> (surprise!)
>
> Then the third patent came out.
>
> (surprise!)
>
> 3 issued patents so far.
> Many,many patents pending.
>
> I geuss you can go to a patent attorney and say golly! Cohen missed something!
> Let's apply for a patent on it! It's not in this patent's claims! Sure! You can
> waste your money any ol' way you want:-)
>

> Surprise!
>
> Smile:-)
>
> Can't fight with success:-) But you can sure try to mislead others and even
> infringe on their IP like Roy Lewallen .
>
> Surprise!
>
> As I said, much is happening 'offline'.
>
> 73
> Phil N1ZKT

HAW HAW HAW!!! What a Frackass!

4986. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 04:35:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98pgoqhlk1@uranium.btinternet.com>
Source record: 168281

Roy, thanks for your time and trouble in researching all the info.

From the Belden site I obtained details of Belden 8230 300-ohm line. From the attenuation vs frequency, velocity, and dimensions it can be deduced the loss factor of the polyethylene insulant is 0.00045. This somewhat high value for Pe is due to the dense brown coloring pigment. Pigment is added to prevent damage due to prolonged exposure to UV rays.

I did the following for amusement.

A reputable manufacturer will specify cable attenuation slightly greater than the average value of production runs. Belden does not specify anything at all below 100 MHz. So to predict what might happen at HF I came up with -

Attenuation = 0.103 * Sqrt(MHz) + 0.0015 * MHz dB/100 feet which fits Belden's data between 100 and 900 MHz.

For your test frequency of 21 MHz this formula gives 0.504 dB/100 feet.

You measured it to be 0.8 dB which is considerably different. But before going into measuring accuracy there's another reason for a discrepancy - the line conductors are copper-coated steel and the manufacturer implies the line is not intended for use below 100 MHz (It is TV antenna downlead). So the copper thickness over the steel is probably no thicker than necessary for operation at 100 MHz.

If the copper was thicker than necessary at 100 MHz the manufacturer would have specified attenuation at an even lower frequency. But he didn't. And so at 21 MHz the current has begun to flow in the lossy and magnetic steel. So if you are hell-bent on winning the contest by digging those last little signal weak signals out of the noise - don't use Belden 8230 with your G5RV.

I vaguely remember we've previously discussed measurement of attenuation using a reflection coefficient meter for power level comparisons. Of all the very many electrical quantities there is only one which is more fraught with error than measurement of high RF power - and that is high RF through-power.

Better ways of measuring RF attenuation involve either impedance bridges or calibrated attenuators. And it's very useful if the two ends of the line under test can be brought close together. The problem is then reduced to determining the ratio of two voltages. If the frequency is varied until the line's input and output

voltages are anti-phase (odd number of 1/4-waves) the measurement
is reduced to a null method - a bridge - the most accurate of
all. The velocity factor is a free gift.

Then pray for rain, or go round with a watering can, and see how
things change.

Incidentally, if the Belden 300-ohm line is used in a resonant
condition, eg, as in a line transformer as described by Cecil, even
with solid copper conductors it would have a Q of only 49 at 2 MHz
and 109 at 10 MHz. Compare those two figures with the Q of coils
in an ordinary tuner. But it doesn't have solid copper conductors
!

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Roy Lewallen <w7el@eznec.com> wrote in message
news:3AAC39C1.7C65C901@eznec.com...
> Roy Lewallen wrote:
>
> > S/m). At 1 degree freezing point depression (about 0.3
g-mol/l), the
> > conductivity is 26 mmho/cm (0.26 S/m). Compare this to
"average". . .
>
> Correction: 26 mmho/cm is 2.6, not 0.26 S/m. My apology.
>
> Roy Lewallen, W7EL

4987. Re: Capacitance hat supports

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 05:05:26 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98piim$b7e$0@208.206.142.72>
Source record: 168274

"jason_hsu"@@@@@planetmail.com wrote:
>
> I recently purchased the W6AAQ DK3 Screwdriver antenna.
>
> I know that any sheet of metal can function as a
>
> capacitance hat.

Doesn't need to be a disc, it can be a spoked wheel configuration with nearly equal effect. You can get a roll of solid aluminum grounding wire from Radio Shack and make a circle, and how ever many spokes you want to use (4? 5?). Leave the spokes extrqa length enough to make a 1" 90 degree bend where they meet the whip. Use a small stainless steel hose clamp to clamp the spokes to the whip. Also leave a couple extra inches length so the spokes can be wound around the outer circle. Cheap, simple, effective and easily changed. The diameter of the hat stucture will depend on how much capacitance you need to add. I'd start with a 3 ft diameter one using 18 inch spokes (add about three inches for above connections) You will probably need to experiment and may need to make more than one to get your objectives met.

> The capacitance hat must be at the top of
>
> the whip in order to be most effective.

But not for effective operation, and you will have a real problem supporting it at the top of any conventional whip. Put it about a third of the way up from the coil. If you use the hat arrangement above it will be easy to experiment to find what you want to leave for the final configuration then you can rework it more permanently as desired. If you leave the whip down closer to the coil it will be self supporting if made as above.

But how can I
>
> support the capacitance hat? Is there something I can
>
> clamp to the top whip to support the hat?
>

See above.

For a mount you can get auto or truck wheel instead of a brake drum, and make up whatever added structure you need to add to it to mount the screwdriver antenna. Use sandbags or plastic milk jugs filled with water for ballast weights.

73 es GL de Dick W0EX

4988. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 06:04:37 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98pm1llgo0@208.206.142.72>
Source record: 168284

Tom W8JI wrote:
>
> On 13 Mar 2001 09:59:57 GMT, storkus@packard-hell.storkus.com (Mike P.
> Storke) wrote:
>
since the E field is much
> >stronger typically than the H field (unless you're using a loop to transmit
> >with, of course), a sometimes dramatic noise reduction can usually be seen,
>
> The claim noise is an E field is a myth.
>
> Noise is NOT predominately any field "gender". It is just like any
> other signal in the world. If you are close to the source, there can
> be a dominance of one field or the other...but either field can be
> dominant. As a matter of fact, it is most likely that most man-made
> noise sources are magnetically dominant or somehat neutral in the
> induction field area because most are radiated by relatively low
> impedance wiring, like long power lines.

Seems to me that most noise that is propagated on power lines is
horizontally polarized simply because of the orientation of the
radiator, like with other antennae. Maybe this is why the story got
around that noise is horizontal.

Dick

4989. Re: RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 06:38:01 UTC
From: k4wge@msn.com
Message-ID: <OE37U8QVjp3b6uIU1Gj000000de@hotmail.com>
Source record: 168468
Body handling: HTML body converted to readable text

Steve, et al. --

The subject presentation is to be given by Prof. Douglas Werner of The Pennsylvania State University. Phil Salkind failed to give him the courtesy of acknowledging his authorship, unfortunately.

Bill

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4990. An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 06:52:44 UTC
From: cb-radio@arrl.org
Message-ID: <arrl_letter@get_the_message>
Source record: 168277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

ARRL members, Here is a letter that you can use and send to your ARRL section manager, Division director, and ARRL board of Director:

Dear (insert directors name here),

Why don't you wake up and pull your fucking head out of your ass? I am concerned about the quality of amateur radio operators, not quantity. If I wanted to listen to a bunch of stupid operators, I would listen to CB. Do us all a favor and propose something that will impove amateur radio, not dumb it down. Bring integrity and intelligence back into the amateur radio service. Thanks and 73.

(insert your name here)

4991. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 08:23:53 UTC
From: Jeroen Belleman <Jeroen.Belleman@cern.ch>
Message-ID: <3AB07C19.677B235A@cern.ch>
Source record: 168275

Reg Edwards wrote:
>
> [...] I've never found the concept of dissipationless resistance
> to be of the slightest practical value. I can't imagine that anyone
> else has ever done so either. [...]

Well, there are some real world applications of the concept. Any
ordinary resistor which transforms energy into heat also does the
opposite: It produces thermal noise.

Folks who make very low noise amplifiers with matched inputs
figured that, rather than putting an actual matching resistor
at the amplifier input, it would be better to use feedback to
do the matching.

As a result, the noise produced by the observed input resistance
is lower than the noise produced by an actual resistor of the
same value. Without this trick, it would have been impossible
to make matched-input amplifiers with better than 3dB NF.

Jeroen Belleman

4992. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 10:21:02 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB0978E.A0393A31@toast.net>
Source record: 168285

Richard Harrison wrote:

> John wrote:
> "Why is noise usually vertically polarized?"
>
> First, when we are concerned with amateur frequencies in the shortwave
> bands, most of the groundwave is exhausted in a short distance from its
> source. This is true for desired and undesired radiation alike.
> Attenuation increases with frequency. You may recall that hams were
> relegated to "200m and down" because shortwaves seemed useless for
> groundwaves, and that was the propagation in use at the time.
>
> Second, The worst noise is usually produced within groundwave distance
> of the receiver.
>
> Third, the horizontal antenna above ground is ineffective for groundwave
> production or reception. Its "mirror image" in its ground reflection is
> 180-degrees out of phase with the radiator. So is radiation from the two
> sources.
> If the ground is a very good reflector, a distant receiver will receive
> two nearly equal and opposite signals that tend to cancel. If the ground
> in the path is a poor reflector, the out of phase reflected energy will
> be weak but so will the direct groundwave signal. Ground that is a poor
> reflector is also a poor propagation medium for groundwaves. So, either
> way, good ground or poor, the signal communications of groundwaves from
> a horizontal antenna is no good.
>
> The vertical antenna launches and receives vertically polarized waves,
> both direct and reflected, which are in-phase. Over good soil, these
> travel much longer distances than horizontally polarized waves. Noise is
> launched and propagates just like signals. Thus, most noise is usually
> vertically polarized.

I'm not sure I understand yet. The first part of your explanation seems to say that most noise is groundwave, or short range noise, and that horizontal dipoles are relatively insensitive to groundwaves because at low elevations there is a cancellation between the antenna's pattern and the pattern of its ground reflection. That makes sense all by itself, but doesn't introduce anything yet about polarization of the noise signal, as far as my inexperienced eye can see. Then you say, essentially, that a vertical antenna has its direct and reflected signals in phase, and thus transmits and receives well at low angles. I can see that this might mean that a vertical antenna picks up more groundwaves or local noise. Is that the case? And that horizontal antennas are essentially less sensitive to local noise? But I can't see that it would say that the noise itself is vertically

polarized. Or am I missing something here?
thanks

john

4993. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 10:33:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB09A8B.1C267381@eznec.com>
Source record: 168283

Are you saying that very little E field exists inside a coaxial cable? A coax cable can have a large E field inside, but no field or an entirely different one outside. But things change when you cut a gap in the shield. Inside a coax cable, the current on the outside of the inner conductor equals the current on the inside of the outer conductor. If you cut a gap in the shield, the current flowing on the inside of the outer conductor has nowhere to go except over the edge to the outside. So you end up with current on the outside of the shield equal to the current on the inside. Similarly, any field impinging on the coax from the outside induces a current on the outside of the shield. This has to flow around the edge to the inside, where it produces the same field inside as was impinging from the outside. That's what happens with a shielded loop.

The preceding discussion depends on the shield being at least several skin depths thick, so it doesn't hold true at audio frequencies, say.

I don't have a ready answer for your experimental results. I see several possible things at work. A filling station canopy is almost certainly well grounded, so you'd be standing under the top hat of a top loaded vertical. I'm not sure that's a good analogy for the loop shield. The loopstick equipped radio might be a lot more sensitive that the one with the short probe. So I'm not sure you can draw the conclusion you did from the experiment. I think a better experiment would be to compare shielded and unshielded loops.

Roy Lewallen, W7EL

Consider

Roy Lewallen, W7EL

Cortland Richmond wrote:
>
> Roy was saying that the same E-field exists inside the shield as outside. This is
> demonstrably incorrect. The shunting impedance of a the shield is so low that very
> little E-field exists inside it.
>
> As proof, try the experiment: A magnetic field antenna such as a loop continues to
> operate in the vicinity of an E-field short, while an E-field antenna does not.
> Merely walking under a porch roof or service station canopy with a short E-field
> probe (such as on some wide band receivers) can drop a formerly strong signal below
> audibility, but a ten dollar, loopstick-equipped AM portable continues to receive.
> This demonstrates a shield need NOT have the same field outside and inside. If the
> E-field is attenuated in this manner for a largely open structure then for a much
> smaller one such as a loop shield, with smaller openings, it will be more so.

>
> Cortland
> ka5s@earthlink.net
>
> Tom W8JI wrote:
>
> > On Wed, 14 Mar 2001 13:40:48 -0800, Cortland Richmond
> > <Cortland.Richmond@usa.alcatel.com> wrote:
> >
> > >This may easily be disproven. Faraday shields DO work. Carry a receiver with a
> > >short E-field antenna under a grounded metal structure and see.
> > >
> > >Cortland
> > >ka5s@earthlink.net
> >
> > I'm missing something.
> >
> > Can you tell me how that proves Roy's statement was incorrect?
> >
> > What if I carried a closed loop of wire inside that structure?
> >
> > Why does my AM radio, with a loopstick, go dead inside a metal
> > building? Why does a radio with a short whip work under the metal roof
> > of my barn, just as a loopstick does?
> >
> > 73 Tom

4994. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 11:31:57 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <d79q89.v2c.ln@localhost.localdomain>
Source record: 168294
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
* wrote:

> Bigotry is ok in my book except against jews.

Why are we continually blighted with this shite on
rec.radio.amateur.space? Please check for cross-posting
before replying to this crap.

Followup set to: alt.flame

73, Ed. EI9GQ

--
Remove 'X' to reply by mail.
http://www.qsl.net/ei9gq

Linux 2.4.2
```

4995. Re: Radio Shack AntennaQST Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 11:37:11 UTC
From: w1rfi@aol.com
Message-ID: <20010315063711.07017.00001013@ng-mj1.aol.com>
Source record: 168279

>From: Gary Danaher

>Thanks to all. I have at least found the title of the article and the date of
>of the QST-- "A Five-Element, 2-Meter Yagi for $20 (Antennas and
>Transmission Lines)", July, 99. Now to dig around and get the specific model.

The article is among those that can be downloaded at:

http://www.arrl.org/tis/info/yagi-v.html

73,
Ed Hare, W1RFI
ARRL Lab

4996. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 11:50:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98qa8o$dt0$1@neptunium.btinternet.com>
Source record: 168273

Copper-clad steel conductors - resistance vs frequency :-

When frequency is low enough for the skin depth in copper to be of the same order as copper thickness, as frequency is further decreased most of the current remains in the copper. Consequently conductor resistance and line attenuation tend to remain constant with frequency.

Eventually, at very low frequencies, where the skin depth in steel approaches the same order as the radius of the steel wire, the resistance is that of the steel in parallel with the copper. At DC, with a thin copper cladding, the resistance will be slightly less than that of the steel alone.

Reg, G4FGQ

4997. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 12:00:39 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <98qaogabe1@slb6.atl.mindspring.net>
Source record: 168270

Richard:

[snip]
> The problem is that many have been misinformed that resistance is
> defined as something that consumes energy while opposing current. That
> is the definition of a resistor. That is not the definition of a
> resistance. The resistor is just one of at least two types of
> resistance.
>
> IEEE is correct.
>
> Best regards, Richard Harrison, KB5WZI
[snip]

Resistance does not "consume" energy. There are no relativistic effects extant in a resistor. No mass is created!

Dear Albert would roll over in his grave to hear such ramblings.

Resistors simply convert energy from one form to another, they consume nothing!

Resistors convert the kinetic energy of motion of free electric charges, generally though not always in the form of electrons, into the kinetic energy of motion, generally though not always in the form of vibrations, of atoms and molecules. Some would measure these vibrations as phonons, others as calories, others as BTU's. All measures of mechanical motion nonetheless.

That conversion of energy from electrical to mechanical motion/vibration, often referred to as "heat", is the principal intended function performed by those devices called resistors.

This function of energy conversion is universally referred to as "dissipating electrical energy as heat".

Nothing more nothing less. Now I ask, what the hexx is "Dissipationless Resistance"? Indeed!

There are lesser known devices that convert heat energy into electrical energy. Devices that convert the mechanical motion or vibration of atoms and molecules directly into the motion of electrical charges... Sort of the reciprocal of a resistor. Shall we call these "reciprocators"? What?

What shall we call these devices? If devices that convert electrical energy to heat are called "dissipation resistors" then I believe that devices that convert heat into electrical energy should be the ones to be called

"dissipationless resistors", but I prefer to create a new word for those devices.... "reciprocators" I like the "ring" of that new word. I'm going to submit that to the Chief Lecicographer at the IEEE Dictionary for the very next edition!

Richard, can you name any of these devices/effects? Their inventors? I'd like to know what the IEEE Dictionary currently calls that particular effect! It's sad to see the misguided IEEE Dictionary authors trying to rename ubiquitous, very old tried and true concepts and names. Why don't they go pick on some lesser known concepts to label or rename.

Please, Richard let's just leave those old standby's like "surge resistance", "radiation resistance", etc... alone!

Stop trying to rename perfectly understood functions, or attempt to re-label them with that "odd and ill-defined" concept called "dissipationless resistance".

That silly and unecessary conceptual contrivance, known as "dissipationless resistance" thrown out by that "crude, coarse fellow" who authored the article on resistance in that dammed abomination of lexicography called the IEEE Dictionary.

Those who truly understand what underlies have no need for such confusing artifices! Dissipationless Resistance begone!

-Peter K1PO

4998. HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 12:05:03 UTC
From: Robert Moughton <mailliw@peoplepc.com>
Message-ID: <tb1c03odm8s9d5@corp.supernews.com>
Source record: 168276

I recently inherited a HF6V antenna from my father and am trying to erect it. The question that I have is, How do I correctly install the Q base coil located at the bottom of the antenna? I think that the instructions are showing that I connect each end of the coil across the base insulator and across the 75ohm matching cable. Then I suppose that the radials will connect to the bottom side of this coil. Does this sound correct?

Bob Moughton
N4RPK

4999. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 12:16:12 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98qc4g$86o$1@newpoisson.nosc.mil>
Source record: 168280

Dick: while awaiting your reply I started thinking about what would happen when you mounted your vertical on the rood and here's what I figured would happen - you'd install radials that approached a 45 degree angle from the horizontal which is one heck of a good way to get the antenna's Zo around 50 ohms - that's a good thing. What I didn't think of was your comment regarding four radials "per band." I don't know how many bands your set up for but, assuming at least four, you've got 16 radials and that's better than a couple on the ground.

My homebrew system has about 20 + (can't remember exactly how many I installed - old age, ya know) and I'm right on top of moist soil and next to that lake so I suspect we're close to "alike" in the performance of our respective systems.

The bands of best performance for me are 40, 30 and 20. My vertical is about 23 feet high (quarter wave on 30) and I add capacitance in parallel with the feedline and ground to tune it for 20; for 40 I add a tad of inductance (hand wound coil). For 12 meters, I switch everything out and just use the 23 feet - turns out to be 5/8 wavelength. The radials vary in length from 16 feet to 30+ feet.

Great to talk to you about verticals! Love working with that antenna, improving it, changing the length and C or L values for different bands - as long as I can "roll my own" I'm happy. LOL! Regards, Jim R.

"Dick Elliott" <elliotta@netusa1.net> wrote in message news:EPUr6.380$w46.3742@newsfeed.slurp.net...
Hello Jim. Be glad to help you out if I can. That was some time ago that I tried salting the heck out of my yard in a three foot circle and mixed it with the clay. My yard is 99% clay, some fill from an old steel mill down about two feet, (found that out when I put up security fence), and now all the yard, 60' X 60' is all a paving "brick yard". But that is another yarn for another day. I was trying to increase all three points you mentioned in your post. When I bought my home ten years ago I was just a brand new General Class, and was trying out different tips I got from my fellow hams who got much better results than I did using the "salt" trick. At first I thought it was my sea level that kept me from receiving and transmitting. But the more I studied about antennas I soon realized it was not so much the soil but my lack of understanding of the "ground system". Once that issue was solved I began to experiment with radials. The main reason I put my antenna up on the roof top was not for height but for a radial system that would compliment the antenna. I am not a whiz at math so a calculator helped me with the system. I have four radials per band cut to the middle of the bands. What a difference that made in all around performance of my rigs. That was four years ago. When I tune up and call CQ I usually get a quick

reply. Hope this has helped you.
"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
news:98ogutnke1@newpoisson.nosc.mil...
Dick: You didn't say why you salted the soil, e.g., improve SWR, decrease radiation resistance, see if it made any difference as far as reported signal strength, etc.

For whatever reason, I'd be interested in what you were attempting to improve and how that improvement was measured. I'm querying Tom because I'm interested in whether modeling or history would indicate that raising my vertical, given the extremely moist soil/water conditions I have, does any good. Don't know what "good" means so I'll await some comments from Tom.

Regards, Jim R.

"Dick Elliott" <elliotta@netusa1.net> wrote in message
news:87Pr6.198.2363@newsfeed.slurp.net...
I tried the "soil the salt trick" when I had my Butternut vertical 6" above the gound. I saturated the ground in a three foot circle. That did help a little. Putting it on the roof top of my house with a 6' mast and lots of radials was the answer to my problems. The reason it helped in my case, I believe, is that the antenna is now above the main power lines for the city park and my neighborhood. I have four main feed lines running North and South over my back yard along the East edge of the city park. I knew when I bought the house that would be a problem. But I am baseball nut and I have a Little League ball diamond right next to my property line and love to sit out there and watch the kids play ball. So in my case height was the answer to overcome the power line problem.

"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
news:98nn3fhmi1@newpoisson.nosc.mil...
Actually, I worded that reply wrong, Tom as it could appear as if I was baiting you. I should have queried differently - instead of "concern with height" perhaps along the lines of "Any interest in less concern with height."

I read often of folks elevating their verticals as high as possible because of the lousy soil conditions they face. Since I'm close to and on top of moist soil and water, can I be less concerned with the height of the antenna? Regards, Jim R.
> >
> > "Tom W8JI" <2w8ji@akorn.net> wrote in message
> > news:3aaeb985.121042575@news.accessunited.com...
> > On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch"
> > rodenkir@spawar.navy.mil wrote:
> >
> > Tom: what if the antenna's location is at sea level? My yard is at
sea
> > level, hell, it's at the edge of a tidal creek fed by the ocean and a
> > coupleof rivers. Any concern with height then? Regards, Jim R.
> >
> >

> > I think like a land-lubber. Of course it helps next to the sea, because
> > that is your terrain!
> >
> > I couldn't resist making that comment because my neighbor always insists
> he
> > gets out well on HF because he is 950 feet ASL. Since the sea is 250
> miles>
> > east, that really doesn't matter.
> >
> > 73 Tom
> > > >
> > > > >
> > > >
> > > >
> > >
> > >
>
>

5000. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 12:30:32 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98qcvg$8ca$1@newpoisson.nosc.mil>
Source record: 168467

Dave: boy, you resurrected old memories of my first ham shack back in Wisconsin, replete with one each Gotham vertical. That was 44 years ago, I was 12 years old, just passed the Novice test and had one each Novice license in hand (KN9JWV). Somehow got wind of this vertical antenna thing (for all bands, for God's sake - what a deal) from Gotham and bought it - suspect my Pop loaned me the money and I paid him back with profits from the paper route.

Anyhow, didn't know squat about antennas so we mounted that thing on a stand next to my bedroom window so I could open the window and move the alligator clip around to find the best tuning spot on that coil as I changed bands. Ran a copper wire to an 8 foot ground rod driven in to the ground in a month that did not have an "r" in the name and I was wired for stereo, or so I thought. It worked, as best as something like that could work without any radials. Found memories though of the old Globe Scout transmitter turned on some cold winter A.M., that 811 tube cooking away, the great smells emitting from that transmitter, the lights turned low and the glow of the tubes warming my innards ----- AH, the wonders and feelings of youth, or "Yoot" as Rush would express it!

Fast forward to today - I've got the same thing, so to speak out at the foot of my property. Do things a little different this time. 23 foot vertical at ground level with 20+ radials of varying length (15 - 30 feet). Can switch in capacitance for 20 meters, inductance for 40 meters, leave both out for 30 and 12, can tune the capacitance for 18 and 10. Bingo - a real vertical system this time. Total cost - around $65 dollars.

Look in the ARRL antenna book and you'll find a myriad of ways to do something vertically. Also, there's several books (one written by W6SAI - can't remember his name but I've got it at home...again, old age showing).

Regards, Jim R.

"Dave Alden (KB8VJD)" <dalden@home.com> wrote in message news:9A6D19144F696BBA.B077077167AA7F49.D055A18F5FB1E69F@lp.airnews.net... About 35 years ago when I got my Novice license at age 13, my "Elmer" gave me a Gotham base loaded vertical that had a coil at the bottom with a tuning clip. As I recall, it was about 16 ft.tall and it would tune all the HF bands.

Just for fun, I would like to build a replica of this antenna if I could find the specifications on it or plans for a similar antenna.

Does anyone have any info on these antennas?

Thanks,

Dave KB8VJD

5001. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 12:41:11 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6D62296.6BCA%stewartx@sccoast.net>
Source record: 168271
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dana wrote:

> [snip] the ham bands sounds just like the cb
> band. I have my extra ticket, and it makes me
> mad every time I listen to 2 meters [snip]

Then don't listen to 2 meters. Is there some reason you cannot turn the dial to another band? Are you disabled? Did you forget to read the owner's manual? If 2 meters is that bad, then go elsewhere. That shouldn't be too difficult for an intellegent person like you to figure out.

You know, I simply don't understand this animosity towards the newer hams. And that is exactly what this is (animosity towards the newer hams) because I rarely see such complaints about the many troublemakers on HF. It's not like the newer hams are taking anything away from the older hams (older as hams, not age). Before the no-code techs came, the 2-meter band was completely dead. There probably weren't 25 people in the entire country using that band on a regular basis, and the number of VHF ham repeaters could likely be counted on one hand.

However, now that the no-code techs are actually using the band, and have put all those repeaters up, the older hams sit around all day complaining. Its not like the older hams have lost anything - they still have all their HF frequencies. And absolutely nobody is forcing any of these people to listen to the 2-meter frequencies. So I just don't understand what all the griping is about.

Perhaps there is some strange twisted logic at work here. Can you explain it to me, Dana? If you don't like the 2-meter band, and nobody is forcing you to listen to it, then why do you sit around listening to it (like you claimed you did above). More importantly, why do you sit around complaining about it when the situation is so easily solved (don't listen)?

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5002. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 12:53:49 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <QU2s6.69$5R6.634@newsfeed.slurp.net>
Source record: 168269

I have two of the Butternut antennas. They work great with a good ground system and radials cut to the middle of each band. When you put the antenna together there should be a plastic dowel about 4" long with the unit. Do not use a wooden dowl if missing. The plastic dowl inserts into the base mount and the main body of the antenna. Attach one end of the coil to base and the other end to the main body. You can attach radials in any manner to the base post. Have fun. W9FPJ
"Robert Moughton" <mailliw@peoplepc.com> wrote in message news:tb1c03odm8s9d5@corp.supernews.com...
> I recently inherited a HF6V antenna from my father and am trying to erect
> it. The question that I have is, How do I correctly install the Q base coil
> located at the bottom of the antenna? I think that the instructions are
> showing that I connect each end of the coil across the base insulator and
> across the 75ohm matching cable. Then I suppose that the radials will
> connect to the bottom side of this coil. Does this sound correct?
>
>
> Bob Moughton
> N4RPK
>
>
>

5003. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 13:07:12 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <483s6.41$9J5.5145@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168278

"Steve Sawicki" <ab2et@MailAndNews.com> wrote in message
news:3ABFC9F1@MailAndNews.com...
> Well I guess I know where and what I will be doing on Friday, July 13,
2001,
> just imagine the frenetic activity that will lead on to this gala event?
>
> But lets lok at the practical side of thing :
> After examining all of the offerings at
> http://www.ewh.ieee.org/soc/aps/2001/workshop/WorkshopShort.htm
>
> SC-3: Practical Consideration in the Design of Antennas for Wireless
> Communication Course fee: $200 a Full Day courses sure looks like the
better
> deal unlike the 1/2 Day Courses SC-7: Fractal Antennas Course fee: $120
>
> <snip>
>
> I am faced with a true Dilemma, SC-3 or go for the "gusto" I think that
> unlike
> the Florida situation I know which is the correct Chad to punch.
>
> 73's
> Steve
> AB2ET
>

Hi Steve:

The IEEE event should be interesting. The SC-3 course is to be presented by Dr. Tuli Herscovici, a close colleague of mine. He and I jointly developed the early version of this presentation and a similar workshop I give. Although this is sure to be a good presentation, I have to go for the gusto: SC-7.

You might also want to check out the fractal antenna session on Wednesday. Just FYI, I am going to present two papers there:

1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal Geometries

2) A Modification of the Small Loop Approximation for Fractal and Bent Wire Loop Antennas

Take care,

Steve VE9SRB

5004. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 13:11:34 UTC
From: richardharrison@webtv.net
Message-ID: <8939-3AB0BF86-13@storefull-113.iap.bryant.webtv.net>
Source record: 168272

Peter, K1PO wrote:
"Dissipationless Resistance begone!"

Cool-ohms has a nice ring, but I think it is already copyrighted.

How about "non-resistor resistance"? It has a few less characters than "dissipationless resistance", but it doesn`t instantly tell you that the "non-resistor resistance" isn`t a heat producer or some other opposition to almost anything.

Best regards, Richard Harrison, KB5WZI

5005. !!! WANTED !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 13:35:04 UTC
From: brradioman <brradioman@charter.net>
Message-ID: <tb1h9m7qh3mrfe@corp.supernews.com>
Source record: 168282

Wanted a 2M HO Loop antenna for 2 meter ssb

email to Bob N2BR brradioman@charter.net

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.237 / Virus Database: 115 - Release Date: 3/7/01

5006. Re: QEX Fractal Antenna Article

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 13:47:34 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <WJ3s6.58$wQ3.6480@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168296

"Fractenna" <fractenna@aol.com> wrote in message
news:20010313091952.01325.00000060@ng-fm1.aol.com...
> >
> >Michael Hart wrote:
> >>
> >> I understand that a "Patent pending" is a warning. It is my
understanding
> >> that if the patent does get through and you have already made the
invention
> >> before the patient is issued you are still libel to the patent owner
for
> >> infrigment. I am not a lawyer either but I think this is the case -
> >> particularly if you have been warned.
> >
> >Consider the patent application process. A person applies for a patent.
> >The application contains a handful of claims which describe precisely
> >what combination the patent is to cover. The patent examiner throws out
> >a bunch of the claims, says others are too broad, and sends it back. The
> >applicant re-writes the patent to try to satisfy the examiner, and so
> >forth. This can go on for literally years. The result is frequently a
> >patent that hardly resembles the original, and often no patent at all.
> >Take for example Fractenna's most recent patent "Fractal antenna ground
> >counterpoise, ground planes, and loading elements" (6,140,975). The
> >"Patent Case Text" shows:
> >
> >"This is a continuation of application Ser. No. 08/649,825 filed May 17,
> >1996 is now abandoned.
> >
> >This application is a continuing application from applicant's pending
> >patent application Ser. No. 08,609,514 entitled TUNING FRACTAL
> >ANTENNAS AND FRACTAL RESONATORS, filed on Mar. 1, 1996, abandoned, which
> >itself is a continuation-in-part of applicant's pending
> >patent application Ser. No. 08/512,954 entitled FRACTAL ANTENNAS AND
> >FRACTAL RESONATORS, filed on Aug. 9, 1995, now
> >abandoned."
> >
> >The "Fractal Antennas and Fractal Resonators" (6,104,349) shows the
> >following history:
> >
> >"This is a continuation, of application Ser. No. 08/609,514 filed Mar.
> >1, 1996 now abandoned, which is a continuation-in-part application of
> >applicant's patent application Ser. No. 08/512,954 entitled FRACTAL
> >ANTENNAS AND FRACTAL RESONATORS, filed on Aug. 9, 1995,
> >abandoned."

> >
> >So you see, there's a trail of abandoned patents leading to each of
> >these. At one time, applications 08/649,825, 08/609,514, and 08/512,954
> >were "pending patents", and now they're souvenirs. Should everyone have
> >stopped making whatever was in these applications until they were
> >"abandoned"? There's no way of telling what was in these abandoned
> >applications, or how much modification was done to the application from
> >the time it was submitted until the patent was issued -- in the U.S.,
> >patent applications aren't public. For all we know, the original patent
> >application was for all antennas with fractal elements, but ended up
> >being for a much more restrictive class of antennas -- or even just a
> >test procedure. All we know until the patent actually issues is that
> >someone applied for a patent for something. (And for that we only have
> >the applicant's word to take for it, but there are penalties for falsely
> >claiming that an application has been made.)
> >
> >So what should we be warned about? The content of the original
> >application? Suppose I apply for a patent to cover all antennas. Sure,
> >it'll be thrown out (or, more nicely put, "abandoned"), but until it is,
> >I have a "pending patent". Should you be forbidden to make, use, or sell
> >all antennas until it is? Ok, so I apply for a patent for a broad range
> >of fractal antennas. By the time the patent gets through the system, I
> >end up with a patent for a way to measure antennas having at least 8
> >fractal elements arranged in a star-like structure made from
> >superconducting material and driven simultaneously with 24 sources
> >having a precise current ratio. When I apply for the patent, I warn you
> >that a patent for a broad range of fractal antennas is "pending". What
> >force of law do you think that should carry?
> >
> >Roy Lewallen, W7EL
> >
> >
>
> Dr. Cohen is the father of fractal element antenna technology and what a
> wonderful and useful field that is:-)
>
> We heard this type of Lewallen nonsense when the first patent came out.
>
> Then the second patent came out.
>
> (surprise!)
>
> Then the third patent came out.
>
> (surprise!)
>
> 3 issued patents so far.
> Many,many patents pending.
>
> I geuss you can go to a patent attorney and say golly! Cohen missed

something!
> Let's apply for a patent on it! It's not in this patent's claims! Sure!
You can
> waste your money any ol' way you want:-)
>
> Surprise!
>
> Smile:-)
>
> Can't fight with success:-) But you can sure try to mislead others and
even
> infringe on their IP like Roy Lewallen .
>
> Surprise!
>
> As I said, much is happening 'offline'.
>
> 73
> Phil N1ZKT
>
>

Reality Check Time:
(these are only my personal opinions)

1) Roy Lewallen has not infringed on Fractal Antenna Systems' or Dr. Cohen's IP. He posted an EZNEC file of a fractal loop antenna created by a third party (me). This EZNEC file is not the property of FAS or Dr. Cohen. As for copyright violation - good luck. Non FAS images of fractal loop antennas can be found in numerous places: The FAS patents (they do not provide copyright protection), the Internet, numerous IEEE publications and several undergraduate and graduate theses.

2) Phil and Chip can brag all day long about patent awards and numerous patents pending. The reality: Having a patent issued is not a verification or certification from the US Government that the claims stated in the patent are accurate, technically correct, valid, useful, novel or of any economic value. A patent examiner does not verify that the claims in the patent application are any of these things. The real bottom line is that the patent is a mechanism to protect
the patent owner in the event that the claims are all of these things and that when a third party uses them to their economic advantage or to the patent owners economic disadvantage, the patent owner can sue in court. The court
system will ultimately decide the real value of the patent. We can read and interpret all of the patent and trademark laws we want to, but its ultimately about money and how much the patent owner thinks they can win in a law suit. If someone thinks that a third party has infringed on the patent (note that a patent does not provide copyright protection) then they should sue them for any economic value lost. I am not sure what the settlement would be against someone who has gained no economic value from an

infringement or against someone who can demonstrate that they have caused no economic harm to the patent owner. Additionally, I don't think that proving patent claims to be invalid falls under the infringement criteria. That's a risk all patent owners face.

3) Infringement for "use" is just that. Use of the patent invention in a manner consistent with the intended or obvious use of the invention as outlined in the patent. Protection from third party "use" does not protect the patent holder in the event that a third party evaluates the claims and demonstrates their validity or invalidity. I don't believe that you can sue a third party for evaluating a patent, discussing their opinions of the claims, or proving the claims to be invalid or not novel.

4) In publicly stating that all hams are free to experiment and use his fractal technology, Dr. Cohen has essentially granted all hams a royalty free, non-commercial license for the use of his fractal technology and patents. So long as this use does not have direct commercial implications, he can't sue any ham for using fractal antennas. I am not certain, but he might also have a hard time suing a ham who publishes the results of his experiments.

I've wasted enough bandwidth ..

Steve, VE9SRB

5007. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 13:48:40 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB0C838.8DCC38CB@IEEE.org>
Source record: 168292

Reg Edwards wrote:
> Richard, I've never found the concept of dissipationless resistance
> to be of the slightest practical value.

Reg, how would you answer this question: Why isn't power dissipated
by the resistive characteristic impedance of a transmission line?
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5008. Re: Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 13:58:40 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB0CA90.F00F39B0@IEEE.org>
Source record: 168305

John O'Flaherty wrote:
>
> I am a new ham. I have an antenna consisting of a wire about 50 feet
> long, fed through a piece of RG8-X and an AH-4 remote automatic antenna
> tuner. I want to increase my signal strength, and I'd like to try making
> my wire a dipole by adding another wire extending 50 feet in the other
> direction. I've been told that I can just extend the other wire from the
> ground side of the tuner to make a dipole.
> Ok, I'll try that. But it occurs to me that it may not make a true
> dipole, since the currents through the ungrounded wing and the grounded
> wing may not be balanced- especially since there is also a grounding
> wire extending straight down from the tuner to a ground rod.

Choose one or the other, either the dipole element or the ground rod,
but not both at the same time.

> What I'd like to try is connecting a choke balun consisting of 10 feet
> of RG8-X wound up in about a 10-inch diameter circle (as described in
> the ARRL handbook), between the AH-4 tuner and the two wings of the
> dipole. Now, would that force the dipole to be a dipole, and would the
> tuner still be able to meaningfully tune the antenna through that balun?
>
> In other words, the antenna won't be resonant, and whatever properties
> it exhibits at a particular frequency will be presented to the remote
> tuner through the choke balun. Will it still tune? Will it arc and
> explode, electrocute the valuable operator, or worse, wreck the antenna
> tuner?

With a nonresonant length of wire, the impedance at the autotuner output
can be sky high, too high for a choke to do any good. Along with that
sky high impedance comes sky high voltages which can cause arcing. My
SGC-230 doesn't have a coax connector for the output for that reason.
--
http://www.mindspring.com/~w6rca

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5009. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 14:00:48 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB0CB10.8C36FD4F@IEEE.org>
Source record: 168291

Richard Clark wrote:
>
> On Wed, 07 Mar 2001 20:59:47 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Richard Clark wrote:
> >> Thus, there
> >> is no direct correlation between resonance and lobe pattern outside of
> >> the lengths involved.
> >>
> >Witness the multi-lobed patterns of resonant 1.5WL, 2.5WL, 3.5WL, ...
> >antennas.
>
> Your statement underlines my point, you had to appeal to length to
> obtain a change in pattern.
>
> Resonance can be forced with lumped components such that a very small
> physical antenna can be made to appear to be large electrically.
> Contrariwise, a physically very large trapped antenna can appear to be
> small electrically. Both can be described as being resonant.
> However, resonance in and of itself has nothing to do with radiation
> pattern.

I was agreeing with you, Richard. My statement was meant to underline
your point.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5010. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 14:06:27 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB0CC63.948F079D@IEEE.org>
Source record: 168301
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

```
message center wrote:
> I am
> concerned about the quality of amateur radio operators, not quantity.

Does this mean that you want to reduce the number of hams available
for emergency communications?
--
http://www.mindspring.com/~w6rca

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```

5011. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 14:19:57 UTC
From: richardharrison@webtv.net
Message-ID: <8939-3AB0CF8D-16@storefull-113.iap.bryant.webtv.net>
Source record: 168293

John wrote:
"But I can`t see that it would say that the noise itself is vertically polarized."

The vertical antenna of opportunity that has its direct and reflected waves in-phase may be the radiator of your noise source. The antenna behaves the same whether transmitting or receiving. Reciprocity rules.

The noise source antenna that launches vertically polarized groundwaves is more effective, because its direct and reflected waves are in-phase, than the noise source antenna which launches horizontally polarized groundwaves.

The noise source antenna that launches horizontally polarized groundwaves is ineffective because direct and reflected waves are out-of-phase.

The better radiation launch of veritcally polarized waves from a noise source means that there is usually more vertically polarized noise out there.

Best regards, Richard Harrison, KB5WZI

5012. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 14:23:51 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3AB0D075.50B3DD54@ix.netcom.com>
Source record: 168287

Hi Jim and others -- great books by Bill Orr, W6SAI (now a silent key)
The Radio Amateur Antenna Handbook By William I. Orr
Cubical Quad Antennas : How to Build and Adjust Quads -- by William I. Orr,
Stuart D. Cowan
Beam Antenna Handbook by William I. Orr, Stuart D. Cowan (Contributor)
Simple Low Cost Wire Antennae by Orr, William I. Orr, Stuart D. Cowan
(Contributor)
Vertical Antennas by William I. Orr, Stuart D. Cowan (Contributor)
Available thru Amazon.com
Or URL:
http://ac6v.com/rbstore.htm#ANT
And of course the ARRL Antenna Handbook
For Low Band DXing - ON4UN's Low Band DXing -- by John Devoldere -- Great Source
For Low band Antennas
Also antenna books by Joe Carr and Lew McCoy, and Moxon
and books on beverage antennas - by Chuck Hutton
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========

Jim Rodenkirch wrote:

> Dave: Look in the ARRL antenna book and you'll find a myriad of ways to do
> something vertically. Also, there's several books (one written by W6SAI -
> can't remember his name but I've got it at home...again, old age showing).
>
> Regards, Jim R.
>
> "Dave Alden (KB8VJD)" wrote in message
> news:9A6D19144F696BBA.B077077167AA7F49.D055A18F5FB1E69F@lp.airnews.net...
> About 35 years ago when I got my Novice license at age 13, my "Elmer" gave
> me a Gotham base loaded vertical that had a coil at the bottom
> with a tuning clip. As I recall, it was about 16 ft.tall and it would tune
> all the HF bands.
>
> Just for fun, I would like to build a replica of this antenna if I could
> find the specifications on it or plans for a similar antenna.
>
> Does anyone have any info on these antennas?
>
> Thanks,
>

> Dave KB8VJD

5013. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 14:31:47 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <gscOiQBTJNs6EA2g@ifwtech.plus.net>
Source record: 168297

Tom W8JI wrote:

>
>When the results are wrong, the data is either wrong or being
>misapplied.

Or both.

The problem with the data is that it isn't truly "sky" noise at low frequencies - it's just noise collected by the antenna. You can only truly talk of "sky" noise if you have a directional antenna so you know where the signals are coming from. At LF, antennas are not directional enough to tell the difference between noise coming from high angles or lower angles.

At VHF and above, antennas can be made sufficiently directional to tell where the noise is coming from, and there Gary's figures tie in with other known data.

At any frequency, what you actually *measure* is the noise power coming from the receiver. Using a signal generator or a noise generator to calibrate the receiver, you can then back-calculate to *infer* the noise power level at the antenna terminals. One step further is to calculate the effective noise temperature of the antenna - or rather, the antenna's RF environment.

Now that's all very fine and standard measurement. The CCIR/CCITT have published "typical" noise temperature vs frequency curves for many years, which are what RSGB adapted for their Handbook.

Where Gary's calculations go wrong, I suspect is that he missed the hidden assumption in all these measurements, namely that the antenna is close to 100% efficient. For the Beverages and small receiving loops we're talking about here, that is far from true. For a small receiving loop, for example (thin wire, no special construction like you'd use for a transmitting loop) the efficiency is about 0.1%, so BOTH the signal AND the background noise power have to be divided by 1000. I suspect the same is true of many Beverages, since the efficiency will be about the same as a vertical of the same height as the antenna (typically 6-10ft) with no special ground plane.

Then it starts to make more sense. Gary's figure of about 20,000,000K at 1.75MHz translates to about -100dBm in 500Hz, as received by a 100% efficient antenna. For a 0.1% efficient antenna, subtract 30dB, so we're somewhere around -130dBm. This is just about the same as the noise floor of a typical RX at Top Band.

OK, those were hand-waving figures, but we can see what's happening here...

ON4UN's book on LF Antennas and DXing points out that some people find they need a preamp, while others (including himself) do not. This is exactly what you'd expect when the antenna noise temperature is within a few dB of the noise floor of the RX. Whether a preamp is useful will thus depend on the individual circumstances, which could make a few dB difference in either direction. It will depend on the actual receiving antenna, the ground beneath it, the receiver, the station layout, and not least the operator's determination to dig for weak signals right down by the noise floor.

For example, ON4UN's layout brings all his Beverages fairly close to the house, so his feedline losses are very low and it's reasonable that he doesn't need a preamp. Tom's receiving antennas, on the other hand, seem to be a significant fraction of a mile away, so even on Top Band the feedline losses are not negligible; he's also in a rural location which will have a low man-made component of noise in at least some directions, so it's equally reasonable that in his circumstances he does find a preamp (or "line driver") to be a benefit.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5014. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 15:49:22 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB0E482.4EB9EC99@toast.net>
Source record: 168290

Richard Harrison wrote:

> John wrote:
> "But I can`t see that it would say that the noise itself is vertically
> polarized."
>
> The vertical antenna of opportunity that has its direct and reflected
> waves in-phase may be the radiator of your noise source. The antenna
> behaves the same whether transmitting or receiving. Reciprocity rules.
>
> The noise source antenna that launches vertically polarized groundwaves
> is more effective, because its direct and reflected waves are in-phase,
> than the noise source antenna which launches horizontally polarized
> groundwaves.
>
> The noise source antenna that launches horizontally polarized
> groundwaves is ineffective because direct and reflected waves are
> out-of-phase.
>
> The better radiation launch of veritcally polarized waves from a noise
> source means that there is usually more vertically polarized noise out
> there.

I see what you mean now. I wonder if high voltage transmission lines would be an exception, they being horizontal, and at such a height that they might be able to radiate at a low angle?

john

5015. FERRITE ANT FOR THE AM BROADCAST BAND

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 16:05:37 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <98qpb8dpd1@bob.news.rcn.net>
Source record: 168303

i need more info on how to build a ferrite ant for the am broadcast band.
.....placement of coils on the rod? which coil is attached to the var cap?
impedance matching to a 50 ohm input

5016. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 16:08:13 UTC
From: richardharrison@webtv.net
Message-ID: <8939-3AB0E8ED-24@storefull-113.iap.bryant.webtv.net>
Source record: 168286

Tom, W8JI wrote:
"We simply can NOT filter time-varying electric fields from magnetic fields, and so we can NOT decouple the loop from the rest of the aircraft at the operating frequency of the loop by adding a shield."

Terman says:
"Electrostatic shielding is obtained by enclosing the space to be shielded by a conducting surface."

Terman devotes 5 pages in "Electronic and Radio Engineering" to shielding of magnetic and electrostatic fields. While the magnetic shield will usually block an electrostatic field, the electrostatic shield usually will not effectively block magnetic coupling. Faraday shields between magnetically coupled coils are examples of this discriminatory coupling. The cans i-f coils are placed in are other examples of electrostatic shielding.

A conducting container which is small in terms of wavelength forces nearly the same potential on all its surfaces by conduction. So, there is no potentental difference to cause trouble on its inner surfaces.

Best regards, Richard Harrison, KB5WZI

5017. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 16:15:14 UTC
From: jflanders2@home.com
Message-ID: <3ab0e938.322171978@news>
Source record: 168295

Yes, that sounds correct - the inductor is connected across the feed point, with one side connected to (the bottom of the antenna+center of coax) and the other side connected to (the junction of the radials+outer sheath of coax+any "ground" connection you may have).

If you don't already have the manual, download one from:

http://www.bencher.com/pdf_download.html

Jerry W4UK

On Thu, 15 Mar 2001 07:05:03 -0500, "Robert Moughton" <mailliw@peoplepc.com> wrote:

>I recently inherited a HF6V antenna from my father and am trying to erect
>it. The question that I have is, How do I correctly install the Q base coil
>located at the bottom of the antenna? I think that the instructions are
>showing that I connect each end of the coil across the base insulator and
>across the 75ohm matching cable. Then I suppose that the radials will
>connect to the bottom side of this coil. Does this sound correct?
>
>
>Bob Moughton
>N4RPK
>
>
>

5018. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 16:42:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98qrai$j0a$1@neptunium.btinternet.com>
Source record: 168308

In built-up areas, especially below 10 MHz, man-made,
locally-generated noise predominates over noise arriving via the
ionosphere.

Local noise sources radiate from domestic wiring, plumbing pipes,
phone wires, TV antenna down-leads, washing machines, shaver cords,
etc. Such noise, at its source, is obviously randomly polarised and
is radiated in random directions and elevation angles.

From one house or building in the town to another, noise
propagation can only be via very low angle and zero angle
groundwave.

Vertically polarised ground waves suffer relatively little
attenuation and will propagate for many wavelengths, perhaps miles.
MF broadcasters depend on it.

But horizontally polarised waves, characterised by horizontal
currents flowing on and just under the surface of the lossy ground,
are severely attenuated. The electric field is shorted out. So
horizontally polarised noise strength falls to an insignificant
level after 1 or 2 wavelengths.

Consequently, at any outdoors receiving point in the locality,
man-made noise is prediminantly vertically polarised, the
horizontal components, from whichever direction they arrive, have
mostly been dissipated in the soil.

The much weaker noise from the ionosphere is randomly polarised.
Get away from human habitation, such as in the middle of the
Pacific Ocean, and from a noise viewpoint, the vertical antenna
offers no advantages over the horizontal. Take a Kon Tiki trip.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

John O'Flaherty <oflahert@toast.net> wrote in message
news:3AB0978E.A0393A31@toast.net...
> Richard Harrison wrote:
>
> > John wrote:
> > "Why is noise usually vertically polarized?"
> >

> > First, when we are concerned with amateur frequencies in the
shortwave
> > bands, most of the groundwave is exhausted in a short distance
from its
> > source. This is true for desired and undesired radiation alike.
> > Attenuation increases with frequency. You may recall that hams
were
> > relegated to "200m and down" because shortwaves seemed useless
for
> > groundwaves, and that was the propagation in use at the time.
> >
> > Second, The worst noise is usually produced within groundwave
distance
> > of the receiver.
> >
> > Third, the horizontal antenna above ground is ineffective for
groundwave
> > production or reception. Its "mirror image" in its ground
reflection is
> > 180-degrees out of phase with the radiator. So is radiation
from the two
> > sources.
> > If the ground is a very good reflector, a distant receiver will
receive
> > two nearly equal and opposite signals that tend to cancel. If
the ground
> > in the path is a poor reflector, the out of phase reflected
energy will
> > be weak but so will the direct groundwave signal. Ground that
is a poor
> > reflector is also a poor propagation medium for groundwaves.
So, either
> > way, good ground or poor, the signal communications of
groundwaves from
> > a horizontal antenna is no good.
> >
> > The vertical antenna launches and receives vertically
polarized waves,
> > both direct and reflected, which are in-phase. Over good soil,
these
> > travel much longer distances than horizontally polarized waves.
Noise is
> > launched and propagates just like signals. Thus, most noise is
usually
> > vertically polarized.
>
> I'm not sure I understand yet. The first part of your explanation
seems to
> say that most noise is groundwave, or short range noise, and that
horizontal

> dipoles are relatively insensitive to groundwaves because at low
elevations
> there is a cancellation between the antenna's pattern and the
pattern of its
> ground reflection. That makes sense all by itself, but doesn't
introduce
> anything yet about polarization of the noise signal, as far as my
> inexperienced eye can see. Then you say, essentially, that a
vertical
> antenna has its direct and reflected signals in phase, and thus
transmits
> and receives well at low angles. I can see that this might mean
that a
> vertical antenna picks up more groundwaves or local noise. Is
that the case?
> And that horizontal antennas are essentially less sensitive to
local noise?
> But I can't see that it would say that the noise itself is
vertically
> polarized. Or am I missing something here?
> thanks
>
> john
>
>

5019. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 16:51:40 UTC
From: richardharrison@webtv.net
Message-ID: <18545-3AB0F31C-12@storefull-114.iap.bryant.webtv.net>
Source record: 168302

John wrote:
"I wonder if high voltage transmission lines would be an exception ,
they being horizontal, and at such a height that they might be able to
radiate at a low angle.?'

The high voltage transmission line picks up and re-radiates r-f. You may have listened to a distant station on your car radio while crossing under a high voltage line and noticed a surge in signal from your loudspeaker. But this performance depends on many variables.

At a point broadside and far from the transmission line, there is rarely any significant effect because the line is usually many r-f wavelengths and every 1/2-wave the r-f in the line reverses direction. The sum of waves from the line at a distant point will therefore be just about nill.

In the direction of the line, the transmitting wave-antenna effect of the line is overshadowed by its radiating transmission line effect, in most cases.

As a bit of trivia, the rule of thumb for power transmission line energy-supply voltage is 1000 volts per mile. A 1/2-mile line should be supplied 500 volts. A 50-mile line should be supplied 50 kv.

Best regards, Richardb Harrison, KB5WZI

5020. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:06:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98qsmn$lb3$1@neptunium.btinternet.com>
Source record: 168289

Jeroen, there is a resistance at the input of your low noise amplifier - it is the feedback resistance across which is a noise voltage.

I can see no connection between your example and an imaginary non-dissipative resistance. Circuit operation can be completely analysed and explained using elementary ideas such as Ohm's Law without ever having heard of an NDR. It was sorted out by Black about 75 years back.

Reg.

****

Jeroen Belleman <Jeroen.Belleman@cern.ch> wrote in message news:3AB07C19.677B235A@cern.ch...
> Reg Edwards wrote:
> >
> > [...] I've never found the concept of dissipationless resistance
> > to be of the slightest practical value. I can't imagine that anyone
> > else has ever done so either. [...]
>
> Well, there are some real world applications of the concept. Any
> ordinary resistor which transforms energy into heat also does the
> opposite: It produces thermal noise.
>
> Folks who make very low noise amplifiers with matched inputs
> figured that, rather than putting an actual matching resistor
> at the amplifier input, it would be better to use feedback to
> do the matching.
>
> As a result, the noise produced by the observed input resistance
> is lower than the noise produced by an actual resistor of the
> same value. Without this trick, it would have been impossible
> to make matched-input amplifiers with better than 3dB NF.
>
> Jeroen Belleman

5021. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:16:18 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tb1u6d7hgncgdc@corp.supernews.com>
Source record: 168299
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6D62296.6BCA%stewartx@sccoast.net...
> However, now that the no-code techs are actually using the band, and
have
> put all those repeaters up, the older hams sit around all day complaining.
> Its not like the older hams have lost anything

They are losing, or lost, the PR battle that every no code Tech has a
burning desire to get on H.F. A surprising number of Tech class operators
don't care for H.F. much. I would dare say that some of the new Hams don't
even consider access to H.F. as the "crown jewel" of Ham Radio any more.

> - they still have all their HF frequencies.

And some like to go out of their way to tweak the noses of no code Techs
about too.

> And absolutely nobody is forcing any of these people to
> listen to the 2-meter frequencies. So I just don't understand what all
the
> griping is about.

With more things to do on V/UHF the lure of H.F. has declined a bit. As you
pointed out, in the past with little use of the V/UHF bands, a Tech class
had few choices for stations to work. That's now no longer true.

> Perhaps there is some strange twisted logic at work here.

Yup. The Tech class people are having fun, and some of the OTers are really
bugged about it.

--
Leland C. Scott
KC8LDO

5022. Re: FERRITE ANT FOR THE AM BROADCAST BAND

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:28:53 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <rhu1bt4ltkadtmekvi0gk927f1vqu280eb@4ax.com>
Source record: 168307

On Thu, 15 Mar 2001 11:05:37 -0500, "marvin rosen"
<n3bqa@starpower.net> wrote:

> i need more info on how to build a ferrite ant for the am broadcast band.
>.....placement of coils on the rod? which coil is attached to the var cap?
>impedance matching to a 50 ohm input

Coil winding technique and placement on a ferrite rod have a great
deal of impact on the resulting inductance and Q. Unfortunately, it's
not a trivial exercise to predict how a given coil winding technique
on a given rod will behave. There are lots of equations I can cite,
but it isn't easy getting those results with any consistency.

I consider Cecil's approach to be the most pragmatic.

As for matching to a 50 Ohm input, I strongly suggest a low noise,
high impedance pre-amplifier. Remember, small loops have very high
characteristic impedances. The losses associated with just
transforming this signal to a 50 ohm input are substantial enough to
warrant a pre-amplifier of some sort.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

5023. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:39:41 UTC
From: kb7qhc@home.com
Message-ID: <3ab1fce5.1123395186@news.seanet.com>
Source record: 168306

On Wed, 14 Mar 2001 19:33:40 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"So what? is the question."
>
>It is significant, that`s what. It is meaningful that opposition can be
>offered to electrical flow and it does not alter the in-phase
>relationship between voltage and current, nor does this opposition
>consume power.

Hi Richard,

This does NOT answer the question "So what?"

In phase, out of phase? Resistance is the force by which current is impeded. Heat may come of it and it is certain to come of it eventually - thus heat is so commonplace as to become transparent as a device for argument. Consume power? Imprecise meaning here fails at the level of language and science; and taints any appeal to definitions offered. This simply reveals you are drawing a box around the problem to fit the answer - not an answer to the problem.

And just what is this "problem" that is the future argument under which this wobbly dissipationlessness is suppose to support as a rubber crutch?

No, those at the altar have been fumbling with their beads rather than facing the problem of "So What?"

This is the principle crux of the situation. This argument of dissipationlessness is not in and of itself useful except as the basis of another premise which cannot thrive without it. Thus we have the prospect of suspending disbelief twice to accommodate one idea that is yet to presented.

73's
Richard Clark, KB7QHC

5024. Re: DDRR VHF WHO HAVE THE DIAGRAMM???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:47:28 UTC
From: richardharrison@webtv.net
Message-ID: <21636-3AB10030-43@storefull-116.iap.bryant.webtv.net>
Source record: 168300

Gervais wroe:
"---looking for the diagram to build a DDRR VHF antenna--"

It can be found on page 10-7 of the 14th edition of the ARRL Antenna Book, and several other editions also carry this information, I believe.

Best regards, Richard Harrison, KB5WZI

5025. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:48:07 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB10057.93AFD9CC@IEEE.org>
Source record: 168288
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" wrote:
> A surprising number of Tech class operators
> don't care for H.F. much. I would dare say that some of the new Hams don't
> even consider access to H.F. as the "crown jewel" of Ham Radio any more.

When I worked at Intel, a group of us would camp out together. We would
meet at a preset place on a Saturday morning, decide where to camp out,
and head out at a preset time. Somebody was always late and out of range
of CB radios. I talked the entire group into getting their Tech licenses.

We then used a mountain-top repeater to keep in touch with the late
comers and direct them to the camp site. It worked out well but only
a few of the campers saw any use for HF. After all, they had given
up their CB radios and gone to the trouble to obtain Tech licenses
because HF couldn't perform the required function.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5026. Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:51:05 UTC
From: Jeff Farrar <jeff@farrar.com>
Message-ID: <di7s6.24867$H5.5602831@news1.rdc2.pa.home.com>
Source record: 168298

I am trying to decide between two different Diamond mobile antennas. The two models are:

Model Band Wavelength Gain Watts
Mount Height

SG2000HD: 2M 2-1/4 & 1-3/8 5.2 150
UHF 62
NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
UHF 40.2

This info is straight from Diamond's site.

Right now I am only plan on using it on a 2M radio.

My pros and cons for each.

SG2000HD: Pro: gain. Con: Height, and can't use the mount I want
NR770HA: Pro: Height, I can use the mount I want Con: Gain

Questions:

1) Will I notice a difference between the two gains to make any real world difference?
2) The two antennas have a different wavelength construction. What type of terrain is each one suited best for? I live in a very hilly area.

Thanks

5027. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 17:53:40 UTC
From: Michael Edelman <mje@spamcop.net>
Message-ID: <3AB101A4.603D60FE@spamcop.net>
Source record: 168304

I loved those ads- "Flash! Just worked 5Y3GT on 20M!". Noting but a
picture of a simple vertical and a list of stations worked.

-- KE8YY

Michael Edelman mje@spamcop.net
http://www.foldingkayaks.org (nomadics)
http://www.findascope.com (choosing a telescope)

5028. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 18:08:55 UTC
From: richardharrison@webtv.net
Message-ID: <21636-3AB10537-46@storefull-116.iap.bryant.webtv.net>
Source record: 168389

Reg wrote:
"Get away from human habitation, such as the middle of the pacific ocean, and from a noise standpoint, the vertical antenna offers no advantages over the horizontal."

True. If there is no noise, there is no noise problem. But, there is a very important reason to use a vertical antenna at sea. With a horizontal antenna there is a big problem of small signals. The sea offers a very good reflection of out-of-phase signals from its surface which wipe out direct waves to and from a horizontal antenna.

Best regards, Richard Harrison, KB5WZI

5029. Motorola HF autotuner help wanted F2259A

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 18:25:16 UTC
From: JJ&A <w7ls@blarg.net>
Message-ID: <3AB1090C.5F836CBE@blarg.net>
Source record: 168372

If anyone has a manual or some info on a Motorola F2259A automatic HF antenna tuner, please let me know. I'm looking for hookup instructions, etc. Thanks. Jim W7LS

5030. Re: FERRITE ANT FOR THE AM BROADCAST BAND

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 18:31:18 UTC
From: richardharrison@webtv.net
Message-ID: <21640-3AB10A76-3@storefull-116.iap.bryant.webtv.net>
Source record: 168380

Marvin Rosen wrote:
"I need info on how to make a ferrite rod antenna for the a-m broadcast band."

These can be salvaged from an old radio, but you must have reasons to build your own.

The new edition, No. 19, of the ARRL Antenna Book has information starting on page 5-6. Terman, The Radiotron Designer`s Handbook, etc. have more coil information.

If you need an impedance different from that of the tuned winding, just wind a separate coil on the core to produce whatever impedance you desire. Put the tuned circuit coil in the middle of the core for maximum inductance.

Best regards, Richard Harrison, KB5WZI

5031. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 18:43:04 UTC
From: richardharrison@webtv.net
Message-ID: <21636-3AB10D38-49@storefull-116.iap.bryant.webtv.net>
Source record: 168313

Richard Clark wrote:
This does not answer the question "So what?"

The crux is that it is either here or there. Connect a matched load to coax through which you apply high power to the load. Where is heat produced? Is it in the coax or is it in the load?

Best regards, Richard Harrison, KB5WZI

5032. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:01:19 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.ga8xk32.pminews@ca.news.verio.net>
Source record: 168390
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

On Thu, 15 Mar 2001 08:06:27 -0600, W6RCecilA wrote:

>message center wrote:
>> I am
>> concerned about the quality of amateur radio operators, not quantity.
>
>Does this mean that you want to reduce the number of hams available
>for emergency communications?

No, he means that he wants the level of intelligence,
articulation, and verbal persuasiveness of others lowered to
his.

--
73 de Phil Kane - K2ASP

5033. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:02:50 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <Ui8s6.249$5R6.2283@newsfeed.slurp.net>
Source record: 168391
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

```
You are just kidding.........right? W9FPJ
"message center" <cb-radio@arrl.org> wrote in message
news:arrl_letter@get_the_message...
> ARRL members, Here is a letter that you can use and send to your ARRL
section
> manager, Division director, and ARRL board of Director:
>
> -------
>
> Dear (insert directors name here),
>
> Why don't you wake up and pull your fucking head out of your ass? I am
> concerned about the quality of amateur radio operators, not quantity. If
I
> wanted to listen to a bunch of stupid operators, I would listen to CB. Do
us
> all a favor and propose something that will impove amateur radio, not dumb
it
> down. Bring integrity and intelligence back into the amateur radio
service.
> Thanks and 73.
>
> (insert your name here)
>
> --------
```

5034. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:12:53 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab11186.29979272@news.accessunited.com>
Source record: 168371

On Wed, 14 Mar 2001 18:50:38 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I'm obviously failing to communicate. I said that the near field isn't

I read you loud an' clear.

>of any consequence for the shootouts. That's because the near field
>isn't being measured in the shootouts. The example of the dipole and
>loop were to illustrate that the near fields of various small antennas
>can be very different, and why it would therefore be a poor idea to use
>near field measurements for shootouts (or any other time you want to
>compare two antennas that aren't identical). These don't seem
>contradictory to me.

>"arbitrary".) This gives a boundary of a half wavelength for a half
>wavelength dipole. For an 11 foot whip plus a 6 foot radiating vehicle
>on 3.8 MHz, the boundary using this equation works out to a little over
>two feet, although I'd want to get a bit farther away to make sure. But
>there's no question that the shootout measurements are being made in the
>far field.

Or put another way, since you are changing antennas you need to be far
enough away that the radiation all looks like it is coming from a
single point in the distance. Looking from the antenna to the
measurement device it looks like it is a single point also.

The mobile shootouts clearly meet that criteria. One measurement
point is perfectly fine, assuming you care less about the direction
pattern. If you care about that, use one meter at one point and rotate
the car. That's easy enough to do.

The tuner, since the antenna system is not being changed, can be
measured anywhere after the tuner. Only the applied power is changed.

73 Tom

5035. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:15:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98r4ac$70a$1@plutonium.btinternet.com>
Source record: 168387

I
W6RCecilA <Cecil.A.Moore@IEEE.org> wrote in message
news:3AB0C838.8DCC38CB@IEEE.org...
> Reg Edwards wrote:
> > Richard, I've never found the concept of dissipationless
resistance
> > to be of the slightest practical value.
>
> Reg, how would you answer this question: Why isn't power
dissipated
> by the resistive characteristic impedance of a transmission line?
==========
I should have had more sense than to get involved in this daft
discussion.

But as it's you Cecil I ought to advise you your slip is showing:-
a transmission line built from a succession of series and shunt
resistors has a resistive Zo and readily dissipates all the energy
you can shove into it. Especially if the other end is open or
short circuited.

Reg.

5036. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:17:17 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB1153D.F5116BDD@IEEE.org>
Source record: 168378
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Phil Kane wrote:
>
> On Thu, 15 Mar 2001 08:06:27 -0600, W6RCecilA wrote:
>
> >message center wrote:
> >> I am
> >> concerned about the quality of amateur radio operators, not quantity.
> >>
> >Does this mean that you want to reduce the number of hams available
> >for emergency communications?
>
> No, he means that he wants the level of intelligence,
> articulation, and verbal persuasiveness of others lowered to
> his.

Wouldn't that increase the ham population? :-)
--
http://www.mindspring.com/~w6rca

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5037. Re: Diamond CP5/CP6 HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:25:30 UTC
From: Richard <richard@optima-optics.com>
Message-ID: <KG8s6.167$l6.71075@paloalto-snr1.gtei.net>
Source record: 168384

Don,

Tried to email you comments on the CP-6, but it was rejected by the ARRL server....

Richard
W7YES

"kd5ngd" <kd5ngd@arrl.org> wrote in message news:98nuvr$9b8$1@sass1828.sandia.gov...
> I'm looking for information on the Diamond CP5/CP6 vertical HF antennas, and
> I haven't found anything in the product reviews or comments on the more
> common amateur websites (eham, qrz, arrl, etc.). Anyone have any experience
> with these that they'd like to share? Thanks

5038. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:26:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB11766.3622466E@IEEE.org>
Source record: 168376

Reg Edwards wrote:
> a transmission line built from a succession of series and shunt
> resistors has a resistive Zo and readily dissipates all the energy
> you can shove into it. Especially if the other end is open or
> short circuited.

That statement is just not true, Reg. Some, hopefully most, of the energy you shove into it is usually dissipated in the load, not in the transmission line. And if the transmission line is open or short-circuited, it is possible to dissipate reflected power in the generator.

So I ask again, if someone asks you why a *resistive* characteristic impedance doesn't *dissipate* most of the power, what do you say? Seems to me, a 50+j0 ohm characteristic impedance is either dissipative or it's not. Seems to me, a 50+j0 ohm antenna is either dissipative or it's not.
--
http://www.mindspring.com/~w6rca

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5039. Re: Diamond CP5/CP6 HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:47:35 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB11C57.7E35F98F@IEEE.org>
Source record: 168383

Richard wrote:
> Tried to email you comments on the CP-6, but it was rejected by the ARRL
> server....

Maybe it should be arrl.net?

> "kd5ngd" <kd5ngd@arrl.org> wrote in message
--
http://www.mindspring.com/~w6rca

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5040. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 19:51:40 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab11458.30700891@news.accessunited.com>
Source record: 168314

On Thu, 15 Mar 2001 14:31:47 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>Tom W8JI wrote:
>>When the results are wrong, the data is either wrong or being
>>misapplied.
>
>Or both.

Certainly it is both. Because Gary ignored antenna directivity as well as where the noise comes from.

>Where Gary's calculations go wrong, I suspect is that he missed the
>hidden assumption in all these measurements, namely that the antenna is
>close to 100% efficient. For the Beverages and small receiving loops
>we're talking about here, that is far from true. For a small receiving
>loop, for example (thin wire, no special construction like you'd use for
>a transmitting loop) the efficiency is about 0.1%, so BOTH the signal
>AND the background noise power have to be divided by 1000. I suspect the
>same is true of many Beverages, since the efficiency will be about the
>same as a vertical of the same height as the antenna (typically 6-10ft)
>with no special ground plane.

I'm speaking of 160 meters in the following:

Beverages are a bit better than that. Comparing my Beverage to my vertical which (although Gary doesn't think so) is nearly 100% efficient, and allowing for the directivity of the Beverage (which I can do two ways, by comparing my four-square transmitting array to the Beverage or the omni-vertical) my Beverages are crudely about 1% efficient.

The more directive the antenna, the less noise power it receives because noise is arriving from every direction. The primary exceptions to this are days or times when the band is "closed" in certain directions. By far the greatest amount of noise propagates in from the darkness, and it is much stronger than any ground wave source.

One factor that evens things out is at dawn or dusk, when the ionosphere allows propagation mainly in one direction. All the antennas move closer together in S/N ratio because even the omni-directional antennas are hearing noise mainly from the dark area!

This is NOT the case near a large population center, or if you have noisy power lines. In that case the extremely low daytime noise is pushed upwards. At my last QTH, even though I could not hear a "buzz", the background noise on my omni-directional antenna (which was a 1/4

wl vertical) was almost 30 dB stronger than it is at this location on
a similar antenna! That's a large difference.

>Then it starts to make more sense. Gary's figure of about 20,000,000K at
>1.75MHz translates to about -100dBm in 500Hz, as received by a 100%
>efficient antenna. For a 0.1% efficient antenna, subtract 30dB, so we're
>somewhere around -130dBm. This is just about the same as the noise floor
>of a typical RX at Top Band.

We can not ignore directivity and assume a non-directional antenna. My
noise floor **AT THE ANTENNA** at midnight listening towards Europe
was (using 3.5 kHz bandwidth) -123 dBm.

OM0WR the same time was is -95 dBm
DF2PY -88dBm
WA8OLN -78dBm
W4ZV -32dBm

The weakest Europeans are, of course, below the noise floor.

Using 350 Hz selectivity that noise is -133dBm.

My FT-1000D barely makes that level with 10 dB internal S/N ratio
preamp on, and that is for wider-than-SSB bandwidths! On CW, forget
it. The receiver does not have enogh gain and the IF after the narrow
filter is far too noisey.

>ON4UN's book on LF Antennas and DXing points out that some people find
>they need a preamp, while others (including himself) do not. This is

John is in a populated area, close to a chemical plant that gives him
noise.

>For example, ON4UN's layout brings all his Beverages fairly close to the
>house,

Another source of noise.

>so his feedline losses are very low and it's reasonable that he
>doesn't need a preamp. Tom's receiving antennas, on the other hand, seem
>to be a significant fraction of a mile away, so even on Top Band the
>feedline losses are not negligible

True enough, but my measurements are at the antenna feedpoint. My
feedliune losses are generally low, because of the frequency and I
mostly use 5/8" or larger CATV-type cables.

>; he's also in a rural location which
>will have a low man-made component of noise in at least some directions,
>so it's equally reasonable that in his circumstances he does find a
>preamp (or "line driver") to be a benefit.

Indispensable, except on noisy nights or using wide modes, like SSB.

While many people debate the need for amplifiers with large antennas like Beverages, virtually evenyone finds they need them with s mall loop antennas.

73 Tom

5041. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:09:06 UTC
From: n8blk@aol.com
Message-ID: <20010315150906.23261.00000927@nso-cj.aol.com>
Source record: 168375

In article <tb1c03odm8s9d5@corp.supernews.com>, "Robert Moughton"
<mailliw@peoplepc.com> writes:

>I recently inherited a HF6V antenna from my father and am trying to erect
>it. The question that I have is, How do I correctly install the Q base coil
>located at the bottom of the antenna? I think that the instructions are
>showing that I connect each end of the coil across the base insulator and
>across the 75ohm matching cable. Then I suppose that the radials will
>connect to the bottom side of this coil. Does this sound correct?

You can go to the Bencher website and download the PDF file of the manual for
the HF6V. It has all of the info needed, and if you print it out, you have the
equivalent of what originally came with the antenna.
-art clemons-

5042. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:11:00 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab11ce3.32888641@news.accessunited.com>
Source record: 168369

On Thu, 15 Mar 2001 10:08:13 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Terman devotes 5 pages in "Electronic and Radio Engineering" to
>shielding of magnetic and electrostatic fields. While the magnetic
>shield will usually block an electrostatic field, the electrostatic

It is easy to shield a static field of one type, and pass the other field when the fields are static.

When they are time-varying, it is another issue. Take one to zero....and the other must also go to zero.

>shield usually will not effectively block magnetic coupling. Faraday
>shields between magnetically coupled coils are examples of this
>discriminatory coupling.

In the example you gave a large amount of DIRECT capacitance is isolated by a "wall" between the coils, but this a balance issue and u you are isolating the unbalanced sources! The coils are unbalanced, and the capacitance directly couples.

If you made the coils small "loops" and wound them out oif sheilded wire, you'd find the coupling remained the SAME or might even become higher!

Let me give a clear example of where adding a shield INCREASES unwanted coupling. There is a design of Beverage transformers that uses RG-174 coax in the primary, wound over a secondary winding. The shield of that coax is grounded at one end.

If you measure common mode coupling from the primary to the secondary, it is LESS with normal small wire than with the shield in place! Unbalance is also less on a floating secondary.

It's not so much you add a shield, its HOW the shield affects the system.

Now to correct that transformer design, you simply isolate the windings from each other and ground a "Faraday shield" between the windings to an independent ground . If you ground that shied to the primary, you INCREASE the common mode coupling through the transformer.

>The cans i-f coils are placed in are other
>examples of electrostatic shielding.

No, they clearly shield BOTH fields. They are "shorted turns".

>A conducting container which is small in terms of wavelength forces
>nearly the same potential on all its surfaces by conduction. So, there
>is no potentental difference to cause trouble on its inner surfaces.

The loop is in itself a small conducting container. If you put a
shield over it that allows reception of radio signals, the shield
simply becomes the antenna.

You can not shield it for time-varying electric fields, and still
expect time-varying magnetic fields to pass. Even if we could, noise
is an electromagnetic wave just like a desired signal.

We may want it to be otherwise, but it isn't. We are stuck in this
world. You can not "shield noise" without "shielding signals" unless
we are talking about things less than a few loop diameters away.

Even if we are talking about that, the real cure comes from balancing
the system, NOT from shielding.

73 Tom

5043. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:16:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB1230E.FFD975B1@eznec.com>
Source record: 168379

I'm afraid that people are confusing electrostatic fields with time-varying electric fields. The former is what you get when you pet your cat on a dry day. The latter is the electric part of an electromagnetic field. I entirely agree that a shielded loop is indeed shielded from electrostatic fields. But electrostatic fields aren't a problem for me or most people, and I can't hear them with my receiver. What the loop shield doesn't shield from is time-varying electric fields.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Terman says:
> "Electrostatic shielding is obtained by enclosing the space to be
> shielded by a conducting surface."
>
> Terman devotes 5 pages in "Electronic and Radio Engineering" to
> shielding of magnetic and electrostatic fields. While the magnetic
> shield will usually block an electrostatic field, the electrostatic
> shield usually will not effectively block magnetic coupling. Faraday
> shields between magnetically coupled coils are examples of this
> discriminatory coupling. The cans i-f coils are placed in are other
> examples of electrostatic shielding.
>
> A conducting container which is small in terms of wavelength forces
> nearly the same potential on all its surfaces by conduction. So, there
> is no potentental difference to cause trouble on its inner surfaces.
>
> Best regards, Richard Harrison, KB5WZI

5044. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:18:53 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab12176.34059607@news.accessunited.com>
Source record: 168317

On Wed, 14 Mar 2001 16:53:23 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Roy was saying that the same E-field exists inside the shield as outside. This is
>demonstrably incorrect. The shunting impedance of a the shield is so low that very
>little E-field exists inside it.

If you touch the shield in a shielded loop, driven with 100 watts, you
will burn your fingers.

You can draw arcs, and measure voltages just as high across that gap
as if the shield was resonanted by the capacitor that is on the inner
conductor.

You can remove the capacitor that tunes the inner conductor and place
it across the gap and the loop will behave exactly the same way, as
long as the capacitor is re-resonanted. As a matter of fact, the
voltages in the system and currents all remain almost exactly the
same!!!

That's how it is, and we can't change that no matter how nice it would
be! Actually it wouldn't be nice to change that, because we would
have trouble making coupled circuits work. In this instance, link
coupled outputs would quit working. So would many antennas.

73 Tom

5045. New web site REF68

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:21:42 UTC
From: REF 68 <webmaster@ref68.com>
Message-ID: <98r8cq$72e$1@front6m.grolier.fr>
Source record: 168388

French REF 68 Ham-radio club station proud to present its new web site:
http://www.ref68.com

In French:

Les radioamateurs du Haut-Rhin sont heureux de vous faire part de la
naissance de leur (nouveau) site internet.
http://www.ref68.com

Vous y attendent :

- Vos petites annonces
- La radiogoniom&#65533;trie sportive (chasse au renard)
- Les installations du d&#65533;partement 68
- Les responsables du d&#65533;partement 68
- Les pages d'annonces d'activit&#65533;s r&#65533;gionales

Et plein d'autres choses...

webmaster@ref68.com

5046. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:22:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB1247F.C55EBF92@eznec.com>
Source record: 168310

I'd take Diamond's gain figures with a large grain of salt. I've had one Diamond antenna, a RHA627 I got for my Yaesu VX-5 HT, and it was noticeably worse on all three bands than the ducky that came with the radio, despite being much longer. If you can't trust the gain figures, there's not much basis for an objective comparison.

Roy Lewallen, W7EL

Jeff Farrar wrote:
>
> I am trying to decide between two different Diamond mobile antennas. The
> two models are:
>
> Model Band Wavelength Gain Watts
> Mount Height
>
> SG2000HD: 2M 2-1/4 & 1-3/8 5.2 150
> UHF 62
> NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
> UHF 40.2
>
> This info is straight from Diamond's site.
>
> Right now I am only plan on using it on a 2M radio.
>
> My pros and cons for each.
>
> SG2000HD: Pro: gain. Con: Height, and can't use the mount I want
> NR770HA: Pro: Height, I can use the mount I want Con: Gain
>
> Questions:
>
> 1) Will I notice a difference between the two gains to make any real world
> difference?
> 2) The two antennas have a different wavelength construction. What type of
> terrain is each one suited best for? I live in a very hilly area.
>
> Thanks

5047. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 20:23:24 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab1238d.34594893@news.accessunited.com>
Source record: 168385

On 15 Mar 2001 06:04:37 GMT, Dick Carroll <dixie@townsqr.com> wrote:

> Seems to me that most noise that is propagated on power lines is
>horizontally polarized simply because of the orientation of the
>radiator, like with other antennae. Maybe this is why the story got
>around that noise is horizontal.
>
>Dick

It depends where you are at in relationship to the conductors, and
other factors.

Your dipole antenna radiates a vertically polarized signal off the
ends. Beverages are long horizontal antennas, that respond to
vertically polarized signals.

Noise is considered to be mainly vertically polarized because
attenuation along the earth "removes" any horizontal component. Get
close to the source, and it is randomly polarized.

73 Tom

5048. Re: Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 21:04:39 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ab12e67$0$88187$bbae4d71@news.net-link.net>
Source record: 168392

If the RG8X is between your transceiver and the AH-4 you are fine. If you have the RG8X going from the AH-4 output to the antenna wire, I hope you have removed the outer jacket and shield. The dielectric insulation and center conductor of RG-8 type coax is OK to use in place of "genuine" high voltage cable. Your antenna starts at the output terminal. Do not hook any baluns or chokes to your coupler. If you are going for a dipole type antenna, hook equal lengths of wire to both sides of the coupler, at least 23 feet of longer. Do not use a ground wire in this configuration. You might also want to give a loop some thought. Do not use a ground wire in a loop configuration either. I like using couplers with a single wire inverted L or V over radials.

John O'Flaherty wrote in message <3AB01111.D6BF83BD@toast.net>...

> I am a new ham. I have an antenna consisting of a wire about 50 feet
>long, fed through a piece of RG8-X and an AH-4 remote automatic antenna
>tuner. I want to increase my signal strength, and I'd like to try making
>my wire a dipole by adding another wire extending 50 feet in the other
>direction. I've been told that I can just extend the other wire from the
>ground side of the tuner to make a dipole.

> Ok, I'll try that. But it occurs to me that it may not make a true
>dipole, since the currents through the ungrounded wing and the grounded
>wing may not be balanced- especially since there is also a grounding
>wire extending straight down from the tuner to a ground rod.

> What I'd like to try is connecting a choke balun consisting of 10 feet
>of RG8-X wound up in about a 10-inch diameter circle (as described in
>the ARRL handbook), between the AH-4 tuner and the two wings of the
>dipole. Now, would that force the dipole to be a dipole, and would the
>tuner still be able to meaningfully tune the antenna through that balun?
>

> In other words, the antenna won't be resonant, and whatever properties
>it exhibits at a particular frequency will be presented to the remote
>tuner through the choke balun. Will it still tune? Will it arc and
>explode, electrocute the valuable operator, or worse, wreck the antenna
>tuner?
>

>Any and all comments appreciated. Thanks.
>

>john
>

5049. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 21:09:53 UTC
From: Jack <kc8pkn@arrl.net>
Message-ID: <98rb2a$9vq$1@nntp9.atl.mindspring.net>
Source record: 168315
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Not sure I would use a letter that was not run through a spell checker
first.

> impove amateur radio, not dumb it

Jack

5050. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 21:19:47 UTC
From: richardharrison@webtv.net
Message-ID: <21637-3AB131F3-26@storefull-116.iap.bryant.webtv.net>
Source record: 168382

Roy, W7EL wrote:
"I am afraid that people are confusing electrostatic fields with time-varying electric fields."

Terman says:
"Thus, the secondary winding of a transformer may be shielded electrostatically from the primary by a shield having an insulating gap located in such a manner as to prevent the shield from becoming a short-circuited turn."

It is obvious that Terman is not talking about petting a cat on a dry day. It is clear that Terman is crediting the electrostatic shield with capability to handle time-varying electic fields as well. The problem is a drift in the jargon over the century.

Best regards, Richard Harrison, KB5WZI

5051. Re: L tuner adjustments

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 21:20:21 UTC
From: kb7qhc@home.com
Message-ID: <3ab12a78.1135062082@news.seanet.com>
Source record: 168381

On Wed, 14 Mar 2001 18:50:38 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I'm obviously failing to communicate. I said that the near field isn't
>of any consequence for the shootouts. That's because the near field
>isn't being measured in the shootouts. The example of the dipole and
>loop were to illustrate that the near fields of various small antennas
>can be very different, and why it would therefore be a poor idea to use
>near field measurements for shootouts (or any other time you want to
>compare two antennas that aren't identical). These don't seem
>contradictory to me.

There's certainly room for confusion. I always attempted to speak
from the perspective of the units being configured with small antennas
(hence my statement that they would exhibit identical near/far field
geometries - this is not true in terms of near/far in the sense of
field as it is in the near/far sense of wavelength, my error that you
correct below) being measured by an FSM with a small antenna.
>
>"Near field" can have a number of definitions, since there's no abrupt
>boundary. But from a half wavelength dipole, the field gets very close
>to having the characteristics of the far field (wave nearly planar, E/H
>nearly 377 ohms, attenuation proportional to distance) in well under a
>wavelength away from the antenna. Kraus, in Antennas, says "the boundary
>beween the two [regions] may be arbitrarily taken to be at a radius of R
>= 2L^2/lambda", where L is the maximum dimension of the antenna and
>lambda is the wavelength, both in the same units as R. (Note the use of
>"arbitrary".) This gives a boundary of a half wavelength for a half
>wavelength dipole. For an 11 foot whip plus a 6 foot radiating vehicle
>on 3.8 MHz, the boundary using this equation works out to a little over
>two feet, although I'd want to get a bit farther away to make sure. But
>there's no question that the shootout measurements are being made in the
>far field.

I can live with arbitrary, thanx for the descriptive explanation.

So, being within a wavelength does not conflict with the mandate to be
in the far field if that distance is on the order of 2 feet and the
FSM is out even 10.

However, being 10 feet out brings its own problems of serious error if
you cannot assure that all candidates place their source of radiation
at the same "point." This is not something that can be taken for
granted as we all can appreciate that the "antenna" is not always the
major contributor to radiation in these shoot-offs.

Hence my solution of moving away to resolve this source of error.

In another sense, the small size of the unit's antenna (radiator) also reduces the possibility of error due to measuring variation of near fields (as near fields are extremely close to the small radiator and the FSM is always at a greater distance).

And still, one source of error remains as a simple product of geometry at a minimum (as long as we can all agree on the scales of that geometry).

>
>There are some software packages that'll give you really nice graphical
>near field plots. Most of the ones I've heard about are in the $20,000
>category, but as far as I know they're readily available if you really
>need this capability.
>
>Roy Lewallen, W7EL
>

Hi Roy,

The last is simply the old adage that you can always spend more money. Having an investment in Mathcad, I will look at that again with renewed hope (of not having to spend $20K).

73's
Richard Clark, KB7QHC

5052. RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 21:27:25 UTC
From: Steve AB2ET <ab2et@MailAndNews.com>
Message-ID: <3AB2A93B@MailAndNews.com>
Source record: 168309

>===== Original Message From "VE9SRB" <srbest@att.net> =====
>"Steve Sawicki" <ab2et@MailAndNews.com> wrote in message
>news:3ABFC9F1@MailAndNews.com...
>> Well I guess I know where and what I will be doing on Friday, July 13,
>2001,
>> just imagine the frenetic activity that will lead on to this gala event?
>>
>> But lets lok at the practical side of thing :
>> After examining all of the offerings at
>> http://www.ewh.ieee.org/soc/aps/2001/workshop/WorkshopShort.htm
>>
>> SC-3: Practical Consideration in the Design of Antennas for Wireless
>> Communication Course fee: $200 a Full Day courses sure looks like the
>better
>> deal unlike the 1/2 Day Courses SC-7: Fractal Antennas Course fee: $120
>>
>> <snip>
>>
>> I am faced with a true Dilemma, SC-3 or go for the "gusto" I think that
>> unlike
>> the Florida situation I know which is the correct Chad to punch.
>>
>> 73's
>> Steve
>> AB2ET
>>
>
>Hi Steve:
>
>The IEEE event should be interesting. The SC-3 course is to be presented by
>Dr. Tuli Herscovici, a close colleague of mine. He and I jointly developed
>the early version of this presentation and a similar workshop I give.
>Although this is sure to be a good presentation, I have to go for the gusto:
>SC-7.
>
>You might also want to check out the fractal antenna session on Wednesday.
>Just FYI, I am going to present two papers there:
>
>1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
>Geometries
>
>2) A Modification of the Small Loop Approximation for Fractal and Bent Wire
>Loop Antennas
>

>Take care,
>
>Steve VE9SRB
>
>

Hi Steve:

Now this is FANTASTIC News, thank you for informing others and me on this newsgroup about your upcoming presentation that will be held on Wednesday July
11th.
It just makes me wonder as to the motive or motives of the originator of this
thread of excluding this important fractal antenna related information?

Again thank you this information makes it a bit easier for me to schedule my time and greatly allays my fears of the dreaded Friday the 13th and the return
night flight back to Islip from Providence (as well as save a buck or two on the flight cost).

I do hope that you can "post" the papers after the presentation for all that did not have the opportunity to attend in person.

Oh and yes it sure looks like Bean Town will be Fractelizing at least on Wednesday night for sure, see you then...

73's

Steve
AB2ET

5053. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 21:40:32 UTC
From: kb7qhc@home.com
Message-ID: <3ab232a5.1137155292@news.seanet.com>
Source record: 168377

On Thu, 15 Mar 2001 12:43:04 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>This does not answer the question "So what?"
>
>The crux is that it is either here or there. Connect a matched load to
>coax through which you apply high power to the load. Where is heat
>produced? Is it in the coax or is it in the load?
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

What coax and what load? Imprecision of language does not bode well for attempts to define. Again this is framing the question to match the answer. If this is your infinite line, the line is the load and it is obvious that energy has been passed from source to sink and thus dissipated by convention.

You sorely want to find heat in that infinite line, but it having no loss makes that desire one of fantasy (and thus returns us to the notion that dissipationlessness is an artifice to explain, not a reality that exhibits a property). Being just a notion does not elevate it to another argument's proof.

On the other hand, you attempt to state this as line and load separately, that too fails in that heat will be found in both as you still cannot provide a finite lossless line. Attempts to provide a low loss line may be argued, but then you are simply arguing degree, not theory. And for this separate line load combination, the power never returns and that is enough. The load may be a resistor or it may be a radiator (in fact both are radiators/dissipators of energy) and that still does not change the question "So What?"

73's
Richard Clark, KB7QHC

5054. Re: !!! WANTED !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:10:35 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <20010315171035.03630.00000892@ng-mf1.aol.com>
Source record: 168311

<<Wanted a 2M HO Loop antenna for 2 meter ssb>>

I built a 6 Meter Full Wave loop. It's also my Surfboard/Ladder rack... It's mounted on the Fiberglass cap of my Pickup truck. Works Awesome. Just a few turns of coax to form a Balun & I get 3.5 Mhz bandwidth.

Just do the 1005/F equasion. No capacitor adjustments & stuff....
Ed G.
KB1DQX
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)

5055. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:12:43 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB13E5B.77C0E6CB@usa.alcatel.com>
Source record: 168374

Lets try a thought experiment. Take a shielded loop with a 1-ohm resistance center conductor. Putting 10 volts 60 Hz AC across the center conductor terminals, I am inputting 100 watts to the loop. How, exactly, does this cause arcs from the (grounded) shield?

Cortland

Tom W8JI wrote:

> On Wed, 14 Mar 2001 16:53:23 -0800, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >Roy was saying that the same E-field exists inside the shield as outside. This is
> >demonstrably incorrect. The shunting impedance of a the shield is so low that very
> >little E-field exists inside it.
>
> If you touch the shield in a shielded loop, driven with 100 watts, you
> will burn your fingers.
>
> You can draw arcs, and measure voltages just as high across that gap
> as if the shield was resonanted by the capacitor that is on the inner
> conductor.
>
> You can remove the capacitor that tunes the inner conductor and place
> it across the gap and the loop will behave exactly the same way, as
> long as the capacitor is re-resonanted. As a matter of fact, the
> voltages in the system and currents all remain almost exactly the
> same!!!
>
> That's how it is, and we can't change that no matter how nice it would
> be! Actually it wouldn't be nice to change that, because we would
> have trouble making coupled circuits work. In this instance, link
> coupled outputs would quit working. So would many antennas.
>
> 73 Tom

5056. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:16:35 UTC
From: richardharrison@webtv.net
Message-ID: <6402-3AB13F43-20@storefull-115.iap.bryant.webtv.net>
Source record: 168318

Roy, W7EL wrote:
"I am afraid that people are confusing electrostatic fields with
time-varying electric fields."

Terman says (about the shielded loop antenna) on page 1049 of
"Electronic and Radio Engineering":
"It is also helpful to enclose the loop in an ELECTROSTATIC shield, such
as a metal housing broken by an insulated bushing as shown schematically
in Fig. 26-27c."

Terman didn`t put electorstatic all in caps. I did that for purposes of
emphasis and illustration.
But, for me, that makes the name of a shield of this type applied to a
loop antenna, officially, an "electrostatic shield", now and forever.

Best regards, Richard Harrison, KB5WZI

5057. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:23:30 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3AB140E2.146B0884@iquest.net>
Source record: 168316

You've got the basic idea Bob. What is the length of your 75 ohm
matching section?

Patrick

Robert Moughton wrote:
>
> I recently inherited a HF6V antenna from my father and am trying to erect
> it. The question that I have is, How do I correctly install the Q base coil
> located at the bottom of the antenna? I think that the instructions are
> showing that I connect each end of the coil across the base insulator and
> across the 75ohm matching cable. Then I suppose that the radials will
> connect to the bottom side of this coil. Does this sound correct?
>
> Bob Moughton
> N4RPK

5058. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:31:32 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB142C4.B36968CF@usa.alcatel.com>
Source record: 168386

Let's see. I have a coaxial cable handy. I drill a hole in its shield. Does this negate the shield? No; I can even cut one end off. The shield still works, despite a hole in the shield as large (almost) as the coax itself.

Cortland
ka5s@earthlink.net

Roy Lewallen wrote:

> Are you saying that very little E field exists inside a coaxial cable? A
> coax cable can have a large E field inside, but no field or an entirely
> different one outside. But things change when you cut a gap in the
> shield. Inside a coax cable, the current on the outside of the inner
> conductor equals the current on the inside of the outer conductor. If
> you cut a gap in the shield, the current flowing on the inside of the
> outer conductor has nowhere to go except over the edge to the outside.
> So you end up with current on the outside of the shield equal to the
> current on the inside. Similarly, any field impinging on the coax from
> the outside induces a current on the outside of the shield. This has to
> flow around the edge to the inside, where it produces the same field
> inside as was impinging from the outside. That's what happens with a
> shielded loop.
>
> The preceding discussion depends on the shield being at least several
> skin depths thick, so it doesn't hold true at audio frequencies, say.
>
> I don't have a ready answer for your experimental results. I see several
> possible things at work. A filling station canopy is almost certainly
> well grounded, so you'd be standing under the top hat of a top loaded
> vertical. I'm not sure that's a good analogy for the loop shield. The
> loopstick equipped radio might be a lot more sensitive that the one with
> the short probe. So I'm not sure you can draw the conclusion you did
> from the experiment. I think a better experiment would be to compare
> shielded and unshielded loops.
>
> Roy Lewallen, W7EL
>
> Consider
>
> Roy Lewallen, W7EL
>
> Cortland Richmond wrote:
> >
> > Roy was saying that the same E-field exists inside the shield as outside. This is
> > demonstrably incorrect. The shunting impedance of a the shield is so low that very

> > little E-field exists inside it.
> >
> > As proof, try the experiment: A magnetic field antenna such as a loop continues to
> > operate in the vicinity of an E-field short, while an E-field antenna does not.
> > Merely walking under a porch roof or service station canopy with a short E-field
> > probe (such as on some wide band receivers) can drop a formerly strong signal below
> > audibility, but a ten dollar, loopstick-equipped AM portable continues to receive.
> > This demonstrates a shield need NOT have the same field outside and inside. If the
> > E-field is attenuated in this manner for a largely open structure then for a much
> > smaller one such as a loop shield, with smaller openings, it will be more so.
> >
> > Cortland
> > ka5s@earthlink.net
> >
> > Tom W8JI wrote:
> >
> > > On Wed, 14 Mar 2001 13:40:48 -0800, Cortland Richmond
> > > <Cortland.Richmond@usa.alcatel.com> wrote:
> > >
> > > >This may easily be disproven. Faraday shields DO work. Carry a receiver with a
> > > >short E-field antenna under a grounded metal structure and see.
> > > >
> > > >Cortland
> > > >ka5s@earthlink.net
> > >
> > > I'm missing something.
> > >
> > > Can you tell me how that proves Roy's statement was incorrect?
> > >
> > > What if I carried a closed loop of wire inside that structure?
> > >
> > > Why does my AM radio, with a loopstick, go dead inside a metal
> > > building? Why does a radio with a short whip work under the metal roof
> > > of my barn, just as a loopstick does?
> > >
> > > 73 Tom

5059. Re: Diamond CP5/CP6 HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:41:31 UTC
From: Richard <richard@optima-optics.com>
Message-ID: <vybs6.2234$0a7.281045@dfiatx1-snr1.gtei.net>
Source record: 168373

Thanks Cecil -- I didn't notice the ".org" -- could that be a subtle attempt to deflect Spam; or does he work for the ARRL.... go figure. I'll give it another try using .net this time.

Having said that.... I just found out I already deleted the file -- not in the mood to write it again. Summary version -- good antenna, 82 DXCC's in ~5 weeks.

73
Richard

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3AB11C57.7E35F98F@IEEE.org...
> Richard wrote:
> > Tried to email you comments on the CP-6, but it was rejected by the ARRL
> > server....
>
> Maybe it should be arrl.net?
>
> > "kd5ngd" <kd5ngd@arrl.org> wrote in message
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5060. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 22:50:18 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AB1472A.66A7B068@bwcc.com>
Source record: 168370

Cortland Richmond wrote:
> Putting 10 volts 60 Hz AC across the center conductor terminals
You left off the M from in front of the Hz.

5061. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 23:02:17 UTC
From: "J. Duffy Beischel" <duffyb01@fuse.net>
Message-ID: <tb2ife5m8nuff9@corp.supernews.com>
Source record: 168418
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Why do we bother to reply to troll bait written by people who are gutless
weasles who can't post a message with their name. Ignore this trash.

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AB0CC63.948F079D@IEEE.org...
> message center wrote:
> > I am
> > concerned about the quality of amateur radio operators, not quantity.
>
> Does this mean that you want to reduce the number of hams available
> for emergency communications?
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5062. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 23:02:45 UTC
From: richardharrison@webtv.net
Message-ID: <21637-3AB14A15-32@storefull-116.iap.bryant.webtv.net>
Source record: 168395

Richard Clark wrote:
"What coax and what load?"

Seems pedantic to me, but Richard Clark used to teach. I never did, other than some tutoring. I didn`t have the patience needed.

OK, any coax that is "low-loss" in this situation. It will be used with a matching load which was of the dummy resistance load type in my conception. I should have said so.

In the proposed case, the line would remain cool while the load warmed. The clear cause is the "dissipationless type resistance" inherent in the coax, and the "resistor type resistance" inherent in the dummy load.

Richard Clark is right. The load on the coax could have been a 100% efficient antenna. In this case the radiation resistance of the antenna would have been of the "dissipationless type" also, and there would have been no nearby heat to be measured.

The radiated energy is dissipated in one of the dictionary definitions because it was dispersed not to return. But, this is not the prevailing definition used by the electrical community which reserves the term "dissipation" to the conversion of electricity to heat.

I feel now as I sometimes do at a baggage claim watching the same old luggage go around on the carousel. I`ve seen it all before. This subject is stale indeed.

Best regards, Richard Harrison, KB5WZI

5063. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 23:16:46 UTC
From: richardharrison@webtv.net
Message-ID: <21636-3AB14D5E-80@storefull-116.iap.bryant.webtv.net>
Source record: 168397

I wrote:
"Terman didn`t put electorstatic all in caps."

Of course he didn`t. The state of Florida already had "electorstatic"
copyrighted.

Best regards, Richard Harrison, KB5WZI

5064. RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 23:44:07 UTC
From: fractenna@aol.com
Message-ID: <20010315184407.01728.00002095@ng-da1.aol.com>
Source record: 168222

Yep:

Fun surprises in store! And wouldn't you like to know what they are:-)

;-)

73
Phil
N1ZKT

5065. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-15 23:55:42 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <3ab1493e_1@news1.prserv.net>
Source record: 168312

I wish to thank everyone who commented on my question about wet ladder line. My conclusions (based on group replies and private replies) are:

1. In theory, the wet line should not make much difference. (Exception: Roy's comments go against this conclusion.)

2. In practice, there can be a substantial problem -- especially on the "higher" bands (which I take to mean frequencies above 20 m).

My current use is modest -- involving a 45' dipole, up only 20', with about 110' of feed line. I plan to put up a full-wave (on 20 m) loop, with relays to open the "top" of the diamond loop, and use it for 30-10 meters. The top of the loop will be about 66' high, with about 150' of feed line, and the whole thing will be difficult to take down for changes after it is installed. I am beginning to think I should go with open line instead of ladder line. I have never worked with open line, and it looks like handling it (standoffs, feeding it through a wall, running along a basement ceiling, etc) could be a bit messy. Perhaps it is because we have had an unusually wet winter, but I am disappointed in the ladder line. Even heavy dew seems to affect it. (Several people pointed out that the high impedance of my current antenna, on most bands, contributes to the problem --- but my proposed loop has the same exposure.)

Bill Ogden
W2WO

(Second attempt to post this note. First one seems to have fallen in a bit bucket somewhere.)

5066. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 00:14:28 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab15a31.48584341@news.accessunited.com>
Source record: 168408
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

On Thu, 15 Mar 2001 06:52:44 GMT, cb-radio@arrl.org (message center)
wrote:

Nice troll. That outta stir up some people who are silly enough to
think you are serious.

5067. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 00:34:56 UTC
From: "David Michael Kelly"
Message-ID: <6sn2btg3csts94vsshq611mfbg4pfoaa57@4ax.com>
Source record: 168407

On Thu, 15 Mar 2001 07:53:49 -0500, "Dick Elliott"
<elliotta@netusa1.net> wrote:

>I have two of the Butternut antennas. They work great with a good ground
>system and radials cut to the middle of each band.

How many radials do you use per band?

TIA
--
david
AC7LY

5068. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 00:52:19 UTC
From: kb7qhc@home.com
Message-ID: <3ab26375.1149651100@news.seanet.com>
Source record: 168399

On Thu, 15 Mar 2001 17:02:45 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>
>I feel now as I sometimes do at a baggage claim watching the same old
>luggage go around on the carousel. I`ve seen it all before. This subject
>is stale indeed.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Made even worse when you don't see your baggage :-(

OK, we'll save this for another day. ;-)

73's
Richard Clark, KB7QHC

5069. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 00:58:52 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <zxds6.1565$Fb5.1262426@nntp3.onemain.com>
Source record: 168219
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AB10057.93AFD9CC@IEEE.org...
> When I worked at Intel, a group of us would camp out together. We would
> meet at a preset place on a Saturday morning, decide where to camp out,
> and head out at a preset time. Somebody was always late and out of range
> of CB radios. I talked the entire group into getting their Tech
licenses.
>
> We then used a mountain-top repeater to keep in touch with the late
> comers and direct them to the camp site. It worked out well but only
> a few of the campers saw any use for HF. After all, they had given
> up their CB radios and gone to the trouble to obtain Tech licenses
> because HF couldn't perform the required function.
> --
> http://www.mindspring.com/~w6rca

And I would make a sizable bet that no one told their wives. This
bringing home bread and milk plays hob with mortuni time.

5070. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:19:39 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3AB16A2A.A6F6BED7@ix.netcom.com>
Source record: 168400
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Measures an S7 on my troll meter......

message center wrote:

> Dear (insert directors name here),
>
> Why don't you wake up and pull your f***ing head out of your a**? I am
> concerned about the quality of amateur radio operators, not quantity. If I
> wanted to listen to a bunch of stupid operators, I would listen to CB. Do us
> all a favor and propose something that will impove amateur radio, not dumb it
> down.

Well, suggest something good to them. If it's intelligent and well reasoned,
they'll
listen to it.

> Bring integrity and intelligence back into the amateur radio service.
> Thanks and 73.
>
> (insert your name here)
>
> --------

5071. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:20:03 UTC
From: kb7qhc@home.com
Message-ID: <3ab363d2.1149744945@news.seanet.com>
Source record: 168221

On 15 Mar 2001 23:44:07 GMT, fractenna@aol.com (Fractenna) wrote:

>Yep:
>
>Fun surprises in store! And wouldn't you like to know what they are:-)
>
>;-)
>
>73
>Phil
>N1ZKT

herr doktor,

A touch of understandable manic in that, but we do appreciate the humor fraudtenna brings us, and the compound interest in the fract pas littering these "scientific" missives. :-)

I hope that you've got that verboten material posted, the violations are mounting and the possible legal costs are a recursive function of that number. Simply a friendly reminder.... unacknowledged in-fract-ions will be turned over to an agency for collection.

Take notes (and keep the colors inside the jagged lines). Being already apprised of one presentation, it presents the prospects of some surprises indeed! Remember to take an aspirin a day as a prophylactic before you attend, tho' while you attend you may need more. :-(

That last patent must've been a supreme bummer, hope the summer festivities raises your spirits. One slow step at a time so that the rise time does not drive you into wringing.

73's
Richard Clark, KB7QHC

5072. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:29:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB16C8B.32A3F977@eznec.com>
Source record: 168229

When the current on the inside of the shield encounters the hole, it has two choices of path. One is to dodge around the hole, and the other is to flow over the edge and along the outside of the shield. The fraction which takes each path is inversely proportional to the impedance the current sees. As long as a little metal is present for longitudinal flow (assuming that it isn't too long), the vast majority of current will take that path and stay on the inside. but if you cut the shield completely around the cable, and make the gap wide enough to reduce the gap capacitance across it, the current has no choice but to flow over the edge and along the outside.

I'm not sure what you mean by "cutting one end off", but if you mean completely disconnecting the shield at one end, you can bet your boots you'll ruin the shielding effectiveness (at least at frequencies above audio). Anyone with an EMC background can tell you what happens even if you connect a shield end via a pigtail. The same problem occurs that I was just talking about. The pigtail impedance can easily be as high as the path along the outside of the shield, so current is diverted there where it can radiate or, reciprocally, can cause signal ingress. Good coax fittings connect the shield all the way around the inner conductor.

You can easily set up an experiment to test these if you have some decent equipment. What you'll need are well shielded signal generator, dummy load, and receiver. Either connect the receiver to the dummy load and couple the signal generator to the outside of the connecting cable, or connect the generator to the dummy load and couple to the receiver. Then break the shield and see what happens.

Roy Lewallen, W7EL

Cortland Richmond wrote:
>
> Let's see. I have a coaxial cable handy. I drill a hole in its shield. Does this negate
> the shield? No; I can even cut one end off. The shield still works, despite a hole in the
> shield as large (almost) as the coax itself.
>
> Cortland
> ka5s@earthlink.net

5073. R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:30:53 UTC
From: "James A. Sullivan" <sja6@uswest.net>
Message-ID: <3AB16CCD.23FAFDFC@uswest.net>
Source record: 168220

I recently purchased a Cushcraft R5. I am having trouble getting a good match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.

What tips are there to setting this up?

I have a 2 and 6 meter beam located 20 feet away. Will this affect the R5?

Jim Sullivan N7TCF

5074. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:32:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB16D4B.A576B774@eznec.com>
Source record: 168398

You're absolutely correct. Terman said that, so it must be so. From now on, I'll regard "time varying electric fields" and "electrostatic fields" as being the same thing. I stand corrected.

Now that I think about it, the field I get from petting my cat is time varying, after all. . .

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy, W7EL wrote:
> "I am afraid that people are confusing electrostatic fields with
> time-varying electric fields."
>
> Terman says:
> "Thus, the secondary winding of a transformer may be shielded
> electrostatically from the primary by a shield having an insulating gap
> located in such a manner as to prevent the shield from becoming a
> short-circuited turn."
>
> It is obvious that Terman is not talking about petting a cat on a dry
> day. It is clear that Terman is crediting the electrostatic shield with
> capability to handle time-varying electic fields as well. The problem is
> a drift in the jargon over the century.
>
> Best regards, Richard Harrison, KB5WZI

5075. RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:36:02 UTC
From: k1bqt@aol.com
Message-ID: <20010315203602.07017.00001091@ng-mj1.aol.com>
Source record: 168228

>Fun surprises in store! And wouldn't you like to know what they are:-)<

These are not the words of an adult.

Rick K1BQT

5076. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 01:37:58 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <b5es6.485$5R6.3965@newsfeed.slurp.net>
Source record: 168412

The HF6V on the roof has four radials per band. I use the same ammount when camping with the other one. The rules say you can never have enough ground. So put as many as you can each cut to the middle of the bands. I use the same method of radials with my "slinky" vertical. W9FPJ
"David Michael Kelly" <avid@nospam@home.com> wrote in message news:6sn2btg3csts94vsshq611mfbg4pfoaa57@4ax.com...
> On Thu, 15 Mar 2001 07:53:49 -0500, "Dick Elliott"
> <elliotta@netusa1.net> wrote:
>
> >I have two of the Butternut antennas. They work great with a good ground
> >system and radials cut to the middle of each band.
>
> How many radials do you use per band?
>
> TIA
> --
> david
> AC7LY

5077. Re: R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 02:35:54 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <aXuxOlQmjWD=GwtEP80pGQqUbcCI@4ax.com>
Source record: 168226

"James A. Sullivan" <sja6@uswest.net> wrote:

>I recently purchased a Cushcraft R5. I am having trouble getting a good
>match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.
>
>What tips are there to setting this up?
>
>I have a 2 and 6 meter beam located 20 feet away. Will this affect the
>R5?
>
>Jim Sullivan N7TCF

You're sure it's an R5, and not an R3? I had what I believe what was an R3, for
20, 15 and 10 meters, but it wasn't really marked or anything.

Bob
k5qwg

5078. RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 02:38:18 UTC
From: fractenna@aol.com
Message-ID: <20010315213818.01790.00001749@ng-da1.aol.com>
Source record: 168415

>>Fun surprises in store! And wouldn't you like to know what they are:-)<
>
>These are not the words of an adult.
>
>Rick K1BQT
>

SMILE Rikkie:-)

You should enjoy life and akcentu-ate the positive:-)

73
Phil N1ZKT

5079. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 02:45:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98rul2$610$1@neptunium.btinternet.com>
Source record: 168414

W6RCecilA wrote
> So I ask again, if someone asks you why a *resistive*
characteristic
> impedance doesn't *dissipate* most of the power, what do you say?
========================
I say "All is not phoo that titters".

I've just given you an example where ALL energy accepted by a line
with a resistive Zo is dissipated in the line. So your question
doesn't make sense to me.

Let's state the same thing backwards. ALL the energy which has been
dissipated in a line can only have got there via its input
terminals.

Reg.

5080. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 02:51:44 UTC
From: vlfiscus@mcn.net
Message-ID: <tb2vu0oti8t38f@news.supernews.com>
Source record: 168404
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

cb-radio@arrl.org (message center) wrote in
<arrl_letter@get_the_message>:

>ARRL members, Here is a letter that you can use and send to your ARRL
>section manager, Division director, and ARRL board of Director:
>
>-------
>

What if I'm not a League member anymore, can I still send the letter?

kb7adl

>Dear (insert directors name here),
>
>Why don't you wake up and pull your fucking head out of your ass? I am
>concerned about the quality of amateur radio operators, not quantity.
>If I wanted to listen to a bunch of stupid operators, I would listen to
>CB. Do us all a favor and propose something that will impove amateur
>radio, not dumb it down. Bring integrity and intelligence back into the
>amateur radio service. Thanks and 73.
>
>(insert your name here)
>
>--------

5081. Re: Wet Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 03:11:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98s0ni$3nj$1@plutonium.btinternet.com>
Source record: 168224

More on Belden 300-ohm ribbon.

Finally, Beldon specifies DC resistance as 2.36 ohms per 100 feet.
If the conductors were solid copper the DC resistance would be
0.888 ohms. If we knew the resistivity of the steel core used in
the cable we could deduce the thickness of the copper cladding and
so predict the attenuation at 21 MHz even more accurately. But
we'll never know. I doubt even if Beldon knows.

Reg.

5082. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 03:11:44 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <3AB18470.EC0CAC2C@arrl.org>
Source record: 168416
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

[Followup to r.r.a.policy]

Dwight Stewart wrote:
>
> Before the no-code techs came, the 2-meter band was
> completely dead. There probably weren't 25 people in the entire country
> using that band on a regular basis, and the number of VHF ham repeaters
> could likely be counted on one hand.

That's breathtakingly incorrect. The no-code Tech license came to be in 1990. The 2-meter band has been home to thousands of repeaters and a huge amount of activity since the late 1960's. I'm sure plenty of no-code Techs have participated in establishing and maintaining repeaters during the last decade, and more power to them. But the amount of activity at VHF and above prior to that was tremendous, and to say that VHF repeaters exist because of no-code Techs is just a complete distortion of history.

Jon

5083. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 03:16:46 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <Qxfs6.528$5R6.5449@newsfeed.slurp.net>
Source record: 168417
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

```
Coming from you Roger that is a compliment.
"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
news:984703856.3ab16370e97c3@webmail.cotse.com...
> "DickHEAD Elliott" <elliotta@netusa1.net> wrote in message news:Ui8s6.249
> $5R6.2283@newsfeed.slurp.net...
> > You are just kidding.........right? W9FPJ
>
> Francis, you just PROVED how goddamn STUPID you really are.
>
>
> > "message center" <cb-radio@arrl.org> wrote in message
> > news:arrl_letter@get_the_message...
> > > ARRL members, Here is a letter that you can use and send to your ARRL
> > section
> > > manager, Division director, and ARRL board of Director:
> > >
> > > -------
> > >
> > > Dear (insert directors name here),
> > >
> > > Why don't you wake up and pull your fucking head out of your ass? I
am
> > > concerned about the quality of amateur radio operators, not quantity.
If
> > I
> > > wanted to listen to a bunch of stupid operators, I would listen to CB.
Do
> > us
> > > all a favor and propose something that will impove amateur radio, not
dumb
> > it
> > > down. Bring integrity and intelligence back into the amateur radio
> > service.
> > > Thanks and 73.
> > >
> > > (insert your name here)
> > >
> > > --------
> >
> >
>
> 73 de Roger, KC8JBO
> EM99|
```

> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
>
> .You poor whining a$$holes!
>
>
>
>
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>
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>
>
>
>

5084. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 03:22:48 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <Uwgs6.13410$PH.1246463@e3500-chi1.usenetserver.com>
Source record: 168394

Hi Richard, I've always wanted to lurk but I've never learned how. Perhaps
you could teach me? I've heard that one can become a lert by lurking, and
God knows we need all the lerts we can get.

Walt

Richard Harrison <richardharrison@webtv.net> wrote in message
news:22740-3AAFC88F-44@storefull-117.iap.bryant.webtv.net...
> Walt wrote:
> "Please delete "N2DU" and replace it with "W2DU".
>
> Can you imagine an "N2DU Balun"? I can`t.
>
> Sorry, Walter. I need to retire to the sidelines and lurk for awhile.
>
> Best regards, Richard Harrison, KB5WZI
>

5085. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 03:29:50 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <4Kfs6.531$5R6.5609@newsfeed.slurp.net>
Source record: 168413
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Does anybody know the procedure for having an individual removed from the news groups if they are as caustic as this "gentleman"? This type of abuse and attacks are totally uncalled for. It is one thing for people to have a little fun with matching barbs but this individual and others are stretching the avenues of freedom of speech beyond civilized limits. How dare he be allowed to character assassinate with the ugliness of a devil. There must be a place to report him besides the "abuse" center.

And One does not expect to produce quality anything by sending such garbage to the FCC or the ARRL. W9FPJ

"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message news:984703856.3ab16370e97c3@webmail.cotse.com...
> "DickHEAD Elliott" <elliotta@netusa1.net> wrote in message news:Ui8s6.249
> $5R6.2283@newsfeed.slurp.net...
> > You are just kidding.....right? W9FPJ
>
> Francis, you just PROVED how goddamn STUPID you really are.

5086. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 03:39:56 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AB18B0C.A0A4BF0C@bwcc.com>
Source record: 168402
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Dick Elliott wrote:
> Does anybody know the procedure for having an individual removed from the
> news groups if they are as caustic as this "gentleman"?
You can write to his ISP. They could TOS him out.
But it is not likely.

> There must be a place to report him besides the "abuse" center.
Unless he threatens to harm someone, no.

5087. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 04:29:32 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB196AC.D7DB499C@toast.net>
Source record: 168227

Reg Edwards wrote:

> In built-up areas, especially below 10 MHz, man-made,
> locally-generated noise predominates over noise arriving via the
> ionosphere.
>
> Local noise sources radiate from domestic wiring, plumbing pipes,
> phone wires, TV antenna down-leads, washing machines, shaver cords,
> etc. Such noise, at its source, is obviously randomly polarised and
> is radiated in random directions and elevation angles.
>
> From one house or building in the town to another, noise
> propagation can only be via very low angle and zero angle
> groundwave.
>
> Vertically polarised ground waves suffer relatively little
> attenuation and will propagate for many wavelengths, perhaps miles.
> MF broadcasters depend on it.
>
> But horizontally polarised waves, characterised by horizontal
> currents flowing on and just under the surface of the lossy ground,
> are severely attenuated. The electric field is shorted out. So
> horizontally polarised noise strength falls to an insignificant
> level after 1 or 2 wavelengths.
>
> Consequently, at any outdoors receiving point in the locality,
> man-made noise is prediminantly vertically polarised, the
> horizontal components, from whichever direction they arrive, have
> mostly been dissipated in the soil.
>
> The much weaker noise from the ionosphere is randomly polarised.
> Get away from human habitation, such as in the middle of the
> Pacific Ocean, and from a noise viewpoint, the vertical antenna
> offers no advantages over the horizontal. Take a Kon Tiki trip.

I thought I was understanding, and then something slipped away. If noise is vertically polarized, why would the vertical antenna offer any advantage over the horizontal, in regards to noise? Wouldn't it be more sensitive to the noise that is polarized in its plane?

john

5088. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 04:30:15 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <rFgs6.1059$wQ3.73418@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168223

Hi Steve:

"Steve AB2ET" <ab2et@MailAndNews.com> wrote in message
news:3AB2A93B@MailAndNews.com...
> >===== Original Message From "VE9SRB" <srbest@att.net> =====
> >"Steve Sawicki" <ab2et@MailAndNews.com> wrote in message
> >news:3ABFC9F1@MailAndNews.com...
> >> Well I guess I know where and what I will be doing on Friday, July 13,
> >2001,
> >> just imagine the frenetic activity that will lead on to this gala
event?
> >>
> >> But lets lok at the practical side of thing :
> >> After examining all of the offerings at
> >> http://www.ewh.ieee.org/soc/aps/2001/workshop/WorkshopShort.htm
> >>
> >> SC-3: Practical Consideration in the Design of Antennas for Wireless
> >> Communication Course fee: $200 a Full Day courses sure looks like the
> >better
> >> deal unlike the 1/2 Day Courses SC-7: Fractal Antennas Course fee: $120
> >>
> >> <snip>
> >>
> >> I am faced with a true Dilemma, SC-3 or go for the "gusto" I think that
> >> unlike
> >> the Florida situation I know which is the correct Chad to punch.
> >>
> >> 73's
> >> Steve
> >> AB2ET
> >>
> >
> >Hi Steve:
> >
> >The IEEE event should be interesting. The SC-3 course is to be presented
by
> >Dr. Tuli Herscovici, a close colleague of mine. He and I jointly
developed
> >the early version of this presentation and a similar workshop I give.
> >Although this is sure to be a good presentation, I have to go for the
gusto:
> >SC-7.
> >
> >You might also want to check out the fractal antenna session on

Wednesday.
> >Just FYI, I am going to present two papers there:
> >
> >1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
> >Geometries
> >
> >2) A Modification of the Small Loop Approximation for Fractal and Bent
Wire
> >Loop Antennas
> >
> >Take care,
> >
> >Steve VE9SRB
> >
> >
>
>
> Hi Steve:
>
> Now this is FANTASTIC News, thank you for informing others and me on this
> newsgroup about your upcoming presentation that will be held on Wednesday
> July
> 11th.
> It just makes me wonder as to the motive or motives of the originator of
> this
> thread of excluding this important fractal antenna related information?
>

In fairness to Phil, he would not as yet have seen the session schedule.

> Again thank you this information makes it a bit easier for me to schedule
my
> time and greatly allays my fears of the dreaded Friday the 13th and the
> return
> night flight back to Islip from Providence (as well as save a buck or two
on
> the flight cost).
>
> I do hope that you can "post" the papers after the presentation for all
that
> did not have the opportunity to attend in person.
>

Unfortunately, I won't be able to post these papers because the copyrights
will belong to the IEEE.

Not to worry though, the final edit of my fractal antenna article for QEX
went to the editor this week. This article, titled (subject to change)
"The Fractal Loop Antenna: Understanding the Significance of Fractal
Geometry in Determining Antenna Performance" will provide a very objective
and comprehensive analysis of fractal and other bent wire loop

configurations. The focus of the article is twofold. First, the performance trade-offs associated with using fractal geometries in antennas is considered. Performance trade-offs in terms of the antenna's radiation resistance, bandwidth and efficiency are considered. Second, the significance of fractal geometry in determining the antenna performance is evaluated.

> Oh and yes it sure looks like Bean Town will be Fractelizing at least on
> Wednesday night for sure, see you then...
>
> 73's
>
> Steve
> AB2ET
>

Looking forward to it.

73
Steve VE9SRB

5089. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 05:20:21 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98s7qlpjs3@208.206.142.75>
Source record: 168393
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:
>
> "Leland C. Scott" wrote:
> > A surprising number of Tech class operators
> > don't care for H.F. much. I would dare say that some of the new Hams don't
> > even consider access to H.F. as the "crown jewel" of Ham Radio any more.
>
> When I worked at Intel, a group of us would camp out together. We would
> meet at a preset place on a Saturday morning, decide where to camp out,
> and head out at a preset time. Somebody was always late and out of range
> of CB radios. I talked the entire group into getting their Tech licenses.
>
> We then used a mountain-top repeater to keep in touch with the late
> comers and direct them to the camp site. It worked out well but only
> a few of the campers saw any use for HF. After all, they had given
> up their CB radios and gone to the trouble to obtain Tech licenses
> because HF couldn't perform the required function.
>

Here we go with some more Cecilian Logic. CB *is* HF because it is *in*
HF. Right!

Whatta clown.

5090. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 05:27:46 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB1A452.6FA1F57E@IEEE.org>
Source record: 168401
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> Here we go with some more Cecilian Logic. CB *is* HF because it is *in*
> HF. Right!

Well Dick, if 27MHz is not HF, please tell us what it is.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5091. Re: Non Newtonian Propulsion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 05:55:21 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <dVhs6.16$Te.20475@monger.newsread.com>
Source record: 168234

"Brian.Farrelly" <Brian.Farrelly@nho.hydro.com> wrote in message
news:3AB1D3AD.63547B8A@nho.hydro.com...
> Roger Halstead wrote:
> >
> > "asps" <as.ps@flashnet.it> wrote in message
> > news:984fm5$3n4$1@news.flashnet.it...
> > > Subject : PNN (Non Newtonian Propulsion)
> > >
> > > http://www.mywebpages.com/asps/sc23in.htm
> >
> > I don't trust pages that open windows on my machine...even minutes after
I
> > leave the page.
> >
> > The DAMN Thing is still doing it too.
> >
> > Roger Halstead (K8RI)
> > WWW.RogerHalstead.com
> > N833R (World's Oldest Debonair? S# CD-2)
> > >
>
> How long did it keep up that performance?

I don't know how long it would have gone on, but I had closed IE.
Then an add popped up. I closed it.
About a minute later another popped up (web page, or at least an IE window)

Then I discovered two IE tasks running when another window popped up a
minute or two later.
Closing this one didn't work. (it would just switch back and forth between
the two)

So, I did an <ATL><CTRL><DEL> to the task manager and shut them down that
way, but even then it took several tries.

It (the page) aparently placed some code on the computer, which then called
those pages after I had left.
It went right past Zone Alarm as I had just visited the page, it thought it
was OK.

Admittedly I was a bit concerned so I was more interested in getting rid of
the thing, rather than counting how many times pages came up and how it
worked, but I think I have the sequence correct.

That has the potential of being one dangerous page.
It could be an advertizing gimick, or it could be some testing of a very

effective way to deliver things we probably don't want on our computers.
That thing could even deliver a malicious payload.

> I got the heck out of there as fast as possible, and
> closed down Netscape and haven't seen further signs of
> trouble.
>
I have seen no further effects...so far.
But I think it's time to "scan the files", just to be sure.

> Always had an interest for nutters but not when
> they behave like this!
>
> Brian
>

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)

>
> --
> mailto:Brian.Farrelly@nho.hydro.com Norsk Hydro Research Centre
> phone +47 55 99 68 74 (((Postboks 7190
> fax +47 55 99 69 70 2oooS N-5020 Bergen
> home +47 55 13 78 49 HYDRO Norway

5092. Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 06:22:41 UTC
From: KA6PFE <ka6pfe@pacbell.net>
Message-ID: <7wis6.13074$qv3.6179317@nnrp5-w.sbc.net>
Source record: 168410

Hello all,

The problem seems to be common, small backyard and no antenna's allowed. So I've been looking at different screwdriver antenna's that are available and of course every manufacturer's antenna is the best (just look at their web site).

There's the ATAS (I have one of those), the DK3, BB3, Stealth, and others.

Now here's the question (I hope not to create a spam war on this), which one would perform best in both a mobile and base environment using 80 thru 10 as the guideline?

As a side note, the backyard is 12ft long by 6ft wide with a 6x6 patch of dirt that I was thinking of using something like a tri-pod mount on.

Input would be appreciated.

73's
Brian

5093. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 06:54:03 UTC
From: richardharrison@webtv.net
Message-ID: <6402-3AB1B88B-60@storefull-115.iap.bryant.webtv.net>
Source record: 168406

John wrote:
"If noise is vertically polarized, why would the vertical antenna offer any advantage over the horizontal in regards to noise?"

John has it right. The horizontal antenna is better at rejecting some of the groundwave noise. The vertical antenna is more susceptible to noise because it favors vertically polarized radiation which matches the polarization of most groundwave propagated noise.

The lone vertical may have another slight disadvantage because it is completely non-directional. The horizontal dipole is almost completely non-directional too, the way they are often used. Off the ends of the dipole there are nulls in its horizontal pattern of propagation, but that pattern is for the horizontally polarized wave. The dipole doesn`t have the same rejection for vertically polarized waves off its ends. Still, if noise is predominantly from a particular direction, a position may be found which reduces the noise pick up.

Over sea water, the vertical antenna is much better than the horizontal antenna which isn`t bad, it is awful.

Destructive interference between the direct and reflected waves over sea water tends to obliterate horizontal antenna signals. The vertical antenna`s performance is better than it is over average ground. If there were much groundwave noise at sea, the vertical antenna would be much better at picking it up. Fortunately, as Reg pointed out, noise levels at sea tend to be low. So, the vertical antenna won`t be overly bothered with noise, and it will be good at sending and receiving signals. The horizontal antenna will be no good for sending signals and no good at receiving either noise or signals.

Best regards, Richard Harrison, kB5WZI

5094. Re: Non Newtonian Propulsion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 07:07:34 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <WYis6.68$9d.3618@newshog.newsread.com>
Source record: 168396

"asps" <as.ps@flashnet.it> wrote in message
news:984fm5$3n4$1@news.flashnet.it...
> Subject : PNN (Non Newtonian Propulsion)
>
> http://www.mywebpages.com/asps/sc23in.htm

I don't trust pages that open windows on my machine...even minutes after I
leave the page.

The DAMN Thing is still doing it too.

Roger Halstead (K8RI)
WWW.RogerHalstead.com
N833R (World's Oldest Debonair? S# CD-2)
>
>
>
>
>

5095. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 07:20:29 UTC
From: vlfiscus@mcn.net
Message-ID: <tb3fltm5e7gk67@news.supernews.com>
Source record: 168405
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Cecil.A.Moore@IEEE.org (W6RCecilA) wrote in <3AB0CC63.948F079D@IEEE.org>:
>
>Does this mean that you want to reduce the number of hams available
>for emergency communications?

It means he wants to improve the quality of amateurs that are available
for emergencies. I'm not surprised that you failed to see that Cecil, but
then you never were one that put much stock in quality.

kb7adl

5096. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 07:22:20 UTC
From: richardharrison@webtv.net
Message-ID: <18544-3AB1BF2C-131@storefull-114.iap.bryant.webtv.net>
Source record: 168409

Walter, W2DU wrote:
"I`ve always wanted to lurk but I`ve never learned how."

I share the problem. There is a popular Portuguese axiom which says:
"you can`t straighten out the whole world." The implication is that you might as well not try. I`ve known that one for almost a half century but still can`t seem to put it into practice.

Best regards, Richard Harrison, KB5WZI

5097. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 07:35:51 UTC
From: richardharrison@webtv.net
Message-ID: <18545-3AB1C257-49@storefull-114.iap.bryant.webtv.net>
Source record: 168411

Cecil, W6RCA wrote:
"---if 27MHz is not HF, please tell us what it is."

Oh boy, this thread has the ear-marks of the longevity of a "47 KW CB".

Best regards, Richard Harrison, KB5WZI

5098. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 07:52:31 UTC
From: fractenna@aol.com
Message-ID: <20010316025231.01958.00001443@ng-cu1.aol.com>
Source record: 168225

>In fairness to Phil, he would not as yet have seen the session schedule.
>

Sounds interesting. Can you tell me what else will be given at that session? The web page doesn't give the schedule. I wonder if Dr. Cohen will be giving a paper. How do you think he will react to your papers?

73
Phil N1ZKT

5099. Re: Non Newtonian Propulsion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 08:49:49 UTC
From: "Brian.Farrelly" <Brian.Farrelly@nho.hydro.com>
Message-ID: <3AB1D3AD.63547B8A@nho.hydro.com>
Source record: 168403

Roger Halstead wrote:
>
> "asps" <as.ps@flashnet.it> wrote in message
> news:984fm5$3n4$1@news.flashnet.it...
> > Subject : PNN (Non Newtonian Propulsion)
> >
> > http://www.mywebpages.com/asps/sc23in.htm
>
> I don't trust pages that open windows on my machine...even minutes after I
> leave the page.
>
> The DAMN Thing is still doing it too.
>
> Roger Halstead (K8RI)
> WWW.RogerHalstead.com
> N833R (World's Oldest Debonair? S# CD-2)
> >

How long did it keep up that performance?
I got the heck out of there as fast as possible, and
closed down Netscape and haven't seen further signs of
trouble.

Always had an interest for nutters but not when
they behave like this!

Brian

--
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5100. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 09:16:18 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab1d89d.80953188@news.accessunited.com>
Source record: 168236

On Thu, 15 Mar 2001 14:12:43 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Lets try a thought experiment. Take a shielded loop with a 1-ohm resistance center
>conductor. Putting 10 volts 60 Hz AC across the center conductor terminals, I am
>inputting 100 watts to the loop. How, exactly, does this cause arcs from the (grounded)
>shield?
>
>Cortland

Let's not be silly .

The loop has to be resonant, and we all know at 60 Hz any loop large
enough to have any efficiency at all would have to be extremely large.

We also know that if the loop is tuned to 2 MHz, the receiver won't
respond to 60 Hz energy or to static fields. If it does, we need a new
receiver.

73 Tom

5101. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 09:22:21 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab1d96a.81158348@news.accessunited.com>
Source record: 168230

On Thu, 15 Mar 2001 14:31:32 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Let's see. I have a coaxial cable handy. I drill a hole in its shield. Does this negate
>the shield? No; I can even cut one end off. The shield still works, despite a hole in the
>shield as large (almost) as the coax itself.
>
>Cortland
>ka5s@earthlink.net

That's correct, at least at any frequency where the hole was tiny in
terms of wavelength. A loop made that way would be stone dead for
receiving.

If you cut the shield entirely around the circumference, like we do in
a "shielded" loop antenna, the shield would make a dandy antenna even
if we fed the center conductor. We've probably all had that happen
when a shield connection is broken someplace along a cable.

73 Tom

5102. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 09:24:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB1DBDC.5197C398@eznec.com>
Source record: 168247

Surely Dr. Cohen, a Doctor of Philosophy, scientist and college professor, will thoughtfully consider the facts and insights presented by his colleagues, and be grateful for the opportunity to gain knowledge from their experience and learning. What reason could anyone possibly have to anyone expect any other sort of reaction from such an esteemed scientist?

Roy Lewallen, W7EL

Fractenna wrote:
>
> >In fairness to Phil, he would not as yet have seen the session schedule.
> >
>
> Sounds interesting. Can you tell me what else will be given at that session?
> The web page doesn't give the schedule. I wonder if Dr. Cohen will be giving a
> paper. How do you think he will react to your papers?
>
> 73
> Phil N1ZKT

5103. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 09:28:05 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab1db40.81628753@news.accessunited.com>
Source record: 168232

On Fri, 16 Mar 2001 00:54:03 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>John wrote:
>"If noise is vertically polarized, why would the vertical antenna offer
>any advantage over the horizontal in regards to noise?"

The *question* is "why is noise mostly vertically polarized".

The answer is the earth attenuates horizonatlly polarized signals
more, so all you are left with is the vertical component of distant
ground wave sources. So with random sources, which we have, all but
the vertical components are filtered out as the propagate along the
earth.

73 Tom

5104. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 09:59:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <98vkgm$9b6$1@plutonium.btinternet.com>
Source record: 168249

John wrote -
> I thought I was understanding, and then something slipped away.
If noise
> is vertically polarized, why would the vertical antenna offer any
> advantage over the horizontal, in regards to noise? Wouldn't it
be more
> sensitive to the noise that is polarized in its plane?
======================
John, who says a vertical antenna has an advantage over a
horizontal in regard to noise ?

Yes it would be more sensitive.

Reg.

5105. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 12:04:34 UTC
From: Codeman
Message-ID: <3ab1fe31.1489899@news2.gj.net>
Source record: 168420

"Jeff Farrar" <jeff@farrar.com> wrote:

>I am trying to decide between two different Diamond mobile antennas. The
>two models are:
>
>Model Band Wavelength Gain Watts
>Mount Height
>
>SG2000HD: 2M 2-1/4 & 1-3/8 5.2 150
>UHF 62
>NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
>UHF 40.2
>
>This info is straight from Diamond's site.
>
>Right now I am only plan on using it on a 2M radio.
>
>My pros and cons for each.
>
>SG2000HD: Pro: gain. Con: Height, and can't use the mount I want
>NR770HA: Pro: Height, I can use the mount I want Con: Gain
>
>Questions:
>
>1) Will I notice a difference between the two gains to make any real world
>difference?

You will only see a difference in the two different types of antennas
when you are out on the fuzzy fringe of the repeater. The higher gain
antenna*may* get thru where the other will not. However, you will
never for sure know this is true unless you have used both antennas
at the same location, same weather, same snow pack, same......

For example, I know of *particular* parking spaces in distant towns
that will allow me to transmit/receive all the way back to the home
repeater. I guess I am bouncing my signal off buildings/mts/ect just
right to make it. Move over a parking space or two and its a no
go.... Don't think a 5.2 gain over a 3.0 would have made a
difference, but then again? Amazing.

>2) The two antennas have a different wavelength construction. What type of
>terrain is each one suited best for? I live in a very hilly area.

Can not answer that. I suspect there will be cases where one will
have an advantage over the other and then again, there will be other
cases where the other will do better. A real crap shoot.

Codeman

PS

I run a Larsen 5/8 antenna with a 150 watt amp. The 5/8 wave performs well in deep dark canyons, and fits into the garage, survives thru tree branches and parking garages, bank breezeways, etc..

5106. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 12:06:57 UTC
From: Codeman
Message-ID: <3ab201c9.2409188@news2.gj.net>
Source record: 168421

"Jeff Farrar" <jeff@farrar.com> wrote:

>I am trying to decide between two different Diamond mobile antennas. The
>two models are:
>
>Model Band Wavelength Gain Watts
>Mount Height
>
>SG2000HD: 2M 2-1/4 & 1-3/8 5.2 150
>UHF 62
>NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
>UHF 40.2
>
>This info is straight from Diamond's site.
>
>Right now I am only plan on using it on a 2M radio.
>
>My pros and cons for each.
>
>SG2000HD: Pro: gain. Con: Height, and can't use the mount I want
>NR770HA: Pro: Height, I can use the mount I want Con: Gain
>
>Questions:
>
>1) Will I notice a difference between the two gains to make any real world
>difference?

You will only see a difference in the two different types of antennas
when you are out on the fuzzy fringe of the repeater. The higher gain
antenna*may* get thru where the other will not. However, you will
never for sure know this is true unless you have used both antennas
at the same location, same weather, same snow pack, same......

For example, I know of *particular* parking spaces in distant towns
that will allow me to transmit/receive all the way back to the home
repeater. I guess I am bouncing my signal off buildings/mts/ect just
right to make it. Move over a parking space or two and its a no
go.... Don't think a 5.2 gain over a 3.0 would have made a
difference, but then again? Amazing.

>2) The two antennas have a different wavelength construction. What type of
>terrain is each one suited best for? I live in a very hilly area.

Can not answer that. I suspect there will be cases where one will
have an advantage over the other and then again, there will be other
cases where the other will do better. A real crap shoot.

Codeman

PS

I run a Larsen 5/8 antenna with a 150 watt amp. The 5/8 wave performs well in deep dark canyons, and fits into the garage, survives thru tree branches and parking garages, bank breezeways, etc..

5107. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 12:44:21 UTC
From: "Max Donoghue (VE3TMT)" <mdonoghue1@sympatico.ca>
Message-ID: <FUns6.399014$Pm2.5987069@news20.bellglobal.com>
Source record: 168239

"KA6PFE" <ka6pfe@pacbell.net> wrote in message
news:7wis6.13074$qv3.6179317@nnrp5-w.sbc.net...
> Hello all,
>
> The problem seems to be common, small backyard and no antenna's allowed.
So
> I've been looking at different screwdriver antenna's that are available
and
> of course every manufacturer's antenna is the best (just look at their web
> site).
>
> There's the ATAS (I have one of those), the DK3, BB3, Stealth, and others.
>
> Now here's the question (I hope not to create a spam war on this), which
one
> would perform best in both a mobile and base environment using 80 thru 10
as
> the guideline?
>
> As a side note, the backyard is 12ft long by 6ft wide with a 6x6 patch of
> dirt that I was thinking of using something like a tri-pod mount on.
>
> Input would be appreciated.
>
> 73's
> Brian
>
> Hi Brian,

Have you considered using a mini loop? I built a 6' version that cover
80-15 with absolutely flat SWR on the tuned frequency. Best of all it
requires no ground system, is very effecient, although has a narrow
bandwith. I worked stations on 40m out to 500 miles when the thing was
still in my basement.

Good luck,

Max VE3TMT
>

5108. Re: Non-Dissipative Resistance Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 12:45:49 UTC
From: Jeroen Belleman <Jeroen.Belleman@cern.ch>
Message-ID: <3AB20AFD.673DF09D@cern.ch>
Source record: 168231

Reg Edwards wrote:
>
> Jeroen, there is a resistance at the input of your low noise
> amplifier - it is the feedback resistance across which is a noise
> voltage.

No, in fact, in the case I had in mind, there isn't. What I was thinking of are the charge preamplifiers commonly used in high-energy physics detectors. These things have capacitive feedback. The input impedance is nevertheless 50 Ohms *resistive*.

The equivalent input noise is much less than what would be expected from a real 50 Ohm resistor. That alone is enough to prove that this input resistance doesn't dissipate all the power that's put in.

Jeroen Belleman

5109. Re: R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 13:13:20 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3AB2116F.C512D533@ix.netcom.com>
Source record: 168248

Bob -- check all dimensions as per the manual. The distances around the fiberglass collar are critical. See Figure 1 in the manual. If you bought it used it may be assembled incorrectly.

Tune the 10M band first then 15M, 17M and finally 20M. Put the vswr meter at the base of the antenna, not back at the rig. No 12M adjustment required - they say.

You may have a blown trap as these antennas didn't like hi power, several folks here frazzled theirs. 15M set up easily on mine - very wide bandwidth, so check yours for a blown trap, an antenna analyzer should help figure out where the antenna sections resonant.

DO NOT try to horse the antenna to other bands with a tuner, several here in San Diego did this, antenna protested and blew traps. Others got away with it, but not recommended.

I had the R5 for a few years - worked fine -- liked the full bandwidth on 20M which my R-7000 won't do. A 6 meter vertical was mounted about 15 feet away - no problems.
--
All Cushcraft dimensions are at URL:
http://www.cushcraft.com/support/pdf/r5.pdf

73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========
Bob Miller wrote:

> "James A. Sullivan" <sja6@uswest.net> wrote:
>
> >I recently purchased a Cushcraft R5. I am having trouble getting a good
> >match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.
> >
> >What tips are there to setting this up?
> >
> >I have a 2 and 6 meter beam located 20 feet away. Will this affect the
> >R5?
> >
> >Jim Sullivan N7TCF
>
> You're sure it's an R5, and not an R3? I had what I believe what was an R3, for
> 20, 15 and 10 meters, but it wasn't really marked or anything.
>
> Bob

> k5qwg

5110. Re: R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 13:20:40 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3AB21327.F3D90A43@ix.netcom.com>
Source record: 168238

James - check all dimensions as per the manual. The distances around the fiberglass
collar are critical. See Figure 1 in the manual. If you bought it used it may be
assembled incorrectly.

Tune the 10M band first then 15M, 17M and finally 20M. Put the vswr meter at the
base of the antenna, not back at the rig. No 12M adjustment required - they say.

You may have a blown trap as these antennas didn't like hi power, several folks
here frazzled theirs. 15M set up easily on mine - very wide bandwidth, so check
yours for a blown trap, an antenna analyzer should help figure out where the
antenna sections resonant.

DO NOT run a kilowatt into this antenna for tune up, quick way to blow a
trap. Tune amp into dummy load, the switch to antenna.

DO NOT try to horse the antenna to other bands with a tuner, several here in San
Diego did this, antenna protested and blew traps. Others got away with it, but not
recommended.

I had the R5 for a few years - worked fine -- liked the full bandwidth on 20M which
my R-7000 won't do. A 6 meter vertical was mounted about 15 feet away - no
problems.
--
All Cushcraft dimensions are at URL:
http://www.cushcraft.com/support/pdf/r5.pdf

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700 Ham Topics & 6,000 Links
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I Doubt, Therefore I Might Be!!!
==========

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> >match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.

> >
> >What tips are there to setting this up?
> >
> >I have a 2 and 6 meter beam located 20 feet away. Will this affect the
> >R5?
> >
> >Jim Sullivan N7TCF

5111. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 13:41:26 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <aKos6.1560$M%2.108166@bgtnsc05-news.ops.worldnet.att.net>
Source record: 168233

"Fractenna" <fractenna@aol.com> wrote in message
news:20010316025231.01958.00001443@ng-cu1.aol.com...
> >In fairness to Phil, he would not as yet have seen the session schedule.
> >
>
> Sounds interesting. Can you tell me what else will be given at that
session?
> The web page doesn't give the schedule. I wonder if Dr. Cohen will be
giving a
> paper. How do you think he will react to your papers?
>
> 73
> Phil N1ZKT

Hi Phil:

I am not aware of the session schedule either. I am certain that you know whether Dr. Cohen will be presenting any papers at this session. I sincerely hope he does as I would enjoy meeting him and seeing his presentation(s).

I don't think Dr. Cohen will have any issues with my papers. They are purely technical in nature and give full credit to Dr. Cohen for his previous work in this area. The conclusions I arrive at are based solely on technical fact and a much more detailed analysis than Dr. Cohen presented in his CQ papers. He may not agree with some of my conclusions but that's really an issue for the broader audience. I hope he and I have the opportunity for a technical interchange of these results.

Steve VE9SRB

5112. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 14:14:37 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AB21FCD.53E8@pacbell.net>
Source record: 168240

Roy Lewallen wrote:
>
> Surely Dr. Cohen, a Doctor of Philosophy, scientist and college
> professor, will thoughtfully consider the facts and insights presented
> by his colleagues, and be grateful for the opportunity to gain knowledge
> from their experience and learning. What reason could anyone possibly
> have to anyone expect any other sort of reaction from such an esteemed
> scientist?
>
> Roy Lewallen, W7EL
>

Much of the history of science is concerned with esteemed
academics fighting each other tooth and nail over abstruse
doctrinal matters. Getting an advanced degree has never made
anyone less childish.

Tom Donaly KA6RUH

5113. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 14:32:31 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB223FF.86C642DB@IEEE.org>
Source record: 168242

Richard Harrison wrote:
> Over sea water, the vertical antenna is much better than the horizontal
> antenna which isn`t bad, it is awful.
>
> Destructive interference between the direct and reflected waves over sea
> water tends to obliterate horizontal antenna signals.

If there is destructive interference somewhere, doesn't that imply
constructive interference elsewhere?
--
http://www.mindspring.com/~w6rca

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5114. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 14:36:01 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <3ab224f6$1$vtanpl$mr2ice@news.uga.edu>
Source record: 168235

Can you provide more details on your antenna?
Ignacy, NO9E

>Have you considered using a mini loop? I built a 6' version that cover
>80-15 with absolutely flat SWR on the tuned frequency. Best of all it
>requires no ground system, is very effecient, although has a narrow
>bandwith. I worked stations on 40m out to 500 miles when the thing was
>still in my basement.

>Good luck,

>Max VE3TMT
>>

5115. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 14:39:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB225AB.28A9EE88@IEEE.org>
Source record: 168244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

"Vince Fiscus, KB7ADL" wrote:
>
> Cecil.A.Moore@IEEE.org (W6RCecilA) wrote in <3AB0CC63.948F079D@IEEE.org>:
> >Does this mean that you want to reduce the number of hams available
> >for emergency communications?
>
> It means he wants to improve the quality of amateurs that are available
> for emergencies. I'm not surprised that you failed to see that Cecil, but
> then you never were one that put much stock in quality.

So Vince, during an emergency, are you and your family going to refuse
to be saved by an amateur radio operator who doesn't measure up to your
standards for quality? As far as emergency amateur radio operators go,
seems to me that halitosis is better than no breath at all.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5116. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 14:48:39 UTC
From: richardharrison@webtv.net
Message-ID: <6988-3AB227C7-66@storefull-117.iap.bryant.webtv.net>
Source record: 168243

Tom, W8JI wrote:
"You can not "shield noise" without "shielding signals" unless we are talking about things less than a few loop diameters away."

That is perfectly logical. There are no tags, one saying I`m signal, and another saying I`m noise, keep me out. It all looks the same to the loop.

We can place a conductive covering over a coil to provide electrostatic shielding.

Terman says:
"It is possible to shield electrostatic flux without simultaneously affecting the magnetic field by surrounding the space to be shielded with a conducting cage that is made in such a way as to provide no low-resistance path for the flow of eddy currents, while at the same time offering a metallic terminal upon which electrostatic flux lines can terminate."

Examples are Faraday shields, transformer electrostatic shields between primary and secondary coils, and shields on direction-finding loops. A shield gap is used in each example to stop those eddy currents.

Terman gives flux diagrams of solenoid coil shielding on page 37 of his 1955 edition of "Electronic and Radio Engineering". In Figure 2-19(d), one can see the symmetry of flux terminations in the short-circuited shield. We know this works. Pull the cans off the i-f transformers in your receiver and it will likely oscillate. The shields short-out the voltage differences that could be caused by unbalanced capacitive coupling. Capacitive coupling is nullified by the shield.

The fact that time-varying capacitive stress is called "electrostatic flux" is one of those oxymorons like "jumbo shrimp".How can something static be in flux? But that`s the way it is.

Best regards, Richard Harrison, KB5WZI

5117. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 14:52:38 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <WMps6.97520$Aj2.1272417@typhoon.columbus.rr.com>
Source record: 168246

"Fractenna" <fractenna@aol.com> wrote in message
news:20010316025231.01958.00001443@ng-cu1.aol.com...
> >In fairness to Phil, he would not as yet have seen the session schedule.
> >
>
> Sounds interesting. Can you tell me what else will be given at that
session?
> The web page doesn't give the schedule. I wonder if Dr. Cohen will be
giving a
> paper. How do you think he will react to your papers?
>
> 73
> Phil N1ZKT

Based on previous behavior, he'll likely stomp his foot and threaten
to start a lawsuit.

--
Jeff Maass jmaass@columbus.rr.com Located near Columbus Ohio
USPSA # L-1192 NROI/CRO Amateur Radio K8ND
Maass' IPSC Resources Page: http://home.columbus.rr.com/jmaass

5118. 30' vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 15:21:00 UTC
From: Dennis Peterson <k0ckdennis@machlink.com>
Message-ID: <3AB22F5B.278CDFB@machlink.com>
Source record: 168237

Just though some of you might be interested in knowing that I worked 3Gï¿½Y with a 30 foot CTSVR/UNI-HAT Vertical on a city lot on 160 meters. Cfmd 559 reports.....

Might not seem like much to some, but for those of us who live on restricted space and budgets-------it says alot for perserverance, sticktoitiveness and dedication.

It's been a long time coming getting this antenna to do what its suppose to; but with a 50' civil defense pole 28' away that caused alot of coupling I think we may have finally succeeded. Guess I better knock on wood(^(*^%^%$$#@#$@%)*&)(

On the 19th of February also worked DJï¿½MDR and EA6SX on 160 as well. Been working numerous DX stations on the other bands with only 100 watts and same antenna.

Cheers de Kï¿½CKD Dennis

5119. Re: Non Newtonian Propulsion

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 15:34:14 UTC
From: "Brian.Farrelly" <Brian.Farrelly@nho.hydro.com>
Message-ID: <3AB23276.7AC760B0@nho.hydro.com>
Source record: 168245

Roger,

I was using Netscape on a Unix system which is probably
why shutting down the browser was enough for me, but not
for you with IE on a PC.

This feels like someone testing an IE security weakness.
Even if it is an advertising gimmick it is extremely
annoying and as you say potentially dangerous.

Brian

--
mailto:Brian.Farrelly@nho.hydro.com Norsk Hydro Research Centre
phone +47 55 99 68 74 (((Postboks 7190
fax +47 55 99 69 70 2oooS N-5020 Bergen
home +47 55 13 78 49 HYDRO Norway

5120. Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 15:39:56 UTC
From: Nathan Ciufo <nani@fuse.net>
Message-ID: <tb4cvf7agc3s34@corp.supernews.com>
Source record: 168241

I recently purchased an antenna switch and put it inline between 2 HF rigs, and 1 antenna, so I can switch between the rigs. I still receive some signals on the rig that is switched "off" . If I'm transmitting on the "on" rig, should I be concerned about the possibility of an RF signal going into the "off" rig? Probably a dumb question, and silly way of explaining it, but it works hi hi..Thanks in advance for your time in reading. 73's, Nathan KA3MTT

5121. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 16:23:24 UTC
From: richardharrison@webtv.net
Message-ID: <8939-3AB23DFC-142@storefull-113.iap.bryant.webtv.net>
Source record: 168360

Cecil, W6RCA wrote:
"If there is destructive interference somewhere, doesn`t that imply constructive interference elsewhere?"

Yes, as Cecil, a leading advocate of horizontal antennas, knows better than I do, power from an antenna is like the air in a balloon. Squeeze it in one place, and it has to go somewhere else.

Fig 12 on page 3-11 of edition 19 of the ARRL Antenna Book gives vertical radiation patterns of horizontal antennas. Notable is the cancellation of horizontal radiation, which is more complete, the lower the antenna. That is, the null extends to higher elevation angles as the antenna is lowered.

I had said that "Destructive interference between the direct and reflected waves over sea water tends to obliterate horizontal antenna signals." That would be the ground wave which doesn`t have much effect on sky wave communications.

You need more height than is convenient aboard most ships to get low-angle radiation from horizontal antennas.

Even a short vertical antenna has its maximum radiation at zero elevation-angle over perfect earth. This can be seemn in Fig 16 on page 3-13 of the new ARRL Antenna Book. Sea Water isn`t "perfect earth", but it is very nearly so.

Best regards, Richard Harrison, KB5WZI

5122. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 16:29:33 UTC
From: "R. Makul K1XV" <k1xv@arrl.net>
Message-ID: <hve4btk7281ih1ljnd182g9o5gmvlp92f9@4ax.com>
Source record: 168358

On Thu, 15 Mar 2001 07:30:32 -0500, "Jim Rodenkirch"
<rodenkir@spawar.navy.mil> wrote:

(snip)

>Look in the ARRL antenna book and you'll find a myriad of ways to do
>something vertically. Also, there's several books (one written by W6SAI -
>can't remember his name but I've got it at home...again, old age showing).
>
>Regards, Jim R.
>
Hey Jim, Dave did not want to get advice about verticals that work.
He wanted advice on a Gotham Vertical, installed the way Gotham said
it would work.

I have done a little research on Gotham. It was run by two brothers
named Winston who, along with many other brothers, started a company
in 1931 called America's Hobby Center in New York City before World
War II. America's Hobby Center is still in business and has a web
site,
http://www.ahc1931.com/index.html

The two brothers who ultimately became "Gotham" went off into the
military, while their other brothers stayed home. When the vets came
home, apparently the other brothers would not let them back into the
business, so they started their own competing hobby company in New
York, Gotham Hobby. Gotham Hobby in the late 1940s sold such things
as model airplane supplies, their most notorious product being a model
plane engine known as the "Deezil" that barely worked. Even then,
their advertising was known for exaggeration.

The hobby business apparently was not doing too well, and Gotham Hobby
diversified into ham antennas. I know it was the same company,
because advertisements for the airplane motors had the same address as
their advertisements for antennas. They started with yagis, but
around 1955 came out with the famous "Gotham Vertical", and continued
their exaggerations in advertising, particularly with respect to this
vertical. A year or two later, they dropped "Hobby" from their name,
and became known as "Gotham". They moved to 1805 Purdy Ave. in Miami
Beach Florida. They remained in business into the 1970s, when I
assume they retired and withdrew from the business. While they sold
verticals up to the end, by their latter years they were more into
pushing Gotham quads.

Their ads in the late 1950s and early 1960s were great. One even
implied, not long after the Cuban Missile Crisis, that the fate of a

nation might depend on a message getting through, and therefore the all band Gotham Vertical was a necessity for national survival.

I was working on an article on the Gotham vertical and its creators, but just ran out of spare time to complete it.

Ray K1XV

5123. Re: Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 17:27:59 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AB24D71.43C7EE52@earthlink.net>
Source record: 168362

Nathan Ciufo wrote:

> I recently purchased an antenna switch and put it inline between 2 HF rigs,
> and 1 antenna, so I can switch between the rigs. I still receive some
> signals on the rig that is switched "off" . If I'm transmitting on the "on"
> rig, should I be concerned about the possibility of an RF signal going into
> the "off" rig?

Yes, but only until your front end on the "off" rig is cooked. Then you can stop being concerned. :-)

73 .... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

5124. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 17:50:49 UTC
From: pete owen <nutmeg@w-link.net>
Message-ID: <3AB25279.500B4638@w-link.net>
Source record: 168364

I too would like some constructional details. I have the same problem, small yard, problematic antenna installation.

Thanks,

Pete/N9PT

"Max Donoghue (VE3TMT)" wrote:

> "KA6PFE" <ka6pfe@pacbell.net> wrote in message
> news:7wis6.13074$qv3.6179317@nnrp5-w.sbc.net...
> > Hello all,
> >
> > The problem seems to be common, small backyard and no antenna's allowed.
> So
> > I've been looking at different screwdriver antenna's that are available
> and
> > of course every manufacturer's antenna is the best (just look at their web
> > site).
> >
> > There's the ATAS (I have one of those), the DK3, BB3, Stealth, and others.
> >
> > Now here's the question (I hope not to create a spam war on this), which
> one
> > would perform best in both a mobile and base environment using 80 thru 10
> as
> > the guideline?
> >
> > As a side note, the backyard is 12ft long by 6ft wide with a 6x6 patch of
> > dirt that I was thinking of using something like a tri-pod mount on.
> >
> > Input would be appreciated.
> >
> > 73's
> > Brian
> >
> > Hi Brian,
>
> Have you considered using a mini loop? I built a 6' version that cover
> 80-15 with absolutely flat SWR on the tuned frequency. Best of all it
> requires no ground system, is very effecient, although has a narrow
> bandwith. I worked stations on 40m out to 500 miles when the thing was
> still in my basement.
>
> Good luck,

>
> Max VE3TMT
> >

5125. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 17:53:18 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB2530E.FBC600A7@usa.alcatel.com>
Source record: 168365

No, a loop does not have to be resonant. Many aren't. I own several EMI receiving loops, and
work with more I don't own. None are resonant, all are shielded. It is an appropriate case.

You say, these antennas respond to an electric field, not a magnetic one. I see, when I short circuit the electric field, they keep working the same. This makes it look very much as if your explanation how shielded loop antennas work is in error.

Cortland

Tom W8JI wrote:

> On Thu, 15 Mar 2001 14:12:43 -0800, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >Lets try a thought experiment. Take a shielded loop with a 1-ohm resistance center
> >conductor. Putting 10 volts 60 Hz AC across the center conductor terminals, I am
> >inputting 100 watts to the loop. How, exactly, does this cause arcs from the (grounded)
> >shield?
> >
> >Cortland
>
> Let's not be silly .
>
> The loop has to be resonant, and we all know at 60 Hz any loop large
> enough to have any efficiency at all would have to be extremely large.
>
> We also know that if the loop is tuned to 2 MHz, the receiver won't
> respond to 60 Hz energy or to static fields. If it does, we need a new
> receiver.
>
> 73 Tom

5126. "Aerials"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 18:09:51 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB256EF.9D15BC90@IEEE.org>
Source record: 168368

What's wrong with this picture? Kurt sez a transmission line
with an SWR of 10:1 that delivers 100 watts to the antenna
has 67 watts of reflected power. That sounds more like an
SWR of 4.5:1 to me.

While accessing the Worldradio web page to tell Kurt of his
error, I stumbled across this:

http://www.wr6wr.com/articles/features/fractals.html
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5127. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 18:25:23 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <DRss6.311$pl.1433@newsfeed.slurp.net>
Source record: 168419
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

This is not a joke. I will pray for you. Everyday. W9FPJ

"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
news:984746781.3ab20b1d6473b@webmail.cotse.com...
> "DickHEAD Elliott" <elliotta@netusa1.net> babbled in message
news:Qxfs6.528
> $5R6.5449@newsfeed.slurp.net...
> >
> > Coming from you Roger that is a compliment.
>
> Do you ever wonder what life would be like if you'd had enough oxygen at
> birth? Don't thank me for insulting you. It was my pleasure, dumbass.
> Your intellect rivaled only by garden tools, Francis.
>
> > "KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
> > news:984703856.3ab16370e97c3@webmail.cotse.com...
> > > "DickHEAD Elliott" <elliotta@netusa1.net> wrote in message
news:Ui8s6.249
> > > $5R6.2283@newsfeed.slurp.net...
> > > > You are just kidding.....right? W9FPJ
> > >
> > > Francis, you just PROVED how goddamn STUPID you really are.
> > >
> > >
> > > > "message center" <cb-radio@arrl.org> wrote in message
> > > > news:arrl_letter@get_the_message...
> > > > > ARRL members, Here is a letter that you can use and send to your
ARRL
> > > > section
> > > > > manager, Division director, and ARRL board of Director:
> > > > >
> > > > > -------
> > > > >
> > > > > Dear (insert directors name here),
> > > > >
> > > > > Why don't you wake up and pull your fucking head out of your ass?
I
> > am
> > > > > concerned about the quality of amateur radio operators, not
quantity.
> > If
> > > > I
> > > > > wanted to listen to a bunch of stupid operators, I would listen to

CB.
> > Do
> > > > us
> > > > > all a favor and propose something that will impove amateur radio,
not
> > dumb
> > > > it
> > > > > down. Bring integrity and intelligence back into the amateur radio
> > > > service.
> > > > > Thanks and 73.
> > > > >
> > > > > (insert your name here)
> > > > >
> > > > > --------
> > > >
> > > >
> > >
> > > 73 de Roger, KC8JBO
> > > EM99|
> > > Yaesu FT-920 | Inverted vee @ 40 Feet
> > > Yaesu FT-90R | Copper J-pole
> > >
> > > .You poor whining assholes!
>
>
> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
>
> .You poor whining a$$holes!
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5128. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 18:33:29 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab25967.113928841@news.accessunited.com>
Source record: 168422

On Fri, 16 Mar 2001 09:53:18 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>No, a loop does not have to be resonant.

It does to efficiently apply power, which is necessary in the context
of the example I gave. I guess we can argue about the example, even
though it won't change how the loops actually work.

>Many aren't. I own several EMI receiving loops, and
>work with more I don't own. None are resonant, all are shielded. It is an appropriate
case.

So?

>You say, these antennas respond to an electric field, not a magnetic one.

No one I know of ever said that.

I plainly said the loop MUST respond to time-varying electic fields or
it will NOT respond to time-varying magnetic fields. If you take one
to zero, the other goes to zero.

>I see, when I
>short circuit the electric field, they keep working the same. This makes it look very much
>as if your explanation how shielded loop antennas work is in error.

If you short circuit the electric field, the loop will go dead.

Here's how you short the electric field, place a jumper across the gap
in the loop's shield. That causes the shield's inside to not respond
very well to any time-varying electric fields on the outside. It also
will not respond to time-varying magnetic fields.

73 Tom

5129. Re: Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 18:51:28 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB260B0.5C084F5D@oio.net>
Source record: 168423

Nathan,
It's not the best idea in the world! If they were my
radios, I'd turn the one not in use, off. If you have to
run them as you are, at the very least, make sure the
"off" switch positions are grounded.
'Doc

5130. Re: "Aerials"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 19:01:08 UTC
From: kb7qhc@home.com
Message-ID: <3ab35d89.1213671056@news.seanet.com>
Source record: 168426

On Fri, 16 Mar 2001 12:09:51 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>
>While accessing the Worldradio web page to tell Kurt of his
>error, I stumbled across this:
>
>http://www.wr6wr.com/articles/features/fractals.html
>--
I see you found a source of more errors:
>Fractal antennas pose a few surprises. First, they have a tendency to be very
>broadband or multiband. Second, they can shrink the size down without coils or
>capacitors and are very efficient.
Which are about to be blown away in new material slated for
publication.

Hi Cecil,

Rather a gushing page that appears to be stylistically similar to
other postings found in this venue that are as saccharin (although I
expect that herr doktor doesn't mind that violation of copyright).
The style of both suggest a hard effort at bolstering a sagging image.

Too bad herr doktor suffered the triple whammy of a miserable patent
allowance (pittance more likely), a loss of prestige in his own
challenge and that terrible defamation of an innocent as the Wakefield
Killer. But he seems to be on the road to recovery and perhaps there
will be an amendment to that possible "legal action" so that herr
doktor is released from his possible restraining order. Here's hoping
;-)

By summer, the new disappointments :-(will not seem so looming. :-)

73's
Richard Clark, KB7QHC

5131. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 19:02:36 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab25c35.114646574@news.accessunited.com>
Source record: 168425

On Fri, 16 Mar 2001 08:48:39 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Terman says:
>"It is possible to shield electrostatic flux without simultaneously
>affecting the magnetic field by surrounding the space to be shielded
>with a conducting cage that is made in such a way as to provide no
>low-resistance path for the flow of eddy currents, while at the same
>time offering a metallic terminal upon which electrostatic flux lines
>can terminate."

I think Roy hit the nail on the head. You are confusing electrostatic fields with time-varying fields.

>Examples are Faraday shields, transformer electrostatic shields between
>primary and secondary coils, and shields on direction-finding loops. A
>shield gap is used in each example to stop those eddy currents.

You are confusing common-mode shielding with differental mode operation.

>Terman gives flux diagrams of solenoid coil shielding on page 37 of his
>1955 edition of "Electronic and Radio Engineering". In Figure 2-19(d),
>one can see the symmetry of flux terminations in the short-circuited
>shield. We know this works. Pull the cans off the i-f transformers in
>your receiver and it will likely oscillate. The shields short-out the
>voltage differences that could be caused by unbalanced capacitive
>coupling. Capacitive coupling is nullified by the shield.

...as is magnetic coupling. When you take the time-varying electric field outside the shield can towards zero, you also take the time-varying magnetic field towards zero.

>The fact that time-varying capacitive stress is called "electrostatic
>flux" is one of those oxymorons like "jumbo shrimp".How can something
>static be in flux? But that`s the way it is.

I think you are mixing definitions of flux. When we use that term in electronics, we are not saying it is changing....such as "the tide is in a state of flux".

In the context of charges, lines of flux are curves drawn to indicate the direction and density of the electric force, nothing more. It certainly does not imply the flux is in a state of flux (pardon the pun).

73 Tom

5132. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 19:04:14 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB263AE.1851CF30@oio.net>
Source record: 168424

Brian,
All other things being approximately equal, I'd pick the antenna with the largest diameter coil. The larger diameter coils will tend to have a higher 'Q', which can't do anything but help.
With a 'patch' of ground that size to work with, I'd copper plate it and hope for the best. It sounds like your looking for a 'portable' installation (tripod mount). An arrangement of a burried pipe (at ground level(?)) with a removable post might work better. If done correctly, you wouldn't have to worry about mowing grass, just mow over the pipe.
But for the very most best'est ground, dig a hole and bury a '48 Packard in it. Be sure to make a good connection between Packard and ground on the screwdriver...(drain the gas tank)
'Doc

5133. Re: Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 19:07:15 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab26316.116408437@news.accessunited.com>
Source record: 168427

On Fri, 16 Mar 2001 10:39:56 -0500, "Nathan Ciufo" <nani@fuse.net>
wrote:

>I recently purchased an antenna switch and put it inline between 2 HF rigs,
>and 1 antenna, so I can switch between the rigs. I still receive some
>signals on the rig that is switched "off" . If I'm transmitting on the "on"
>rig, should I be concerned about the possibility of an RF signal going into
>the "off" rig? Probably a dumb question, and silly way of explaining it,
>but it works hi hi..Thanks in advance for your time in reading. 73's,
>Nathan KA3MTT
>

Natahan, how much weaker are the signals on the forst rig when you
switch to the other rig?

Tune in a strong steady signal and switch the antenna off to the other
rig. How much does the signal change? How strong is the signal from
the second rig, if you run really low power? What rigs do you have?
What switch?

Without knowing that, it is impossible to answer your
question...except for wise-guy answers.

73 Tom

5134. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 19:24:30 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <98tpjt$4fs$1@newpoisson.nosc.mil>
Source record: 168429

Hey, Ray: read Dave's original post again! I'm pasting it here for your perusal so you'll see I wasn't toooooo far off base in my reply.

Start quote," <snip> my "Elmer"
gave me a Gotham base loaded vertical that had a coil at the bottom with a tuning clip. As I recall, it was about 16 ft.tall and it would tune all the HF bands.

Just for fun, I would like to build a replica of this antenna if I could find the specifications on it or plans for a similar antenna.

Does anyone have any info on these antennas?

Thanks, Dave KB8VJD" End Quote

Now, your post on the Gotham folks was informative and I appreciate the opportunity to study the history of commercial entities that influenced Amateur Radio. However, I stand behind what Dave intimated and I inferred from his orginal post for the intent of my original reply to him. Sheesh!

Regards, Jim R.

"R. Makul K1XV" <k1xv@arrl.net> wrote in message
news:hve4btk7281ih1ljnd182g9o5gmvlp92f9@4ax.com...
On Thu, 15 Mar 2001 07:30:32 -0500, "Jim Rodenkirch"
<rodenkir@spawar.navy.mil> wrote:

(snip)

Look in the ARRL antenna book and you'll find a myriad of ways to do something vertically. Also, there's several books (one written by W6SAI - can't remember his name but I've got it at home...again, old age showing).

Regards, Jim R.

Hey Jim, Dave did not want to get advice about verticals that work. He wanted advice on a Gotham Vertical, installed the way Gotham said it would work.

I have done a little research on Gotham. It was run by two brothers named Winston who, along with many other brothers, started a company in 1931 called America's Hobby Center in New York City before World War II.
America's Hobby Center is still in business and has a web site,
http://www.ahc1931.com/index.html
The two brothers who ultimately became "Gotham" went off into the military, while their other brothers stayed home. When the vets came home, apparently the other brothers would not let them back into the business, so they started their own competing hobby company in New York, Gotham Hobby. Gotham

Hobby in the late 1940s sold such things as model airplane supplies, their most notorious product being a model plane engine known as the "Deezil" that barely worked. Even then, their advertising was known for exaggeration.

The hobby business apparently was not doing too well, and Gotham Hobby diversified into ham antennas. I know it was the same company, because advertisements for the airplane motors had the same address as their advertisements for antennas. They started with yagis, but around 1955 came out with the famous "Gotham Vertical", and continued their exaggerations in advertising, particularly with respect to this vertical. A year or two later, they dropped "Hobby" from their name, and became known as "Gotham". They moved to 1805 Purdy Ave. in Miami Beach Florida. They remained in business into the 1970s, when I assume they retired and withdrew from the business. While they sold verticals up to the end, by their latter years they were more into pushing Gotham quads.

Their ads in the late 1950s and early 1960s were great. One even implied, not long after the Cuban Missile Crisis, that the fate of a nation might depend on a message getting through, and therefore the all band Gotham Vertical was a necessity for national survival.

I was working on an article on the Gotham vertical and its creators, but just ran out of spare time to complete it.

Ray K1XV

5135. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 19:35:21 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AB26AF9.BE@bellsouth.net>
Source record: 168428

As a screwdriver builder, I'm not going to try to 'sell' you anything.
Go with what you think is best. As Doc said, try to get one with a
larger coil and heavier wire. Stay away from those that use PVC. Here,
another idea I've seen done. If you really want stealth, mount the an-
tenna horizontally in the very peak of the attic. Then run several
wires of varying length (for different bands) from the base of the unit.
For 75 meters, it shouldn't hurt to bend it and run it around the peri-
meter of the attic. Then run lengths for 40, 15, 20, 10. Due to the
"agile" nature of the screwdriver, you *might* get away with no more
than that. There are many variables with this, so your results may be
diferent--you just have to esperiment. Just a thought......

Jerry
K4KWH

KA6PFE wrote:
>
> Hello all,
>
> The problem seems to be common, small backyard and no antenna's allowed. So
> I've been looking at different screwdriver antenna's that are available and
> of course every manufacturer's antenna is the best (just look at their web
> site).
>
> There's the ATAS (I have one of those), the DK3, BB3, Stealth, and others.
>
> Now here's the question (I hope not to create a spam war on this), which one
> would perform best in both a mobile and base environment using 80 thru 10 as
> the guideline?
>
> As a side note, the backyard is 12ft long by 6ft wide with a 6x6 patch of
> dirt that I was thinking of using something like a tri-pod mount on.
>
> Input would be appreciated.
>
> 73's
> Brian

5136. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 20:06:04 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB2722C.769EA6E4@IEEE.org>
Source record: 168430

Jerry Oxendine wrote:
>
> As a screwdriver builder, I'm not going to try to 'sell' you anything.
> Go with what you think is best. As Doc said, try to get one with a
> larger coil and heavier wire. Stay away from those that use PVC. Here,
> another idea I've seen done. If you really want stealth, mount the an-
> tenna horizontally in the very peak of the attic. Then run several
> wires of varying length (for different bands) from the base of the unit.
> For 75 meters, it shouldn't hurt to bend it and run it around the peri-
> meter of the attic. Then run lengths for 40, 15, 20, 10. Due to the
> "agile" nature of the screwdriver, you *might* get away with no more
> than that. There are many variables with this, so your results may be
> diferent--you just have to esperiment. Just a thought......

How about using a Ventenna just above the coil?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5137. Re: CATV coax cable SHIELDING as an antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 20:35:30 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98tts3dho1@slb0.atl.mindspring.net>
Source record: 168432

Thanks 'Doc. I thought that was what you meant but since I wasn't sure...
Just thought I'd ask. I've only been at this a little less than a year so I
ask when I'm unclear. Best way to learn. :-)

--

"'Doc" <w5lz@oio.net> wrote in message news:3AAFC923.D79D0A44@oio.net...
>
>
> KB9WFK,
> What you say is true, but since any signal he put into
> the cable would be orders of magnitude stronger than the
> signals on the cable, it's almost a 'lead-pipe' cinch that
> his signals are going to cause RFI. Depending on how much
> signal is 'induced' in the CATV system, he may also be
> responcible for fixing other people's TVs if they're affected,
> not to mention the cable company's equipment. Sort of like
> petting an alligator, just hope it doesn't turn around and
> bite you...
> 'Doc

5138. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 20:46:54 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98tui1$4o4$1@slb5.atl.mindspring.net>
Source record: 168359

--

"Fractenna" <fractenna@aol.com> wrote in message
news:20010316025231.01958.00001443@ng-cu1.aol.com...
> >In fairness to Phil, he would not as yet have seen the session schedule.
> >
>
> Sounds interesting. Can you tell me what else will be given at that
session?
> The web page doesn't give the schedule. I wonder if Dr. Cohen will be
giving a
> paper. How do you think he will react to your papers?
>
> 73
> Phil N1ZKT

If past behavior is any indicator, by throwing a tantrum and threatening
legal action.

5139. Re: SKY TEMPERATURE FOR HAMS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 21:34:13 UTC
From: kb7qhc@home.com
Message-ID: <3ab2848f.1223661081@news.seanet.com>
Source record: 168363

On Thu, 15 Mar 2001 03:21:44 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>I think as a first step it would be a good idea to see how the data was
>collected and whether it has been independently corroborated. Perhaps as you
>have such an excellent location and an antenna farm of some magnitude you
>would be in a position to supply some measured data and where possible
>independent verification would be useful.
>Perhaps you know a source of information for the sky temperatures on HF, the
>main consideration for the Ham community is to be able to anticipate what
>signals they will be able to receive on each of the bands which they are
>likely to be able to use. This will to a large extent determine what
>equipment they will require to accomplish the task. You could be
>instrumental (forgive the pun) in providing this vital source data.
>73
>--
>Gary7SLL

Hi Gary,

I think you would be well served if you reviewed the other thread
where Tom offered many measurements in response to you. I am at
somewhat at a loss to recommend further as I have lost that thread in
my reader. It would serve us all if Tom were to repeat them here for
continuity.

Some of those questions you pose to him in regard to his references or
corroboration are probably not going to be responded to as he provided
measurables, not modeling, formal research nor educated guesses.
Rather, you should be able to infer much of what you ask for from
these measures, once you have come to understand his system (and he
responds to those enquiries you have made in that regard). Your
effort in this regard of reverse engineering the temperatures from the
observations should be instructive.

This is an excellent opportunity for the convergence of deep
understanding with deep experience as represented by the scope of both
your activities. I hope that this thread develops an understanding
for all.

73's
Richard Clark, KB7QHC

5140. Re: Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 21:38:49 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB287E9.3FAF6D69@toast.net>
Source record: 168366

W6RCecilA wrote:

>
> With a nonresonant length of wire, the impedance at the autotuner output
> can be sky high, too high for a choke to do any good. Along with that
> sky high impedance comes sky high voltages which can cause arcing. My
> SGC-230 doesn't have a coax connector for the output for that reason.

I guess that would explain the two-inch high ribbed insulator at the output of the AH-4.
I guess there's no way to used this unbalanced tuner on a balanced antenna then, because even if I disconnected the heavy wire going to the ground rod, it would still be grounded through the shield of the feed coax, and the unshielded power supply and control wires. That makes me nervous about removing the ground connection, because to the degree it is disconnected from ground to rf, to that degree rf voltages will be present on the control inputs.

john

5141. Re: Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 21:41:15 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB2887B.52D39F23@toast.net>
Source record: 168367

Rudy Marcelletti wrote:

> If the RG8X is between your transceiver and the AH-4 you are fine. If you
> have the RG8X going from the AH-4 output to the antenna wire, I hope you
> have removed the outer jacket and shield. The dielectric insulation and
> center conductor of RG-8 type coax is OK to use in place of "genuine" high
> voltage cable. Your antenna starts at the output terminal. Do not hook any
> baluns or chokes to your coupler. If you are going for a dipole type
> antenna, hook equal lengths of wire to both sides of the coupler, at least
> 23 feet of longer. Do not use a ground wire in this configuration. You
> might also want to give a loop some thought. Do not use a ground wire in a
> loop configuration either. I like using couplers with a single wire
> inverted L or V over radials.

The feed coax would still be grounding the ground side of the antenna tuner,
though. There are also the power supply and control wires. Wouldn't they force
the thing to be unbalanced anyhow?

john

5142. Re: Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 22:01:22 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98u2oa$7dt$1@slb6.atl.mindspring.net>
Source record: 168433

--

"Nathan Ciufo" <nani@fuse.net> wrote in message
news:tb4cvf7agc3s34@corp.supernews.com...
> I recently purchased an antenna switch and put it inline between 2 HF
rigs,
> and 1 antenna, so I can switch between the rigs. I still receive some
> signals on the rig that is switched "off" . If I'm transmitting on the
"on"
> rig, should I be concerned about the possibility of an RF signal going
into
> the "off" rig? Probably a dumb question, and silly way of explaining it,
> but it works hi hi..Thanks in advance for your time in reading. 73's,
> Nathan KA3MTT
>
>
I just installed a 3 to 1 switch and see the same thing. After asking some
guys in the club about it I have learned there are basically 2 kinds of
switches. One kind grounds the unused contacts which would pretty much
eliminate what we are seeing and the other lets them float. By not being
grounded there is some rf 'bleeding' over to the other contacts. Now the
consensus is not as clear as to whether or not this harmful, and if it is,
to what degree.
KB9WFK

5143. Re: Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 22:58:06 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab29761.129797386@news.accessunited.com>
Source record: 168434

On Fri, 16 Mar 2001 16:01:22 -0600, "KB9WFK" <KB9WFK@mindspring.com>
wrote:

>I just installed a 3 to 1 switch and see the same thing. After asking some
>guys in the club about it I have learned there are basically 2 kinds of
>switches. One kind grounds the unused contacts which would pretty much
>eliminate what we are seeing and the other lets them float.

I've got bad news for everyone. You can ground the unused contact, and
make things much WORSE than it is with it open. It is the open circuit
that is the problem, it's the layout inside the switch. As a matter of
fact, I'd rather have a switch that floats the unused rig's ceneter
conductor than one that grounds it. The reason for that is simple. If
you ground the lead, and a shield connection opens up on he active
ports, you'll dump all kinds of power into the unused radio.

Also, if the switch has RF loops, you can drive current into the
unused port.

My rig switch opens the unused radios, and has about 80-90 dB of
attenuation to the unused port when it is terminated in 50 ohms. I can
still hear signals, but it is far from having a level that would
damage the radio. As a matter of fact, I run 1500 watts through that
switch all the time and don't bother my other radios.

The fact you hear signals does not mean you are going to damage the
radio, and certainly tuirning the radio off won't help! I've got a
friends radio here now, that he blew up because he left it connected
to an antenna while using another radio on another antenna.

Despite my advice to disconnect it, he simply turned it off. Now the
front-end is zapped.

> By not being
>grounded there is some rf 'bleeding' over to the other contacts. Now the
>consensus is not as clear as to whether or not this harmful, and if it is,
>to what degree.

Even if you ground it, it will have finite port to port isolation.
Layout inside the switch is the key factor, not grounding.

73 Tom

5144. Re: Still looking for capacitance hat ideas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 23:17:11 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB29EF7.D091654D@IEEE.org>
Source record: 168435
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Jason Hsu wrote:
> I don't want to use a rigid mast as a
> substitute for the whip, as this would put too much stress on the Screwdriver
> mast ...

This is simply not true. If the screwdriver mast is braced (and it
should be braced) a two foot rigid section puts very little additional
stress on the antenna. Take a look at my mobile installation at:

http://people.delphi.com/cecilmoore/mobnow.htm
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5145. Re: Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 23:34:06 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB2A2EE.A4BCA2AF@IEEE.org>
Source record: 168436

John O'Flaherty wrote:
> I guess there's no way to used this unbalanced tuner on a balanced antenna
> then, because even if I disconnected the heavy wire going to the ground rod,
> it would still be grounded through the shield of the feed coax, and the
> unshielded power supply and control wires.

You can use coax with an autotuner if you can guarantee that the
SWR will not exceed the voltage and current specs for the coax.
For instance, if you have a 10m vertical that is resonant at 28.5,
you can use an autotuner on it to cover the entire 10m band.

Bottom line is: if you want to use coax on the output of an
autotuner, you need to know the impedances that you are dealing
with in order to limit the voltage/current to values that
the coax can handle. Otherwise, forget the coax.
--
http://www.mindspring.com/~w6rca

5146. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-16 23:58:52 UTC
From: "Dennis B.Sheaffer" <wy3f@onemain.com>
Message-ID: <3AB2A8BC.60EB23E0@onemain.com>
Source record: 168437
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Vince Fiscus, KB7ADL" wrote:

> cb-radio@arrl.org (message center) wrote in
> <arrl_letter@get_the_message>:
>
> >ARRL members, Here is a letter that you can use and send to your ARRL
> >section manager, Division director, and ARRL board of Director:
> >
> >-------
> >
>
> What if I'm not a League member anymore, can I still send the letter?
>
> kb7adl
>

Sure you can ,you may want to also make mention that the dues went up too !
You see now that all the people that did 5 wpm who are Generals are higher
are now supporting the
ARRL,because they think the ARRL is sooooooo great,but the sorry part of the
matter is they are going to pay for something the ARRL had no say in.
When it comes down to it the FCC has the Final say always the government!

> >Dear (insert directors name here),
> >
> >Why don't you wake up and pull your fucking head out of your ass? I am
> >concerned about the quality of amateur radio operators, not quantity.
> >If I wanted to listen to a bunch of stupid operators, I would listen to
> >CB. Do us all a favor and propose something that will impove amateur
> >radio, not dumb it down. Bring integrity and intelligence back into the
> >amateur radio service. Thanks and 73.
> >
> >(insert your name here)
> >
> >--------

5147. RE: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 00:08:12 UTC
From: k1bqt@aol.com
Message-ID: <20010316190812.08096.00000902@ng-mb1.aol.com>
Source record: 168438

>You should enjoy life and akcentu-ate the positive:-)<

I think we know who's doing smiley face in exchange for their 1st-amendment rights, don't we. But, just as Sonny had Cher, the bankroller of this site has "you", Babe (and a pathetic loophole at that). And, of course, need I remind anyone, since Mr. XXXXX has seen fit to spread his passwords around like wolf-tickets at a rough-trade party in a bath house, no person or institution can have any confidence whatsoever who they are really addressing or who's words they are really reading. Can they?

73

Rick K1BQT

5148. Glass Antennas and NMO no good for 23cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 00:52:02 UTC
From: storkus@packard-hell.storkus.com
Message-ID: <98ucfilm1@nnrp.atgi.net>
Source record: 168439
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

I drive a taxicab for a living, and have been struggling for some time now to try to figure out how to use an outside antenna without making permanent modifications. The problem, of course, is that all 4 doors of the car are opened and closed routinely while I work, making using a mag-mount with the coax going out the window a pain.
While I won't get more than 2 bands out of it, I'm considering a glass-mount antenna. Since I've never used one before, I have some questions hopefully a few of you can answer:

1. How well do they REALLY work?
2. The Larsens say they can be attached and removed easily for putting on another vehicle, while one I saw at Radio Shack said that removing it would "permanently damage" it. Realistically, how easily are they to remove and re-install as I see fit?
3. Are there any references to rolling your own? I'd love to make one for 23 cm and 6m, but I'm probably asking for too much on these bands (too much stray reactance--or maybe not enough?--on 23cm, and the whip would be physically too big at 6m to hold to the glass, most likely).

Ok, my second question is that I found and looked through the antennas in the print-version of HRO's catalog, and noticed something interesting in the Diamond antenna section: none of their 23cm antennas came in NMO mount--only with an N-connector. When I first started considering an antenna for 23cm, I really had some doubts about the NMO, not the least of which is its size relative to the small wavelength. Since I have yet to get my hands on a meter that will measure reflected power at that frequency (one of these days...), I really have no idea just how good or bad a match to my antenna I'm really getting at 23cm (as I pointed out in earlier messages, the antenna is an Austin Antennas "Pentenna", and yes, it comes in NMO). This is sort of exasperated by the fact that the bottom part of the NMO is a thru-hole that has to pass through the steel of the mag mount which in turn is connected to the shield--thus producing a short (1cm or so) run of "coax" of a very different response.
So the question is: are my fears valid? Is NMO a bad mount to use at 23cm? I've seen them used (apparently successfully) in commercial 800 MHz installations, so they seem to work there--hell, my cab is using such an arrangement! The antenna seems to work, but I have no idea how efficient it really is--it's hard to tell by reception.

Thanks again!

Mike

5149. antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 01:03:55 UTC
From: MWhite <mwhite@simplynet.net>
Message-ID: <%Jys6.1735$lt3.347442@dfiatx1-snr1.gtei.net>
Source record: 168440

I have a 2001 chevy truck and need some advice on the best application for a 2 meter 440 mobile antenna. If anyone has any advice I would appreciate it.

Thanks
KC5YOF

5150. Re: R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 01:04:00 UTC
From: kk4bh1@cs.comnospam
Message-ID: <20010316200400.20610.00001474@ng-cn1.news.cs.com>
Source record: 168441

>I recently purchased a Cushcraft R5. I am having trouble getting a good
>match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.
>
>What tips are there to setting this up?
>
>I have a 2 and 6 meter beam located 20 feet away. Will this affect the
>R5?
>
>Jim Sullivan N7TCF
>
>
Jim,
I've had an R5 up now for over 10 years. After about 5 years I started having similar problems. I found taking the antenna apart and cleaning all connecting points(where tubes slide inside other tubes) corrected the problem. I used steel wool to do this but other abrasives would probably work. Remember, the 10 meter portion of the antenna is the section from the matchbox (black box) to the bottom of the first trap. 12 meters from the previous section to the bottom of the second trap and so on up the antenna. It appears your problem exists just above the 12 meter trap since 15, 17 & 20 are affected. If after cleaning connecting points the problem still exists, it is likely the 15 meter trap is defective since it is in the 15, 17 & 20 meter circuit. I doubt the "black box" is the culpret since it is in the entire frequecy circuitry. Cushcraft has had problems with moisture getting into the traps which can cause this. Good luck.

73
Ken
KK4BH

5151. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 01:10:38 UTC
From: "R. Makul K1XV" <k1xv@arrl.net>
Message-ID: <06e5bto2hekhdtajdkp8gip6uh3o5c05bq@4ax.com>
Source record: 168442

Jim: I did read it. Dave's primary goal is to build a REPLICA of a
Gotham Vertical based on its original specifications, or plans for a
SIMILAR antenna.

Jim, to me, a replica to a Gotham Vertical means one that is a simple
multi section thin wall aluminum tube end fed through a B&W inductor
at the bottom, attached to the hot side of an unbalanced antenna coax
via an alligator clip so you can vary the inductance by changing the
tap location on the coil with the alligator clip. The ground side of
the coax attached to a ground rod. The whole thing then attached to
the side of a house or to a non conducting support via "u" straps.

I agree that the ARRL books have discussions of verticals, but I
never saw anything in there that was quite like a Gotham Vertical as I
have described it, but I may be wrong. I often am.

Anyway, its not worth getting worked up over. Everybody seems to want
to help somebody build something that works, but I think Dave wants to
build a replica of a Gotham Vertical for "historical examination",
regardless of whether it would or wouldn't work, to check for himself
exactly how accurate or exaggerated those old advertisements were.

Just wondering Jim, in retrospect, how well did that Gotham work? I
suspect your present vertical, with radials and a much more
sophisticated loading system, works much better.

Everybody have a Happy St. Patrick's Day!! ;^)

73, Ray K1XV

On Fri, 16 Mar 2001 14:24:30 -0500, "Jim Rodenkirch"
<rodenkir@spawar.navy.mil> wrote:

>Hey, Ray: read Dave's original post again! I'm pasting it here for your
>perusal so you'll see I wasn't toooooo far off base in my reply.
>
>Start quote," <snip> my "Elmer"
>gave me a Gotham base loaded vertical that had a coil at the bottom with a
>tuning clip. As I recall, it was about 16 ft.tall and it would tune all the
>HF bands.
>
>Just for fun, I would like to build a replica of this antenna if I could
>find the specifications on it or plans for a similar antenna.
>

5152. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 01:34:21 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB2BF1D.7930BAC@usa.alcatel.com>
Source record: 168443

One can short circuit the electric part of the local field by shunting it with a low impedance.
It is not necessary to do anything to the loop being tested; indeed that would be counterproductive -- the objective of the test is to see what effect varying the electric field
(without varying the magnetic field) has on how well the loop receives.

The ambient electric field does go down under a grounded roof. This can be verified with a receiver, an analyzer, or a field strength meter, using antennas sensitive to the electric field. If a loop were receiving the electric field, as you say, its signal would drop in that
environment as well, but if you do the experiment, you will find it does not. (Some care has to
be taken to insure that the magnetic field is not shunted as well, but this basically means avoiding shorted turns in the structure used as an E-field shunt.)

Cortland

Tom W8JI wrote:

> On Fri, 16 Mar 2001 09:53:18 -0800, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >No, a loop does not have to be resonant.
>
> It does to efficiently apply power, which is necessary in the context
> of the example I gave. I guess we can argue about the example, even
> though it won't change how the loops actually work.
>
> >Many aren't. I own several EMI receiving loops, and
> >work with more I don't own. None are resonant, all are shielded. It is an appropriate case.
>
> So?
>
> >You say, these antennas respond to an electric field, not a magnetic one.
>
> No one I know of ever said that.
>
> I plainly said the loop MUST respond to time-varying electic fields or
> it will NOT respond to time-varying magnetic fields. If you take one
> to zero, the other goes to zero.
>
> >I see, when I
> >short circuit the electric field, they keep working the same. This makes it look very

much
> >as if your explanation how shielded loop antennas work is in error.
>
> If you short circuit the electric field, the loop will go dead.
>
> Here's how you short the electric field, place a jumper across the gap
> in the loop's shield. That causes the shield's inside to not respond
> very well to any time-varying electric fields on the outside. It also
> will not respond to time-varying magnetic fields.
>
> 73 Tom

5153. Re: No-code kills

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 01:46:30 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AB2C1F6.5F6DA2DB@bctv.com>
Source record: 168444

Richard Clark wrote:
>
> On Tue, 13 Mar 2001 04:44:35 +0000, Keith Wood <kw@bctv.com> wrote:
>
> >Ridiculing opposition -- the politics of theft.
> >
> >You still haven't provided any basis for your belief that you deserve my
> >money more than I do.
>
> I wasn't going to point it out, but your admission is telling.
>
> But, rest assured, the democracy I fought for was for your freedom of
> expression and I allow that given that the Spartan ethic is not one
> tradition praticed by conservatives re: Only those who served are
> allowed to vote.
>
> No doubt our "compassionate" conservatives would have cut off the
> widow's fund of the 300 Spartans at Thermopolye.

What has this absurd allegation got to do with whether or not you should
be permitted to steal my money?

5154. Re: SKY TEMPERATURE FOR HAMS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 01:56:46 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab2b2b4.136792617@news.accessunited.com>
Source record: 168445

On Thu, 15 Mar 2001 03:21:44 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>I am always willing to learn Tom perhaps you would be so kind as to instruct
>me in the exact nature of HF noise and wher it originates.

You could look in Reference Data for Radio Engineers, in the chapter
on Radio Noise and Interference. That chapter connects the sky
temperature data you have with real-world results...although it will
not include anything about directivity and how that effects noise
except to say "directive receiving antennas modify noise
considerably". Reference Data for Radio Engineers concludes, as I do,
galactic noise does NOT reach the earth below about 15 MHz.

Most texts on noise agree with what I have seen. Those that don't
agree can easily be proven wrong. All it takes is a few measurements
in a quiet rural location.

>importantly what is the magnitude of the noise on HF, how is it measured and
>a description of the Antennas used and their efficiency and pattern.

There are a variety of ways to measure noise level. I've already
described several times what I did. You obviously haven't bothered
reading my answers, so why should I keep repeating the same thing?

>This information will be useful to facilitate the calculation of anticipated
>thresholds and signal to noise considerations on eacdh of the Amateur bands.
>If ther is only good data for one band then that will be a good start to
>collecting and colating an accepted standard and a basis for future
>obervations and calculations.

It isn't that hard to measure.

>Ther is no garauntee that the noise will
>remain constant we have not been around for long enough yet to know.

It changes a lot with propagation and seasonal changes, as well
frequency. But of course that has already been said, several times.

>> Galactic temperature is virtually meaningless over all of HF, and
>> certainly should never be used on bands below 10 MHz unless there are
>> extreme exception to the normal application.
>
>Where do you get your values for sky temperature and what are they for these
>bands?

Who cares? Galactic noise is meaningless below 10-15 Mhz. Any galactic
noise that would somehow filter through the ionosphere is buried in

terrestrial noise.

>Can you describe your antennae and their characteristics and the effective
>sky noise temperatures that you measure?

I've offered signal levels and antenna descriptions at least three
times now. While I try to be helpful, at some point I conclude
repeating the same thing won't help. Virtually ALL of the questions
you ask have already been answered more than twice.

I can take 20 minutes and copy and repost everything, but it is a wase
of Newsgroup bandwidth. I don't think it is productive to repeat the
same thing more than three times.

If you actually read what other people wrote, you wouldn't ask the
same questions over and over. Such as this one:

>> There is a 10-15 dB noise increase at night on 160 meters, because of
>> propagated noise, even on the most quiet winter days. On twenty
>> meters, as well as 160, I can tell what direction the band is open by
>> listening for a noise increase.
>
>Wher is this noise generated and more iimportantly what is the magnitude of
>the noise at your antenna?

Asked and answered. I will repeat it one more time and I hope this
time you read it:

For a working MEASURED example, noise floor to the NE on an array of
880 foot long Beverages on a quiet winter night, using 3.5 kHz
bandwidth, is -123 dBm with no feedline loss. That's 194 nanovolts (I
have a 75 ohm system) with a very wide 3.5kHz bandwidth.

That array, after feedline losses are deducted, is typically slightly
less than 20 dB down from a 200 foot tall single element vertical with
100 200 foot long radials and a vacuum variable and large edge wound
inductor for matching, when signal levels from distant stations in the
direction where the Beverages point are compared.

>> Now I'm sure if my antennas were above the ionosphere, galactic noise
>> would be important. But I simply can't manage that height and even if
>> I did I wouldn't be able to work many people below ten MHz because of
>> the attenuation of the ionosphere.
>
>Are you suggesting that HF noise originates in the effective terminating
>load formed by the high attenuation of the Ionosphere? If so what is the
>driving force, where does the energy come from to produce the noise?

I plainly stated where the noise comes from many times, and it wasn't
ORIGINATED in the ionosphere. Let's not be silly, and out of repect
for other people's time PLEASE read what they write.

>equipment they will require to accomplish the task. You could be
>instrumental (forgive the pun) in providing this vital source data.

It's already been done Gary. Many times. My data agrees with other data that is readily available. It is nothing new or earth-shaking.

73 Tom

5155. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 02:08:30 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98uguu$fi9$0@208.206.142.103>
Source record: 168446
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" wrote:
>
> "Dwight Stewart" <stewartx@sccoast.net> wrote in message
> news:B6D62296.6BCA%stewartx@sccoast.net...
> > However, now that the no-code techs are actually using the band, and
> have
> > put all those repeaters up, the older hams sit around all day complaining.
> > Its not like the older hams have lost anything
>
> They are losing, or lost, the PR battle that every no code Tech has a
> burning desire to get on H.F. A surprising number of Tech class operators
> don't care for H.F. much. I would dare say that some of the new Hams don't
> even consider access to H.F. as the "crown jewel" of Ham Radio any more.
>
> > - they still have all their HF frequencies.
>
> And some like to go out of their way to tweak the noses of no code Techs
> about too.
>
> > And absolutely nobody is forcing any of these people to
> > listen to the 2-meter frequencies. So I just don't understand what all
> the
> > griping is about.
>
> With more things to do on V/UHF the lure of H.F. has declined a bit. As you
> pointed out, in the past with little use of the V/UHF bands, a Tech class
> had few choices for stations to work. That's now no longer true.
>
> > Perhaps there is some strange twisted logic at work here.
>
> Yup. The Tech class people are having fun, and some of the OTers are really
> bugged about it.
>

No, Leland, no one is "bugged" about that. Many of us have dedicated a
huge amount of our personal time to help make that happen, in case you
didn't know what a VE does.
What many are "bugged" about is the lowering of requirements,
especially for the highest class of license. Nothing more.

5156. 40-Meter Vertical Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 02:36:05 UTC
From: PCB <Xpaulc@mediaone.net>
Message-ID: <p4As6.3460$525.61202@typhoon.jacksonville.mediaone.net>
Source record: 168447

In the coming weeks, I will be installing a shortened 40-meter vertical dipole (60% of full size). I have two possible mounting configurations: 1) Ground mount on a glass insulator, or 2) mounted 25-feet in the air atop my chimney.

Any educated opinions as to how the two will compare? At 7 MHz is there any ground reflection gain to be had that would add in phase with the direct wave in the far field? Thanks!

-Paul, W4XR

5157. Re: 40-Meter Vertical Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 02:37:25 UTC
From: PCB <Xpaulc@mediaone.net>
Message-ID: <F5As6.3464$525.61309@typhoon.jacksonville.mediaone.net>
Source record: 168448

Almost forgot...when replying directly, please remove the spam blocking "X"
from my e-mail address.

-Paul

"PCB" <Xpaulc@mediaone.net> wrote in message
news:p4As6.3460$525.61202@typhoon.jacksonville.mediaone.net...
> In the coming weeks, I will be installing a shortened 40-meter vertical
> dipole (60% of full size). I have two possible mounting configurations:
1)
> Ground mount on a glass insulator, or 2) mounted 25-feet in the air atop
my
> chimney.
>
> Any educated opinions as to how the two will compare? At 7 MHz is there
any
> ground reflection gain to be had that would add in phase with the direct
> wave in the far field? Thanks!
>
> -Paul, W4XR
>
>

5158. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:05:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98ukadnee1@208.206.142.103>
Source record: 168451
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:
>
> Dick Carroll wrote:
> > Here we go with some more Cecilian Logic. CB *is* HF because it is *in*
> > HF. Right!
>
> Well Dick, if 27MHz is not HF, please tell us what it is.

That's an easy shot - try 3 to 30 mhz.

5159. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:09:11 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab2d05d.144387463@news.accessunited.com>
Source record: 168452

On Fri, 16 Mar 2001 17:34:21 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>One can short circuit the electric part of the local field by shunting it with a low impedance.

The impedance of a single turn "shield" around the inner conductor(s)
is the SAME as the impedance of the antenna in a loop.

That's because the outer conductor becomes the actual antenna. We
can't change that, because one the shield is several skin depths thick

If you short the electric field, you are shorting the desired signal
as well. They are inseparable.

>The ambient electric field does go down under a grounded roof. This can be verified with a
>receiver, an analyzer, or a field strength meter, using antennas sensitive to the electric
>field.

A broadcast FSM is calibrated to measure the electric field, and it
often has a "shielded loop" antenna. Despite using a shielded loop, a
FSM can indicate the electric field because it is INSEPARABLE from
the time-varying magnetic field.

If you measure a change in the electric field below the roof, you will
measure a change in the magnetic field. They are inseparable.

>environment as well, but if you do the experiment, you will find it does not. (Some care has to
>be taken to insure that the magnetic field is not shunted as well, but this basically means
>avoiding shorted turns in the structure used as an E-field shunt.)

You can change the field impedance or modify the direction of the
field, but if you take the electric field to zero the magnetic field
must go to zero. In essence, the structure becomes the antenna.

73 Tom

5160. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:10:55 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ab2eeaf$0$15024$cc9e4d1f@news.dial.pipex.com>
Source record: 168457

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:98b1d6$bl1$1@plutonium.btinternet.com...
> Gary, your analysis is reasonable if antenna sensitivity is a
> normal sort of value. But the antenna in question is is an untuned
> ferrite rod of great insensitivity. Any gain between it and the
> noisy first mixer would be very welcome.
>
> A better solution on 160m would be to tune the winding and match it
> to the receiver input impedance via a link coupling.

This is a return to the earlier part of this thread Reg et al.,
In the light of what has been said and in particular a private E-Mail from
Bart wb6hqk

How much do you think the efficiency of this type of antenna will be
improved by making it resonant?
Can you show the workings please Reg.
--
73 de Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5161. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:13:14 UTC
From: wf3h@ptd.net
Message-ID: <3ab2d42b.86475884@news.ptdprolog.net>
Source record: 168449
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Thu, 15 Mar 2001 12:16:18 -0500, "Leland C. Scott"
<no-spam@junk-mail.net> wrote:

>
>
>With more things to do on V/UHF the lure of H.F. has declined a bit. As you
>pointed out, in the past with little use of the V/UHF bands, a Tech class
>had few choices for stations to work. That's now no longer true.
>

which is nonsense. HF is as popular as ever. the fact some folks cant
use 'em doesnt mean they're not popular.

5162. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:14:58 UTC
From: wf3h@ptd.net
Message-ID: <3ab2d462.86531509@news.ptdprolog.net>
Source record: 168450
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Thu, 15 Mar 2001 11:48:07 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>"Leland C. Scott" wrote:
>> A surprising number of Tech class operators
>> don't care for H.F. much. I would dare say that some of the new Hams don't
>> even consider access to H.F. as the "crown jewel" of Ham Radio any more.
>
>When I worked at Intel, a group of us would camp out together. We would
>meet at a preset place on a Saturday morning, decide where to camp out,
>and head out at a preset time. Somebody was always late and out of range
>of CB radios. I talked the entire group into getting their Tech licenses.
>
>We then used a mountain-top repeater to keep in touch with the late
>comers and direct them to the camp site. It worked out well but only
>a few of the campers saw any use for HF. After all, they had given
>up their CB radios and gone to the trouble to obtain Tech licenses
>because HF couldn't perform the required function.
>--

which, of course, has nothing to do with HF at all, since this is not
its use.

5163. Re: R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:18:54 UTC
From: jim@snoopy.cmagic.com
Message-ID: <3ab2d6c0.19633994@news.epix.net>
Source record: 168453

I have an R3. It's pretty easy to distinguish it from the R5. The R3
has only two traps and no radials/couterpoises. At the base is a big
motor driven tuning capacitor. That cap will actually tune the antenna
on 17 and 12 meters even though the antenna doesn't have traps for
those bands. Surprisingly it also works pretty well on those bands.

Bob Miller <bamiller@texas.net> wrote:

>"James A. Sullivan" <sja6@uswest.net> wrote:
>
>>I recently purchased a Cushcraft R5. I am having trouble getting a good
>>match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.
>>
>>What tips are there to setting this up?
>>
>>I have a 2 and 6 meter beam located 20 feet away. Will this affect the
>>R5?
>>
>>Jim Sullivan N7TCF
>
>You're sure it's an R5, and not an R3? I had what I believe what was an R3, for
>20, 15 and 10 meters, but it wasn't really marked or anything.
>
>Bob
>k5qwg
>

5164. Re: Question about Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 03:36:01 UTC
From: Nathan Ciufo <nani@fuse.net>
Message-ID: <tb5mu899sevh68@corp.supernews.com>
Source record: 168454

I'm in the same boat as KB9WFK. It's a 3 position switch that is not grounded anywhere. It's an antenna switch made by ParaDynamics. It seemed too good to be true for the price of it. I should know better hi hi...I'm running a Yaesu FT-920 as my primary HF rig, switching between a Kenwood TS-430S as my digital mode HF rig. The weird thing is when I tune in a very strong station on the 920, then switch over to the 430, it attenuates the signal some; but, you still can hear the signal with no problem, and the s-meter goes to zero. I'm assuming I would be better off returning it for one of the heavy duty MFJ switches ? Thanks for all the replies. 73's, Nathan KA3MTT
"Tom W8JI" <2w8ji@akorn.net> wrote in message news:3ab29761.129797386@news.accessunited.com...
> On Fri, 16 Mar 2001 16:01:22 -0600, "KB9WFK" <KB9WFK@mindspring.com>
> wrote:
>
> >I just installed a 3 to 1 switch and see the same thing. After asking some
> >guys in the club about it I have learned there are basically 2 kinds of
> >switches. One kind grounds the unused contacts which would pretty much
> >eliminate what we are seeing and the other lets them float.
>
> I've got bad news for everyone. You can ground the unused contact, and
> make things much WORSE than it is with it open. It is the open circuit
> that is the problem, it's the layout inside the switch. As a matter of
> fact, I'd rather have a switch that floats the unused rig's ceneter
> conductor than one that grounds it. The reason for that is simple. If
> you ground the lead, and a shield connection opens up on he active
> ports, you'll dump all kinds of power into the unused radio.
>
> Also, if the switch has RF loops, you can drive current into the
> unused port.
>
> My rig switch opens the unused radios, and has about 80-90 dB of
> attenuation to the unused port when it is terminated in 50 ohms. I can
> still hear signals, but it is far from having a level that would
> damage the radio. As a matter of fact, I run 1500 watts through that
> switch all the time and don't bother my other radios.
>
> The fact you hear signals does not mean you are going to damage the
> radio, and certainly tuirning the radio off won't help! I've got a
> friends radio here now, that he blew up because he left it connected
> to an antenna while using another radio on another antenna.
>
> Despite my advice to disconnect it, he simply turned it off. Now the

> front-end is zapped.
>
> > By not being
> >grounded there is some rf 'bleeding' over to the other contacts. Now the
> >consensus is not as clear as to whether or not this harmful, and if it
is,
> >to what degree.
>
> Even if you ground it, it will have finite port to port isolation.
> Layout inside the switch is the key factor, not grounding.
>
> 73 Tom

5165. Re: 40-Meter Vertical Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 04:06:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB2E2C8.9561479@eznec.com>
Source record: 168455

That would be an ideal problem for the free demo version of EZNEC. You
can get it from http://eznec.com.

Roy Lewallen, W7EL

PCB wrote:
>
> In the coming weeks, I will be installing a shortened 40-meter vertical
> dipole (60% of full size). I have two possible mounting configurations: 1)
> Ground mount on a glass insulator, or 2) mounted 25-feet in the air atop my
> chimney.
>
> Any educated opinions as to how the two will compare? At 7 MHz is there any
> ground reflection gain to be had that would add in phase with the direct
> wave in the far field? Thanks!
>
> -Paul, W4XR

5166. Re: Another AH-4 question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 04:25:34 UTC
From: markwunderman@sprintmail.com
Message-ID: <3AB2E730.C2A35B59@sprintmail.com>
Source record: 168456

John,

You can tune a dipole with your AH-4 tuner by connecting the AH-4 to the dipole antenna with 450 ohm ladder line. I have been using this set up with an inverted V dipole at my QTH for the last year and it works fine. Run one side of the ladder line to the ceramic terminal on the coupler and the other wire to the ground terminal. Then hook each wire at the other end of the ladder line to each side of your dipole. Twist the ladder line every foot or so and keep it at least a few inches from any metal objects. I run mine under the roof line inserted into 2 inch pieces of 2" plastic pipe which is screwed to the roof beams. The entire setup has worked well and required no maintenance.

Mark
KE6QCT

John O'Flaherty wrote:

> I am a new ham. I have an antenna consisting of a wire about 50 feet
> long, fed through a piece of RG8-X and an AH-4 remote automatic antenna
> tuner. I want to increase my signal strength, and I'd like to try making
> my wire a dipole by adding another wire extending 50 feet in the other
> direction. I've been told that I can just extend the other wire from the
> ground side of the tuner to make a dipole.
> Ok, I'll try that. But it occurs to me that it may not make a true
> dipole, since the currents through the ungrounded wing and the grounded
> wing may not be balanced- especially since there is also a grounding
> wire extending straight down from the tuner to a ground rod.
> What I'd like to try is connecting a choke balun consisting of 10 feet
> of RG8-X wound up in about a 10-inch diameter circle (as described in
> the ARRL handbook), between the AH-4 tuner and the two wings of the
> dipole. Now, would that force the dipole to be a dipole, and would the
> tuner still be able to meaningfully tune the antenna through that balun?
>
> In other words, the antenna won't be resonant, and whatever properties
> it exhibits at a particular frequency will be presented to the remote
> tuner through the choke balun. Will it still tune? Will it arc and
> explode, electrocute the valuable operator, or worse, wreck the antenna
> tuner?
>
> Any and all comments appreciated. Thanks.
>
> john

5167. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 05:00:51 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB2EF83.13F9C50C@IEEE.org>
Source record: 168458
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Dick Carroll wrote:
>
> W6RCecilA wrote:
> >
> > Dick Carroll wrote:
> > > Here we go with some more Cecilian Logic. CB *is* HF because it is *in*
> > > HF. Right!
> >
> > Well Dick, if 27MHz is not HF, please tell us what it is.
>
> That's an easy shot - try 3 to 30 mhz.

Seems to me 27MHz lies within that range. Is 7MHz HF? Is 4MHz HF?
Is 29MHz HF?
--
http://www.mindspring.com/~w6rca

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5168. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 05:05:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB2F0A7.D6A33B05@IEEE.org>
Source record: 168459
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

wf3h@ptd.net wrote:

> W6RCA wrote:
> >We then used a mountain-top repeater to keep in touch with the late
> >comers and direct them to the camp site. It worked out well but only
> >a few of the campers saw any use for HF. After all, they had given
> >up their CB radios and gone to the trouble to obtain Tech licenses
> >because HF couldn't perform the required function.
>
> which, of course, has nothing to do with HF at all, since this is not
> its use.

It has everything to do with HF configurations not being able to
deliver the required performance. Along with CW, has HF also become
such a religion that nobody can admit that VHF/UHF repeaters have some
advantages over HF without repeaters?
--
http://www.mindspring.com/~w6rca

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5169. RE: My question about Gotham Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 05:38:02 UTC
From: "Dave Alden (KB8VJD)" <dalden@home.com>
Message-ID: <5FEA2CBFAAFB1E3A.9FD509E865345BFF.580C5391FE85312F@lp.airnews.net>
Source record: 168460

Gee Guys,

I didn't mean to get you into a heated debate about Gotham Verticals.

As I said, I had my Gotham back around 1964 when I was 13 years old and had just received my Novice ticket. I used the antenna with a Heathkit HW-16 CW transceiver that I built from a kit. I didn't know squat about antennas at that point (Not that I know too much now!) but, I do remember that I seemed to make regular CW contacts without much trouble.

I subsequently lost my ticket for failure to upgrade to General within 2 years (the rule back then) and didn't really get back into ham radio actively until about 8 years ago.

My intent was to ask if anyone had the specs on the coil and height and construction of the antenna in order to build one. I know it ain't going to be much of an antenna but I have always been interested in simple "low-profile" antennas for small lots, apartments, and mobile use and I thought that it would be fun to play around with.

Plus, national security might depend on it!!!!!

Anyway, I do appreciate the historical information. Quite interesting how some products come to be.

I know I could cobble something together that resembled the Gotham but I was hoping that someone might know what size B&W coil was used, how tall and what diameter the radiator was etc. just to get a head start on it.

Next swap that I go to I'm going to look for some old QST's and see if I can find one of their ads. It might be fun to blow it up and hang it on the wall in the shack.

Or, if I soak the ad in saltwater and hook it to my MFJ tuner, I might be able to get a match on 160 meters.

Dave Alden KB8VJD

5170. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 05:48:06 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <98utqmjfo0@208.206.142.103>
Source record: 168461
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Not all HF works like Cb, Cecil, in fact little of it does.

W6RCecilA wrote:
>
> wf3h@ptd.net wrote:
>
> > W6RCA wrote:
> > >We then used a mountain-top repeater to keep in touch with the late
> > >comers and direct them to the camp site. It worked out well but only
> > >a few of the campers saw any use for HF. After all, they had given
> > >up their CB radios and gone to the trouble to obtain Tech licenses
> > >because HF couldn't perform the required function.
> >
> > which, of course, has nothing to do with HF at all, since this is not
> > its use.
>
> It has everything to do with HF configurations not being able to
> deliver the required performance. Along with CW, has HF also become
> such a religion that nobody can admit that VHF/UHF repeaters have some
> advantages over HF without repeaters?
> --
> http://www.mindspring.com/~w6rca
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5171. Re: My question about Gotham Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 05:55:09 UTC
From: "R. Makul K1XV" <k1xv@arrl.net>
Message-ID: <stu5bto45183d2g7nmhjts6q81t8vfivbp@4ax.com>
Source record: 168462

Dave:

I happen to have one, a V160, disassembled sitting around here. If I get a chance over the weekend I will try to get some dimensions for you.

Ray K1XV

On Sat, 17 Mar 2001 00:38:02 -0500, "Dave Alden (KB8VJD)" <dalden@home.com> wrote:

>Gee Guys,
>
>I didn't mean to get you into a heated debate about Gotham Verticals.
>
> As I said, I had my Gotham back around 1964 when I was 13 years old
>and had just received my Novice ticket. I used the antenna with a
>Heathkit HW-16 CW transceiver that I built from a kit. I didn't know
>squat about antennas at that point (Not that I know too much now!)
>but, I do remember that I seemed to make regular CW contacts without
>much trouble.
>
>I subsequently lost my ticket for failure to upgrade to General within
>2 years (the rule back then) and didn't really get back into ham radio
>actively until about 8 years ago.
>
>My intent was to ask if anyone had the specs on the coil and height
>and construction of the antenna in order to build one. I know it
>ain't going to be much of an antenna but I have always been interested
>in simple "low-profile" antennas for small lots, apartments, and
>mobile use and I thought that it would be fun to play around with.
>
>Plus, national security might depend on it!!!!!
>
>Anyway, I do appreciate the historical information. Quite interesting
>how some products come to be.
>
>I know I could cobble something together that resembled the Gotham but
>I was hoping that someone might know what size B&W coil was used, how
>tall and what diameter the radiator was etc. just to get a head start
>on it.
>
>Next swap that I go to I'm going to look for some old QST's and see if
>I can find one of their ads. It might be fun to blow it up and hang
>it on the wall in the shack.

>
>Or, if I soak the ad in saltwater and hook it to my MFJ tuner, I might
>be able to get a match on 160 meters.
>
>Dave Alden KB8VJD

5172. Re: antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 06:26:53 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <98v0ih$3jb$1@slb4.atl.mindspring.net>
Source record: 168463

--

"MWhite" <mwhite@simplynet.net> wrote in message
news:%Jys6.1735$lt3.347442@dfiatx1-snr1.gtei.net...
> I have a 2001 chevy truck and need some advice on the best application for
a
> 2 meter 440 mobile antenna. If anyone has any advice I would appreciate
it.
>
> Thanks
> KC5YOF
>
>
The best application for such an antenna would be to connect it to a
dualband radio and use it for transmitting and receiving. If you mean the
"best way" to install such an antenna a bit more info is needed. Do you
mind drilling holes in your new truck? If not, you can mount it that way.
There are clamp on antennas, mag mounts,through-glass..."best" is a very
subjective term.

5173. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 06:56:39 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ab30ba8$0$15031$cc9e4d1f@news.dial.pipex.com>
Source record: 168464

"Wes Stewart" wrote ...
> Gary Peach" wrote:
> >Once the space craft had soft landed the aperature of the antenna was
> >completly filled by the disc of the Moon 0.5 degree diameter at a
> >temperature of 150�K (I made the first measurement of this phenomenon. It
> >was neccassary to command the spacecraft signal off in order to make the
> >measurement. The additional noise came as a bit of a surprise to the
> >analysis team it was afctor that had not been considered at the planning
> >stage.
>
>
> Too bad the analysis team didn't have a competent ham EME operator on
board;
> he could have told you this would happen.

Wow! that is a surprise I did not know that there were any Ham EME operators with Antenna of BEAMWIDTH 0.5° or less wide. Certainly no on 2 m anyway. :)

>
> By the way, what frequency were you using?

Deep Space, (Monn distance and beyond), Spacecraft operate with an up link frequency centred around 2,113 MHz and a downlink frequency centred around 2,295 MHz This frequency is chosen because the back ground noise if falling with frequency but the water attenuation and noise are rising with frequency and around this frequency the cross over occurs so that maximum advantage mat be taken. With very deep space spacecraft the difference of 0.001 dB Signal level can shorten the mission by many years, so every little that can help is welcome. The antenna used for the measurement that I made was 85 fett in diameter having a gain of 55 dB and an efficiency optimised at 63 % by focusing on distant noise sources (Known Stars) and adjusting the hyperbola with respect to the parabolic surface of the main dish.
The Cassegrain construction means that any over spill due to attempting full illumination of the dish surface by the feed horn spill into the coolth of space at 4°K If a direct fedd is used then the over spill looks into the ground at 300°K and thus the possible System Temperature would not be realised. The system tempereature in those day was of the order 40°K using a ruby MASER in a helium refrigerator, Maser Gain bandwidth product in excess of 30 dB, mixer noise temperature 2,500°K (10 dB Noise Figure)
The frequency allocations are channelised in order to permit simulteneous operation of many spacecraft.
The noise measurements are made by selecting off a 20 MHz wide section of the 50 MHz IF. This wide noise bandwidth provides plenty of noise power to improve mesurement accuracy. Long time constant Simple RC integrators were

used to collect the noise and provide adequate drive to a diode bridge
detector. Clever backing off voltages could be added to the detector output
so that the signal applied to a strip chart could show a measuring
sensitivity of 1 dB for 10" or more, this precision is not required but it
is nice to be able to use it when looking for needles in hay stacks. where
this facility came into its own was when using the dish in tye Radio
Telescope mode and one wished to observe a Quasar droft through the beam of
the Antenna, the Quasar being distant 400,000,000 light years the wave front
is almost, but not quite straight. the plot so produced because the Earth's
rotation is constant gives a most excellent plot of the antenna pattern.

> Your temperature seems a bit lower than is given in some of my references,

OK the figure that I quoted was not corrected by our antenna efficiency of
63% as we were mainly interested in the S/N of the images. taking 150°K and
correcting it upwards for antenna efficiency gives, 238°K whcich accords
with your figure.
Although this antenna was built using best practices and not stinted for
money the efficiency was only measured at 63% and was probaly the best
available at that time. From time to time we had visiting Radio Astronmers
that had used the facilities at differnt Radio observatories around the
world. They were always amazed when I could show a Quasar drift through and
trace out on the stip chart. The main reason being that at that time
university Radio observatories could not afford MASERS which cost half a
million Dollars to build and about 10,000 dollars a week to run.
The best they could do was parametric amplifiers giving them system
temperatures of the order 150°K
We had one for stand by.
It is amazing to see that these days transistors exist with better noise
figures and their prices are in the tens of Dollars range and no maintenance
is required.
Alas that Historic Antenna was demolished a few months ago in the most
vandalistic manner possible.

> although if your frequency was high
> enough and the moon was less than full the average temp is lower.

Yes it is true that the Sun illumination of the Moon angle does affect the
observed temperature. This effect is due to the Albedo of the Moon. 0.07
or -11.5 dB when viewed head on. This means that if you could accurately aim
a parrallel beam of 0.5° beamwidth at the moon the reflection loss will be -
11.5 dB.
If the beam width of your antenna is twice that then the figure should be
decreased by the ratio of the beamwidths squared thus a 1° beam is another 6
dB down giving a reflection loss -17.5 dB a 2° beamwidth (36 db Gain on 2m
that would be a dish 40 m diameter on 70 cm 25 m dia) gives 12 dB additional
loss giving 23.5 dB reflection loss etc.
Some how I cant see such dishes being operated by Hams
a 3m dia dish at 70 cm would have a theoretical gain of 23 dB and a beam
width of 16.7° the moon reflection loss becomes -(20 log(16.7/0.5)+11.5) dB

= -42 dB

Branegan GM4IHJ speaks of 70 cm 25 dB (dish approx 4m), Gain Antenna in his book Space Radio Handbook. later in the chapter he lamentes the loss of rotators and the problems steering such "monsters". Our 85' dish took two 50 HP hydraulic motors to position it to two thousandths of a degree and track in Hour Angle HA at a rate of 15°/hour, I mention this in passing to give the readers a feel for what is involved in this enterprise, when you get it going though it is exciting stuff. The oil pressure to drive the motors wat 6,000 PSIG supplied through thick walled steam pipe. Any trip up the antenna entailed pasiing past these pressure lines, a pin hole in the line would permit an invisible high velocity jet that was sharp enough to cut your head off before you even felt it. this system took a team of six full time to keep the hydraulics and supprt structure on top line. Clambering around on one of those structures is definitely not for the timid. Imagine hanging in a rope cradle from a galavised iron girder 200 feet above a flat concrete surface instruments all lashed on and swinging about in the breeze whilst you attempt to adjust the VSWR of a waveguide run with some G cramps. Not too bad when the Sun is shining a little, not too much, but turn on the wind and rain and the whole thing becomes a bit treacherous.

> In the chapter, "Microwave System Calibration Using the Sun and Moon",
(ARRL
> UHF/Microwave Experimenter's Manual) author David Shaffer gives the radio
> temperature of the moon as 225K.
>
> The chapter, "EME Communications" in the same publication gives the moon
> temperature as about 210K , referencing, Zheleznyakov, "Radio Emission of
the
> Sun and the Planets."

If you stop to think for a moment the Moon temperature is mainly due to Sun illumination It is at the same approximate distance from the Sun as us on the Earth. Our mean temperature is about 290°K (17°C) so there isn't much surprising about what we find the Moon's temperature to be. The Sun delivers about 2 kW per square foot that is the value that the Solar panels that provided the power for the Surveyors was calculated upon. You can use about the same figure less some for atmospheric attenuation on Earth.

It is interesting to note that even the best antennas are inefficient.

Do your references give any figures for Sun Noise temperature and the
varience of them?

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5174. CFA-Have you built one?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 10:33:15 UTC
From: Dave <rni220fgi@email.com>
Message-ID: <98veol$3n2jk$1@ID-49477.news.dfncis.de>
Source record: 168465

Today I found some notes on my old CFA test which possibly might interest some.
I used the same dimensions and frequency as the article in May 93 Wireless World, so was running it at 50 MHz.
The feeders were 300 ohm balanced, about 3 feet long going into a 4:1 balun, bringing down to 50 ohms for each path(RG58).
The 90 degree phasing was done with coax, and a 'trombone' I made from an old RF Fuse unit and a cigar tube!
The dimensions were E plates 100mm dia, 125 long and the D plates (Capacitors) were 200 mm dia. The spacing was fairly large, 50mm between each.
These were the results, for those interested.

Dipole -30 dBm
Helical/1/4 gnd plane -40 dBm
1/4 wave whip(no gnd plane) -35 dBm
CFA -47 dBm (a bit worse than I
remember, strange how your memory can compensate, to make things better!)

I did this all in a day or two, and had little information, bar the WW article on what to expect. I didn't fiddle around with the dimensions/spacing either.
I used a sig gen for the TX with two attenuators as the splitter. I didn't have a vector voltmeter and adjusted for the 90 degree shift by trial and error, but remember it had little effect! Apparently that is where the answer to the CFA lies- getiing the phase relationship dead right. But when I adjusted for maximum received signal, nothing happened!
I wonder if anyone else also experienced this?
I thought I had
had thrown these notes away (July 1993), I might have another go at this now, as I can get my hands on a vector voltmeter for a weekend....Bloody shame I have thrown away the phasing unit :-(
Or, maybe not-it could have been faulty, we shall see!!!

5175. Windom vs. Longwire

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 11:28:09 UTC
From: Ash <ash@gravitywell.org>
Message-ID: <3AB34A48.2C7FF8B@gravitywell.org>
Source record: 168466

Hi,
at the moment I'm using a mini-windom (0.5-30mhz) , original length is only 4meters so
I quadrupled it to a total of 16meters. I think it's working pretty okey, but as you know
"if you can get any better .. cheap - why not"....
I was thinking about buying an MLB and attaching perhaps 20meters of cable,
does anyone know if this will really be an improvement, from what I've heard the windom
is a good antenna...
Regards

//Greg

5176. Re: Windom vs. Longwire

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 15:56:47 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3ab38961$0$88184$2c3e98f8@news.voyager.net>
Source record: 168250

think i would stay with the windom it will be much quieter than the long
wire

Ash wrote:
>
> Hi,
> at the moment I'm using a mini-windom (0.5-30mhz) , original length is only 4meters so
> I quadrupled it to a total of 16meters. I think it's working pretty okey, but as you know
> "if you can get any better .. cheap - why not"....
> I was thinking about buying an MLB and attaching perhaps 20meters of cable,
> does anyone know if this will really be an improvement, from what I've heard the windom
> is a good antenna...
> Regards
>
> //Greg

5177. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 16:12:36 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB38CF4.8CC61BCA@toast.net>
Source record: 168251

Reg Edwards wrote:

> John wrote -
> > I thought I was understanding, and then something slipped away.
> If noise
> > is vertically polarized, why would the vertical antenna offer any
> > advantage over the horizontal, in regards to noise? Wouldn't it
> be more
> > sensitive to the noise that is polarized in its plane?
> ======================
> John, who says a vertical antenna has an advantage over a
> horizontal in regard to noise ?
>
> Yes it would be more sensitive.

Reg, your last paragraph said,

The much weaker noise from the ionosphere is randomly polarised.
Get away from human habitation, such as in the middle of the
Pacific Ocean, and from a noise viewpoint, the vertical antenna
offers no advantages over the horizontal. Take a Kon Tiki trip.

That made me think you were saying that not having gotten away from
human habitation, the vertical antenna _would_ offer an advantage. Sorry
if I misunderstood.

john

5178. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 16:14:15 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB38D57.1296591A@IEEE.org>
Source record: 168252
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> Not all HF works like Cb, Cecil, in fact little of it does.

The point is that VHF/UHF has some advantages over HF, Dick.
Mountain-top repeaters around the Valley of the Sun are one
of them. No HF frequency would do what we needed done unless
there were HF repeaters and there were not any. The only reason
most of those campers got their Tech licenses was to be able
to have reliable 2500 square mile full-time coverage. There's
no reason for those guys to want to get on HF, therefore no
reason for them to want to upgrade. A few of them who have
moved away from the Valley of the Sun have become interested
in HF.
--
http://www.mindspring.com/~w6rca

5179. Re: Windom vs. Longwire

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 16:55:41 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AB3970D.20F290FA@hiwaay.net>
Source record: 168253

Ash- I dont recognize those dimensions as relating to a Windom. What
frequencies are you interested in, and- is this for listening only ?

Bill-W4BSG

Ash wrote:
>
> Hi,
> at the moment I'm using a mini-windom (0.5-30mhz) , original length is only 4meters so
> I quadrupled it to a total of 16meters. I think it's working pretty okey, but as you know
> "if you can get any better .. cheap - why not"....
> I was thinking about buying an MLB and attaching perhaps 20meters of cable,
> does anyone know if this will really be an improvement, from what I've heard the windom
> is a good antenna...
> Regards
>
> //Greg

5180. Re: Installation of DX-CC 80-10M Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 17:00:47 UTC
From: Mike <KA1DRZQRM@worldnet.att.net>
Message-ID: <3LMs6.2873$wQ3.240652@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168254

I have one installed as a flat top using trees at either end for support. The ends are about 45' up and I allow a bit of sag in the middle. I would remove the SEP arc-plug from the center insulator as the instrucions state over 2:1SWR can cause it to go off, A barefoot 100watt rig probably has a bit more room to play SWR wise, but I would play it safe and remove the plug and use a switch in the shack that grounds out the antenna when not in use (and remember to always switch it to ground when not in use). I didnt write down the actual bandwidths but they all were acceptable when compared to homemade mono-band diploes (as expected the bandwidth would be a little less than monoband dipoles). I have both a built in automatic antenna tuner and an outboard tuner MFJ-948; and both easily touch the antenna up when getting further away from the 1:1 points.

There was a 1:1 spot within each band and it would be quite easy to tune the antenna for a different favorite spot, but I didn't find it necessary.

I have some people complain that they are hard to tune with a tuner on the 80 meter band (because it is loaded there), but I have found no real difficulty when compared to a unloaded dipole!

And on 80 meters I have been able to hold my own up against full size dipoles and other "high performance antennas".
Good luck and 73,
Mike
KA1DRZ

"george vollmann" <georgev@cts.com> wrote in message
news:3AACF067.A05233D5@cts.com...
> Has anyone done an installation of the DX-CC in an
> inverted VEE with/without an antenna tuner? Can you
> share any "gottcha's" with me, I am about to begin this
> process!
>
> tnx,
> George Vollmann (georgev@cts.com)
>
>

5181. VA QSO PARTY (3/17 - 3/18)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 17:11:11 UTC
From: "John (KB3CDF)" <murphman@erols.com>
Message-ID: <9905rn$f1f$1@bob.news.rcn.net>
Source record: 168255
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

500 pts to contact K4NVA, the club station.

More details @ http://www.qsl.net/sterling

73's

5182. Re: Windom vs. Longwire

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 17:33:33 UTC
From: Ash <ash@gravitywell.org>
Message-ID: <3AB39FED.B86997E0@gravitywell.org>
Source record: 168256

Hi,
The mini-windom is a reception only HF antenna from RF Systems,
stated to recieve 0.5-30mhz or so.
I dont have the exact measurements but counting from the center magnetic balun
one end is ~125cm and the other is ~250cm, sort of a dipole style antenna.
I wanted to extend this and people on the newsgroup agreed it could be done
so I extended both ends X4, so the aprox. total length is now ~15meters and it works
really good compared to the original setup.
However I've now bought a better radio (Icom R8500) and want a really good antenna
to go with the really good radio...
A good system is never better than the antenna :)
So I was thinking about a separate MLB and some wire...
I'd like it as broadbanded as possible but best reception prefered is about 8-12mhz.
And it's for reception only ....

Bill Aycock wrote:

> Ash- I dont recognize those dimensions as relating to a Windom. What
> frequencies are you interested in, and- is this for listening only ?
>
> Bill-W4BSG
>
> Ash wrote:
> >
> > Hi,
> > at the moment I'm using a mini-windom (0.5-30mhz) , original length is only 4meters so
> > I quadrupled it to a total of 16meters. I think it's working pretty okey, but as you
know
> > "if you can get any better .. cheap - why not"....
> > I was thinking about buying an MLB and attaching perhaps 20meters of cable,
> > does anyone know if this will really be an improvement, from what I've heard the windom
> > is a good antenna...
> > Regards
> >
> > //Greg

5183. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 19:09:48 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <mm77btkl531dj3g77ruved5qpft2rig51t@4ax.com>
Source record: 168257

On Sat, 17 Mar 2001 06:56:39 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>The Sun delivers
>about 2 kW per square foot that is the value that the Solar panels that
>provided the power for the Surveyors was calculated upon. You can use about
>the same figure less some for atmospheric attenuation on Earth.
>
>It is interesting to note that even the best antennas are inefficient.
>
>Do your references give any figures for Sun Noise temperature and the
>varience of them?
>
>73
>--
>Gary7SLL

Hi Gary,

I would ask about your spec of 2 KW per square foot.

I have always used a loose figuring of 1KW/M**2 at noon, on an
equinox, at the equator. I can't say that I have a ready reference to
offer, but a simple browse of the net revealed one fellow's work with
solar ovens and he specifies:
>Ambient solar flux, direct beam radiation = 494.5 W/m2
at:
http://www.engr.colostate.edu/~burns/me444/project-6-data.html

or a report of my area seeing an annual average of 145 W/M**2
http://faldo.atmos.uiuc.edu/FINGERPRINT/IMAGE2/csiro.frsa.ann.gif
Ireland, Scotland, and Britain see only 100 W/M**2

It sounds as though you are quoting for the cellular array, not a
cell.

I can quote some optical measurements related to the sun and moon in
their Luminance values from Burle's Photomultiplier Handbook:

Source candelas/M**2

Sun 1,600,000,000
Clear Blue Sky 7,900
Moon 2,500

the tube you are looking at ... 170

73's
Richard Clark, KB7QHC

5184. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 19:14:57 UTC
From: richardharrison@webtv.net
Message-ID: <27647-3AB3B7B1-57@storefull-116.iap.bryant.webtv.net>
Source record: 168259

John wrote:
"That made me think you (Reg) was saying that not having gotten away from human habitation, the vertical_would_ offer an advantage."

The vertical antenna is much better at sending and receiving ground waves than is a horizontal antenna. That is why medium wave broadcasters all use them.

Usually, most noise is vertically polarized. That`s because vertical noise sources are more effective at launching ground waves than are horizontal sources.

Reciprocity rules, so within ground wave signal range of a noise source, the vertical antenna will pick up more noise because it is better at picking up ground waves, just as it is more effective at launching them, and it suffers no loss in effectiveness from cross-polarization. Propagation along the ground has little effect on the wave`s polarization.

In a remote location where sky waves produce the only signals and noise to be heard, the horizontal antenna loses its cross-polarization loss to signals and noise because polarization is scrambled in the reflection process by the ionosphere. Thus, the vertical is no different from the horizontal as to polarization, except the horizontal antenna over sea water is a weak performer for for both signal and noise reception. If you have enough signal and noise to hear from your receiver, the S/N ratio should not be affected by the antenna`s lousy performance. It is equal opportunity with regard to signal and noise.

The vertical antenna will have stronger reception over sea water but that includes noise as well as signal. So, the vertical antenna shows no signal to noise ratio advantage over the horizontal antenna in most cases as Reg said when you are in the middle of the Pacific Ocean.

Best regards, Richard Harrison, KB5WZI

5185. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 19:29:49 UTC
From: wf3h@ptd.net
Message-ID: <3ab3b91c.6660315@news.ptdprolog.net>
Source record: 168258
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Fri, 16 Mar 2001 23:05:43 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>wf3h@ptd.net wrote:
>
>>
>>
>> which, of course, has nothing to do with HF at all, since this is not
>> its use.
>
>It has everything to do with HF configurations not being able to
>deliver the required performance.

which never was the intent of HF operations.

Along with CW, has HF also become
>such a religion that nobody can admit that VHF/UHF repeaters have some
>advantages over HF without repeaters?
>--

apples and oranges

5186. Re: Windom vs. Longwire

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 19:45:07 UTC
From: richardharrison@webtv.net
Message-ID: <27647-3AB3BEC3-62@storefull-116.iap.bryant.webtv.net>
Source record: 168262

Ash wrote:
I`d like it as broadbanded as possible but best reception preferred is about 8-12 MHz."

Back in 1937 we got a new 17-tube GE radio complete with a "V-Doublet" antenna kit.

We had an L-type aerial and a ground rod in place like most other people at the time. When we put up the dipole, we got rid of much noise and received a lot more stations. The doublet kit included transformers to maintain balance on the twisted-pair feedline.

I`d trash the Windom and go for a balanced system.

Best regards, Richard Harrison, KB5WZI

5187. GOOD GUY AWARD....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 19:48:07 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AB3BF77.E0C27BE@bellsouth.net>
Source record: 168260
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.cb

I would like to say that there are still some honest folks out there.
And Bill Deem wc8i was a wonderful person to deal with.
we made a deal, both of us sent our items the same day. arrived to us on
same day.
Not a problem one.
THE GOOD GUY AWARD TO WC8I
thanks Bill

chris ni4l

5188. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 19:50:21 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3ab3b80f.130749406@news.aepnet.org>
Source record: 168261

On Sat, 17 Mar 2001 06:56:39 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

[snip]
>>
>> Too bad the analysis team didn't have a competent ham EME operator on
>board;
>> he could have told you this would happen.
>
>Wow! that is a surprise I did not know that there were any Ham EME operators
>with Antenna of BEAMWIDTH 0.5° or less wide. Certainly no on 2 m anyway. :)
>

It isn't necessary to actually have an 0.5 deg BW to know that the
moon is a hot rock and radiates as such. But since you asked, I
believe an acquaintence of mine, Jim, WA7CJO, does have a 0.5 deg. BW
on the antenna he used to make the first ham EME QSO on 10 GHz.

[snip]

>
>Branegan GM4IHJ speaks of 70 cm 25 dB (dish approx 4m), Gain Antenna in
>his book Space Radio Handbook. later in the chapter he lamentes the loss of
>rotators and the problems steering such "monsters".

Monsters? Four meters is a monster?

My friend John, W7BBM, has been operating a homemade 40 ft dish on
144, 432 and 1296 MHz. for over 20 years. (See the cover "CQ VHF"
magazine for Nov, 1996.) This was for EME only; it could not point at
the horizon. To overcome this limitation, he has just completed a
tower-mounted 30' dish. This is entirely homebrew welded steel
construction and he assembled and mounted on top of a homebrew tower
singlehandedly. He is receiving good echos and making QSOs on 1296
MHz using an output power of 11W.
>

>Our 85' dish took two 50
>HP hydraulic motors to position it to two thousandths of a degree and track
>in Hour Angle HA at a rate of 15°/hour, I mention this in passing to give
>the readers a feel for what is involved in this enterprise, when you get it
>going though it is exciting stuff. The oil pressure to drive the motors wat
>6,000 PSIG supplied through thick walled steam pipe. Any trip up the antenna
>entailed pasiing past these pressure lines, a pin hole in the line would
>permit an invisible high velocity jet that was sharp enough to cut your head
>off before you even felt it. this system took a team of six full time to

>keep the hydraulics and supprt structure on top line. Clambering around on
>one of those structures is definitely not for the timid. Imagine hanging in
>a rope cradle from a galavised iron girder 200 feet above a flat concrete
>surface instruments all lashed on and swinging about in the breeze whilst
>you attempt to adjust the VSWR of a waveguide run with some G cramps. Not
>too bad when the Sun is shining a little, not too much, but turn on the wind
>and rain and the whole thing becomes a bit treacherous.

You should try maintaining twenty-seven 85 footers:

http://www.aoc.nrao.edu/vla/html/VLAhome.shtml

>
>> In the chapter, "Microwave System Calibration Using the Sun and Moon",
>(ARRL
>> UHF/Microwave Experimenter's Manual) author David Shaffer gives the radio
>> temperature of the moon as 225K.
>>
>> The chapter, "EME Communications" in the same publication gives the moon
>> temperature as about 210K , referencing, Zheleznyakov, "Radio Emission of
>the
>> Sun and the Planets."
>
>If you stop to think for a moment the Moon temperature is mainly due to Sun
>illumination It is at the same approximate distance from the Sun as us on
>the Earth. Our mean temperature is about 290�K (17�C) so there isn't much
>surprising about what we find the Moon's temperature to be.

My point exactly. The operative phrase is, "If you stop to think for
a moment...." <g>
>
>The Sun delivers
>about 2 kW per square foot that is the value that the Solar panels that
>provided the power for the Surveyors was calculated upon. You can use about
>the same figure less some for atmospheric attenuation on Earth.

Maybe you meant 2 kW/ m^2?

>It is interesting to note that even the best antennas are inefficient.

Why that is surprising. Who would have guessed?
>
>Do your references give any figures for Sun Noise temperature and the
>varience of them?

Yes.

73,

Wes Stewart, N7WS

5189. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 20:26:41 UTC
From: Patricia Gibbons <wa6ube@tactical-link.com>
Message-ID: <990hal$b0p$1@slb1.atl.mindspring.net>
Source record: 168263

Gee... is this drivel on fractal antennas ever going to end ???

The last time I checked in on rec.radio.amateur.antenna
was about a year ago... sheesh ... still here ..
--
Patricia E. Gibbons & Carla Satra
Tactical Link Systems
<ICQ#: 72818195>
<http://www.tactical-link.com>
see my comvan at:
<http://www.qrz.com/callsign.html?callsign=wa6ube>
.....
My Public Key is available at:
<http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
Key ID: 0xEDECB44F
This key is RSA, NOT Diffie-Hellman !!

Fractenna <fractenna@aol.com> wrote in message
news:20010309221234.02033.00000704@ng-cu1.aol.com...
> I'd like to pass along this invitation for all interested hams to join us
on
> the fractal antenna reflector. This is the primo forum on the web for the
> discussion of fractal antennas. Moderated, lively, and filtered for spam
and
> off topic comments this is the home of fun feedback on a ham-grown
technology.
>
> Dr. Cohen participates in this forum and it is the only one he responds to
on
> the web.
>
> To join:
>
> fractalantenna-subscribe@yahoogroups.com
>
> 73
> Phil N1ZKT

5190. 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 20:35:35 UTC
From: jim <kg4enu@carolina.rr.com>
Message-ID: <08i7bt4u4lk5mn72ec12h1iem01t2n8vht@4ax.com>
Source record: 168266

anybody built / or have plans for a cheap 6meter mobil
antenna...either 50-51 mhz..or 53-54 mhz...Thanks

Jim-kg4enu

5191. Re: VA QSO PARTY (3/17 - 3/18)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 20:41:48 UTC
From: W4NTI <w4nti@nospammindspring.com>
Message-ID: <990i6r$lu0$1@slb5.atl.mindspring.net>
Source record: 168264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Yeah and he is easy to find... right now he is on 14.278 with buckshot all the way down to 14.273 and up to 283. Probably forgot the ALC plug-in.

Dan/W4NTI

"John (KB3CDF)" <murphman@erols.com> wrote in message news:9905rn$f1f$1@bob.news.rcn.net...
> 500 pts to contact K4NVA, the club station.
>
> More details @ http://www.qsl.net/sterling
>
> 73's
>
>

5192. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 20:42:22 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <fNjRaLBuw8s6EACx@ifwtech.plus.net>
Source record: 168265

Wes Stewart wrote:
>
>>
>>Branegan GM4IHJ speaks of 70 cm 25 dB (dish approx 4m), Gain Antenna in
>>his book Space Radio Handbook. later in the chapter he lamentes the loss of
>>rotators and the problems steering such "monsters".
>
I'm afraid the so-called "Space Radio handbook" is actually all about satellite communications - active satellites, that is. The author had no experience of EME, and no conception of the important differences in technologies required. The fact that a conventional rotator won't handle an EME-sized dish is only part of it.

A 4m diameter dish for 70cm is a toy. It isn't big enough (in wavelengths) to be acting as an efficient reflector, and it's impossible to feed it effectively without significant blockage by the feed antenna itself.

I can see exactly where the estimate of 25dB comes from, namely the naive use of a textbook formula that only applies for dishes that are many wavelengths in diameter - many more than 6, that is. Also the formula totally ignores feed efficiency and blockage, which are real killers for a small dish at UHF. In reality, you can expect well under 20dBi from such a dish.

The transition between a dish being "big enough" and "too small" is very sharp. On 70cm it's somewhere around 5m diameter. A 6m (20ft) will really work well, but a 4m dish is a total waste of time.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5193. yahoo ham radio room

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 21:36:48 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <990lga$1jl$1@bob.news.rcn.net>
Source record: 168267

yahoo messenger chat rooms has a new ham radio chat room---your patronage would be appreciated

5194. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 21:37:34 UTC
From: richardharrison@webtv.net
Message-ID: <12533-3AB3D91E-44@storefull-111.iap.bryant.webtv.net>
Source record: 168268

Richard Clark wrote:
"Ambient solar flux, direct beam radiation =
494.5 watts/meter squared."

My little Solarex book says their 2-in dia. solar cell has a peak output of 0.225 watts. So, that would be 5.16 watts per square foot.

Solarex says the cell is 11% efficient. So, that gives 46.9 watts per square foot into the cell or 505 watts per square meter.

Close enough to Richard Clark`s number.

Best regards, Richard Harrison, KB5WZI

5195. Aluminum Tubing For Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 21:53:26 UTC
From: EAG <n5nug@ix.netcom.com>
Message-ID: <990mck$e5b$1@slb1.atl.mindspring.net>
Source record: 168070

I have T6061 T6 aluminum tubing 12' X .75"O.D. X .058" wall thickness for sale at $9.00 a stick. Total is 480' part or all. Finish varies from stick to stick. Cash or cashiers check. Pick up in Dallas, TX at 75229 zipcode. 73, Ed - N5NUG

5196. Re: 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 21:53:54 UTC
From: QSB@QRM-QRN.net
Message-ID: <slrn9b7n7i.bq7.QSB@animas.frontier.net>
Source record: 168069

On Sat, 17 Mar 2001 20:35:35 GMT, jim scribbled:
>anybody built / or have plans for a cheap 6meter mobil
>antenna...either 50-51 mhz..or 53-54 mhz...Thanks

A series-coil-matched 2M 5/8 wave antenna works fine.
But, *not* the capacitor-tapped-on-a-coil type.

I.e., a 2M 5/8 wave antenna that measures continuity from
the center conductor to the whip, and *does not* measure
any continuity from the whip to the shell should work.
You might need to extend the whip and inch or two for
the 50.1-50.2 range. I've used RG-58-style braid slipped
over the tip and held in place by tying a loop of lacing
cord above and below the tip ball to get the extension.

73,
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

5197. FS: dual roller inductors

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 21:57:59 UTC
From: k9sqg@aol.com
Message-ID: <20010317165759.19731.00001873@ng-bj1.aol.com>
Source record: 168071

Dual, ganged inductors excellent for double balanced tuner. Non-coductive frame, ceramic forms. $50 plus UPS shipping, CONUS only.

73s,

Evan

5198. Re: GOOD GUY AWARD....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 22:35:58 UTC
From: BadaBing <badabing@home.com>
Message-ID: <iFRs6.29327$H5.6686914@news1.rdc2.pa.home.com>
Source record: 168072
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.cb

What did you buy?
"cf" <cfox007@bellsouth.net> wrote in message
news:3AB3BF77.E0C27BE@bellsouth.net...
> I would like to say that there are still some honest folks out there.
> And Bill Deem wc8i was a wonderful person to deal with.
> we made a deal, both of us sent our items the same day. arrived to us on
> same day.
> Not a problem one.
> THE GOOD GUY AWARD TO WC8I
> thanks Bill
>
> chris ni4l
>

5199. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 22:40:05 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <wGRs6.774$Mh1.5586@newsfeed.slurp.net>
Source record: 168073

Hello Jim and thanks for your comments. Your right I have a bunch of wires up on the roof. About 28 of #14 stranded copper wire spread out like a spider web and a lone set of four #14 s.c.w., independent of any bands, connected to the mast and to a buried 6 foot copper rod. The system tunes up quite well and I very pleased with the "solid contacts". When the antenna was 6 inches off the ground I had to try and try and try to get in on a pile up. Now when I to go back to our Ham Brothers on either side of the "ponds" I get a response on the first or 2nd try. Some of my Rigs I use here at the shack are an Alinco DX70T. This is an outstanding little rig. I also use on occasion a SB104A, HW9, and HW5400 which by the way is my very first HF rig I began building way before I became a ham. I really enjoy reading about antennas and building them. My favorite quick and dirty camping antennas I use with the Alinco or HW9 is a slinky and/or a rotor cable cut for several bands. I have had a lot fun at camp grounds setting up my slinky either in a vertical or adding another slinky and making an inverted V. Over on 2ms and 70cms I have some home made 1/4 wave vertical ground plane antennas made from coat hangers and a SO239 connector. My main 2m antenna has been in service since April of 1987. It is up in my attic and works great. Any way I love antennas and have learned quite a bit more since downloading this site.
73 W9FPJ
"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
news:98qc4g$86o$1@newpoisson.nosc.mil...
> Dick: while awaiting your reply I started thinking about what would
happen
> when you mounted your vertical on the rood and here's what I figured would
> happen - you'd install radials that approached a 45 degree angle from the
> horizontal which is one heck of a good way to get the antenna's Zo around
50
> ohms - that's a good thing. What I didn't think of was your comment
> regarding four radials "per band." I don't know how many bands your set
up
> for but, assuming at least four, you've got 16 radials and that's better
> than a couple on the ground.
>
> My homebrew system has about 20 + (can't remember exactly how many I
> installed - old age, ya know) and I'm right on top of moist soil and next
to
> that lake so I suspect we're close to "alike" in the performance of our
> respective systems.
>
> The bands of best performance for me are 40, 30 and 20. My vertical is
> about 23 feet high (quarter wave on 30) and I add capacitance in parallel
> with the feedline and ground to tune it for 20; for 40 I add a tad of
> inductance (hand wound coil). For 12 meters, I switch everything out and

> just use the 23 feet - turns out to be 5/8 wavelength. The radials vary
in
> length from 16 feet to 30+ feet.
>
> Great to talk to you about verticals! Love working with that antenna,
> improving it, changing the length and C or L values for different bands -
as
> long as I can "roll my own" I'm happy. LOL! Regards, Jim R.
>
> "Dick Elliott" <elliotta@netusa1.net> wrote in message
> news:EPUr6.380$w46.3742@newsfeed.slurp.net...
> Hello Jim. Be glad to help you out if I can. That was some time ago that I
> tried salting the heck out of my yard in a three foot circle and mixed it
> with the clay. My yard is 99% clay, some fill from an old steel mill down
> about two feet, (found that out when I put up security fence), and now all
> the yard, 60' X 60' is all a paving "brick yard". But that is another yarn
> for another day. I was trying to increase all three points you mentioned
in
> your post. When I bought my home ten years ago I was just a brand new
> General Class, and was trying out different tips I got from my fellow hams
> who got much better results than I did using the "salt" trick. At first I
> thought it was my sea level that kept me from receiving and transmitting.
> But the more I studied about antennas I soon realized it was not so much
the
> soil but my lack of understanding of the "ground system". Once that issue
> was solved I began to experiment with radials. The main reason I put my
> antenna up on the roof top was not for height but for a radial system that
> would compliment the antenna. I am not a whiz at math so a calculator
helped
> me with the system. I have four radials per band cut to the middle of the
> bands. What a difference that made in all around performance of my rigs.
> That was four years ago. When I tune up and call CQ I usually get a quick
> reply. Hope this has helped you.
> "Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
> news:98ogutnke1@newpoisson.nosc.mil...
> Dick: You didn't say why you salted the soil, e.g., improve SWR,
decrease
> radiation resistance, see if it made any difference as far as reported
> signal strength, etc.
>
> For whatever reason, I'd be interested in what you were attempting to
> improve and how that improvement was measured. I'm querying Tom because
> I'm interested in whether modeling or history would indicate that raising
my
> vertical, given the extremely moist soil/water conditions I have, does
any
> good. Don't know what "good" means so I'll await some comments from Tom.
>
> Regards, Jim R.
>

> "Dick Elliott" <elliotta@netusa1.net> wrote in message
> news:87Pr6.198.2363@newsfeed.slurp.net...
> I tried the "soil the salt trick" when I had my Butternut vertical 6"
above
> the gound. I saturated the ground in a three foot circle. That did help a
> little. Putting it on the roof top of my house with a 6' mast and lots of
> radials was the answer to my problems. The reason it helped in my case, I
> believe, is that the antenna is now above the main power lines for the
city
> park and my neighborhood. I have four main feed lines running North and
> South over my back yard along the East edge of the city park. I knew when
I
> bought the house that would be a problem. But I am baseball nut and I have
a
> Little League ball diamond right next to my property line and love to sit
> out there and watch the kids play ball. So in my case height was the
answer
> to overcome the power line problem.
>
> "Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message
> news:98nn3fhmi1@newpoisson.nosc.mil...
> Actually, I worded that reply wrong, Tom as it could appear as if I was
> baiting you. I should have queried differently - instead of "concern with
> height" perhaps along the lines of "Any interest in less concern with
> height."
>
> I read often of folks elevating their verticals as high as possible
because
> of the lousy soil conditions they face. Since I'm close to and on top of
> moist soil and water, can I be less concerned with the height of the
> antenna? Regards, Jim R.
> > >
> > > "Tom W8JI" <2w8ji@akorn.net> wrote in message
> > > news:3aaeb985.121042575@news.accessunited.com...
> > > On Tue, 13 Mar 2001 12:54:37 -0500, "Jim Rodenkirch"
> > > rodenkir@spawar.navy.mil wrote:
> > >
> > > Tom: what if the antenna's location is at sea level? My yard is at
> sea
> > > level, hell, it's at the edge of a tidal creek fed by the ocean and a
> > > coupleof rivers. Any concern with height then? Regards, Jim R.
> > >
> > >
> > > I think like a land-lubber. Of course it helps next to the sea,
because
> > > that is your terrain!
> > >
> > > I couldn't resist making that comment because my neighbor always
insists
> > he

> > > gets out well on HF because he is 950 feet ASL. Since the sea is 250
> > miles>
> > > east, that really doesn't matter.
> > >
> > > 73 Tom
> > > > >
> > > > >
> > > > >
> > > > >
> > > >
> > > >
> > >
> > >
>
>

5200. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 22:54:23 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab3e7e9.215961856@news.accessunited.com>
Source record: 168076

On Sat, 17 Mar 2001 10:12:36 -0600, John O'Flaherty
<oflahert@toast.net> wrote:

>The much weaker noise from the ionosphere is randomly polarised.
>Get away from human habitation, such as in the middle of the
>Pacific Ocean, and from a noise viewpoint, the vertical antenna
>offers no advantages over the horizontal. Take a Kon Tiki trip.
>
>That made me think you were saying that not having gotten away from
>human habitation, the vertical antenna _would_ offer an advantage. Sorry
>if I misunderstood.

Vertical antennas DO offer an advantage on low frequency bands,
assuming the location has relatively low groundwave noise levels. You
do not have to be at sea to experience such locations.

Every array I use on 160 meters is vertically polarized (even my
Beverages), and my arrays of short phased-verticals are among the best
antennas I have. As a matter of fact, the most popular low-band
receiving antennas are almost always vertically polarized antennas.
Beverages are vertically polarized antennas, and people use them with
great success.

It's darn near impossible to build an effective antenna that is
horizontally polarized on lower bands, because it's tough to get
enough height.

Day or night, longer distance signals usually have higher S/N ratio
on my omni-directional transmitting vertical than a high dipole (I do
mean high, 300 feet).

The reason is simple, the dipole isn't all that directive....and the
vertical receives (and transmits) better at long distances. While the
vertical isn't quieter, it has stronger signals from distant stations.

So while verticals aren't quieter, they can be very effective antennas
if you are not bombed with groundwave noise.

73 Tom

5201. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:03:31 UTC
From: fractenna@aol.com
Message-ID: <20010317180331.00511.00002035@ng-cd1.aol.com>
Source record: 168075

>
>Gee... is this drivel on fractal antennas ever going to end ???
>
>The last time I checked in on rec.radio.amateur.antenna
>was about a year ago... sheesh ... still here ..
>--
>Patricia E. Gibbons & Carla Satra
>Tactical Link Systems
><ICQ#: 72818195>
><http://www.tactical-link.com>
> see my comvan at:
><http://www.qrz.com/callsign.html?callsign=wa6ube>
>.....
>My Public Key is available at:
><http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
>Key ID: 0xEDECB44F
>This key is RSA, NOT Diffie-Hellman !!
>
>Fractenna <fractenna@aol.com> wrote in message
>news:20010309221234.02033.00000704@ng-cu1.aol.com...
>> I'd like to pass along this invitation for all interested hams to join us
>on
>> the fractal antenna reflector. This is the primo forum on the web for the
>> discussion of fractal antennas. Moderated, lively, and filtered for spam
>and
>> off topic comments this is the home of fun feedback on a ham-grown
>technology.
>>
>> Dr. Cohen participates in this forum and it is the only one he responds to
>on
>> the web.
>>
>> To join:
>>
>> fractalantenna-subscribe@yahoogroups.com
>>
>> 73
>> Phil N1ZKT

IF you mean announcement of the Fractal Antenna reflector?

Of course not.

What right do you have to discourage those who may wish to know about it? In
the last week 30 more people joined.

Only the usual trouble makers posted (false) complaints. Now what does that say there Patricia?

73
de Phil
N1ZKT

5202. Re: 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:04:50 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3AB3ED92.1512AA6A@ipeg.com>
Source record: 168074

jim wrote:

> anybody built / or have plans for a cheap 6meter mobil
> antenna...either 50-51 mhz..or 53-54 mhz...Thanks
>
> Jim-kg4enu

Jim,

Probably the cheapest and easiest 6m mobile antenna is a Radio Shack
102" steel CB whip. Cut it down to 1/4 wave on 6 and away you go.
Depending on your individual mounting system/location the length will
be something in the 54" range. Start long and adjust length carefully
and in small increments.

Marty
N7MX

5203. Re: GOOD GUY AWARD....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:11:31 UTC
From: cf <cfox007@bellsouth.net>
Message-ID: <3AB3EF23.377687B7@bellsouth.net>
Source record: 168077
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.swap,rec.radio.cb

I traded a ten-tec 705 mic for a tempo RBF-1 watt swr meter in pristine condition.
i am very much pleased with the transaction.
chris

BadaBing wrote:

> What did you buy?
> "cf" <cfox007@bellsouth.net> wrote in message
> news:3AB3BF77.E0C27BE@bellsouth.net...
> > I would like to say that there are still some honest folks out there.
> > And Bill Deem wc8i was a wonderful person to deal with.
> > we made a deal, both of us sent our items the same day. arrived to us on
> > same day.
> > Not a problem one.
> > THE GOOD GUY AWARD TO WC8I
> > thanks Bill
> >
> > chris ni4l
> >

5204. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:24:36 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AB3F234.8695613B@hiwaay.net>
Source record: 168078

Patricia- see my notes below. (BTW I visited your Van site before-
impressive)

Fractenna wrote:
>
> >
> >Gee... is this drivel on fractal antennas ever going to end ???

> >Patricia E. Gibbons & Carla Satra
....
. This is the primo forum on the web for the
> >> discussion of fractal antennas. Moderated, lively, and filtered for spam
> >and
> >> off topic comments this is the home of fun feedback on a ham-grown
> >technology.
> >>
> >> Dr. Cohen participates in this forum and it is the only one he responds to
> >on
> >> the web.
> >>
Dr.Cohens participation is the "filtering" mentioned. He edits ALL
posts, and lets only those get out that he approves of. His editing
often consists of comments interjected into the posts submitted.

> >> Phil N1ZKT
>
> IF you mean announcement of the Fractal Antenna reflector?
>
> Of course not.
>
> Only the usual trouble makers posted (false) complaints. Now what does that say
> there Patricia?
>
The "trouble makers" really include some people with impressive
credentials re antennas. THey include one who has refuted Chips
claims,and beat his performance, and another that has publihed MUCH more
on Fractal antennas than Chip.
However, there is serious doubt that the signatures on these posts from
"FRactenna" are truthful- THey are probably from Cohen, signing the name
of an underling, to avoid some kind of problem. That is just my
opinion, but there is past evidence that he has done so, frequently.

> 73
> de Phil
> N1ZKT

73- Bill-W4BSG

5205. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:37:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <990t6a$926$1@neptunium.btinternet.com>
Source record: 168079

John O'Flaherty <oflahert@toast.net> wrote in message
news:3AB38CF4.8CC61BCA@toast.net...
> Reg Edwards wrote:
>
> > John wrote -
> > > I thought I was understanding, and then something slipped
away.
> > If noise
> > > is vertically polarized, why would the vertical antenna offer
any
> > > advantage over the horizontal, in regards to noise? Wouldn't
it
> > be more
> > > sensitive to the noise that is polarized in its plane?
> > ======================
> > John, who says a vertical antenna has an advantage over a
> > horizontal in regard to noise ?
> >
> > Yes it would be more sensitive.
>
> Reg, your last paragraph said,
>
> The much weaker noise from the ionosphere is randomly polarised.
> Get away from human habitation, such as in the middle of the
> Pacific Ocean, and from a noise viewpoint, the vertical antenna
> offers no advantages over the horizontal. Take a Kon Tiki trip.
>
> That made me think you were saying that not having gotten away
from
> human habitation, the vertical antenna _would_ offer an
advantage. Sorry
> if I misunderstood.
====================

Sorry John, It was my fault. I implied the opposite of what I
meant.

If noise is randomly polarised from ALL directions there's no
advantage from either antenna polarisation. As this is fairly
obvious it would have been better if I said nothing. You have the
right undersatanding otherwise you would not have asked for
clarification.

Yours, Reg, G4FGQ

5206. 220 MHz...Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:51:38 UTC
From: carl domanico <carl.domanico@verizon.net>
Message-ID: <3AB3F883.ACEC2FA5@verizon.net>
Source record: 168080

Hi anyone have the plans for a nice 220 MHz..Yagi/Beam Antenna..Nothing too big..say 3 to 5 elements, simple to construct, say about 10 DB Foward Gain, Standard aluminum Tubing...

Thanks
Carl

5207. Re: Fractal Antenna Reflector--QST--QST

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-17 23:52:34 UTC
From: k1bqt@aol.com
Message-ID: <20010317185234.05438.00001001@ng-mo1.aol.com>
Source record: 168081

>Only the usual trouble makers posted (false) complaints.<

Tell us Phil, who pays for this account and who's password are you using to access it (if, indeed, you're Phil at all). One can't know, can they? BU beware! No one at Fractenna can prove who's writing what because this is a rouge site. But everyone knows who's account this is! And it is there the buck must stop.

73

Rick K1BQT

5208. (no subject)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 00:15:52 UTC
From: jod97 <jod97@optonline.net>
Message-ID: <3AB3FE13.CD7C6B50@optonline.net>
Source record: 168082

A 20 METER "CLOUDWARMER"
I thank you for showing an interest in my antenna which was voted theA number one wire antenna is North America by an independent research organization: AF2Y Enterprises! I did NOT invent it; the idea was given to me by WB2OTK in South Carolina. He didn't invent it either. Who then did? I don't know; I don't care; all I know is that it works like a BOMB! Furthermore the U.S. military is using it under the name N.V.I.S.(Near Vertical Incidence Skywave). In 30 years on the air, it is the best wire antenna I've ever used and can easily challege commercial beams for effectiveness.

A few basic concepts to begin with. A "Cloudwarmer" is a MONOBAND 2 element wire beam. I stress MONOBAND and it can be erected for ANY BAND. Secondly it is based entirely on mathematics and is uncomplicated. Thirdly, all that's required is standard wire, 52 ohm coax of any length and five insulators. Also I do not recommend using a tuner because if the construction is correct and adjustments,if necessary are made, a tuner will be unnecessary and furthermore it may mess up the mathematical relationships which govern this antenna. Lastly, any ham who can set up a standard dipole can EASILY construct a Cloudwarmer. And if any ham cannot construct a standard dipole, then he or she has no business being on the air therefore delete this information and take up basket weaving!

Keep this in mind because it applies to any Cloudwarmer for any band. The "Warmer" consists of a driven element called a dipole with a parasitic called a reflector the latter of which is 6% longer and placed between .15 and .2 wavelengths below and parallel to the driven element or as NEARLY parallel as possible. THAT'S IT. It is also known as a "SCATTERBEAM" because the RF hits the ionosphere at high angles and then scatters all over the world. It is a COMPLETELY NON-DIRECTIONAL ANTENNA on the order of a vertical but better than one for INTENSIFIED OMNIDIRECTIVITY.

Now for the mathematics. Let's talk about the numerical figures regarding wavelengths. Let's say a 20 meter HALF WAVE dipole is to be constructed to resonate with a very low SWR at 14.300. Using the formula 468/frequency , we see that such a dipole must be 32.7 feet which equates to 32'8". Let's now convert that to inches. 32' x 12 =384 inches +8=392 inches. That's a HALF WAVE. Double it and we get 784 inches therefore we now know there are 784 inches in a FULL WAVE dipole FOR 14.300. The reflector we discussed which ALWAYS GOES BENEATH the dipole i.e. driven element can be between .15 to .2 wavelengths in distance. What then has to be the length it we place it, for example .15 wavelengths below? Simply multiply 784 x .15 and we come out with 117.6 inches and divide by twelve to convert to feet and we get 9.8 which is 9 feet,10 inches. That is the minimum distance the reflector must be placed underneath the dipole. The maximum is .2

wavelengths and to change that to feet multiply 784 x .2=156.8 inches, divide by 12 and we come up with 13 feet. We now know that the reflector can be placed from 9 feet, 10 inches to 13 feet below. MIne is at 10 feet; supposedly increasing the distance will give more gain but I do just fine right where it is.

The reflector must be 6% LONGER than the dipole. We already know the length of that dipole for 14.300 is 392 inches. Multiply by .06 and we get 23.5 inches which is 23'6" and that's the length of my reflector.

So now with the math done, we proceed to erect that Cloudwarmer. Put up a dipole 16'4" from either side of the center insulator and feed it with any length of, for example, RG8U. Take an SWR reading and WRITE IT DOWN..it's VERY IMPORTANT.
Next, string out a relector wire about 10 feet below and about 2 feet LONGER as parallel as possible. Each end should terminate in insulators. There is NO ELECTRICAL CONNECTION between it and the driven element dipole nor is there any electrical connection between it and the coax feed. It just hangs there minding its own business but is nevertheless the secret to success!

Now take an SWR reading with everything in place. If you see ANY change whatsoever, good or bad, LEAVE THE INSTALLATION ALONE! It's working! If there's no change then either LOWER the reflector 6" at a time or LENGTHEN it by a few inches. What we MUST see is a change in that SWR. Once it happens, go work the world and YOU WILL.

We know that a dipole less than a full wavelength high has a multilobular pattern with appreciable ground loss. Now when we use a vertical at ground level, we must add radials. Why? Because we must minimize ground loss. The radials are RF collectors meaning that the emitted RF instantaneously is picked up by them and RETURNED to the base of the vertical to be RERADIATED at about 15 degrees to the horizon. That reflector acts just about the same way. It MINIMIZES ground losses by reradiating the RF into the "clouds" at much higher intensity than will a standard dipole and your signal will be heard in places you never knew existed. The Cloudwarmer has APPRECIABLE gain on receive versus a standard dipole and vertical-REMARKABLE GAIN. And on transmit, try switching back and forth between it and another antenna and see what happens. The person on the other end will be STUNNED!

5209. Re: 40-Meter Vertical Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 01:12:01 UTC
From: thompson@mindspring.com
Message-ID: <99129d$i1t$1@nntp9.atl.mindspring.net>
Source record: 168083

I have a short Mor-Gain Dipole (66') for 80 and 40 mounted almost vertical
from a rall tree branch. It actually slopes 20 degrees
on the ground side end. The pattern is nearly omni with slight directivity
toward the east (NOT GAIN!). The end is about 12 feet
off the ground. ANY horizontal dipole or inverted V willl work better for
short skip (within 800 to 1000 miles) but where it comes to the fore
is DX as it has a low angle comparable to a vertical. This antenna worked
D68C on one call on 75 SSB.

Dave K4JRB

5210. QST---QST--Fractal Antenna Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 02:18:50 UTC
From: fractenna@aol.com
Message-ID: <20010317211850.13654.00000015@ng-fm1.aol.com>
Source record: 168084

I'd like to pass along this invitation for all interested hams to join us on the fractal antenna reflector. This is the primo forum on the web for the discussion of fractal antennas. Moderated, lively, and filtered for spam and off topic comments this is the home of fun feedback on a ham-grown technology.

Dr. Cohen participates in this forum and it is the only one he responds to on the web.

To join:

fractalantenna-subscribe@yahoogroups.com

73
Phil N1ZKT

5211. Re: 220 MHz...Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 02:31:02 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <9916l6bpk2@bashir.peak.org>
Source record: 168086

carl domanico <carl.domanico@verizon.net> wrote:
: Hi anyone have the plans for a nice 220 MHz..Yagi/Beam Antenna..Nothing
: too big..say 3 to 5 elements, simple to construct, say about 10 DB
: Foward Gain, Standard aluminum Tubing...

You should be able to find what you want in any Radio Amateur's Handbook.

--
Bill Nelson (billn@peak.org)

5212. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 02:33:50 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <7h48btoglnsi619h5gk8lkn015f46lv4av@4ax.com>
Source record: 168085

On Tue, 20 Feb 2001 13:52:06 GMT, "VE9SRB" <srbest@att.net> wrote:
>I fully understand why its called "path loss". Most people understand the
>end result. Describing the process is where problems usually arise. My
>comments were directed at your statement "if there is no dissipation there
>is no propagation". Dissipation of energy in the form of heat is not a
>requirement for the propagation of EM energy. It may however, be part of
>the propagation process. The distribution of energy in space as it travels
>away from a source is not a heat dissipation issue as your statement might
>lead some to believe.

Why would that be, Steve? Is it not heat because it is confined to a narrow band
of frequencies rather than having a black body spectrum? Is the shape of a signal's
spectrum the determining factor in deciding when radiation is heat and when it is not?
I don't think so. The principles don't change with frequency.

From our provincial viewpoints, we often want to confine heat radiation to the infrared,
because we can sense that directly with the nerves in our skin, but there is no principle
which requires this limited view. All radiation is thermal in the sense that it can agitate
matter when it encounters it. Low frequencies just don't do it as vigorously as higher
frequencies.

Energy radiated from a point source *is* dissipated throughout space, whether that
point source is a candle flame or an amateur radio antenna. Dissipation is energy
dispersion from the source in such a manner that it is irretrievable by the source in
the same form, IE entropy of the transmitting system increases. Except in the case
of a radar system, that describes what occurs with any radiating system.

Of course the energy doesn't cease to exist, energy can neither be created
nor destroyed (ignoring nuclear events for this discussion). It either goes
somewhere else, or changes to another form. But the key thing with
respect to dissipation is that the source can't get it back in the same form.
Resistors do it, antennas do it, infinitely long transmission lines do it. etc.
(Which is why we can treat all of them as equivalents in system equations.)

Gary Peach is right that all propagation is dissipative. If all the energy were
still available to the source, it couldn't be said to have propagated. Once it
leaves at the speed of light, nothing is fast enough to run it down and bring
it back. It is gone irretrievably.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
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5213. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 02:44:30 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <2188btk6r39v9d7vfdtgasnu1jm6b9calr@4ax.com>
Source record: 168087

On Thu, 22 Feb 2001 20:06:58 -0000, "Gary Peach" <xcg34@dial.pipex.com> wrote:
>"Richard Harrison" wrote
>> Gary Peach wrote:
>> "What is the limit of their useful range (assume unmodulated)? note:
>> space loss to 16,000km at 2GHz=183dB.
>>
>> The signal is periodic. Processing to distinguish this periodicity may
>> be improved making a weaker signal detectable. How much can sifting the
>> signal from its background be improved?
>
>There will eventually be a point when the wave has insufficient energy to
>make any difference to the input condition of the receiver, the wave will be
>spent. Please do not complicate the issue by using FFT etc.

Even if you do use signal processing, Shannon sets a hard limit at
-1.6 dB Eb/No. So when the signal power of any given information
symbol is -1.6 dB below the noise power in the matched bandwidth
used to convey the symbol, you've gone as far as you can go.

Gary
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5214. Re: 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 02:55:33 UTC
From: jim <kg4enu@carolina.rr.com>
Message-ID: <5h88bts6gc1t679v9knj7i1ervav1vq9nt@4ax.com>
Source record: 168088

Thanks...just did that...kinda......, made one out of a 11meter
stinger cut to 54".....works great....

Kg4enu

On Sat, 17 Mar 2001 15:04:50 -0800, Martin Hibbs <mhibbs@ipeg.com>
wrote:

>jim wrote:
>
>> anybody built / or have plans for a cheap 6meter mobil
>> antenna...either 50-51 mhz..or 53-54 mhz...Thanks
>>
>> Jim-kg4enu
>
>Jim,
>
>Probably the cheapest and easiest 6m mobile antenna is a Radio Shack
>102" steel CB whip. Cut it down to 1/4 wave on 6 and away you go.
>Depending on your individual mounting system/location the length will
>be something in the 54" range. Start long and adjust length carefully
>and in small increments.
>
>Marty
>N7MX
>

5215. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 03:17:02 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <pl88bt0e5iqij1qp7atrikqguhe8mjc6ni@4ax.com>
Source record: 168089

On Sat, 17 Feb 2001 20:43:13 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:
>Peter K1PO wrote:
>"It is not fair to characterize a diode as a resistor."
>
>I called the diode a "dissipationless resistance", not a dissipationless
>resistor (there is no such thing). I didn`t call it a resistor because
>all resistors convert the energy they accept into heat instantly.
>Resistors don`t store electrical energy, it undergoes instant
>conversion.
>
>A resistor is one type of resistance. Not every resistance is a
>resistor.
>
>A diode used to inhibit current has insignificant energy storage as it
>is not using reactance to limit current. Voltage and current are
>in-phase. Power loss in the diode is insignificant, so there is no
>significant resistor there. The diode is acting as a dissipationless
>resistance, not as a resistor.

Nonsense. Lets assume an ideal diode for the sake of discussion.
If you attempt to measure the resistance of the diode, during one
half cycle, it will measure infinite, during the other half cycle it will
measure zero. At no time is it similar to the resistance of the light
bulb, which it would have to be for your "dissipationless resistance"
argument to be true. It doesn't work out if you try to average its
resistance either. Infinity plus zero divided by 2 is still infinity.

But for the sake of argument, lets assume the diode is a "dissipationless"
resistance. Then if we shunt two of these diodes in series to ground, we
should be able to measure half the supply voltage at the junction of the two
diodes. Do we? No we don't. Not ever, not even as an average. A pair of
equal resistances would show us half the supply voltage, but the diodes
don't, so we must conclude they aren't resistances, dissipationless or
otherwise.

If a resistance is a resistance, it must obey all the laws relating to resistance.
If it doesn't, it isn't a resistance. These diodes don't obey Kirchhoff's law for
series resistances, so they aren't resistances.

Gary
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5216. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 03:21:05 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB429A1.16F1E971@IEEE.org>
Source record: 168090
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

wf3h@ptd.net wrote:
>
> <Cecil.A.Moore@IEEE.org> wrote:
> >It has everything to do with HF configurations not being able to
> >deliver the required performance.
>
> which never was the intent of HF operations.

Who said it was??? The point is that a bunch of my friends who once
were CBers are now Techs because HF did not meet their needs and
VHF did. And HF still doesn't meet their needs.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5217. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 03:32:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB42C64.F2AAD537@IEEE.org>
Source record: 168091

Gary Coffman wrote:
> Energy radiated from a point source *is* dissipated throughout space, whether that
> point source is a candle flame or an amateur radio antenna. Dissipation is energy
> dispersion from the source in such a manner that it is irretrievable by the source in
> the same form, IE entropy of the transmitting system increases.

From The IEEE Dictionary: "dissipation (electrical energy) Loss of electric
energy as heat."
--
http://www.mindspring.com/~w6rca

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-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5218. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 05:25:12 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <YEXs6.3889$M%2.300969@bgtnsc05-news.ops.worldnet.att.net>
Source record: 168092

"Gary Coffman" <ke4zv@bellsouth.net> wrote in message
news:7h48btoglnsi619h5gk8lkn015f46lv4av@4ax.com...
> On Tue, 20 Feb 2001 13:52:06 GMT, "VE9SRB" <srbest@att.net> wrote:
> >I fully understand why its called "path loss". Most people understand
the
> >end result. Describing the process is where problems usually arise. My
> >comments were directed at your statement "if there is no dissipation
there
> >is no propagation". Dissipation of energy in the form of heat is not a
> >requirement for the propagation of EM energy. It may however, be part of
> >the propagation process. The distribution of energy in space as it
travels
> >away from a source is not a heat dissipation issue as your statement
might
> >lead some to believe.
>
> Why would that be, Steve? Is it not heat because it is confined to a
narrow band
> of frequencies rather than having a black body spectrum? Is the shape of a
signal's
> spectrum the determining factor in deciding when radiation is heat and
when it is not?
> I don't think so. The principles don't change with frequency.
>
> From our provincial viewpoints, we often want to confine heat radiation to
the infrared,
> because we can sense that directly with the nerves in our skin, but there
is no principle
> which requires this limited view. All radiation is thermal in the sense
that it can agitate
> matter when it encounters it. Low frequencies just don't do it as
vigorously as higher
> frequencies.
>
> Energy radiated from a point source *is* dissipated throughout space,
whether that
> point source is a candle flame or an amateur radio antenna. Dissipation is
energy
> dispersion from the source in such a manner that it is irretrievable by
the source in
> the same form, IE entropy of the transmitting system increases. Except in
the case
> of a radar system, that describes what occurs with any radiating system.
>

> Of course the energy doesn't cease to exist, energy can neither be created
> nor destroyed (ignoring nuclear events for this discussion). It either
goes
> somewhere else, or changes to another form. But the key thing with
> respect to dissipation is that the source can't get it back in the same
form.
> Resistors do it, antennas do it, infinitely long transmission lines do it.
etc.
> (Which is why we can treat all of them as equivalents in system
equations.)
>
> Gary Peach is right that all propagation is dissipative. If all the energy
were
> still available to the source, it couldn't be said to have propagated.
Once it
> leaves at the speed of light, nothing is fast enough to run it down and
bring
> it back. It is gone irretrievably.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

Hi Gary:

"Dissipation" infers that energy is lost in the form of heat. EM energy is converted to thermal energy. When an EM wave propagates away from an antenna, the energy density thins out as a function of distance traveled. This process (the rate of energy thinning) is identical for all frequencies. This is the basis for the derivation of the familiar path loss formula. At an infinite distance, the thinning process will cause the energy density to go to zero, but this is not a "dissipation" process. Dissipation of the energy will only occur if the energy encounters a lossy medium. The formula for path loss is written as a function of frequency because an antenna with a defined physical aperture extracts less total energy out of a passing wave with increasing frequency.

Steve, VE9SRB

5219. re: R5 Vertical ..high SWR readings..heres some tips..

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 06:02:46 UTC
From: earlve3ab@igs.net
Message-ID: <3ab44dea.24383403@news.igs.net>
Source record: 168093

with the R5 ..there are some things to really watch for...make sure
the fiberglass base insualator is really clean and all the joints are
cleaned and properly treated with antioxidant
" i like..butternuts brand "butter-its-not". Keeping that base
insulator free of conductive trails on the inner side is particularly
important. I bought a used R5 once and couldnt get the SWRs
right..but after a thorough cleaning with alcohol throughout..it
behaved as per the graphs in the manual...73 Earl VE3AB
ps..if you ever have to fix the base where the aluminum main
radiator fits into the base insulator..that dimension is important..
if it is "slid in" too much..you'll get poor swr curves and i would
venture..poor performance.

5220. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 06:58:38 UTC
From: richardharrison@webtv.net
Message-ID: <14206-3AB45C9E-111@storefull-113.iap.bryant.webtv.net>
Source record: 168095

Gary Coffman wrote:
"Nonsense."

A resistance is a ratio of voltage to curent in which the voltage is in phase with the current.
When current is flowing in a diode it is in phase with the voltage.

Given a perfect diode in series with an a-c circuit containing a resistive load, the perfect diode acts as a perfect switch which operates in synchronism with the applied voltage.

The power delivered to an a-c resistive circuit with no diode is peak voltage times peak current divided by two. Insert a diode and power is cut in half. The circuit is disconnected half the time. So, the power to the load will be peak voltage times peak current divided by four.

The effect on a resistive load over a complete cycle is the same on average as adding a series resistor in the circuit equal in value to the load. The temperature rise in the load will be the same either way the power is limited.

The temperature rise of the perfect diode will be nill because we`ve specified it is lossloss.

The temperature rise of the limiting resistor added to limit power to the same value as the diode does will be the same as that in the load resistance itself given a similar size shape, and surroundings.

So, with the diode limiter we have in effect a lossless resistance which is not a resistor. With the limiting resistance we have a resistor.

With the diode limiting the power supplied to the load, the power not wasting in a limiting resistance is not supplied by the source. The Class "C" amplifier and the switching regulator are among other devices using "lossless resistance" to current flow.

Best regards, Richard Harrison, KB5WZI

5221. FS: HF and 6 meter antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 07:13:12 UTC
From: k6stu@aol.com
Message-ID: <20010318021312.17564.00000031@ng-fm1.aol.com>
Source record: 168094

I have for sale the following antennas which are pick-up only in the Los Angeles area.
Mosley TA-36 6-elements on 20-15-10. $175.00, HY-GAIN 203BAS 3-ele 20 Meter beam $175.00 and 204BAS and 4-ele 20 meter beam $250.00 , Cushcraft 5 element 6-meter beam A50-5S $110.00, cubex 3-element Cubical quad no wire $175.00, cubex 4-element cubical quad with wire $350.00.
Mike, K6STU

5222. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 10:15:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <8IeApOBErIt6EAvn@ifwtech.plus.net>
Source record: 168096

W6RCecilA wrote:
>Gary Coffman wrote:
>> Energy radiated from a point source *is* dissipated throughout space, whether
>that
>> point source is a candle flame or an amateur radio antenna. Dissipation is
>energy
>> dispersion from the source in such a manner that it is irretrievable by the
>source in
>> the same form, IE entropy of the transmitting system increases.
>
>From The IEEE Dictionary: "dissipation (electrical energy) Loss of
>electric energy as heat."

Then the IEEE Dictionary is illiterate.

Gary C has it right. As any normal dictionary should tell you, the key feature of dissipation is that something - no matter what - has been lost and dispersed irretrievably. You can dissipate money, you can dissipate goodwill, and you can dissipate energy of any form.

The only essential requirement is that it's a loss from the system you're trying to account for, and you don't know where it went. In the case of dissipated money, it's gone out of your possession and you don't know where to. In the case of electrical (RF) energy in a transmitter-feedline-antenna system, some is dissipated as heat but hopefully most is dissipated as EM radiation.

It is quite wrong of the IEEE Dictionary to identify dissipation of electrical energy exclusively as heat.

It is also wrong to claim that "radiated RF energy is eventually degraded to heat, somewhere in that universe." It is true, of course; what's wrong is that it's cheating on the system boundaries. Dragging the universe into the argument is like saying, "I've dissipated all my money, but it must be out there somewhere..." - and just as pointless.

In any system smaller than the entire universe, we have to draw a boundary round it in order to analyse it. But then we must keep that boundary fixed, all the time. If we don't, the results of the analysis are going to be nonsense.

Power station engineers have a very clear sense of their system boundary - it's the perimeter fence. They account for their own energy inputs and losses on site, but their analysis ends with "watts sent out" to be dissipated by customers outside the fence. You won't catch a power station engineer wondering about that energy being degraded into heat

throughout the universe.

Likewise in an engineering analysis of a transmitter-feedline-antenna system, we're considering only the energy flows in the wires. Anything that isn't electrons flowing in a wire, is outside the system boundaries and not part of the analysis. Inside those system boundaries there is an exact balance:

(electrical energy supplied to transmitter) = (RF energy dissipated by EM radiation) + (energy dissipated in other ways, almost entirely heat)

The point about dissipation outside of the system is not that you shouldn't consider where it has gone - it's that you MUSTN'T.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5223. continous/linear loading

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 11:51:04 UTC
From: Maurice Murphy <Maurice20@btinternet.com>
Message-ID: <9928bnfrs1@plutonium.btinternet.com>
Source record: 168097

On the subject of so called meander dipoles and monopoles , they are really lumped continous loading of course. They do raise some very interesting questions and experiments galore have been going on at this qth.
I have constructed many dipoles and monopoles for
many different frequencies and also used meanders at different positions in a radiator in an effort to produce some sort of formula to predict the behaviour of an aerial wire loaded in this manner.
So far it would seem that given a constant area the
wavelength of the loading section increases by the root of the decrease in spacing. Meander sections also behave in the same way as inductors in that the wavelength absorbed is greater in high current areas.
As you mention I must point out that the feed point
of a resonant meander system (i.e. the centre in the case of a dipole)is not a current antinode. A full size loop aerial is a simple example of this principle as its perimeter exceeds one wavelength.
Come on gents lets hear if you have similar views.

5224. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 13:44:16 UTC
From: richardharrison@webtv.net
Message-ID: <12214-3AB4BBB0-157@storefull-117.iap.bryant.webtv.net>
Source record: 168100

Ian White, G3SEK wrote:
"From IEEE Dictionary, "dissipation (electric energy) loss of electric energy as heat."

"Then the IEEE Dictionary is illiterate."

Often there is more than one dictionary definition of a word. The definition to be used depends on how and who is using the word.

Ian is correct in saying: "You can dissipate money---". But the IEEE definition includes in paranthesis the words (electric energy) meant as a restriction of the definition to how it is used in the electric energy industry.In the industry among technical people it does not mean money irretrievably lost, and it does not mean electrical energy radiated from an antenna or anything else. It means electric energy converted to heat.

Best regards, Richard Harrison, KB5WZI

5225. Re: Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 13:56:43 UTC
From: Guy Shields <w4gbu@mindspring.com>
Message-ID: <3AB4BE9B.B635632B@mindspring.com>
Source record: 168099

Mauel,
Here's a site that has 6:1 baluns..
http://www.amidoncorp.com/f_ham.htm

Guy - W4GBU
http://www.mindspring.com/~w4gbu

"M.Fernando" wrote:

> Dear friends,
> Best 73's and tks for reading this message.
> I am looking for a balun (6:1) to build a Windom Antenna I have one but
> only for 500 W, I would like to found one but with more power around 1.5 K.
> My beam hab broken (ando rotator) so i need to have a wire while I buy a new
> one .
> Thanks for your help
> Manuel Fernando
> CT1BXX

5226. Re: 40-Meter Vertical Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 14:37:16 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <zMa0OjlPoHhkTRtI7BIqAzAu+5+M@4ax.com>
Source record: 168101

"PCB" <Xpaulc@mediaone.net> wrote:

>In the coming weeks, I will be installing a shortened 40-meter vertical
>dipole (60% of full size). I have two possible mounting configurations: 1)
>Ground mount on a glass insulator, or 2) mounted 25-feet in the air atop my
>chimney.
>
>Any educated opinions as to how the two will compare? At 7 MHz is there any
>ground reflection gain to be had that would add in phase with the direct
>wave in the far field? Thanks!
>
>-Paul, W4XR
>

For whatever it's worth, when I was a kid I put up a 40 meter ground plane.
About 33 feet of aluminum tubing, ground-mounted, sticking straight up. With 4
or 5 buried wire 1/4-wave radials, running every which way. Used a Heath AT-1,
putting out about 15 watts, cw.

It did okay within a few hundred miles, but I only made one cross-country
contact.

I probably needed more radials. Or more power.

Bob
k5qwg

5227. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 15:08:41 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB4CF78.6E255A83@mwci.net>
Source record: 168102

Richard Harrison wrote:

> In the industry among technical people it means electric energy converted
> to heat.

I agree.

RF energy radiated into space is not dissipated, it is "dispersed" in its original RF form. The fact that some of that energy can be recovered in a distant receiver proves that it is not "dissipated" (converted to heat).

The IEEE had in mind this specific idea. They are not "illiterate", except to those who disagree for whatever reason.

IEEE bashing seems to be a pastime.

Bill W0IYH

5228. WTB: large faced SWR wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 15:38:22 UTC
From: k9sqg@aol.com
Message-ID: <20010318103822.26179.00001419@ng-fa1.aol.com>
Source record: 168103

Posting this message for a visually impaired ham. He needs a very large faced SWR wattmeter, something like SWAN, Dosy, Siltronix, etc.

Please call Bill at 317-849-2487. His callsign is N9GWT.

Thanks for reading the posting.

73s,

Evan

5229. wiring a mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 16:29:25 UTC
From: Denis O' Flynn <denisf@eircom.net>
Message-ID: <Kn5t6.1161$_W2.1649@news.indigo.ie>
Source record: 168104

Hi,
Maybe I am on the wrong Newsgroup but I thought someone here might be able to help me.
I bought secondhand a 3 section tower. The rope wire had been cut so I could'nt determine how it was wired. I want my tower ssctions to go up in tandem with each other ie. the inner section to go up with the next section - so I will have support all the time.
Anyone do this job b4?? If so I would appreciate ur comments and/or help.

de Denis EI6HB
denisf@eircom.net

5230. 75 meter - real world question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 17:20:06 UTC
From: Bill Clarke <bill@w2blc.com>
Message-ID: <992qoo$fe1$1@newsfeed.logical.net>
Source record: 168116

In the populated regions of the lower 48, the dipole at 20 to 40 feet, or a similar inverted vee, rules. Verticals just do not do it for close in work.

My question: In the remote areas of West Texas, New Mexico, etc. what are the feelings towards these lower dipoles vs. verticals?

Thanks,

Bill W2BLC

5231. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 17:33:50 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <82s9bt46kea22ilp1v2j25gpgh894s2rol@4ax.com>
Source record: 168105

On Sat, 17 Mar 2001 21:32:52 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Gary Coffman wrote:
>> Energy radiated from a point source *is* dissipated throughout space, whether that
>> point source is a candle flame or an amateur radio antenna. Dissipation is energy
>> dispersion from the source in such a manner that it is irretrievable by the source in
>> the same form, IE entropy of the transmitting system increases.
>
>From The IEEE Dictionary: "dissipation (electrical energy) Loss of electric
>energy as heat."

C'Mon Cecil,

This is the same dictionary that has no definition for heat, isn't it?
>From The IEEE Dictionary: "dissipation (electrical energy) Loss of electric
>energy as that prickly feeling you get when you stand out in ths sun too long
>without that sunblock that your mother warned you to wear since the Ozone hole
>has been opening up."

73's
Richard Clark, KB7QHC

5232. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 17:36:33 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3AB4F221.ACE09275@wb6hqk.ampr.org>
Source record: 168106

Richard Clark wrote:
>
> On Sat, 17 Mar 2001 06:56:39 -0000, "Gary Peach"
> <xcg34@dial.pipex.com> wrote:
>
> >The Sun delivers
> >about 2 kW per square foot that is the value that the Solar panels that
> >provided the power for the Surveyors was calculated upon. You can use about
> >the same figure less some for atmospheric attenuation on Earth.
> >
> >It is interesting to note that even the best antennas are inefficient.
> >
> >Do your references give any figures for Sun Noise temperature and the
> >varience of them?
> >
> >73
> >--
> >Gary7SLL
>
> Hi Gary,
>
> I would ask about your spec of 2 KW per square foot.
>
> I have always used a loose figuring of 1KW/M**2 at noon, on an
> equinox, at the equator. I can't say that I have a ready reference to
> offer, but a simple browse of the net revealed one fellow's work with
> solar ovens and he specifies:
> >Ambient solar flux, direct beam radiation = 494.5 W/m2

Outside the earths atmosphere, the solar constant is 1384 W/m^2. The
actual value varies slightly with variation in the Earth - Sun distance
and solar activity. For many purposes such as calculating the output
available from a photovoltaic array, the spectrum can be considered to
be that of a blackbody at a temperature of around 6000 K.

bart
wb6hqk

5233. Re: wiring a mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 17:37:10 UTC
From: John Burrell <john@g8ozh.com>
Message-ID: <AB6t6.33215$g63.3840317@nnrp3.clara.net>
Source record: 168108

Denis,

Try the Tower-talk group.
Send an email to towertalk-request@contesting.com with the just the word subscribe in the message body.

Best of luck,

John

Denis O' Flynn <denisf@eircom.net> wrote in message news:Kn5t6.1161$_W2.1649@news.indigo.ie...
> Hi,
> Maybe I am on the wrong Newsgroup but I thought someone here might be
> able to help me.
> I bought secondhand a 3 section tower. The rope wire had been cut so I
> could'nt determine how it was wired. I want my tower ssctions to go up in
> tandem with each other ie. the inner section to go up with the next
> section - so I will have support all the time.
> Anyone do this job b4?? If so I would appreciate ur comments and/or
> help.
>
> de Denis EI6HB
> denisf@eircom.net
>
>
>

5234. RE: QST---QST--Fractal Antenna Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 17:39:04 UTC
From: HUMINT@opsyhopsy.com
Message-ID: <jUsT.aNoTheR.mEsSaGe.iD.98493714119009@opsyhopsy.com>
Source record: 168107

>From: (Fractenna)
>Date: 18 Mar 2001 02:18:50 GMT
>Organization: AOL http://www.aol.com

>I'd like to pass along this invitation for all interested hams to
join >us on the fractal antenna reflector. This is the primo forum
on the web >for the discussion of fractal antennas. Moderated, lively,
and filtered >for spam and off topic comments this is the home of
fun feedback on a >ham-grown technology.

>Dr. Cohen participates in this forum and it is the only one he responds
>to on the web.

>To join:fractalantenna-subscribe@yahoogroups.com

>73
>Phil N1ZKT

Thanks, Phil. By the way, a month ago on the reflector, Somebody
wrote:

}I have seen a variety of links on the web that talk about a "fractal
}dipole" but what they actually seem to have is the fractal 2 element
}quad. Is there a different design that has only one element and no
}reflector?

Any idea when the lively Moderator will respond to the month-old
question in the primo forum?

Thanks ever so much.

P.S. Nothing at www.N1IR.com

--
Posted from host4.websitesource.com [209.239.38.252]
via Mailgate.ORG Server - http://www.Mailgate.ORG

5235. Re: continous/linear loading

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:01:00 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <vbt9btgo1bia6ihh9d16s35h5v1cb2lk9k@4ax.com>
Source record: 168109

On Sun, 18 Mar 2001 11:51:04 -0000, "Maurice Murphy"
<Maurice20@btinternet.com> wrote:

>On the subject of so called meander dipoles and monopoles , they are really
>lumped continous loading of course. They do raise some very interesting
>questions and experiments galore have been going on at this qth.
> I have constructed many dipoles and monopoles for
>many different frequencies and also used meanders at different positions in
>a radiator in an effort to produce some sort of formula to predict the
>behaviour of an aerial wire loaded in this manner.
> So far it would seem that given a constant area the
>wavelength of the loading section increases by the root of the decrease in
>spacing. Meander sections also behave in the same way as inductors in that
>the wavelength absorbed is greater in high current areas.
> As you mention I must point out that the feed point
>of a resonant meander system (i.e. the centre in the case of a dipole)is
>not a current antinode. A full size loop aerial is a simple example of this
>principle as its perimeter exceeds one wavelength.
> Come on gents lets hear if you have similar views.
>

Hi Maurice,

There might be an element of your view at:
http://www.qsl.net/kb7qhc/antenna/fractal/Constant%20Band%20Comparisons.htm

73's
Richard Clark, KB7QHC

5236. Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:01:09 UTC
From: godart.christian@wanadoo.fr
Message-ID: <993fisqld3@wanadoo.fr>
Source record: 168135

Good morning, search shema antenna helix 144 & 400 Mhz
Tank you

5237. Re: Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:07:07 UTC
From: rb <rbigg@pcola.gulf.net>
Message-ID: <fP6t6.1756$gl.625334@bin1.nnrp.aus1.giganews.com>
Source record: 168110

Fernando--Radio Works sells a good one that will give you the power capability you want on 10-80m, but is downrated to 500 watts on 160m. Check out the balun and ant combinations on their website at www.radioworks.com

5238. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:12:20 UTC
From: richardharrison@webtv.net
Message-ID: <14205-3AB4FA84-258@storefull-113.iap.bryant.webtv.net>
Source record: 168114

I wrote:
"So, that gives 46.9 watts per square foot into the cell or 505 watts per square meter."

I discovered a glossary in the solarex book. It says: "AM 0" indicates that there is no atmosphere in the path of the light. This is the condition out of space where the power density is about 136 mW/cm squared."

Let`s see, 10,000x136mW is 1360 watts per square meter.

It also says: "AM 1" is the condition at the surface of the earth where the light passes through one atmosphere. The power density is 100mW/cm squared."

That would be 1 KW per square meter on earth.

So, it seems we have a two to one contradiction within the same little book. I have no explanation.

Best regards, Richard Harrison, KB5WZI

5239. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:25:50 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <yX7t6.8165$VQ4.1304056@e3500-chi1.usenetserver.com>
Source record: 168118

Roy Lewallen <w7el@eznec.com> wrote in message
news:3AB16D4B.A576B774@eznec.com...
> You're absolutely correct. Terman said that, so it must be so. From now
> on, I'll regard "time varying electric fields" and "electrostatic
> fields" as being the same thing. I stand corrected.

Roy, I hope you're statement above was intentionally cynical, because that's
the way I interpret it. I consider a " time-varying electrostatic field" an
oxymoron. Do you really mean you 'stand corrected'? Or have you become a
stand-up comedian? (Pun intended)
>
> Now that I think about it, the field I get from petting my cat is time
> varying, after all. . .

Yeah, and don't the fields cancel when you reverse the direction of the
petting? And without a Faraday shield yet!

Walt Maxwell, W2DU

> Roy Lewallen, W7EL

5240. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:26:01 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Z47t6.4675$9J5.357622@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168111

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:8IeApOBErIt6EAvn@ifwtech.plus.net...
> W6RCecilA wrote:
> >Gary Coffman wrote:
> >> Energy radiated from a point source *is* dissipated throughout space,
whether
> >that
> >> point source is a candle flame or an amateur radio antenna. Dissipation
is
> >energy
> >> dispersion from the source in such a manner that it is irretrievable by
the
> >source in
> >> the same form, IE entropy of the transmitting system increases.
> >
> >From The IEEE Dictionary: "dissipation (electrical energy) Loss of
> >electric energy as heat."
>
> Then the IEEE Dictionary is illiterate.
>
> Gary C has it right. As any normal dictionary should tell you, the key
> feature of dissipation is that something - no matter what - has been
> lost and dispersed irretrievably. You can dissipate money, you can
> dissipate goodwill, and you can dissipate energy of any form.
>
> The only essential requirement is that it's a loss from the system
> you're trying to account for, and you don't know where it went. In the
> case of dissipated money, it's gone out of your possession and you don't
> know where to. In the case of electrical (RF) energy in a transmitter-
> feedline-antenna system, some is dissipated as heat but hopefully most
> is dissipated as EM radiation.
>
> It is quite wrong of the IEEE Dictionary to identify dissipation of
> electrical energy exclusively as heat.
>
> It is also wrong to claim that "radiated RF energy is eventually
> degraded to heat, somewhere in that universe." It is true, of course;
> what's wrong is that it's cheating on the system boundaries. Dragging
> the universe into the argument is like saying, "I've dissipated all my
> money, but it must be out there somewhere..." - and just as pointless.
>
> In any system smaller than the entire universe, we have to draw a
> boundary round it in order to analyse it. But then we must keep that
> boundary fixed, all the time. If we don't, the results of the analysis

> are going to be nonsense.
>
> Power station engineers have a very clear sense of their system boundary
> - it's the perimeter fence. They account for their own energy inputs and
> losses on site, but their analysis ends with "watts sent out" to be
> dissipated by customers outside the fence. You won't catch a power
> station engineer wondering about that energy being degraded into heat
> throughout the universe.
>
> Likewise in an engineering analysis of a transmitter-feedline-antenna
> system, we're considering only the energy flows in the wires. Anything
> that isn't electrons flowing in a wire, is outside the system boundaries
> and not part of the analysis. Inside those system boundaries there is an
> exact balance:
>
> (electrical energy supplied to transmitter) = (RF energy dissipated by
> EM radiation) + (energy dissipated in other ways, almost entirely heat)
>
> The point about dissipation outside of the system is not that you
> shouldn't consider where it has gone - it's that you MUSTN'T.
>
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

Ian:

Energy radiated by an antenna is not "dissipated". This would infer that the energy was traveling in a lossy medium and was converted from one form to another.

Energy radiated from an antenna is dispersed in space. It simply travels away from the source. The energy density decreases with distance because of the dispersion process not dissipation.

The energy radiated by the antenna is not "lost" as you imply. If the energy was "lost" through dissipation it could never be recovered. In theory (this is impractical but it illustrates the point), if you could surround the antenna with a sphere capable of collecting all energy hitting the sphere, all of the energy radiated by the antenna could be recovered at any distance away from the antenna. The only time this would not be true is if the energy encountered a lossy medium as it traveled.

Steve

5241. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:26:57 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <5fDx8pAx3Pt6EAeb@ifwtech.plus.net>
Source record: 168112

William E. Sabin wrote:
>
>
>Richard Harrison wrote:
>
>> In the industry among technical people it means electric energy converted
>> to heat.
>
>I agree.
>
>RF energy radiated into space is not dissipated, it is "dispersed" in its
>original RF form. The fact that some of that energy can be recovered in a
>distant receiver proves that it is not "dissipated" (converted to heat).
>
>The IEEE had in mind this specific idea.

If I may reply to Bill and Richard together... sorry, I still can't accept conversion to heat as the exclusive definition of "dissipation" in the context of electrical and electronic engineering.

Bill's contention that RF energy radiated into space is not dissipated does not stand up to examination. Other than in radar, RF energy that has been radiated by a transmitter-feedline-antenna system is not recovered BY THE SYSTEM THAT RADIATED IT. Pardon my shouting, but the whole thing is about drawing the correct boundary around your system. When you analyse the DC to RF power conversion in your transmitting station, you never in fact consider the tiny fraction of the RF energy that might be received at the other end - because that is beyond the boundaries of your analysis.

To examine in more detail what Bill said:
>The fact that some of that energy can be recovered in a
>distant receiver proves that it is not "dissipated" (converted to heat).

On the contrary, it's easy to prove that 99.several-nines% of your radiated RF energy is indeed converted to heat. For example, if you transmit a 1000W signal, and a million receivers receive a picowatt each (7uV in 50 ohms) then only 0.0000001% of your radiated RF energy is ever "recovered". All the rest will converted to low-grade heat, somewhere in the universe. Therefore Bill's example only helps prove my point: once the RF energy has left your transmitter, it is totally dispersed to destinations unknown... and the word for that is "dissipated".

> They are not "illiterate", except
>to those who disagree for whatever reason.
>IEEE bashing seems to be a pastime.

It is certainly not my habitual pastime. I generally respect technical dictionaries, because the definitions have usually been examined at grat length by committees of very picky people. If such a definition looks strange to me, I always examine my own thinking first.

So I did - very carefully - and fully accept that conversion to heat is *one* valid use of the term "dissipation". What I don't accept is the implication that conversion to heat is the *only* valid use of the term in electrical and electronic engineering.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5242. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:43:33 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <OA6Mr3AVHQt6EAoQ@ifwtech.plus.net>
Source record: 168113

VE9SRB wrote:
>
>"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
>news:8IeApOBErIt6EAvn@ifwtech.plus.net...
>> W6RCecilA wrote:
>> >Gary Coffman wrote:
>> >> Energy radiated from a point source *is* dissipated throughout space,
>whether
>> >that
>> >> point source is a candle flame or an amateur radio antenna. Dissipation
>is
>> >energy
>> >> dispersion from the source in such a manner that it is irretrievable by
>the
>> >source in
>> >> the same form, IE entropy of the transmitting system increases.
>> >
>> >From The IEEE Dictionary: "dissipation (electrical energy) Loss of
>> >electric energy as heat."
>>
>> Then the IEEE Dictionary is illiterate.
>>
>> Gary C has it right. As any normal dictionary should tell you, the key
>> feature of dissipation is that something - no matter what - has been
>> lost and dispersed irretrievably. You can dissipate money, you can
>> dissipate goodwill, and you can dissipate energy of any form.
>>
>> The only essential requirement is that it's a loss from the system
>> you're trying to account for, and you don't know where it went. In the
>> case of dissipated money, it's gone out of your possession and you don't
>> know where to. In the case of electrical (RF) energy in a transmitter-
>> feedline-antenna system, some is dissipated as heat but hopefully most
>> is dissipated as EM radiation.
>>
>> It is quite wrong of the IEEE Dictionary to identify dissipation of
>> electrical energy exclusively as heat.
>>
>> It is also wrong to claim that "radiated RF energy is eventually
>> degraded to heat, somewhere in that universe." It is true, of course;
>> what's wrong is that it's cheating on the system boundaries. Dragging
>> the universe into the argument is like saying, "I've dissipated all my
>> money, but it must be out there somewhere..." - and just as pointless.
>>
>> In any system smaller than the entire universe, we have to draw a

>> boundary round it in order to analyse it. But then we must keep that
>> boundary fixed, all the time. If we don't, the results of the analysis
>> are going to be nonsense.
>>
>> Power station engineers have a very clear sense of their system boundary
>> - it's the perimeter fence. They account for their own energy inputs and
>> losses on site, but their analysis ends with "watts sent out" to be
>> dissipated by customers outside the fence. You won't catch a power
>> station engineer wondering about that energy being degraded into heat
>> throughout the universe.
>>
>> Likewise in an engineering analysis of a transmitter-feedline-antenna
>> system, we're considering only the energy flows in the wires. Anything
>> that isn't electrons flowing in a wire, is outside the system boundaries
>> and not part of the analysis. Inside those system boundaries there is an
>> exact balance:
>>
>> (electrical energy supplied to transmitter) = (RF energy dissipated by
>> EM radiation) + (energy dissipated in other ways, almost entirely heat)
>>
>> The point about dissipation outside of the system is not that you
>> shouldn't consider where it has gone - it's that you MUSTN'T.
>>
>>
>> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
>> 'In Practice' columnist for RadCom (RSGB)
>> http://www.ifwtech.com/g3sek
>
>Ian:
>
>Energy radiated by an antenna is not "dissipated". This would infer that
>the energy was traveling in a lossy medium and was converted from one form
>to another.
>
Sorry, Steve, but it's you who are inferring that.

We were trying to analyse what happens in the conversion of DC to RF
within the transmitting station. Within the boundaries of that analysis,
we do not know what happens to RF that is radiated - and more
importantly, we are not allowed to ask.

By considering how the RF energy travels through the propagation medium,
you have shifted the boundaries of your analysis and are now analysing a
different, extended, system.

>Energy radiated from an antenna is dispersed in space. It simply travels
>away from the source. The energy density decreases with distance because of
>the dispersion process not dissipation.
>
>The energy radiated by the antenna is not "lost" as you imply. If the
>energy was "lost" through dissipation it could never be recovered. In

>theory (this is impractical but it illustrates the point), if you could
>surround the antenna with a sphere capable of collecting all energy hitting
>the sphere, all of the energy radiated by the antenna could be recovered at
>any distance away from the antenna. The only time this would not be true is
>if the energy encountered a lossy medium as it traveled.

I understand and agree with all of that, but in the analysis of a
transmitting station, any discussion about RF propagation is outside the
original boundaries of the problem, and therefore inadmissible evidence.

IMO a good engineering definition of "energy dissipation" is
"irreversible transfer of energy beyond the boundaries of the system
under consideration." That includes the IEEE definition as a subset.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5243. RE: QST---QST--Fractal Antenna Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 18:57:45 UTC
From: fractenna@aol.com
Message-ID: <20010318135745.00475.00001937@ng-cd1.aol.com>
Source record: 168115

>
>
>>From: (Fractenna)
>>Date: 18 Mar 2001 02:18:50 GMT
>>Organization: AOL http://www.aol.com
>
>>I'd like to pass along this invitation for all interested hams to
>join >us on the fractal antenna reflector. This is the primo forum
>on the web >for the discussion of fractal antennas. Moderated, lively,
>and filtered >for spam and off topic comments this is the home of
>fun feedback on a >ham-grown technology.
>
>>Dr. Cohen participates in this forum and it is the only one he responds
>>to on the web.
>
>>To join:fractalantenna-subscribe@yahoogroups.com
>
>>73
>>Phil N1ZKT
>
>
>
> Thanks, Phil. By the way, a month ago on the reflector, Somebody
>wrote:
>
>}I have seen a variety of links on the web that talk about a "fractal
>}dipole" but what they actually seem to have is the fractal 2 element
>}quad. Is there a different design that has only one element and no
>}reflector?
>
> Any idea when the lively Moderator will respond to the month-old
>question in the primo forum?
>
> Thanks ever so much.
>
>
>
>P.S. Nothing at www.N1IR.com
>
>

Doubt he will answer at all at the moment as he is incredibly busy.

The question wasn't directed at the Moderator. Are you sure someone else
didn't answer it offline? Lots of others answer those question too.

73
de Phil
N1ZKT

5244. Re: QST---QST--Fractal Antenna Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 19:11:32 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <icv9btslm4e6m5undhmlaoni1cect0qedh@4ax.com>
Source record: 168117

On Sun, 18 Mar 2001 17:39:04 +0000 (UTC), HUMINT@opsyhopsy.com (Achmed Katarash) wrote:

>
>>From: (Fractenna)
>>Date: 18 Mar 2001 02:18:50 GMT
>>Organization: AOL http://www.aol.com
>
>>I'd like to pass along this invitation for all interested hams to
>join >us on the fractal antenna reflector. This is the primo forum
>on the web >for the discussion of fractal antennas. Moderated, lively,
>and filtered >for spam and off topic comments this is the home of
>fun feedback on a >ham-grown technology.
>
>>Dr. Cohen participates in this forum and it is the only one he responds
>>to on the web.
>
>>To join:fractalantenna-subscribe@yahoogroups.com
>
>>73
>>Phil N1ZKT
>
>
>
> Thanks, Phil. By the way, a month ago on the reflector, Somebody
>wrote:
>
>}I have seen a variety of links on the web that talk about a "fractal
>}dipole" but what they actually seem to have is the fractal 2 element
>}quad. Is there a different design that has only one element and no
>}reflector?
>
> Any idea when the lively Moderator will respond to the month-old
>question in the primo forum?
>
> Thanks ever so much.
>
>
>
>P.S. Nothing at www.N1IR.com

Hi Achmed,

Most of my designs are vertical monopoles so that I can leverage the complexity of design against a perfect ground. Thus, by abstraction,

they are dipoles. If this is acceptable, then you might try:
http://members.home.net/kb7qhc/antenna/fractal/index.htm

I have quite a backlog of other designs that are dipoles. The
following link shows the progressions of iterations for a triangle
sweep that is dipole in nature:
http://members.home.net/kb7qhc/antenna/fractal/Triangle%20Sweep/index.htm

Another design that I offer as a practical one (I am not interested in
practicality by and large - this field defies that from the get-go)
also meets your interest in dipoles:
http://members.home.net/kb7qhc/antenna/fractal/InVfracV/index.htm

These sites are free of:
primo
Moderated
lively
filtered
fun

for your convenience ;->

73's
Richard Clark, KB7QHC

5245. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 19:29:10 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <a08t6.4709$9J5.364526@bgtnsc06-news.ops.worldnet.att.net>
Source record: 168119

Ian:

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:OA6Mr3AVHQt6EAoQ@ifwtech.plus.net...
> VE9SRB wrote:
> >
> >"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
> >news:8IeApOBErIt6EAvn@ifwtech.plus.net...
> >> W6RCecilA wrote:
> >> >Gary Coffman wrote:
> >> >> Energy radiated from a point source *is* dissipated throughout
space,
> >whether
> >> >that
> >> >> point source is a candle flame or an amateur radio antenna.
Dissipation
> >is
> >> >energy
> >> >> dispersion from the source in such a manner that it is irretrievable
by
> >the
> >> >source in
> >> >> the same form, IE entropy of the transmitting system increases.
> >> >
> >> >From The IEEE Dictionary: "dissipation (electrical energy) Loss of
> >> >electric energy as heat."
> >>
> >> Then the IEEE Dictionary is illiterate.
> >>
> >> Gary C has it right. As any normal dictionary should tell you, the key
> >> feature of dissipation is that something - no matter what - has been
> >> lost and dispersed irretrievably. You can dissipate money, you can
> >> dissipate goodwill, and you can dissipate energy of any form.
> >>
> >> The only essential requirement is that it's a loss from the system
> >> you're trying to account for, and you don't know where it went. In the
> >> case of dissipated money, it's gone out of your possession and you
don't
> >> know where to. In the case of electrical (RF) energy in a transmitter-
> >> feedline-antenna system, some is dissipated as heat but hopefully most
> >> is dissipated as EM radiation.
> >>
> >> It is quite wrong of the IEEE Dictionary to identify dissipation of
> >> electrical energy exclusively as heat.

> >>
> >> It is also wrong to claim that "radiated RF energy is eventually
> >> degraded to heat, somewhere in that universe." It is true, of course;
> >> what's wrong is that it's cheating on the system boundaries. Dragging
> >> the universe into the argument is like saying, "I've dissipated all my
> >> money, but it must be out there somewhere..." - and just as pointless.
> >>
> >> In any system smaller than the entire universe, we have to draw a
> >> boundary round it in order to analyse it. But then we must keep that
> >> boundary fixed, all the time. If we don't, the results of the analysis
> >> are going to be nonsense.
> >>
> >> Power station engineers have a very clear sense of their system
boundary
> >> - it's the perimeter fence. They account for their own energy inputs
and
> >> losses on site, but their analysis ends with "watts sent out" to be
> >> dissipated by customers outside the fence. You won't catch a power
> >> station engineer wondering about that energy being degraded into heat
> >> throughout the universe.
> >>
> >> Likewise in an engineering analysis of a transmitter-feedline-antenna
> >> system, we're considering only the energy flows in the wires. Anything
> >> that isn't electrons flowing in a wire, is outside the system
boundaries
> >> and not part of the analysis. Inside those system boundaries there is
an
> >> exact balance:
> >>
> >> (electrical energy supplied to transmitter) = (RF energy dissipated by
> >> EM radiation) + (energy dissipated in other ways, almost entirely
heat)
> >>
> >> The point about dissipation outside of the system is not that you
> >> shouldn't consider where it has gone - it's that you MUSTN'T.
> >>
> >>
> >> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> >> 'In Practice' columnist for RadCom (RSGB)
> >> http://www.ifwtech.com/g3sek
> >
> >Ian:
> >
> >Energy radiated by an antenna is not "dissipated". This would infer that
> >the energy was traveling in a lossy medium and was converted from one
form
> >to another.
> >
> Sorry, Steve, but it's you who are inferring that.
>

> We were trying to analyse what happens in the conversion of DC to RF
> within the transmitting station. Within the boundaries of that analysis,
> we do not know what happens to RF that is radiated - and more
> importantly, we are not allowed to ask.
>
>
> By considering how the RF energy travels through the propagation medium,
> you have shifted the boundaries of your analysis and are now analysing a
> different, extended, system.

The boundaries of the "system" must go beyond the transmit station. To understand the process of radiation from an antenna and the resulting propagation to the recieve system (dispersion), we can't simply limit our boundaries to the transmit station and then declare that all the energy that left is "dissipated".

Because you "do not know what happens to RF that is radiated" is exactly why your definition of "dissipation" is incorrect. All you know is that the energy is radiated from the transmit system. If you do not want to look beyond the boundary of the transmit station then your discussion should stop at "radiation".

>
> >Energy radiated from an antenna is dispersed in space. It simply travels
> >away from the source. The energy density decreases with distance because
of
> >the dispersion process not dissipation.
> >
> >The energy radiated by the antenna is not "lost" as you imply. If the
> >energy was "lost" through dissipation it could never be recovered. In
> >theory (this is impractical but it illustrates the point), if you could
> >surround the antenna with a sphere capable of collecting all energy
hitting
> >the sphere, all of the energy radiated by the antenna could be recovered
at
> >any distance away from the antenna. The only time this would not be true
is
> >if the energy encountered a lossy medium as it traveled.
>
> I understand and agree with all of that, but in the analysis of a
> transmitting station, any discussion about RF propagation is outside the
> original boundaries of the problem, and therefore inadmissible evidence.
>

As stated above, your discussion should stop at the concept of radiation. Your statement that "any discussion about RF propagation is outside the original boundaries of the problem" would also preclude you from stating that the energy outside your boundary is "dissipated". All you know is that the energy is outside of your boundary and you should not discuss further.

Unless you are willing to look beyond your boundary, you should not challenge those who do.

>
> IMO a good engineering definition of "energy dissipation" is
> "irreversible transfer of energy beyond the boundaries of the system
> under consideration." That includes the IEEE definition as a subset.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

5246. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 19:58:35 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB5136B.4759A590@mwci.net>
Source record: 168120

Ian White, G3SEK wrote:

> If I may reply to Bill and Richard together... sorry, I still can't
> accept conversion to heat as the exclusive definition of "dissipation"
> in the context of electrical and electronic engineering.

One is certainly entitled to one's opinions. My opinion is not the same as yours. I agree with the "illiterate" IEEE. My opinion stands up to my examination (and the IEEE's) just fine.

Radiated electromagnetic waves can travel virtually forever, for example galaxies that exploded 5 billion light years ago. There is a satellite telescope that is now measuring the X-rays from their black holes.

>once
>the RF energy has left your transmitter, it is totally dispersed to
>destinations unknown... and the word for that is "dissipated".

"Dissipated" is your word for it and that is OK for you. My word for it is "dispersed" and that is OK for me. But they are not the same thing.

The space beyond a free-space (for example) antenna is a transmission line. The antenna is a "transducer" from the 50 ohm line to the 377 ohm line. Space is nothing more than an "extension" of the physical antenna. The total electromagntic energy is essentially the same everywhere, near or far. The beam pattern in free space is exactly the beam pattern that the antenna gives it. To think of that process as dissipation is strange and contrived, in *my* opinion.

In my opinion the illiterate IEEE and (presumably) the illiterate IEE know what dissipation is and what dissipation isn't.

And as for the other 99.9999% that you mentioned, are you sure you know (and how do you know) what is happening to it? If all of it is being picked up, is any of it dissipated? If no one hears it is is all dissipated? Does dissipation really depend on how many receivers are tuned in? I believe you have a logical dilemma regarding "dissipation" in this context.

Bill W0IYH

5247. Balun location on LPY

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:07:41 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <hA8t6.42020$Ok4.3966351@news1.rdc1.ct.home.com>
Source record: 168121

My Log antenna instructions recommend placing a balun at the feedpoint; but I am wondering if the the balun wouldn't be better if placed at the mast plate.. My thinking is with the coax being strapped to the lower boom a lot of energy would be capacitively coupled to the shield; thus defeating whatever was gained by having the balun at the feedpoint.

Where is the best place to put the balun, and what would work best on a 13 to 30 MHz design; ferrite sleeve or coaxial loop?

Thanks

Pete

5248. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:23:11 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB5192F.6A2DC70A@IEEE.org>
Source record: 168123

"Ian White, G3SEK" wrote:
>
> W6RCecilA wrote:
> >From The IEEE Dictionary: "dissipation (electrical energy) Loss of
> >electric energy as heat."
>
> Then the IEEE Dictionary is illiterate.

If we don't agree on definitions then communications is impossible.
What higher standard exists than the IEEE dictionary?
--
http://www.mindspring.com/~w6rca

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5249. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:23:38 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB5194A.822113D8@mwci.net>
Source record: 168122

Roy Lewallen wrote:

> I'm afraid that people are confusing electrostatic fields with
> time-varying electric fields.

The term "electrostatic capacitance" refers, as a matter of convenience, to the ratio of charge to voltage in a *physical* capacitor. This C is thus distinctive from the C of free space, which is associated with EM waves. In a shielded loop, "static" C is the actual, physical capacitive coupling from a nearby object to the loop that is inside the Faraday shield. It's just a matter of convenience that Terman uses. Nobody is confused.

In the case of the loop antenna, it is helpful to use a literary device of this kind to avoid ambiguity.

Bill W0IYH

5250. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:30:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB51AC8.BB9C2121@IEEE.org>
Source record: 168126

"William E. Sabin" wrote:
> RF energy radiated into space is not dissipated, it is "dispersed" in its
> original RF form. ... IEEE bashing seems to be a pastime.

Webster's muddies the water when it indicates that dissipate and
disperse are synonyms in any field except physics.
--
http://www.mindspring.com/~w6rca

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5251. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:34:20 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB51BCC.D72BF240@IEEE.org>
Source record: 168124

"Ian White, G3SEK" wrote:
> What I don't accept is the
> implication that conversion to heat is the *only* valid use of the term
> in electrical and electronic engineering.

The IEEE dictionary allows another valid definition of "dissipation -
(2)(waveguide) The power reduction in a transmission path caused by
resistive or conductive loss, or both."
--
http://www.mindspring.com/~w6rca

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5252. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:36:42 UTC
From: kelly@dvol
Message-ID: <3ab51b59.55054908@news2.dvol.com>
Source record: 168125
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sat, 17 Mar 2001 10:14:15 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>reason for them to want to upgrade. A few of them who have
>moved away from the Valley of the Sun have become interested
>in HF.
>
So the repeater craps out, then what? 75m HTs is what. HF doesn't need
infrastucture to get the job done.
>
>--
>http://www.mindspring.com/~w6rca
>
w3rv

5253. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:39:41 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB51D0D.DC9F258A@IEEE.org>
Source record: 168128

"Ian White, G3SEK" wrote:
> IMO a good engineering definition of "energy dissipation" is
> "irreversible transfer of energy beyond the boundaries of the system
> under consideration." That includes the IEEE definition as a subset.

Well, if we set the boundaries as the universe, would you agree that
some RF that escapes the atmosphere of the earth is not dissipated
until the next big bang?
--
http://www.mindspring.com/~w6rca

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5254. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:43:32 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB51DF4.587B10FE@IEEE.org>
Source record: 168130

Richard Clark wrote:
> C'Mon Cecil,
> This is the same dictionary that has no definition for heat, isn't it?

It's not a dictionary of the English language, Richard, it is a
dictionary of technical terms. Presumable, "heat" is not a technical
enough term to be included in a dictionary published by the Institute
of Electrical and Electronic Engineers. They don't have a definition
of "as" either.
--
http://www.mindspring.com/~w6rca

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5255. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:45:16 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9936oshfi1@208.207.71.173>
Source record: 168127
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Brian Kelly, w3rv" wrote:
>
> On Sat, 17 Mar 2001 10:14:15 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >reason for them to want to upgrade. A few of them who have
> >moved away from the Valley of the Sun have become interested
> >in HF.
> >
> So the repeater craps out, then what? 75m HTs is what. HF doesn't need
> infrastucture to get the job done.

Aw comeon Brian, you kiljoy... None of this tech stuff ever craps out,
haven't you heard? And the local authorities have it all under complete
and total control, every time, all the time. Right.

Dick

5256. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:47:32 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB51EE4.7B4B2FB7@IEEE.org>
Source record: 168131

Walter Maxwell wrote:
> Yeah, and don't the fields cancel when you reverse the direction of the
> petting? And without a Faraday shield yet!

In my case, the fields cancel when the cat touches noses with me
much to our collective surprise.
--
http://www.mindspring.com/~w6rca

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5257. Guying Rohn 25G foldover

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 20:52:13 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <1e9t6.42025$Ok4.3973736@news1.rdc1.ct.home.com>
Source record: 168129

Is there anyway to guy a Rohn foldover using a three-point guying system,
or are four guy wires the only way it can be done?

--
Peter

5258. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 22:26:06 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <2Cat6.1895$X_5.73006@typhoon.mw.mediaone.net>
Source record: 168132
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:98uguu$fi9$0@208.206.142.103...
> No, Leland, no one is "bugged" about that. Many of us have dedicated a
> huge amount of our personal time to help make that happen, in case you
> didn't know what a VE does.

All it takes is one counter example to nullify that argument "no one", and
Richard has provided one.

Quoted from a Richard McCollum post in rec.radio.cb

"Pecking orders come in several flavors. I will make no bones here that I
do not consider a Codeless Tech to be a full-fledged member of the
fraternity and in fact I refused to administer them as a VE"

> What many are "bugged" about is the lowering of requirements,
> especially for the highest class of license. Nothing more.

That maybe true, but for some I think it goes deeper than that.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

5259. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 22:35:14 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <MIat6.759$ei1.2552741@nntp3.onemain.com>
Source record: 168133
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" <no-spam@junk-mail.net> wrote in message
news:2Cat6.1895$X_5.73006@typhoon.mw.mediaone.net...
>
> "Dick Carroll" <dixie@townsqr.com> wrote in message
> news:98uguu$fi9$0@208.206.142.103...
> > No, Leland, no one is "bugged" about that. Many of us have dedicated
a
> > huge amount of our personal time to help make that happen, in case you
> > didn't know what a VE does.
>
> All it takes is one counter example to nullify that argument "no one",
and
> Richard has provided one.
>
> Quoted from a Richard McCollum post in rec.radio.cb
>
> "Pecking orders come in several flavors. I will make no bones here that
I
> do not consider a Codeless Tech to be a full-fledged member of the
> fraternity and in fact I refused to administer them as a VE"
>
> > What many are "bugged" about is the lowering of requirements,
> > especially for the highest class of license. Nothing more.
>
> That maybe true, but for some I think it goes deeper than that.
>
> --
> 73's,
>
> Leland C. Scott
> KC8LDO

1. You are pretty badly out of context but I meant it then and mean it
now.

2. I do not participate in cross-posts. Pick a spot and I will be happy
to take you on.

Dick

5260. FS 48 foot tower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 22:49:34 UTC
From: Dan Yemiola <AI8O@qsl.net>
Message-ID: <3AB53B7E.F53A0A4A@qsl.net>
Source record: 168134

Rohn HBX-48.
Bolts, base stubs, included.
Never erected.
On ground, Ready to go.

$450 DELIVERED within 200 miles of Winston-Salem, North Carolina.
Dan Yemiola
AI8O
336-357-2996

5261. Solarcon, Hygain and MFJ HF antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 23:30:27 UTC
From: nz8c@aol.com
Message-ID: <20010318183027.24154.00001856@ng-fx1.aol.com>
Source record: 168136

I need a smaller sized HF antenna as I live in an apartment. It needs to be a vertical as there is no where to string a dipole. The following brands/models fit my needs but I would like to hear from people who have used them:
Solarcon A99
Hygain 12AVQ
Hygain 14AVQ/WB
MFJ 1796
I am very interested in hearing how these antennas work with DX. Any and all info would be helpful! Thanks in advance. Please email me direct at:
NZ8C@aol.com
73,
Renee

5262. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 23:34:03 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <FkFOSYBrXUt6EAqR@ifwtech.plus.net>
Source record: 168138

W6RCecilA wrote:
>"Ian White, G3SEK" wrote:
>> IMO a good engineering definition of "energy dissipation" is
>> "irreversible transfer of energy beyond the boundaries of the system
>> under consideration." That includes the IEEE definition as a subset.
>
>Well, if we set the boundaries as the universe, would you agree that
>some RF that escapes the atmosphere of the earth is not dissipated
>until the next big bang?

Possibly not - but the system we had been analysing stopped at the
antenna.

I've made my point as well as I know how, so there's nothing more to
say.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5263. Beeble Beeble Peep Peep Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-18 23:34:19 UTC
From: mike.luther@ziplog.com
Message-ID: <tbahfr68p4jv12@corp.supernews.com>
Source record: 168137

That got your attention! ;)

But seriously! What antenna frequency range, modulation technique and encryption parameters are involved in these beeble-beeble peep-peep wagh-wagh car alarm systems?

Inquiring mind wants to know!

--> Sleep well; OS2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3000.n117.z1.fidonet.org

5264. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 00:02:10 UTC
From: hf6v <Morse.Key@btinternet.com>
Message-ID: <993ia7$b1p$1@uranium.btinternet.com>
Source record: 168139

Yes you're quite correct, the radials attach to the bolt holding the lower end of
the coil. The coil is mounted across the insulation between the antenna and the
ground post. If the existing coil is corroded, it is very easy to wind a new one.
Be very sure that you only use stainless steel hardware to bolt the top and bottom
of the coil onto the HF6V.... be very careful not to let copper come into contact with
the aluminium of the antenna or ground post. The interaction between copper and
aluminium is dreadful and you will find the electrical connection deteriorates very
rapidly. So I would suggest having at least one stainless steel nut between the
copper of the coil and the antenna.

If you are putting the radials on, or under the ground, the length of the radial does
not have to be resonant as the ground will detune the things. The secret is to put
as much metal on or under the ground around the antenna. Remember that a lot of
short radials produce better results than a few long ones, a lot of long ones is even
better.

My experience with the HF6V over the last decade is that it is the best HF vert
around however, I have always ensured I have a good ground return path for
the RF, either radials or where that was inpractical then I've used a mat of chicken
wire around the antenna.

Please excuse me if I'm telling you things you already know.

Don't expect miracles on 80M or even more so on 160M if you consider
purchasing the additional coil., even from the HF6V,as Butternut say in
their literature "they can't beat the laws of physics".

As for the WARC band coil pack, my experience is that it degrades the performance
of the antenna overall, but perhaps I was unlucky.

If you've inherited a 75 ohm matching section then I'd consider renewing it
and
also any feeder that may have come with the antenna.

Finally ensure you go with the instructions about a decent DC earth
rod/rods,
these won't help much/at all, as regards RF performance but will help ground
static electricity.

Good luck with the HF6V, look after it and it will return your care with DX
that
the other guys with ********** verticals won't work.

73 Tony G 3 Z R J
the HF6V is a very short radiator on 80 and 160
Robert Moughton <mailliw@peoplepc.com> wrote in message
news:tb1c03odm8s9d5@corp.supernews.com...
> I recently inherited a HF6V antenna from my father and am trying to erect
> it. The question that I have is, How do I correctly install the Q base
coil
> located at the bottom of the antenna? I think that the instructions are
> showing that I connect each end of the coil across the base insulator and
> across the 75ohm matching cable. Then I suppose that the radials will
> connect to the bottom side of this coil. Does this sound correct?
>
>
> Bob Moughton
> N4RPK
>
>
>

5265. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 00:28:38 UTC
From: dennis@wawa.juniper.net
Message-ID: <993jrm$1vhf$1@heap.juniper.net>
Source record: 168140

William E. Sabin <sabinw@mwci.net> wrote:
>Ian White, G3SEK wrote:
>
>> If I may reply to Bill and Richard together... sorry, I still can't
>> accept conversion to heat as the exclusive definition of "dissipation"
>> in the context of electrical and electronic engineering.
>
>One is certainly entitled to one's opinions. My opinion is not the same as
>yours. I agree with the "illiterate" IEEE. My opinion stands up to my
>examination (and the IEEE's) just fine.
>
>Radiated electromagnetic waves can travel virtually forever, for example
>galaxies that exploded 5 billion light years ago. There is a satellite telescope
>that is now measuring the X-rays from their black holes.

I think it is strictly true that heat is always associated with molecular
motion, but electromagnetic radiation is a mechanism for heat transfer (the
other two are convection and conduction). If you run a current through
a resistor in a vacuum then virtually all the electrical energy the
resistor consumes will be transfered away from the resistor in the
form of electromagnetic radiation, some of which may never find other
matter to interact with and may hence travel forever. By your definition
wouldn't that make the resistor dispersive, but dissipationless?

>And as for the other 99.9999% that you mentioned, are you sure you know (and how
>do you know) what is happening to it? If all of it is being picked up, is any
>of it dissipated? If no one hears it is is all dissipated? Does dissipation
>really depend on how many receivers are tuned in? I believe you have a logical
>dilemma regarding "dissipation" in this context.

I'm also not sure why the ability to detect and measure energy would
preclude that energy from having been dissipated by its source. I have
no trouble detecting when my furnace is dissipating chemical energy as
heat, so I'm not uncomfortable with the idea that my radio receiver
detects energy that was dissipated by someone else's antenna.

Dennis Ferguson

5266. Re: Beeble Beeble Peep Peep Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 00:34:43 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3ab553a9$1_3@news.iglou.com>
Source record: 168141

I'm still trying to figure out what frequency the dog shocker collars use so
I can pester a barker.

mike.luther@ziplog.com wrote in message ...
>That got your attention! ;)
>
>But seriously! What antenna frequency range, modulation technique and
>encryption parameters are involved in these beeble-beeble peep-peep
>wagh-wagh car alarm systems?
>
>Inquiring mind wants to know!
>
>
>--> Sleep well; OS2's still awake! ;)
>
>Mike.Luther@ziplog.com
>Mike.Luther@f3000.n117.z1.fidonet.org
>

5267. Re: continous/linear loading

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 00:37:40 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <993k9begv1@uranium.btinternet.com>
Source record: 168142

Not another time-wasting, baffle-gabbing, set of old wives' tales ?

5268. Re: Screwdriver Antenna as a Base & Mobile question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 01:07:04 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3AB55BB8.CBA0D464@netdoor.com>
Source record: 168143

I used mine in the attic for a while, (we were between houses) I didn't know if
a counterpoise would help or not so I just unrolled about 8 feet of chicken wire
and set the screwdriver inna middle. Should have donw a before and after, but
it wus plum hot up there in august!

Butch

KA6PFE wrote:

> Hello all,
>
> The problem seems to be common, small backyard and no antenna's allowed. So
> I've been looking at different screwdriver antenna's that are available and
> of course every manufacturer's antenna is the best (just look at their web
> site).
>
> There's the ATAS (I have one of those), the DK3, BB3, Stealth, and others.
>
> Now here's the question (I hope not to create a spam war on this), which one
> would perform best in both a mobile and base environment using 80 thru 10 as
> the guideline?
>
> As a side note, the backyard is 12ft long by 6ft wide with a 6x6 patch of
> dirt that I was thinking of using something like a tri-pod mount on.
>
> Input would be appreciated.
>
> 73's
> Brian

5269. Re: Beeble Beeble Peep Peep Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 01:10:14 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3AB55C75.80DD93E2@netdoor.com>
Source record: 168144

In all alarms like this Mike the Burkshitzen with a right twist is used.
Every single one.

mike.luther@ziplog.com wrote:

> That got your attention! ;)
>
> But seriously! What antenna frequency range, modulation technique and
> encryption parameters are involved in these beeble-beeble peep-peep
> wagh-wagh car alarm systems?
>
> Inquiring mind wants to know!
>
> --> Sleep well; OS2's still awake! ;)
>
> Mike.Luther@ziplog.com
> Mike.Luther@f3000.n117.z1.fidonet.org

5270. Re: continous/linear loading

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 01:28:37 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <f4oabtcv6c9soas0ncadhf0spfu3lat7dq@4ax.com>
Source record: 168145

On Mon, 19 Mar 2001 00:37:40 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Not another time-wasting, baffle-gabbing, set of old wives' tales ?
>
>
>
Go ahead Punchinello,

Your old wive's tales are as good as any ;-)

73's
Richard Clark, KB7QHC

5271. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 02:52:57 UTC
From: dennis@wawa.juniper.net
Message-ID: <993sa9$2dst$1@heap.juniper.net>
Source record: 168146

VE9SRB <srbest@att.net> wrote:
>Energy radiated by an antenna is not "dissipated". This would infer that
>the energy was traveling in a lossy medium and was converted from one form
>to another.

The IEEE definition for dissipation was the conversion of electrical
energy to heat. Electromagnetic radiation is a mechanism for heat transfer
(the only mechanism that operates in a vacuum, the other mechanisms
are convection and conduction), so by the IEEE definition it would
seem that the energy was dissipated as soon as it left the antenna
in the form of electromagnetic radiation.

In fact I'm not entirely sure that the above is true, but what I am
sure of is that any argument that electrical energy isn't being
dissipated into electromagnetic radiation by the antenna has got
to involve the coherence of the resulting radiation. Other than
its coherence, the electromagnetic radiation emitted by an antenna
is indistiguishable from any other radiated heat.

>Energy radiated from an antenna is dispersed in space. It simply travels
>away from the source. The energy density decreases with distance because of
>the dispersion process not dissipation.

So, if I run a current through a resistor in space (i.e. a vacuum), does
that fact that all the energy consumed by the resistor is radiated
away from the resistor as electromagnetic radiation now mean that
resistors in space aren't dissipative, but rather are simply dispersive?

There are no processes where energy is not conserved, so suggesting that
a process is not dissipative because it is energy-conserving implies that
no process is dissipative. When I was in school processes which were
energy-conserving (all of them are) were still dissipative if they
produced entropy. People often say "conversion to heat" when they
mean entropy production, but in fact dispersive processes of any
sort generally produce entropy even if they don't involve an energy
conversion at all. For example:

>The energy radiated by the antenna is not "lost" as you imply. If the
>energy was "lost" through dissipation it could never be recovered. In
>theory (this is impractical but it illustrates the point), if you could
>surround the antenna with a sphere capable of collecting all energy hitting
>the sphere, all of the energy radiated by the antenna could be recovered at
>any distance away from the antenna. The only time this would not be true is
>if the energy encountered a lossy medium as it traveled.

Here you again argue that radiation isn't dissipative because energy is conserved, yet all processes conserve energy. Dissipation isn't associated with energy conservation (energy is always conserved), it is associated with entropy production, and the process you describe above appears to me to be entropy-producing.

Here is an analogy. I have two perfectly insulated buckets containing 10 kilograms of water, one at 60 degrees above ambient temperature and one at ambient temperature. If I have a thermometer to measure the temperature above ambient, and a scale to weigh each bucket, I can tell you how much heat energy I have in each bucket. The bucket at 60 degrees above ambient has heat, the one at ambient temperature has none.

I now mix the water from each bucket. After they mix (i.e. convective heat transfer), I measure the temperature and weight and discover that the total amount of heat in the mixture is identical to the total heat energy in the buckets I started with, with the 20 kilograms of water now being 30 degrees above ambient. Energy is conserved, but the heat that used to be in the one bucket is now distributed over twice as many molecules and the temperature is halved. But while the process is energy-conserving it is dispersive, and hence entropy-producing, and hence is dissipative. That is, no process can be designed which will have the sole effect of separating the water back into two buckets, one at 60 degrees above ambient temperature and the other at ambient temperature, even though the latter process would also conserve energy. The process has done no energy conversion, but it has transformed the higher-grade 60 degree heat into lower-grade 30 degree heat, which is irreversible and hence dissipative.

The same applies to your example above. The energy density very close to the transmitting antenna might be many W/m^2. If you'd closely coupled a receiving antenna to the transmitting antenna such that no energy was radiated (i.e. if you'd built a transformer) you could have recovered the electrical energy in its original form, but if your surrounding sphere is large enough to be collecting radiated energy you'll be collecting the energy at energy densities of mW/m^2 or uW/m^2 or less. This process is entropy-producing (i.e. there is no process you can design which has the sole effect of returning the energy captured by the sphere to the W/m^2 form it was in when it left the antenna), and is hence as dissipative as any other form of heat transfer. Dispersive processes are synonymous with dissipative processes, as far as I can tell, and the process you describe above is identically a dissipative, entropy-producing transfer of energy from the antenna to the sphere.

Dennis Ferguson

5272. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 03:28:39 UTC
From: richardharrison@webtv.net
Message-ID: <3865-3AB57CE7-53@storefull-117.iap.bryant.webtv.net>
Source record: 168147

Cecil, W6RCA wrote:
"From the IEEE Dictionary: "dissipation (electrical energy) loss of electric energy as heat."

My Random House Dictionary gives (5) definitions, none relate directly to (electrical energy). There are other dictionaries devoid of definitions of dissipation as applied to electrical energy. That`s why the IEEE definition was especially worthwhile.

Here are "Dissipation" definitions from my dictionary:
(1) Act of dissipating.
(2) State of being dissipated; dispersion; disintegration.
(3) A wasting by misuse.
(4) Mental distraction; a diversion.
(5) Dissolute mode of living; intemperance.

The power fed an antenna system is either radiated as a radio signal or converted to heat on-site. We consider heat as wasted energy (dissipation) and radio waves launched by the antenna system as useful because that was our purpose. The launched radio waves are not wasted by misuse, not a diversion, nor dissolute.

I think IEEE got the definition of dissipation just right.

Best regards, Richard Harrison, KB5WZI

5273. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 04:01:21 UTC
From: dennis@wawa.juniper.net
Message-ID: <9940ah$2kru$1@heap.juniper.net>
Source record: 168148

Steve,

VE9SRB <srbest@att.net> wrote:
>"Dissipation" infers that energy is lost in the form of heat. EM energy is
>converted to thermal energy. When an EM wave propagates away from an
>antenna, the energy density thins out as a function of distance traveled.
>This process (the rate of energy thinning) is identical for all frequencies.
>This is the basis for the derivation of the familiar path loss formula. At
>an infinite distance, the thinning process will cause the energy density to
>go to zero, but this is not a "dissipation" process.

I don't see how this could possibly be true. Radiated EM energy *is*
heat in the process of being transfered, and all heat transfer is
dissipative (i.e. generates entropy). In fact, while there are other
heat transfer mechanisms that can operate when you have sufficient
mass density, in the end all heat ends up being transfered in the form
of EM energy. The bulk of the heat generated by hydrogen fusion
at the core of the sun is transfered away from the sun in the form
of EM energy. If you go outside on a sunny day you will indeed
find that heat is being transfered to the molecules on the surface
of the planet in a form we're more likely to call "thermal energy",
but even that is reradiated into the night sky as EM radiation again.
EM radiation is heat in the process of being transfered from a
warmer place to a colder place, and this is the most fundamental
definition of "dissipation".

Irreversible processes are dissipative processes. The decrease in
the radiated energy density, and the resulting reduction in thermal
energy which can be extracted from the field by individual molecules,
is "dissipation" whether the EM energy actually finds molecules to
transfer the thermal energy to or not. And even if it does find
molecules, the molecules themselves will simply re-radiate the
heat as EM radiation again so finding those molecules is not
going to decrease the flux of radiated EM energy either. Energy
is always conserved, this has little to do with dissipation.

The only difference I can see between EM energy radiated from
an antenna and general radiative heat transfer is the coherence
of the energy radiated by the antenna. I'm not sure this matters,
but I am pretty sure that any argument which distinguishes between
EM energy radiated from an antenna and general radiative heat
transfer has got to be based on coherence, since there is no
other difference that I can see.

Dennis Ferguson

5274. Re: Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 04:21:51 UTC
From: richardharrison@webtv.net
Message-ID: <25667-3AB5895F-23@storefull-118.iap.bryant.webtv.net>
Source record: 168150

godart.christian wrote:
"---search schema for helix 144 & 400 MHz."

On page 7.22 of the 3rd edition of RSGB`s YHF-UHF Manual are details for 144, 433 and 1296 MHz.

Page 19-22 in the new 19th edition of the ARRL Antenna Book begins a section on helical antennas which includes a 4-element helical array and tapered line matching sections to parallel 4 elements to reach 50 ohms to match the feedline.

Best regards, Richard Harrison, KB5WZI

5275. Re: HF6V Question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 04:44:42 UTC
From: "David Michael Kelly"
Message-ID: <bl3bbtov3vbeee0abvi60lirmhef2hpn0m@4ax.com>
Source record: 168149

On Mon, 19 Mar 2001 00:02:10 -0000, "hf6v" <Morse.Key@btinternet.com>
wrote:

>around however, I have always ensured I have a good ground return path for
>the RF, either radials or where that was inpractical then I've used a mat of
>chicken
>wire around the antenna.

How much chicken wire?

>Don't expect miracles on 80M or even more so on 160M if you consider
>purchasing the additional coil., even from the HF6V,as Butternut say in
>their literature "they can't beat the laws of physics".

Even with the 160M add-on don't expect much bandwidth? TIA

--
david
AC7LY

5276. moved cordless phone's antenna to the top of the hill

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 05:57:30 UTC
From: Dan Jacobson <jidanni@kimo.FiXcomTHiS.tw>
Message-ID: <m2snkal2r9.fsf@dan.jacobson.tw>
Source record: 168055

In order to increase coverage to the backside of the hill, I have removed the antenna of my cordless phone's base unit and instead attached a coaxial cable 40 meters long to the middle of a stainless steel thin hollow pipe 4 meters high placed vertically on top of the hill, next to a taller grounded pole that will hopefully attract lightning instead.

Seems to indeed have increased coverage. My question is how about the shielding of the coaxial cable? Should I ground it at one end, both, or what? The pole itself: currently not grounded to anything, held in place by wood. is this good? Is the middle of the pole the most ideal connection spot? Is pole length critical? [Seems about twice the length of the original antenna but I didn't bother to measure it.] Yes this is just a simple 250 meter range home cordless phone.

While we're at it, the hand unit's antenna got one section bent off. How critical is having the original length or the simple fraction of the wavelength for cordless phones? I see mostly one uses them with antenna folded in anyway.

To avoid banging into trees and brush with the hand unit's original antenna when extended, can I instead attach a flexible wire, say in my belt loops, or would a non straight antenna like that be ineffective as an antenna, [especially with me in the middle]? If I get a call I can always extend the original antenna, or hold the wire taught, while talking. Is it bad for such wires to be next to one's body?
--
http://www.geocities.com/jidanni Tel886-4-25854780 e-mail:restore .com.

5277. 23 cm superturnstile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 06:30:29 UTC
From: "J.F. FOURCADIER" <jf.fourcadier@wanadoo.fr_NOSPAM>
Message-ID: <99490j$jc8$1@wanadoo.fr>
Source record: 168151

Hello !

Presently, I build an ATV repeater with some friends and we are looking for an antenna horizontally polarized with an omnidirectional radiation pattern. The equipment is going to operate in the 23 cm band and a high gain is obviously highly wishable.

I have seen descriptions of the Alford slot antenna which has a medium gain and would be suitable, but commercial TV stations often use superturnstile antenna which have more gain.

Does someone hear of homebrew superturnstile antenna for the 23 cm ham band or other high gain antenna ?

Thank you for your help.

73 de F4DAY

Jean-Fran&#65533;ois FOURCADIER

5278. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 06:54:21 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB5AD1D.E885DD74@mwci.net>
Source record: 168153

Richard Harrison wrote:

> Cecil, W6RCA wrote:
> "From the IEEE Dictionary: "dissipation (electrical energy) loss of
> electric energy as heat."

In electrical engineering, *common usage* of the term "dissipation" is well understood to mean the conversion of electrical energy to heat. This has been understood in the engineering world for at least a couple of hundred years. It is deeply ingrained into our engineering culture.

This may not conform to the usual dictionary definitions, in which "dispersion" is included. But when someone tells me the dissipation of an electrical system, my experience and my IEEE dictionary tell me exactly what is *intended*.

According to an ordinary dictionary, radiation (dispersion) from an antenna can be construed as "dissipation". However, since energy is not in any way converted to some other form, it does not fit the tacit understanding of what we techno-folks think of as dissipation.

We often find ourselves splitting hairs over semantical matters like this. I believe that the IEEE idea is consistent with common usage, and as such is not the least bit "illiterate".

When we talk about the power "dissipated" in an antenna we know exactly what we mean: the power dissipated in the wire and transmission line, not radiated.

Bill W0IYH

5279. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 06:56:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <994aji$q8r$0@208.207.71.177>
Source record: 168152
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" wrote:
>
> "Dick Carroll" <dixie@townsqr.com> wrote in message
> news:98uguu$fi9$0@208.206.142.103...
> > No, Leland, no one is "bugged" about that. Many of us have dedicated a
> > huge amount of our personal time to help make that happen, in case you
> > didn't know what a VE does.
>
> All it takes is one counter example to nullify that argument "no one", and
> Richard has provided one.
>
> Quoted from a Richard McCollum post in rec.radio.cb
>
> "Pecking orders come in several flavors. I will make no bones here that I
> do not consider a Codeless Tech to be a full-fledged member of the
> fraternity and in fact I refused to administer them as a VE"
>
> > What many are "bugged" about is the lowering of requirements,
> > especially for the highest class of license. Nothing more.
>
> That maybe true, but for some I think it goes deeper than that.

Yes it does. But on an individual basis, at least with me. What torques
my
tail is when one whines because he can't have it all on the strength of
his codefree tech written test, or yesterday's equivalent. It merely
indicated a lifelong whiner of the first magnitude, and I won't cut him
any substantial amound of slack. I have lots of tech friends who never
do that, or they would likely not be my friends.
But don't worry, not everyone is cut out to be a CW operator. Most who
aren't don't have a clue what they are missing and couldn't care less.

5280. Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 12:29:01 UTC
From: "M.Fernando" <nop04918@mail.telepac.pt>
Message-ID: <992a1f$3ml$1@venus.telepac.pt>
Source record: 168098

Dear friends,
Best 73's and tks for reading this message.
I am looking for a balun (6:1) to build a Windom Antenna I have one but
only for 500 W, I would like to found one but with more power around 1.5 K.
My beam hab broken (ando rotator) so i need to have a wire while I buy a new
one .
Thanks for your help
Manuel Fernando
CT1BXX

5281. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 12:38:18 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <994ut6$s18$1@newpoisson.nosc.mil>
Source record: 168154

And, Ray, Dave's mention of a "similar" antenna is what prompted my reply to him. The book that has that antenna is the Vertical antenna book written by W6SAI - believe his name was Bill Orr???

I've got it at home and had it sitting out to bring in today but - didn't; another example of CRS setting in! I'll have it here tomorrow to pass on to Dave as it has discussions on several antennas that are similar to that old Gotham thing.

That Gotham worked about as well as a wet noodle did. However, back then I was 12 to 14 years old and didn't know a radial from a radio - or something like that. My exposure to antenna theory and construction was extremely limited, as opposed to today where it's merely limited - LOL!

Yep, all dem radials and the tuning done at the antennas base make all the difference in the world.

For Dave: I'll have that book info tomorrow A.M. Regards, Jim R.

"R. Makul K1XV" <k1xv@arrl.net> wrote in message news:06e5bto2hekhdtajdkp8gip6uh3o5c05bq@4ax.com...
Jim: I did read it. Dave's primary goal is to build a REPLICA of a Gotham Vertical based on its original specifications, or plans for a SIMILAR antenna.

Jim, to me, a replica to a Gotham Vertical means one that is a simple multi section thin wall aluminum tube end fed through a B&W inductor at the bottom, attached to the hot side of an unbalanced antenna coax via an alligator clip so you can vary the inductance by changing the tap location on the coil with the alligator clip. The ground side of the coax attached to a ground rod. The whole thing then attached to the side of a house or to a non conducting support via "u" straps.

I agree that the ARRL books have discussions of verticals, but I never saw anything in there that was quite like a Gotham Vertical as I have described it, but I may be wrong. I often am.

Anyway, its not worth getting worked up over. Everybody seems to want to help somebody build something that works, but I think Dave wants to build a replica of a Gotham Vertical for "historical examination", regardless of whether it would or wouldn't work, to check for himself exactly how accurate or exaggerated those old advertisements were.

Just wondering Jim, in retrospect, how well did that Gotham work? I suspect your present vertical, with radials and a much more sophisticated loading system, works much better.

Everybody have a Happy St. Patrick's Day!! ;^)

73, Ray K1XV

On Fri, 16 Mar 2001 14:24:30 -0500, "Jim Rodenkirch"
<rodenkir@spawar.navy.mil> wrote:

Hey, Ray: read Dave's original post again! I'm pasting it here for your
perusal so you'll see I wasn't toooooo far off base in my reply.
Start quote," <snip> my "Elmer"
gave me a Gotham base loaded vertical that had a coil at the bottom with a
tuning clip. As I recall, it was about 16 ft.tall and it would tune all the
HF bands.

Just for fun, I would like to build a replica of this antenna if I could
find the specifications on it or plans for a similar antenna.

5282. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 13:10:42 UTC
From: richardharrison@webtv.net
Message-ID: <4134-3AB60552-71@storefull-115.iap.bryant.webtv.net>
Source record: 168156

Dick Carrol wrote:
"But don`t worry, not everyone is cut out to be a CW operator."

Reminds me of a cartoon on a college engineering department door:
Shown was a hip-booted Sad Sack wading the muck of a subterranean sewer,
his little headlamp lighting the gloom. Subscript read:
"You too can be a Sanitary Engineer!"

Best regards, Richard Harrison, KB5WZI

5283. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 13:27:48 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB60954.CFFBDA26@IEEE.org>
Source record: 168155
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Dick Carroll wrote:
> It merely
> indicated a lifelong whiner of the first magnitude, and I won't cut him
> any substantial amound of slack.

Dick, when are you going to stop whining about Techs?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----
```

5284. Re: antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 13:39:53 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3AB60C28.A37C9298@ix.netcom.com>
Source record: 168031

About glass mount antennas. Apparently there is a substance called passivated glass that is used on some autos. Radio Shack for one warns against using a glass mount on this windshield. Some info on glass mounts and tinted glass at URL:
http://forums.vmag.com/suvtahyuk1099/messages/5991.html

From URL:
http://www.alternativewireless.com/cellular-antennas/antennaFAQ.html

"Can I install a glass mount antenna myself?
Since glass mount antennas are glued to your cars glass (making them a non returnable item) and the antennas cable is a little harder to run inconspicuously through the car's interior, we highly recommend professional installation of glass mount antennas. You also need to consider window tinting, defroster wires, proper placement, and passivated glass (glass impregnated with tiny metal particles that render the glass incapable of coupling RF between the inside and outside couplers).

How can I tell if the glass on my vehicle is suitable for one of Larsenï¿½s on-glass antennas?
First, look near a corner of a window for words that mean "sun", relate to sun, or refer to ultraviolet or other forms of radiation. If you find terms like "Soft-Ray", "EZE-Cool", "Solar-Coat", "Solar-Cool" or similar terms, your glass is probably passivated and wonï¿½t work with on-glass antennas. If you want to be 100% certain, and you donï¿½t find helpful words on the glass, ask a 2-way or cellular shop technician to test your glass with a capacitance meter."

Some folks here have had trouble mounting them on the rear window (away from ignition noise) where the defroster wires can interfere with the installation.

On the other hand, one of our locals here has used them for years and prefers them to mag mounts and sez they work fine.

Also use google.com -- type in "glass mount antenna" and get lots of
sites that discuss these antennas.
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========

MWhite wrote:

> Does anyone have an opinion on the through glass antenna's.

5285. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 13:40:41 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <99528p$b7d$1@planet.kis.keele.ac.uk>
Source record: 168157

Roy Lewallen <w7el@eznec.com> wrote:

> The San Remo CFA, we had heard earlier that it was performing as
> expected, is apparently producing less signal than the previously
> used tower antenna at that location --- a "problem" attributed by
> Kabbary to surrounding high objects on all sides and very high trees
> to the north --- but again no measured results reported.

An axe costs very little - a chainsaw maybe a little more?

Leigh....

--

Leigh M. Preece Media and Communications Centre
Keele University. Staffs. UK. ST5 5BG
~~~~~~
Why do I need GPS? If I'm lost - I'm lost!
~~~~~~

5286. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 13:55:31 UTC
From: richardharrison@webtv.net
Message-ID: <3865-3AB60FD3-79@storefull-117.iap.bryant.webtv.net>
Source record: 168158

Dennis Ferguson wrote:
"I`m not sure this matters, but I`m pretty sure that any argument which distinguishes between energy radiated from a antenna and general radiative heat transfer has got to be based on coherence, since there is no other difference that I can see."

You can see light. You can feel heat. Some of the other radiation makes no sense.

If I had a big enough "Thermos Bottle" could I store radio waves for long periods? Would it need a vacuum space to prevent conducton and convection? Seems there are practical differences, at least on a human scale.

Best regards, Richard Harrison, KB5WZI

5287. Re: Balun location on LPY

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:18:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB6153E.D2E8AA5C@oio.net>
Source record: 168159

"Peter J. Bertini" wrote:
>
> My Log antenna instructions recommend placing a balun at the feedpoint; but
> I am wondering if the the balun wouldn't be better if placed at the mast
> plate.. My thinking is with the coax being strapped to the lower boom a lot
> of energy would be capacitively coupled to the shield; thus defeating
> whatever was gained by having the balun at the feedpoint.
>
> Where is the best place to put the balun, and what would work best on a 13
> to 30 MHz design; ferrite sleeve or coaxial loop?
>
> Thanks
>
> Pete

Pete,
Put it where the manufacturer recommends.
'Doc

5288. Re: Guying Rohn 25G foldover

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:20:24 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB615A8.64E5A8C1@oio.net>
Source record: 168160

"Peter J. Bertini" wrote:
>
> Is there anyway to guy a Rohn foldover using a three-point guying system,
> or are four guy wires the only way it can be done?
>
> --
> Peter

Pete,
Just like the balun question, do it like they recommend.
'Doc

5289. Re: 75 meter - real world question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:26:14 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB61706.12188943@oio.net>
Source record: 168161

Bill Clarke wrote:
>
> In the populated regions of the lower 48, the dipole at 20 to 40 feet, or a
> similar inverted vee, rules. Verticals just do not do it for close in work.
>
> My question: In the remote areas of West Texas, New Mexico, etc. what are
> the feelings towards these lower dipoles vs. verticals?
>
> Thanks,
>
> Bill W2BLC

They probably feel like everyone else who has a 'low'
dipole, they wish the dipole was higher...
'Doc

5290. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:28:17 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab61681.358983667@news.accessunited.com>
Source record: 168162

On Mon, 19 Mar 2001 13:40:41 +0000 (UTC), Leigh Preece=
<mda03@keele.ac.uk> wrote:

>Roy Lewallen <w7el@eznec.com> wrote:
>
>> The San Remo CFA, we had heard earlier that it was performing as
>> expected, is apparently producing less signal than the previously
>> used tower antenna at that location --- a "problem" attributed by
>> Kabbary to surrounding high objects on all sides and very high trees
>> to the north --- but again no measured results reported.
>
>An axe costs very little - a chainsaw maybe a little more?

If they buy an axe, they should use it on the CFA...or better yet on
the people who sold them the CFA.

Then they can use the regular antenna, and get the old signal back.

73 Tom

5291. Re: Balun location on LPY

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:32:00 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab6172c.359154916@news.accessunited.com>
Source record: 168163

>"Peter J. Bertini" wrote:
>>
>> My Log antenna instructions recommend placing a balun at the feedpoint; but
>> I am wondering if the the balun wouldn't be better if placed at the mast
>> plate.. My thinking is with the coax being strapped to the lower boom a lot
>> of energy would be capacitively coupled to the shield; thus defeating
>> whatever was gained by having the balun at the feedpoint.

Yopu are right Peter. Tennadyne (I think that is who it is) tells
people to put the balun AT THE WRONG SPOT!!!!!!!!!

I ran into that with a friend of mine.

The balun belongs at the point where the feedline exits the lower
boom, NOT at the feedpoint!

Use a coaxial choke balun at the point where the cable leaves the
lower boom, and simply tape the cable to the lower boom out to the
end. Connect the shield to the lower boom and the center to the upper
boom.

If you put the balun where they tell you, the balun won't do a thing.

73 Tom

5292. Re: Guying Rohn 25G foldover

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:55:13 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AB61DD1.B88B1236@hiwaay.net>
Source record: 168164

Peter- Rohn uses a four guy system on the fold-overs to make clearance
for the boom. The Rohn instructions call for a guy on each of the legs
that dont have the boom, and two guys attached to the bracket at the
hinge point on the boom leg. If you try for three guys, you must make
allowances for clearance for the boom to tip up, which means an angular
offset, which means trouble.
Actually, the four guy system works well for me- the distance to the
anchors is less than for a three guy system.

Bill-W4BSG

"Peter J. Bertini" wrote:
>
> Is there anyway to guy a Rohn foldover using a three-point guying system,
> or are four guy wires the only way it can be done?
>
> --
> Peter

5293. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 14:58:16 UTC
From: richardharrison@webtv.net
Message-ID: <1479-3AB61E88-69@storefull-113.iap.bryant.webtv.net>
Source record: 168165

Dick Carroll wrote:
"What torques my tail is when one whines because he can`t have it all on the strength of his codefree tech written test, or yesterday`s equivalent."

As someone said, it goes deeper than that. Dick Carroll can`t get over grieving lost prestige for code proficiency for which there is now no serious demand. There never again will be demand for Morse operators. It`s done and over. Get over it! We are tired of hearing you moan. Isn`t there something else you can be proud of, or was that your only asset?

Best regards, Richard Harrison, KB5WZI

5294. Re: 75 meter - real world question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 15:58:36 UTC
From: Ross <rwa@gateway.bogons>
Message-ID: <87vgp5da37.fsf@gateway.bogons>
Source record: 168168

"Bill Clarke" <bill@w2blc.com> writes:

> In the populated regions of the lower 48, the dipole at 20 to 40 feet, or a
> similar inverted vee, rules. Verticals just do not do it for close in work.
>
> My question: In the remote areas of West Texas, New Mexico, etc. what are
> the feelings towards these lower dipoles vs. verticals?
>
> Thanks,
>
> Bill W2BLC

Bill,

I found that a delta with the apex at 75' worked well both locally and
for DX on 75m. It was cheap (I already had the tower up) and quiet; I
managed ZL and VK with it (plus 50 states and some south americans) so
I can't complain.

regards,
Ross ve6pdq

5295. Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 16:18:32 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <PzG2OmTgxfcjlfTUuhbymEgmcj+5@4ax.com>
Source record: 168166

Well, I've seen the latest QST, and I'm really excited by the possiblilities of these new Laser Gererated Antennas.

I plan to have one up by April...

Bob
k5qwg

5296. Re: 75 meter - real world question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 16:21:35 UTC
From: richardharrison@webtv.net
Message-ID: <4134-3AB6320F-87@storefull-115.iap.bryant.webtv.net>
Source record: 168169

Bill,W2BLC wrote:
"In the populated regions of the lower 48, the dipole at 20 to 40 feet, or a similar inverted Vee, rules. Verticals just do not do it for close in work."

Then Bill is dependoing on near vertical incidence sky wave propagation. Ground wave propagation ranges from poor to very poor at h-f. It is almost none for horizontally polarized waves. Ground wave propagation gets worse as frequency rises for both polarizations.

For "close in work" the near vertical incidence sky wave works. Vertical radiators have a null at the zenith. See Fig 16 on page 3-13 of the latest ARRL Antenna Book. So, the vertical radiator is not a good antenna for near vertical incidence.

The horizontal antenna is a good radiator at high elevation angles as needed for near vertical incidence when it is erected at low heights. See Fig 12 on page 3-11 of the new ARRL Antenna Book.

35 feet is 10.67 meters or about 1/4-wave at 40m. The high angle radiation is good. At 1/2-wave above ground or or the 20m band, the vertical radiation is down some but radiation at lower elevation angle radiation is up and that is good for more distant contacts.
Best regards, Richard Harrison, KB5WZI

5297. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 16:25:34 UTC
From: matthew@cblmdm205-162-220-96.buckeye-express.com
Message-ID: <slrn9bcd8n.8ep.matthew@cblmdm205-162-220-96.buckeye-express.com>
Source record: 168172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Dick Elliott <elliotta@netusa1.net> spewed forth:
Does anybody know the procedure for having an individual removed from the
news groups if they are as caustic as this "gentleman"? This type of abuse

Pretty hard to get someone "removed." Better yet, just add him to your
killfile and you'll never see another post from him again.

Matthew

--

This message brought to you by our staff chiropractor, Winston Payne.

| Matthew T. Jachimstal KG9LF [\] <*>
| jachim69@excite.com 906-483-0232

5298. Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 16:26:46 UTC
From: wsmith@cinci.rr.com
Message-ID: <3ab63150.13092381@news-server>
Source record: 168167

I need a little advice about mounting an antenna on the rear of my bike. I have used a Diamond 770 series dual band antenna on other bikes with very good sucess. However, I have a new recumbent bike that is giving me a little pause for thought. I have a couple of pictures of the bike at:

http://albums.photopoint.com/j/AlbumIndex?u=1025520&a=12162755&f=0

On my other bikes I had a simple bracket to hold the antenna at the rear end of the rack. But, as you can see, there is an aluminum upright now in place to hold the cold weather/streamlining fabric. My question is: If I mount the antenna bracket on the rack, what problems am I going to run into with the close proximity of the upright. I would think the maximum distance that I can separate the two is about 4 inches. I am running almost exclusively 2 meters.

Thanks for any help.

Walt Smith, KB8ZQW
Harrison, Ohio
Member BMHA

5299. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 16:40:51 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AB63692.774E@pacbell.net>
Source record: 168174

William E. Sabin wrote:
>
> Richard Harrison wrote:
>
> > Cecil, W6RCA wrote:
> > "From the IEEE Dictionary: "dissipation (electrical energy) loss of
> > electric energy as heat."
>
> In electrical engineering, *common usage* of the term "dissipation" is well
> understood to mean the conversion of electrical energy to heat. This has
> been understood in the engineering world for at least a couple of hundred
> years. It is deeply ingrained into our engineering culture.
>
> This may not conform to the usual dictionary definitions, in which
> "dispersion" is included. But when someone tells me the dissipation of an
> electrical system, my experience and my IEEE dictionary tell me exactly what
> is *intended*.
>
> According to an ordinary dictionary, radiation (dispersion) from an antenna
> can be construed as "dissipation". However, since energy is not in any way
> converted to some other form, it does not fit the tacit understanding of
> what we techno-folks think of as dissipation.
>
> We often find ourselves splitting hairs over semantical matters like this.
> I believe that the IEEE idea is consistent with common usage, and as such is
> not the least bit "illiterate".
>
> When we talk about the power "dissipated" in an antenna we know exactly what
> we mean: the power dissipated in the wire and transmission line, not
> radiated.
>
> Bill W0IYH

Each discipline has its own vocabulary. Every person who has
studied electronics for any length of time knows what an
author of electronics texts means when he uses the word
"dissipation." "Dispersion" also has a special meaning.
David K. Cheng in his book "Field and Wave Electomagnetics"
writes, "The phenomenon of signal distortion caused by dependence
of the phase velocity on frequency is called dispersion." Calling
energy radiation from an antenna dispersion might cause some confusion.

Tom Donaly KA6RUH

5300. Re: 75 meter - real world question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 17:10:31 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AB63D87.76F6@wt.net>
Source record: 168170

Bill Clarke wrote:
>
> In the populated regions of the lower 48, the dipole at 20 to 40 feet, or a
> similar inverted vee, rules. Verticals just do not do it for close in work.
>
> My question: In the remote areas of West Texas, New Mexico, etc. what are
> the feelings towards these lower dipoles vs. verticals?
>
> Thanks,
>
> Bill W2BLC

Still rather have the dipole in most cases. The "remote areas" in the SW
are still too close together to use a vertical.
On 75m, I would use a vertical for dx only. But I don't chase much dx on
75m, so I don't use one. Also I don't have the radial room to put up a
"good" 75m vertical. Same problem on 160m. MK
--
http://web.wt.net/~nm5k

5301. Re: continous/linear loading

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 17:19:23 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AB63F9B.1B6D@wt.net>
Source record: 168171

Richard Clark wrote:
>
> On Mon, 19 Mar 2001 00:37:40 -0000, "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >Not another time-wasting, baffle-gabbing, set of old wives' tales ?
> >
> >
> >
> Go ahead Punchinello,
>
> Your old wive's tales are as good as any ;-)
>
> 73's
> Richard Clark, KB7QHC

I prefer young wives tails. MK
--
http://web.wt.net/~nm5k

5302. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 17:53:37 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB647A1.75429925@usa.alcatel.com>
Source record: 168173

Tom W8JI wrote:

> The impedance of a single turn "shield" around the inner conductor(s)
> is the SAME as the impedance of the antenna in a loop.

This is incorrect. The impedance of the shield is not the same as the loop it shields, because it is
NOT a loop; it is open at the center.

> That's because the outer conductor becomes the actual antenna. We
> can't change that, because one the shield is several skin depths thick

Because the outer shield is several skin depths thick, the local E-field does not penetrate it.

> If you short the electric field, you are shorting the desired signal
> as well. They are inseparable.

Since I can short the local E-field and still receive a signal, this statement is also incorrect.
There is nothing sacred about 377 ohms, and the ratio between E and H fields can be quite a bit
different near an antenna. Indeed, by reciprocity, merely placing an antenna in a field creates a
near-field condition in which the E and H field ratio changes drastically.

> A broadcast FSM is calibrated to measure the electric field, and it often has a "shielded loop"
> antenna. Despite using a shielded loop, a FSM can indicate the electric field because it is
> INSEPARABLE from the time-varying magnetic field.

I am using an E-field meter. Not a loop. It uses a probe antenna sensitive only (at broadcast
wavelengths, certainly) to the electric field.

> You can change the field impedance or modify the direction of the
> field, but if you take the electric field to zero the magnetic field
> must go to zero. In essence, the structure becomes the antenna.

The structures of which I speak do not present a low impedance to a magnetic field, and consequently
do not affect it as much as they do the electric field. They do present a low impedance to an
electric field, and so, reduce it more than the magnetic field. As does the loop shield. Zero? No,
perhaps not, theoretically -- but theoretically we can have a point source radiator, which

cannot
exist physically. Not zero then, but a good 60 dB down, and maybe more.

My results imply your understanding is incorrect. What do your measurements show?

Cortland

5303. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 17:58:30 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <995hgl$it7$1@slb4.atl.mindspring.net>
Source record: 168175

Richard Harrison wrote in message
<1479-3AB61E88-69@storefull-113.iap.bryant.webtv.net>...
Dick Carroll wrote:
"What torques my tail is when one whines because he can`t have it all on the strength of his codefree tech written test, or yesterday`s equivalent."

As someone said, it goes deeper than that. Dick Carroll can`t get over grieving lost prestige for code proficiency for which there is now no serious demand. There never again will be demand for Morse operators. It`s done and over. Get over it! We are tired of hearing you moan. Isn`t there something else you can be proud of, or was that your only asset?

Best regards, Richard Harrison, KB5WZI

This criticism from a man who did not have enough motivation to join the ranks of amateur radio through the time honored method of earning his ticket. And he constantly criticizes amateur radio and much of its volunteer work and workers as if it and they are useless; unwanted and pitiful. This man is not a true amateur radio operator...he is one of the freebanders; a welfare wannabee! He exists, therefore he deserves whatever he wants! He is the one who has nothing of which to be proud. It seems the only thing he has is his mouth; which he visits upon us incessantly!

Dean Craft
w4ihk@mindspring.com

5304. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 18:08:44 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB64B2C.1847449E@mwci.net>
Source record: 168176

Donaly wrote:

> "Dispersion" also has a special meaning.
> David K. Cheng in his book "Field and Wave Electomagnetics"
> writes, "The phenomenon of signal distortion caused by dependence
> of the phase velocity on frequency is called dispersion."

Yes. This dispersion effect is well known. It exists in signal processing systems of many kinds. One example is the "group delay" effect in filters.

Bill W0IYH

5305. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 19:10:31 UTC
From: richardharrison@webtv.net
Message-ID: <1707-3AB659A7-79@storefull-116.iap.bryant.webtv.net>
Source record: 168179

Tom, KA6RUH wrote:
"The phenomenon of signal distortion caused by dependence of the phase velocity on frequency is called dispersion."

Yes, there is a transmission line condition for a distortionless line that doesn`t discriminate against frequences and waveforms aren`t affected by the line except perhaps some loss in amplitude, and all frequencies have the same delay. It is called "Heaviside`s condition for the distortionless line":
R/L=G/C
Zo will be a pure resistance.

Best regards, Richard Harrison, KB5WZI

5306. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 19:16:10 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <nUst6.59$SR1.229702@nntp1.onemain.com>
Source record: 168177
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AB60954.CFFBDA26@IEEE.org...
> Dick Carroll wrote:
> > It merely
> > indicated a lifelong whiner of the first magnitude, and I won't cut
him
> > any substantial amound of slack.
>
> Dick, when are you going to stop whining about Techs?
> --
> http://www.mindspring.com/~w6rca

Cecil, Dick is not complaining about Techs as a group nor am I. We are reaping the results of fundamental dishonesty. I will give you two points to look up in your Funk & Wagnalls.

Point 1. The Tech is not and never was designed to be the entry-level license for HF amateur radio. It predates the codeless arguments so we can dispense with them. It was designed to serve a multiplicity of uses, all worthy but none of them in the mainstream of Amateur Radio. Some of them included:
a. Real honest experimenters - all 12 of them.
b. Wives wanting contact with the old man. The Bread-and-Milk thing which was the subject of a lot of dubious subterfuges of which I was once a major instigator. Every wife on our repeater was named Sally and had the same callsign, a 2x3 I once had for 2 months or so.
c. Personal communication of the type you describe with your camping buddies. The FCC whatever else one may think of them has a habit of encouraging communication. Good way to keep tabs on number one son when he is armed and dangerous on a hunting trip.
d. Taking some pressure out of CB. The spots were up then, too.

Without beating the point to death, selling the Tech as an entry-level ticket was and is fundamentally dishonest. In my VE days I did not administer them because I did not believe I was doing anyone a favor. As a practical matter I would not be called upon to anyway because of the necessity to keep the Advanced VEs occupied. In the context where Leland butted in, the discussion was advising the newbie. Guess what? I don't recommend taking Element 2 as an initial step either.

Point 2. This dishonesty, as lies have a habit of doing, has come back to haunt us -- certainly in the general environs of Newington CT. The Tech since it came into existence has been a dead end for a lot of amateur careers. When you get on phone, the time for code practice or working it

never comes again. Larry was in the trap, so was I. So if nothing else our level of tolerance is not as great as some but we know every self-deception in the book. As Billy Sunday once said of Satan, "I know there is a Devil because the Bible tells me so and because I have done business with the bastard personally". I won't lead a man there any more than I would lead him to an open door to unlit basement steps.

At least prior to 1991 the Tech, at least in theory, had to pass 5 wpm so he had some idea of what it was he was evading. Since then, we have developed Lifer Tech Syndrome, Dick's bugbear. Characteristics of this syndrome, a big campaign dedicated toward deceiving both the world and oneself, include:

a. Joining NCI and playing like the code requirement was even a debatable issue within a five-year horizon. Never miss the opportunity to say or write 'Morris Kode'. Note Leland's nearly-indecipherable tag line.

b. Joining everything, subscribing to everything, going to Dayton every year. Activity signifying not a hell of a lot.

c. Entering into every discussion on 'leading edge' technology. Nothing, of course, is ever done just talked about. Knowingly pronounce everything in existence as a 'legacy mode'. Become the resident genius on arcanity -- you too can be the guru of 160 meter gray line propagation.

d. Where anyone has actually achieved anything, even a simple-minded code test, he must be attacked, unhorsed, and mugged. Larry has built a whole new hobby on these dipsticks.

e. Whining endlessly about slights real or imagined. The object, of course, is to punish verbalization of what everyone in the vicinity already knows. In communities of the terminally incompetent the crushing line is "You think you are better than everyone else." When the response is, "I not only think it I know it" it is time for the riot squad. Equality is another word for nothing left to lose -- or more precisely never having gained it to begin with.

I do not play the game nor do I tolerate it.

Dick NBK

5307. Re: CFA Update

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 19:34:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AB65F5E.B9C1550@eznec.com>
Source record: 168178

Once again, for the benefit of recent or future readers, I posted the quoted text, but its author was Jack Belrose, VE2CV.

Roy Lewallen, W7EL

Leigh Preece= wrote:
>
> Roy Lewallen <w7el@eznec.com> wrote:
>
> > The San Remo CFA, we had heard earlier that it was performing as
> > expected, is apparently producing less signal than the previously
> > used tower antenna at that location --- a "problem" attributed by
> > Kabbary to surrounding high objects on all sides and very high trees
> > to the north --- but again no measured results reported.
>
> An axe costs very little - a chainsaw maybe a little more?
>
> Leigh....
>
> --
>
> Leigh M. Preece Media and Communications Centre
> Keele University. Staffs. UK. ST5 5BG
> ~~~~~~
> Why do I need GPS? If I'm lost - I'm lost!

5308. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 19:35:35 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB65F87.617BAED0@IEEE.org>
Source record: 168180

Bob Miller wrote:
> Well, I've seen the latest QST, and I'm really excited by the possiblilities of
> these new Laser Gererated Antennas.

But they are violation of my patent pending on plazma antennas
which I discussed as prior art in this newsgroup about a year
ago.
--
http://www.mindspring.com/~w6rca

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5309. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 19:38:10 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB66022.AAD4212E@IEEE.org>
Source record: 168181

wsmith@cinci.rr.com wrote:
>
> I need a little advice about mounting an antenna on the rear of my
> bike. I have used a Diamond 770 series dual band antenna on other
> bikes with very good sucess. ...
> I am running almost exclusively 2 meters.

You certainly need a flag on your bike. Simply attach a Pico-J to
the fiberglas flag pole. Worked for me.
--
http://www.mindspring.com/~w6rca

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-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5310. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 20:13:59 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AB66887.C9AFC448@usa.alcatel.com>
Source record: 168182

A fluidic antenna is discussed in the HFPack egroup. This may supersede your own patent since the technology of an ionic fluid is some hundreds of years old.

Unless, of course, you determine that RF would fry the anions!

Cortland

W6RCecilA wrote:

> Bob Miller wrote:
> > Well, I've seen the latest QST, and I'm really excited by the possiblilities of
> > these new Laser Gererated Antennas.
>
> But they are violation of my patent pending on plazma antennas
> which I discussed as prior art in this newsgroup about a year
> ago.
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5311. HyTower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 20:15:20 UTC
From: Mark Erbaugh <mark@nospam.microenh.com>
Message-ID: <3ab6698b$0$11820$f5f63664@news.tdin.com>
Source record: 168183

I've always been fascinated with the HyTower antenna. One of my father's (a non-ham) friend was a ham and he had one in his small lot. I thought it was the neatest antenna, especially when I was a 15 newly licensed novice and my dad wouldn't let me put up antennas.

Anyways, I notice that the HyTower is back in the MFJ / Hygain catalog and I am seriously considering one for the antenna farm at my new QTH. I realize that the entire tower is part of the antenna so mounting other antennas directly on it is probably not a good idea. However, is there a way to use it to support a wire antenna? I'm thinking about installing a Carolina Windom 160 and wonder if I can use the HyTower to support either one of the ends, using a length of rope to isolate the two antennas.

If anyone has a HyTower available, I'd be interested in price and condition.

My current plans for the antennas include:

The HyTower as a vertical antenna
The Carolina Windom as the horizontal antenna
My current Force 12 C4S beam for 40, 20, 15 and 10.

I'd use the Force 12 tower to support the center of the Windom.
Ideally, I'd like to use the HyTower to support one end of the Windom and a mast of some sort for the other end. There are no trees at the new QTH and the Radio Works website cautions about installing the Windom's as inverted vees.

73,
Mark, N8ME

5312. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 20:37:26 UTC
From: richardharrison@webtv.net
Message-ID: <1707-3AB66E06-88@storefull-116.iap.bryant.webtv.net>
Source record: 168184

Tom, W8JI wrote:
"If you short the electric field, you are shorting the desired signal as well. They are inseparable."

Terman says they are separable. I`ve already provided his direct quotations. Tom may not agree.

I`ve worked at several broadcast stations. All coupled to their radiators inductively, using a Faraday shield between the cols. It is standard practice as capacitive coupling between the coils acts as a high-pass filter enhancing harmonic feed to the antenna. That shield not only suppresses the harmonics but it serves as a major lightning defense. These shields have the pock marks to prove they work.

I`ll add B. Whitfield Griffith Jr,`s remarks on the topic:
"The process of radiation is not the only means by which energy can be transferred from one circuit to another; if the magnetic lines of force which arise from the flow of current in one circuit happen to pass around, or link, the conductors of another circuit, then there is a mutual inductance between the two circuits,"-----"It is often desirable and practical to allow one type of coupling between two circuits and to eliminate the other. Fig 28-1, for instance, shows two coils which are coupled but have a special type of shielding between them that causes the coupling to be purely inductive and not capacitive. This consists of an array of parallel wires which are grounded at one end only. The lines of electric force from the coils terminate on these grounded wires, so that there are no electric lines of force passing directly from one coil to the other and hence no capacitive coupling. On the other hand, since the wires do not form closed loops, there is no circulating current in the shield and therefore nothing to stop the penetration of the shield by the magnetic field. This type of shield has long been known as a Faraday screen.

The book is "Radio-Electronic Transmission Fundamentals". Don`t know how the separation of magnetic and capacitive coupling could be explained more completely and simply.

Best regards, Richard Harrison, KB5WZI

5313. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 20:44:59 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3ab66fe3$0$62146$2c3e98f8@news.voyager.net>
Source record: 168185

yes they are amazing i have been using a proto for 75m here for over 6
months and there is not a pileup i cant bust
ken

Bob Miller wrote:
>
> Well, I've seen the latest QST, and I'm really excited by the possiblilities of
> these new Laser Gererated Antennas.
>
> I plan to have one up by April...
>
> Bob
> k5qwg

5314. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 21:24:44 UTC
From: richardharrison@webtv.net
Message-ID: <968-3AB6791C-22@storefull-112.iap.bryant.webtv.net>
Source record: 168187

Richard McCollum wrote:
"The tech is not and never was designed to be an entry-level license for HF radio."

Intent, design philosophy, etc. are not relevant to a rule once it`s on the books unless it`s appealed in the courts. In a "rule of laws", the law is exactly what it says, no more, no less. Anything else is a nightmare.

The code nuts have to be into self-dception and denial. Their horse is long dead but they refuse to dismount. All "amateur careers" are "dead end". It`s a hobby!

Code is not a "debatable issue", it`s a dead issue. A legacy mode? As Ann Richard said: You can put lipstick on a sow and call her "Monique", but she`s still a pig.

From reading N0BK`s posting, I think it`s time for the Justice Department to investigate a conspiracy,

Best regards, Richard Harrison, KB5WZI

5315. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 21:31:01 UTC
From: wsmith@cinci.rr.com
Message-ID: <3ab67b36.32013760@news-server>
Source record: 168186

On Mon, 19 Mar 2001 13:38:10 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>wsmith@cinci.rr.com wrote:
>>
>> I need a little advice about mounting an antenna on the rear of my
>> bike. I have used a Diamond 770 series dual band antenna on other
>> bikes with very good sucess. ...
>> I am running almost exclusively 2 meters.
>
>You certainly need a flag on your bike. Simply attach a Pico-J to
>the fiberglas flag pole. Worked for me.

Problem is, I already have the Diamond antenna, and also mounting a
flag (which I dislike) would be very difficult because of the fabric.

5316. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 21:51:44 UTC
From: kb7qhc@home.com
Message-ID: <3ab6751c.1481850027@news.seanet.com>
Source record: 168188

On Mon, 19 Mar 2001 13:10:31 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom, KA6RUH wrote:
>"The phenomenon of signal distortion caused by dependence of the phase
>velocity on frequency is called dispersion."
>
>Yes, there is a transmission line condition for a distortionless line
>that doesn`t discriminate against frequences and waveforms aren`t
>affected by the line except perhaps some loss in amplitude, and all
>frequencies have the same delay. It is called "Heaviside`s condition for
>the distortionless line":
>R/L=G/C
>Zo will be a pure resistance.
>
>Best regards, Richard Harrison, KB5WZI

Hi All,

Again, the corruption of language reveals itself in contradictions WITHIN the discipline that does not fully qualify its own definitions.
- sigh -

And Richard, you are right as far as you go, but the dispersion is an artifact of differences in Zo; not in their being resistive or reactive (although this is a basic consideration).

It simply relates to the metaphor of the prism in that the interface between two Zo's (or in optics, the indices of refraction) cause the applied signal to differentiate along wavelength such that the interface deconstructs the signal into slower and faster data arriving out of phase/time with respect to their original orientation. Or in terms of this metaphor, a white signal is translated into the spectrum of its constituent, colored components. Some of those components travel a greater distance than others and special care must be taken to reconstruct such a signal to recover the data without distortion.

The optical solution to this is found in the use of a transmission line with variable density, where the variation is found radially out from the coaxial center (this would be a blast to see in transmission lines, but I'm not going to hold my breath for an example).

This variability is added to the design to pull the spectrum of constituents together and keep them that way. Another design variation is call mono-mode and relates in similar fashion.

Thus the balkanization of terms with the imprimatur of being a standard expression within a technical community reveals itself for what it is, committee generated jargon with less than particular care for prior usage. When someone expresses the fact that something dissipated an applied signal, I needn't challenge them for a specification for temperature rise, and I certainly wouldn't challenge them with the observation that this heat must have in turn dissipated from its load to the environment. This is, as pointed out by both sides, the commonplace expression and expectation. However, those arguing this specious meaning of dissipationlessness would take the trouble to argue that the heat does NOT dissipate (which would confound their rigid logic) and turn their backs on centuries of established understanding within science and engineering. Even though the terms are understood and used in these common ways, this is not a rigorous basis for a formal definition, but rather for a dictionary of argot and cant (which is all that the IEEE can aspire to be in all reality).

And the question remains: "So What?"

73's
Richard Clark, KB7QHC

5317. Re: Balun location on LPY

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:00:30 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <2kvt6.45385$Ok4.4172689@news1.rdc1.ct.home.com>
Source record: 168189

Why?

"'Doc" <w5lz@oio.net> wrote in message news:3AB6153E.D2E8AA5C@oio.net...
>
>
> "Peter J. Bertini" wrote:
> >
> > My Log antenna instructions recommend placing a balun at the feedpoint;
but
> > I am wondering if the the balun wouldn't be better if placed at the mast
> > plate.. My thinking is with the coax being strapped to the lower boom a
lot
> > of energy would be capacitively coupled to the shield; thus defeating
> > whatever was gained by having the balun at the feedpoint.
> >
> > Where is the best place to put the balun, and what would work best on a
13
> > to 30 MHz design; ferrite sleeve or coaxial loop?
> >
> > Thanks
> >
> > Pete
>
> Pete,
> Put it where the manufacturer recommends.
> 'Doc

5318. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:10:24 UTC
From: jder8745@aol.com
Message-ID: <20010319171024.02261.00002206@ng-fy1.aol.com>
Source record: 168190

I have been using one for a long time.

Works lilke a charm.

73 de Jack, K9CUN

5319. Wellbrook Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:16:29 UTC
From: radionut44@hotmail.com
Message-ID: <3ab68247.124097104@news-server.triad.rr.com>
Source record: 168192

Are there any companies in the US selling these antennas, specifically
the 1530?

5320. Are F-connectors constant impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:16:44 UTC
From: jder8745@aol.com
Message-ID: <20010319171644.02282.00002293@ng-fy1.aol.com>
Source record: 168191

Howdy,

And if they are, do they make 50-Ohm F connectors?

Experienced users or knowledgable replies only, please.

tnx es 73 de Jack, K9CUN

5321. Re: Guying Rohn 25G foldover

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:35:03 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <rQvt6.45391$Ok4.4177340@news1.rdc1.ct.home.com>
Source record: 168193

Thanks Bill. Bought the tower used, and it came with three sets of guys. I couldn't figure how it was installed, and the previous owner is a silent key. I'm trying to find the engineering drawings for the 25G foldover guying; Rohn dropped the product and they act like I am speaking Martian when I call asking for info.

Pete

"Bill Aycock" <baycock@hiwaay.net> wrote in message news:3AB61DD1.B88B1236@hiwaay.net...
> Peter- Rohn uses a four guy system on the fold-overs to make clearance
> for the boom. The Rohn instructions call for a guy on each of the legs
> that dont have the boom, and two guys attached to the bracket at the
> hinge point on the boom leg. If you try for three guys, you must make
> allowances for clearance for the boom to tip up, which means an angular
> offset, which means trouble.
> Actually, the four guy system works well for me- the distance to the
> anchors is less than for a three guy system.
>
> Bill-W4BSG
>
> "Peter J. Bertini" wrote:
> >
> > Is there anyway to guy a Rohn foldover using a three-point guying system,
> > or are four guy wires the only way it can be done?
> >
> > --
> > Peter
>

5322. Re: Balun location on LPY

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:37:14 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab688be.388232648@news.accessunited.com>
Source record: 168194

On Mon, 19 Mar 2001 22:00:30 GMT, "Peter J. Bertini"
<commquart@home.com> wrote:

>Why?
>
>
>"'Doc" <w5lz@oio.net> wrote in message news:3AB6153E.D2E8AA5C@oio.net...
>> Pete,
>> Put it where the manufacturer recommends.
>> 'Doc

Because even though the balun won't work correctly, at least you'll be
doing what they tell you.

Now picture this Peter. These people that manufacture the antenna (if
it is the same one I had experience with) obviously don't have a clue
how a balun works.

Scary, isn't it?

73 Tom

5323. Re: 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 22:52:49 UTC
From: Dennis Kaylor <k4oxg@earthlink.net>
Message-ID: <3AB68D9E.15E1F1F9@earthlink.net>
Source record: 168195

how much cheaper can you get than the hamstick for 6 meters i think its
under $20 and a mag mount fromn radio shack or your local CB store

jim wrote:

> anybody built / or have plans for a cheap 6meter mobil
> antenna...either 50-51 mhz..or 53-54 mhz...Thanks
>
> Jim-kg4enu

5324. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 23:02:49 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab68a43.388622111@news.accessunited.com>
Source record: 168196

Hi Guys,

Some people will swear the tooth fairy is real.

On Mon, 19 Mar 2001 09:53:37 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Tom W8JI wrote:
>
>> The impedance of a single turn "shield" around the inner conductor(s)
>> is the SAME as the impedance of the antenna in a loop.
>
>This is incorrect. The impedance of the shield is not the same as the loop it shields,
because it is
>NOT a loop; it is open at the center.

The shield IS the antenna. Get a copy of a later Reference Data for
Radio Engineers, and read it.

The shield IS resonant (if the center conductor is tuned to resonance)
because the mutal coupling between the shield and center conductor is
virtually perfect.

Sometimes we will ignore all plainly evident facts to make an antenna
have magical properties.

1.) The time-varying fields can NOT pass through a conductor several
skin depths thick. They get to the inside of the loop by "spilling
over" the cut in the shield. If you measure voltage across the gap in
the shield, that voltage will equal the voltage of a single turn
inside the loop.

2.) If you short a turn (or turns) inside the loop, the voltage across
the gap in the shield goes to zero (except for a tiny voltage
remaining from losses).

3.) If you short the gap, you force the voltage to zero and the loop
goes dead.

4.) We know fields don't penetrate coaxial cables, and accept the fact
the current must "spill over" at the ends to create common mode
current outside the cable. We can't measure either MAGNETIC or
ELECTRIC fields outside the cable to any extent unless we allow this
to happen, no matter what shape we form the coax into. Yet a few of us
blindly insist it can happen in a loop made from coax!

5.) Even if we could violate every rule known and have fields pass
through the shield, the effect on noise would be ZERO. Noise is a

signal, just like any other signal.

6.) About 1/10th of a wavelength beyond the small loop antenna, the field impedance INVERTS. What was a strong magnetic field and weaker electric field NOW becomes the opposite. So much for the bologna that magnetic antennas are "quieter" because they are "magnetic".

Not only does shielding NOT happen, even if it did happen it would make no predictable difference in signal-to-noise ratio.

All the shield does is allow us to balance the antenna. There are a dozen ways to accomplish the same thing without a shield, and it is just as eas to screw-up the antenna by adding a "shield" if it is done incorrectly.

Faraday shields, for RF applications, are strictly common-mode devices. Thay have absolutely NOTHING to do with stopping electric fields from interacting with the antenna, and normal coupling of electric fields in a transformer.

If the system is built right, they are totally unnecessary. If the shield is grounded or constructed incorrectly, the shield can make things worse.

73 Tom

5325. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-19 23:36:05 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AB69835.5A6D381B@earthlink.net>
Source record: 168197

Richard Harrison wrote:

> Dick Carrol wrote:
> "But don`t worry, not everyone is cut out to be a CW operator."
>
> Reminds me of a cartoon on a college engineering department door:
> Shown was a hip-booted Sad Sack wading the muck of a subterranean sewer,
> his little headlamp lighting the gloom. Subscript read:
> "You too can be a Sanitary Engineer!"

And so a no-code license was set up, and behold - many became Sanitary
Engineers. Instant gratification still lives.

Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

5326. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 00:16:23 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <Cgxt6.109$Rw3.1950@newsfeed.slurp.net>
Source record: 168198
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Thanks I will do that. But he shows up in a lot of groups. How sad he must really be. W9FPJ
"Matthew T. Jachimstal" <matthew@cblmdm205-162-220-96.buckeye-express.com> wrote in message news:slrn9bcd8n.8ep.matthew@cblmdm205-162-220-96.buckeye-express.com...
> Dick Elliott <elliotta@netusa1.net> spewed forth:
> # Does anybody know the procedure for having an individual removed from the
> # news groups if they are as caustic as this "gentleman"? This type of abuse
>
> Pretty hard to get someone "removed." Better yet, just add him to your
> killfile and you'll never see another post from him again.
>
> Matthew
>
> --
>
> This message brought to you by our staff chiropractor, Winston Payne.
>
> | Matthew T. Jachimstal KG9LF [\] <*>
> | jachim69@excite.com 906-483-0232

5327. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 01:13:26 UTC
From: ik7565@erols.com
Message-ID: <3AB6AEB6.2DFB457E@erols.com>
Source record: 168199

I should have mine installed by April 1st.

73 de N8IK

JDer8745 wrote:
>
> I have been using one for a long time.
>
> Works lilke a charm.
>
> 73 de Jack, K9CUN

5328. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 01:31:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB6B2D5.785D03E8@IEEE.org>
Source record: 168200

wsmith@cinci.rr.com wrote:
> Problem is, I already have the Diamond antenna, and also mounting a
> flag (which I dislike) would be very difficult because of the fabric.

Cars aren't looking for those kinds of bikes and very often don't
see them. Do yourself a big favor and get a flag - maybe two flags.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5329. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 01:48:06 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3AB6B6D6.DECF4152@aztek-eng.com>
Source record: 168201

Whenever I hear someone bad mouth CW as you are it is either because:

a.) The person is too lazy to learn it or
b.) They have overly bright pink skin, wear lipstick and go by "Monique".

CW happens to be enjoyable for many (certainly not all) hams and it still has a 14dB advantage over SSB which help those who live in a CCR&R area where large antennas are not possible. Look at all the QRP rigs being sold. I think there are just a few too many crybabies who don't wish or know how to work towards a goal and would much rather complain.

Just my $.02

Larry, W0QE

Richard Harrison wrote:
>
> Richard McCollum wrote:
> "The tech is not and never was designed to be an entry-level license for
> HF radio."
>
> Intent, design philosophy, etc. are not relevant to a rule once it`s on
> the books unless it`s appealed in the courts. In a "rule of laws", the
> law is exactly what it says, no more, no less. Anything else is a
> nightmare.
>
> The code nuts have to be into self-dception and denial. Their horse is
> long dead but they refuse to dismount. All "amateur careers" are "dead
> end". It`s a hobby!
>
> Code is not a "debatable issue", it`s a dead issue. A legacy mode? As
> Ann Richard said: You can put lipstick on a sow and call her "Monique",
> but she`s still a pig.
>
> From reading N0BK`s posting, I think it`s time for the Justice
> Department to investigate a conspiracy,
>
> Best regards, Richard Harrison, KB5WZI

5330. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 02:00:06 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <VNyt6.141$Rw3.1434@newsfeed.slurp.net>
Source record: 168202

When I got into ham radio in 1987 I took a step that was a big one for me. I have learning disabilities. Math; never got past 7th grade. Retention meant repetition until I "got" it. I learned by watching, and mimicking what I needed to learn. Typing took a long time but I learned it. For years I faked a lot of stuff. I very good at anticipating what the instructor wanted from me and could give the answers out-. But to sit down and take a test was gosh-awful. I failed the code portion of my Novice ticket. But a VE saw what was going on with me and he gave me the test again in another room. The Tech class took two testing sessions, so did the General, again the code. The Advanced test took three trips in years time and the Extra took two times. My "ELEMERS" taught me how to do the formulas that would be on the test and that was a chore believe me.

Why, you ask, am I "confessing"? Well following this string has revealed something that I picked up on in 1987. Amateur Radio is, to some individuals, "THEIR" hobby, and if you do not meet or exceed their station in the hobby then you do not belong on the same level as they do. These folks have no bones in telling you that you do not belong either. I hid my "learning disabilities" because I was ashamed of it. I missed out on a life time of adventure and excitement in during the 50's, 60's, 70's, and half the 80's because of that attitude. You would have to live it to know what I am talking about.

When I see someone say something about knowing code or you are not a "real" ham makes me want to throw up. A true ham radio operator is one who knows what the word "ELMER" means and puts it into practice. Packet is part of ham radio. But I do not practice it, nor slow scan TV, or satellites. But I do love SSB and CW. Am I a ham? You bet. Is the person who takes the tests, one at a time a ham? You bet. And shame on you who says it ain't so!

I know many hams who got in ham radio on the no-code ticket. Guess what? Most of them go after the code with a vengeance. Why? Because someone took the time to show how much fun it is. If the person who is a VE does not want to work with the Tech tests, get out. Stay out. Sell your ham gear because you are hurting the hobby more than you will ever know!

I love the Morse Code. I now send and receive about 17 words a minute. Any faster and I lose it. If someone does not want to reply to my CQ because it is too slow for them, well, that is their loss. I am sure the hams that loved "spark-gap" era felt the same way about the "modern" advances that did away with "sparky" as a lot of hams feel about the Morse Code. But change is part of life. Hell I would love to be stuck between 1950 and 1960. Those were the best times of my life. My mom and dad were my best friends, my brothers and sisters were also. Everything was in place back then. No real worries. Not a whole bunch of cruel people around then either. But folks

time moves on. Most of us adjusted and changed with the changes.

The amateur radio hobby will be here for a long time, if change is accepted, and everyone quits trying protect "their" area. You who love the code as I do will see to it that the "code freqs" will be protected. I can not imagine not being able to use code on the bands.

We will lose our precious and valuable airwaves if attitudes do not change. Motorola is just waiting for that not to happen.

5331. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 02:25:44 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AB6BFA8.D83BD1A2@hiwaay.net>
Source record: 168203

MIne has been up at about 48.36 feet for some time. It works fine, but
the real fun is in watching birds try to land on it. When one hits it
just right, I turn the power off. HI.

Bill-W4BSG

Bob Miller wrote:
>
> Well, I've seen the latest QST, and I'm really excited by the possiblilities of
> these new Laser Gererated Antennas.
>
> I plan to have one up by April...
>
> Bob
> k5qwg

5332. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 02:35:27 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB6C1EF.D89CC731@mwci.net>
Source record: 168204

Tom W8JI wrote:

> The time-varying fields can NOT pass through a conductor several
> skin depths thick. They get to the inside of the loop by "spilling
> over" the cut in the shield.

Beg to differ on this one. The field does not reach the inside by a current "spilling over the edge" and
back along the inside surface. This "loop-current-over-the-open end" fallacy has been floating around for
quite a few years.

It is also not true that an EM wave cannot be transmitted *through* a Faraday shield. It happens all the
time.

Skin effect does not operate to prevent this coupling from the outside to the inside. At any particular
location on the shield, there is no skin effect between the outside and the inside, measured directly
through (perpendicular to the surface) the thickness of the shield, which is an excellent conductor.
Skin effect doesn't work like that, it only works for a current that is flowing along the surface, not
directly through the thickness. Also, a net current does not flow along the length of the outer surface
for the simple reason that it is open-circuited, just like any other conventional transformer, which is
exactly what we are talking about here.

The induced EMF and charge distribution on the outer surface exists identically on the inner surface.
This EMF and charge distribution on the inner surface creates an EM wave at the inside of the shield that
then propagates to the turns of the inner multiturn loop. Depending on the load resistance connected to
this multiturn loop, a "counter-wave" can also be created that reflects back to (and through) the shield.

A length of coax shield that is not shorted to itself is an excellent Faraday shield and does not stop
the transmission of an EM wave. This wave is "re-created" in-phase at the inside of the shield. There is
no mickey mouse phase shift due to a travel time around the open end of the shield and back into the
inside of the shield. The wave inside the shield is exactly in-phase (or very damn near)

with the wave on
the outside of the shield.

In an open-circuited length of coax Faraday shield there is no circulating current. It is just like any
other open-circuit winding on any other ordinary transformer.

There is a simple and interesting way to see what is going on along the length of the Faraday shield.
Imagine that the shield is composed of a very large number of very small segments. Within each segment
there are two things 1) an induced EMF created by the incoming wave and 2) a charge distribution due to
electrons. These two fields cancel each other so that the "net composite" E field within that tiny
segment is zero, just as it's supposed to be. But because of the charges, each segment is like a small
open-circuited battery. The total voltage is the sum of these many individual voltages. And because the
net E field in each segment is zero, and because the shield is open-circuited, there is *no* net current
flow along the surface.

Now suppose the incoming EM wave suddenly reverses direction. Within each tiny segment the induced EMF
and the charge arrangement both quickly reverse directions. The zero net E field is maintained at each
and every location. This reversal occurs "locally" and there is no "sloshing" of electrons (current flow)
from one end of the shield to the other. The EMF and charge distribution are both *uniform* along the
length.

Is there any dissipation in the copper due to these reversals? Yes, there is a small dissipation within
each tiny segment due to the reorientations of electrons within that segment. In other words, an
open-circuit transformer winding will dissipate a very small power due to high frequency cycling within
each of the many tiny segments.

There is another interesting thing. Text books tell us that a wave cannot penetrate a good conducting
surface beyond a few skin effect depths. That would seem to refute what I have been saying here.
However, if we look more closely at the textbook, it specifies that the surface must have an
unrestricted current flow, in other words an infinitely large surface. The reason is that it is this
current flow that creates the opposition field that creates the reflection. The wave is not just bouncing
off of the surface like a golf ball against a stone wall. It is the surface current that creates the

reflection. That is why we see skin effect mentioned with regard to depth of penetration of the wave into
the surface.

A shield room that is buttoned up tight also approximates just such a surface so that surface current has
an unrestricted continuous closed path. That is the basic principle of the shield room and any other RF
magnetic shield (Terman 1955). The basic principle of the Faraday shield is that a continuous or closed
path for current does not exist, therefore an EM wave can pass through with very little attenuation in
the manner that I have described. A very thick shield material could create some problems, but a single
coax braid is OK at HF, at least.

Bill W0IYH

5333. antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 02:38:47 UTC
From: MWhite <mwhite@simplynet.net>
Message-ID: <lozt6.1215$lr6.304317@paloalto-snr1.gtei.net>
Source record: 168205

Does anyone have an opinion on the through glass antenna's.

5334. Re: Guying Rohn 25G foldover

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 03:12:44 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3ab6c988.1120837@news.aepnet.org>
Source record: 168206

On Mon, 19 Mar 2001 22:35:03 GMT, "Peter J. Bertini"
<commquart@home.com> wrote:

>Thanks Bill. Bought the tower used, and it came with three sets of guys. I
>couldn't figure how it was installed, and the previous owner is a silent
>key. I'm trying to find the engineering drawings for the 25G foldover
>guying; Rohn dropped the product and they act like I am speaking Martian
>when I call asking for info.
>
I have a Rohn 45 foldover and Rohn Dwg # D770022 R5 specifies four
guys with the anchors 18' from the base of the tower. This is
assuming that there are two 10' full sections above and below the
hinge section. If there is an extra section in there someplace then
the distance increases to 25'.

The '45 hinge section has welded tabs for guy attachment, so it is
obvious where they connect. I can't speak to the '25 tho...

73,

Wes

5335. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 03:14:10 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <996i00vtl1@slb0.atl.mindspring.net>
Source record: 168207

Bill Aycock <baycock@hiwaay.net> wrote in message
news:3AB6BFA8.D83BD1A2@hiwaay.net...
> MIne has been up at about 48.36 feet for some time. It works fine, but
> the real fun is in watching birds try to land on it. When one hits it
> just right, I turn the power off. HI.

I've been lurking in this group for some time, and I can tell you H.A.M. operators have some very mean-spirited and retrograde attitudes, but this is the worst example of them all. Ever since Cowboy Bush stole the election the right-wingers and animal-haters have been licking their chops. Well, I draw the line HERE. I think what needs to happen now is for Mr Aycock to post an apology in this chatroom with a pledge not to commit such acts again. I've already made note of the laser antenna and it's potential dangers to wildlife. Needless to say, I'll be campaigning for an outright ban on this device.

Corry

--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/

5336. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 03:39:10 UTC
From: richardharrison@webtv.net
Message-ID: <969-3AB6D0DE-10@storefull-112.iap.bryant.webtv.net>
Source record: 168208

Richard Clark wrote:
"---you are right as far as you go--"

If I were half the mathematician that Oliver Heaviside was, I`d have completed the exercise. I thought I was doing well just to remember Heaviside`s criteria for over 50 years. (R/L=G/C)

If a line is going to treat all frequencies the same, it must look like a pure resistance. This was especially important to telephone companies. Heaviside realized this and invented the loading coil.

Heaviside invented vectors and that may be his biggest accomplishment, although he made J.C. Maxwell`s equations understandable and useful to ordinary engineers. Heaviside was born in 1850. He was mostly self-taught as a London mathematician and scientist. Oh yes, he also got at least part of the credit for describing ionospheric reflection and got the honor of having the reflecting layers named for him, but while I think Hertz should go away and we should go bact to CPS, I see nothing wrong with a Heaviside layer. But alas, the use of Heaviside`s name has faded while the name of Hertz has not.

Best regards, Richard Harrison, KB5WZI

,

5337. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 03:50:50 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6DC3DC9.7233%stewartx@sccoast.net>
Source record: 168209
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:

> [snip] What torques my tail is when one whines
> because he can't have it all on the strength of
> his codefree tech written test, or yesterday's
> equivalent. [snip]

What a bunch of bullcrap, Dick. I don't know of a single person that wants to "have it all on the strength of his codefree tech written test." Instead, what most of us (Techs) want is to be able to use the capabilities that the FCC has authorized, without constantly being harrassed for using those capabilities differently then you might use them (in other words, stop endlessly judging us).

In addition, like all human beings, we would not mind a little respect - not as a ham operator (I know we'll never get that from you, no matter what we do), but simply as a human being who wants to enjoy life without all the endless insults (the crap you wrote above or the "no-code equals no ham" nonsense, for examples).

And finally, some (not all - some don't mind the code tests and some have no desire to upgrade at all) want an opportunity to upgrade without spending weeks learning an absolutely antiquated communications mode that very few, if any, outside of ham radio uses anymore. By the way, describing code as an "antiquated communications mode" is not a judgement, a put-down of code users, or even an opinion - it is a fact.

Now, every single person that I've met who feels that way is more than willing to meet reasonable requirements (the written tests, for example), so it is not an situation of wanting something for free. Instead, they all seem to be saying they want a fair price for what is offered (and learning Morse Code is not a fair price simply because you once had to pay it).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5338. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 03:54:07 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AB6D45F.B15A6409@bctv.com>
Source record: 168210

Cortland Richmond wrote:
>
> A fluidic antenna is discussed in the HFPack egroup. This may supersede your own
> patent since the technology of an ionic fluid is some hundreds of years old.
>
> Unless, of course, you determine that RF would fry the anions!

What's the problem? Fried anions are great with a cheeseburger.

5339. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:13:26 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AB6D8E5.5F64F930@hiwaay.net>
Source record: 168212

Corry is right, I'm sorry about the birds. However, this gave me another idea, and I have a laser tree stand in the works for next deer season. I wonder if Corry will volunteer to be Beta tester? One of the safety features is a cut-off switch actuated by chin pressure, if the hunter nods off.

"Cowboy Bush"- as they say in Texas- " All hat and no herd"

Bill

Unclaimed Mysteries wrote:
>
> Bill Aycock <baycock@hiwaay.net> wrote in message
> news:3AB6BFA8.D83BD1A2@hiwaay.net...
> > MIne has been up at about 48.36 feet for some time. It works fine, but
> > the real fun is in watching birds try to land on it. When one hits it
> > just right, I turn the power off. HI.
>
> I've been lurking in this group for some time, and I can tell you H.A.M.
> operators have some very mean-spirited and retrograde attitudes, but this is
> the worst example of them all. Ever since Cowboy Bush stole the election the
> right-wingers and animal-haters have been licking their chops. Well, I draw
> the line HERE. I think what needs to happen now is for Mr Aycock to post an
> apology in this chatroom with a pledge not to commit such acts again. I've
> already made note of the laser antenna and it's potential dangers to
> wildlife. Needless to say, I'll be campaigning for an outright ban on this
> device.
>
> Corry
>
> --
> It Came From C. L. Smith's Unclaimed Mysteries.
> http://www.unclaimedmysteries.net/

5340. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:15:37 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AB6D969.C4AF5CC3@hiwaay.net>
Source record: 168211

Huh- Keith can't even spell "Unions"

Bill

Keith Wood wrote:
>
> Cortland Richmond wrote:
> >
> > A fluidic antenna is discussed in the HFPack egroup. This may supersede your own
> > patent since the technology of an ionic fluid is some hundreds of years old.
> >
> > Unless, of course, you determine that RF would fry the anions!
>
> What's the problem? Fried anions are great with a cheeseburger.

5341. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:16:01 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AB6D981.F675BF30@bctv.com>
Source record: 168213

Sorry, I'm in a Right-to-Work state, I'm not in a union.

Bill Aycock wrote:
>
> Huh- Keith can't even spell "Unions"
>
> Bill
>
> Keith Wood wrote:
> >
> > Cortland Richmond wrote:
> > >
> > > A fluidic antenna is discussed in the HFPack egroup. This may supersede your own
> > > patent since the technology of an ionic fluid is some hundreds of years old.
> > >
> > > Unless, of course, you determine that RF would fry the anions!
> >
> > What's the problem? Fried anions are great with a cheeseburger.

5342. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:28:44 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <996m9s$l6h$3@bashir.peak.org>
Source record: 168214

W6RCecilA <Cecil.A.Moore@ieee.org> wrote:
: "William E. Sabin" wrote:
:> RF energy radiated into space is not dissipated, it is "dispersed" in its
:> original RF form. ... IEEE bashing seems to be a pastime.

: Webster's muddies the water when it indicates that dissipate and
: disperse are synonyms in any field except physics.

Unless Webster's states that they are "sometimes synonymous", then they
are wrong. Nothing new there - such dictionaries list common usage, not
precise definitions.

--
Bill Nelson (billn@peak.org)

5343. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:32:59 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB6DD7B.2D80D9D0@IEEE.org>
Source record: 168217
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Dick Carroll wrote:
>
> W6RCecilA wrote:
> > Dick, when are you going to stop whining about Techs?
>
> Uh, Cec, OB, it ain't just the techs.....Check yer mirror....

Novices also?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----
```

5344. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:35:21 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <996mm9$262$1@208.206.142.67>
Source record: 168215
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:
>
> Dick Carroll wrote:
> > It merely
> > indicated a lifelong whiner of the first magnitude, and I won't cut him
> > any substantial amound of slack.
>
> Dick, when are you going to stop whining about Techs?

Uh, Cec, OB, it ain't just the techs.....Check yer mirror....

5345. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 04:39:25 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AB6DEFD.AA2DBACD@bctv.com>
Source record: 168216
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Phil Kane wrote:
>
> On Thu, 15 Mar 2001 08:06:27 -0600, W6RCecilA wrote:
>
> >message center wrote:
> >> I am
> >> concerned about the quality of amateur radio operators, not quantity.
> > >
> > >Does this mean that you want to reduce the number of hams available
> > >for emergency communications?
> >
> > No, he means that he wants the level of intelligence,
> > articulation, and verbal persuasiveness of others lowered to
> > his.

I dunno, can a fern GET a license . . ?

5346. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 05:17:30 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <996p5a$94l$0@208.206.142.67>
Source record: 168218
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Richard McCollum wrote:
>
> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3AB60954.CFFBDA26@IEEE.org...
> > Dick Carroll wrote:
> > > It merely
> > > indicated a lifelong whiner of the first magnitude, and I won't cut
> him
> > > any substantial amound of slack.
> >
> > Dick, when are you going to stop whining about Techs?
> > --
> > http://www.mindspring.com/~w6rca
>
> Cecil, Dick is not complaining about Techs as a group nor am I. We are
> reaping the results of fundamental dishonesty. I will give you two points
> to look up in your Funk & Wagnalls.
>
> Point 1. The Tech is not and never was designed to be the entry-level
> license for HF amateur radio. It predates the codeless arguments so we
> can dispense with them. It was designed to serve a multiplicity of uses,
> all worthy but none of them in the mainstream of Amateur Radio. Some of
> them included:
> a. Real honest experimenters - all 12 of them.
> b. Wives wanting contact with the old man. The Bread-and-Milk thing
> which was the subject of a lot of dubious subterfuges of which I was once
> a major instigator. Every wife on our repeater was named Sally and had
> the same callsign, a 2x3 I once had for 2 months or so.
> c. Personal communication of the type you describe with your camping
> buddies. The FCC whatever else one may think of them has a habit of
> encouraging communication. Good way to keep tabs on number one son when
> he is armed and dangerous on a hunting trip.
> d. Taking some pressure out of CB. The spots were up then, too.
>
> Without beating the point to death, selling the Tech as an entry-level
> ticket was and is fundamentally dishonest. In my VE days I did not
> administer them because I did not believe I was doing anyone a favor. As
> a practical matter I would not be called upon to anyway because of the
> necessity to keep the Advanced VEs occupied. In the context where Leland
> butted in, the discussion was advising the newbie. Guess what? I don't
> recommend taking Element 2 as an initial step either.
>
> Point 2. This dishonesty, as lies have a habit of doing, has come back to

> haunt us -- certainly in the general environs of Newington CT. The Tech
> since it came into existence has been a dead end for a lot of amateur
> careers. When you get on phone, the time for code practice or working it
> never comes again. Larry was in the trap, so was I. So if nothing else
> our level of tolerance is not as great as some but we know every
> self-deception in the book. As Billy Sunday once said of Satan, "I know
> there is a Devil because the Bible tells me so and because I have done
> business with the bastard personally". I won't lead a man there any more
> than I would lead him to an open door to unlit basement steps.
>
> At least prior to 1991 the Tech, at least in theory, had to pass 5 wpm so
> he had some idea of what it was he was evading. Since then, we have
> developed Lifer Tech Syndrome, Dick's bugbear. Characteristics of this
> syndrome, a big campaign dedicated toward deceiving both the world and
> oneself, include:
>
> a. Joining NCI and playing like the code requirement was even a
> debatable issue within a five-year horizon. Never miss the opportunity to
> say or write 'Morris Kode'. Note Leland's nearly-indecipherable tag line.
>
> b. Joining everything, subscribing to everything, going to Dayton every
> year. Activity signifying not a hell of a lot.
>
> c. Entering into every discussion on 'leading edge' technology.
> Nothing, of course, is ever done just talked about. Knowingly pronounce
> everything in existence as a 'legacy mode'. Become the resident genius
> on arcanity -- you too can be the guru of 160 meter gray line
> propagation.
>
> d. Where anyone has actually achieved anything, even a simple-minded
> code test, he must be attacked, unhorsed, and mugged. Larry has built a
> whole new hobby on these dipsticks.
>
> e. Whining endlessly about slights real or imagined. The object, of
> course, is to punish verbalization of what everyone in the vicinity
> already knows. In communities of the terminally incompetent the crushing
> line is "You think you are better than everyone else." When the response
> is, "I not only think it I know it" it is time for the riot squad.
> Equality is another word for nothing left to lose -- or more precisely
> never having gained it to begin with.
>
> I do not play the game nor do I tolerate it.
>
> Dick Nï¿½BK

BINGO!!! Right *ON* the head!

Dick Wï¿½EX

5347. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 05:55:48 UTC
From: Phil Kane <Phil.Kane@nospam.spam>
Message-ID: <cuvyxnansvbet.gah6q52.pminews@ca.news.verio.net>
Source record: 168019
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 20 Mar 2001 04:39:25 +0000, Keith Wood wrote:

>> >Does this mean that you want to reduce the number of hams available
>> >for emergency communications?
>>
>> No, he means that he wants the level of intelligence,
>> articulation, and verbal persuasiveness of others lowered to
>> his.
>
>I dunno, can a fern GET a license . . ?

Once a noted wealthy ham went on a safari to Africa and came
home with a monkey. He brought the monkey to a club meeting,
and cornered the ham class guru. "I'll give you a hundred
bucks to get my monkey ready to take the Tech test". The guru
demurred. "Five hundred bucks." More denial. "A thousand
bucks." Finally the guru said "OK, but it will take 18 months."
"Deal" said the ham with the monkey and departed.

"Hey, old buddy, what kind of a deal is that?" said the guru's
pal. "Look", the guru said "in 18 months anything can happen.
The ham can die. The monkey can die. And even if not, you
ought to see some of those folks that I have to prepare....."

--
73 de Phil Kane - K2ASP

5348. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 06:33:50 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <996tkeimj1@news.hawaii.edu>
Source record: 168020
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA <Cecil.A.Moore@IEEE.org>wrote:
>has HF also become
>such a religion that nobody can admit that VHF/UHF repeaters have some
>advantages over HF without repeaters?

What's currently achieved on V/UHF used to be done with MF groundwave.
Power aside, look at the coverage your local AM broadcast stations have
on MF. 73, Jeff KH6O

5349. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 06:56:47 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <PaDt6.7334$wQ3.555590@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168022

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:993sa9$2dst$1@heap.juniper.net...
> VE9SRB <srbest@att.net> wrote:
> >Energy radiated by an antenna is not "dissipated". This would infer that
> >the energy was traveling in a lossy medium and was converted from one
form
> >to another.
>
> The IEEE definition for dissipation was the conversion of electrical
> energy to heat. Electromagnetic radiation is a mechanism for heat
transfer
> (the only mechanism that operates in a vacuum, the other mechanisms
> are convection and conduction), so by the IEEE definition it would
> seem that the energy was dissipated as soon as it left the antenna
> in the form of electromagnetic radiation.
>
> In fact I'm not entirely sure that the above is true, but what I am
> sure of is that any argument that electrical energy isn't being
> dissipated into electromagnetic radiation by the antenna has got
> to involve the coherence of the resulting radiation. Other than
> its coherence, the electromagnetic radiation emitted by an antenna
> is indistiguishable from any other radiated heat.more

Dennis:

There seems to be some confusion as to the terms and processes we are discussing here. Consider the total energy delivered to the antenna. First, if the antenna is lossy, some portion of the energy delivered to the antenna will be "dissipated" in or at the antenna. Dissipation infers loss, in that the dissipated energy is lost and not available for radiation. "Radiation" is the process through which the antenna converts the energy delivered to its terminals into a traveling EM wave in space. This process is "radiation", it is not "dissipation" nor is it "dispersion".

The "dispersion" process that we have been discussing is what happens to the EM energy after leaves the antenna. Is it "dissipated" in space or is it "dispersed" in space? Again, dissipation of the traveling energy infers a much different process than dispersion of the traveling energy. Dispersion in itself may be a poor choice of a word. "Spreading of Energy" may be a more appropriate term.

>
> >Energy radiated from an antenna is dispersed in space. It simply travels
> >away from the source. The energy density decreases with distance because
of

> >the dispersion process not dissipation.
>
> So, if I run a current through a resistor in space (i.e. a vacuum), does
> that fact that all the energy consumed by the resistor is radiated
> away from the resistor as electromagnetic radiation now mean that
> resistors in space aren't dissipative, but rather are simply dispersive?

I think you're confusing processes again. The energy converted to heat
would be dissipation. The energy radiated would be radiation. Again, we
are discussing the concepts of what happens to the radiated wave as it
travels away from its source.

>
> There are no processes where energy is not conserved, so suggesting that
> a process is not dissipative because it is energy-conserving implies that
> no process is dissipative. When I was in school processes which were
> energy-conserving (all of them are) were still dissipative if they
> produced entropy. People often say "conversion to heat" when they
> mean entropy production, but in fact dispersive processes of any
> sort generally produce entropy even if they don't involve an energy
> conversion at all. For example:
>
> >The energy radiated by the antenna is not "lost" as you imply. If the
> >energy was "lost" through dissipation it could never be recovered. In
> >theory (this is impractical but it illustrates the point), if you could
> >surround the antenna with a sphere capable of collecting all energy
hitting
> >the sphere, all of the energy radiated by the antenna could be recovered
at
> >any distance away from the antenna. The only time this would not be true
is
> >if the energy encountered a lossy medium as it traveled.
>
> Here you again argue that radiation isn't dissipative because energy is
> conserved, yet all processes conserve energy. Dissipation isn't
associated
> with energy conservation (energy is always conserved), it is associated
> with entropy production, and the process you describe above appears to
> me to be entropy-producing.
>
> Here is an analogy. I have two perfectly insulated buckets containing
> 10 kilograms of water, one at 60 degrees above ambient temperature
> and one at ambient temperature. If I have a thermometer to measure
> the temperature above ambient, and a scale to weigh each bucket, I can
> tell you how much heat energy I have in each bucket. The bucket at 60
> degrees above ambient has heat, the one at ambient temperature has none.
>
> I now mix the water from each bucket. After they mix (i.e. convective
> heat transfer), I measure the temperature and weight and discover that
> the total amount of heat in the mixture is identical to the total heat
> energy in the buckets I started with, with the 20 kilograms of water

> now being 30 degrees above ambient. Energy is conserved, but the
> heat that used to be in the one bucket is now distributed over twice
> as many molecules and the temperature is halved. But while the process
> is energy-conserving it is dispersive, and hence entropy-producing, and
> hence is dissipative. That is, no process can be designed which will
> have the sole effect of separating the water back into two buckets, one
> at 60 degrees above ambient temperature and the other at ambient
> temperature, even though the latter process would also conserve
> energy. The process has done no energy conversion, but it has transformed
> the higher-grade 60 degree heat into lower-grade 30 degree heat, which
> is irreversible and hence dissipative.
>
> The same applies to your example above. The energy density very
> close to the transmitting antenna might be many W/m^2. If you'd closely
> coupled a receiving antenna to the transmitting antenna such
> that no energy was radiated (i.e. if you'd built a transformer) you
> could have recovered the electrical energy in its original form, but
> if your surrounding sphere is large enough to be collecting radiated
> energy you'll be collecting the energy at energy densities of mW/m^2 or
> uW/m^2 or less. This process is entropy-producing (i.e. there is no
> process you can design which has the sole effect of returning the
> energy captured by the sphere to the W/m^2 form it was in when it left
> the antenna), and is hence as dissipative as any other form of heat
> transfer. Dispersive processes are synonymous with dissipative
> processes, as far as I can tell, and the process you describe above
> is identically a dissipative, entropy-producing transfer of energy from
> the antenna to the sphere.
>
> Dennis Ferguson

See the other response for more discussion ..

Steve VE9SRB

5350. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 06:56:48 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <QaDt6.7335$wQ3.555238@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168021

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:9940ah$2kru$1@heap.juniper.net...
> Steve,
>
> VE9SRB <srbest@att.net> wrote:
> >"Dissipation" infers that energy is lost in the form of heat. EM energy
is
> >converted to thermal energy. When an EM wave propagates away from an
> >antenna, the energy density thins out as a function of distance traveled.
> >This process (the rate of energy thinning) is identical for all
frequencies.
> >This is the basis for the derivation of the familiar path loss formula.
At
> >an infinite distance, the thinning process will cause the energy density
to
> >go to zero, but this is not a "dissipation" process.
>
> I don't see how this could possibly be true.

I am not sure what part of this you don't see as true. Perhaps you could
explain.

Consider this:

The antenna is an isotropic source with 0 dBi gain. Why is the EM field
density different at a distance of 10,000 km as compared to the EM field
density at a distance of 1,000 km?

After answering that question, consider this: At any distance from the
antenna, if you were to integrate the energy density or energy intensity
over a sphere surrounding the antenna, the total energy over the sphere
would be the same. The total energy does not decrease with distance, it is
not "lost" nor does it decrease as it travels. This is why the radiated
energy is not said to be dissipated as it travels - it is dispersed (spread
out or thinned) in space. The term dissipation would infer the loss of
energy, which is a different process than the spreading out of the energy.
There is no energy lost as the wave travels (considering the total sphere
surrounding the antenna). The fact that we do not have a mechanism to
capture all of this energy is another separate issue.

One of the most confusing definitions is that of free space path loss. It
is written as a function of distance and wavelength (frequency). As a
result, many assume that there is more "loss" of traveling energy with
increasing frequency as if it were "dissipated" somehow. Actually, the
process is the same for all frequencies. The frequency dependence is
introduced to account for the fact that the effective aperture of an antenna

is a function of frequency.

>Radiated EM energy *is*
> heat in the process of being transfered, and all heat transfer is
> dissipative (i.e. generates entropy). In fact, while there are other
> heat transfer mechanisms that can operate when you have sufficient
> mass density, in the end all heat ends up being transfered in the form
> of EM energy. The bulk of the heat generated by hydrogen fusion
> at the core of the sun is transfered away from the sun in the form
> of EM energy. If you go outside on a sunny day you will indeed
> find that heat is being transfered to the molecules on the surface
> of the planet in a form we're more likely to call "thermal energy",
> but even that is reradiated into the night sky as EM radiation again.
> EM radiation is heat in the process of being transfered from a
> warmer place to a colder place, and this is the most fundamental
> definition of "dissipation".
>
> Irreversible processes are dissipative processes. The decrease in
> the radiated energy density, and the resulting reduction in thermal
> energy which can be extracted from the field by individual molecules,
> is "dissipation" whether the EM energy actually finds molecules to
> transfer the thermal energy to or not.

Defining dissipation in this manner seems to be a personal preference. If
you choose to define dissipation in this manner that's fine but it does not
sufficiently explain the process that an EM wave undergoes as it travels.

Steve, VE9SRB

>And even if it does find
> molecules, the molecules themselves will simply re-radiate the
> heat as EM radiation again so finding those molecules is not
> going to decrease the flux of radiated EM energy either. Energy
> is always conserved, this has little to do with dissipation.
>
> The only difference I can see between EM energy radiated from
> an antenna and general radiative heat transfer is the coherence
> of the energy radiated by the antenna. I'm not sure this matters,
> but I am pretty sure that any argument which distinguishes between
> EM energy radiated from an antenna and general radiative heat
> transfer has got to be based on coherence, since there is no
> other difference that I can see.
>
> Dennis Ferguson

5351. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 10:48:04 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3ab73593$0$62140$2c3e98f8@news.voyager.net>
Source record: 168023

also in the works is the laser antenna support also laser operated you
can adjust the height of the laser antenna from 6 to 500 feet as needed
ken

Bob Miller wrote:
>
> Well, I've seen the latest QST, and I'm really excited by the possiblilities of
> these new Laser Gererated Antennas.
>
> I plan to have one up by April...
>
> Bob
> k5qwg

5352. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 11:00:22 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab733b9.432010644@news.accessunited.com>
Source record: 168024

Hi Bill,

We have to be careful or we will perpetuate the myth that "magnetic" signals in a shielded loop pass right through the shield, while "electric" signals are shorted. That isn't true at all, and is easy to prove.

The "shield" does not change the field impedance of the loop at all. It does not sort the "magnetic" part of an EM wave from the "electric" part of an EM wave.

It does not sort signals from noise.

All it does is modify the balance of the structure, and improve balance if it is installed correctly.

73 Tom

5353. Installing a Cushcraft R7 Vertical - Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 11:50:21 UTC
From: Don <k4wva@home.com>
Message-ID: <1uHt6.333613$j6.46978370@news1.rdc1.va.home.com>
Source record: 168025

I recently acquired a Cushcraft R7 vertical antenna and was considering a "near the ground" installation. This is one of the verticals which does not require separate radials since it has build in counterpoise rods at the base. The instructions indicate that "dangerouly high voltages" can be present on the counterpoise rods, and recommends a mounting height of at least 8 feet.

I will probably not run more than 100 watts through the antenna. Any one have experience with the this vertical (or similar) and the voltages that might be present on the antenna / counterpoise rods? Needless to say, after reading the instructions, I have to rethink the installation.

Any help / comments are appreciated.

Don
K4WVA
Roanoke, VA

5354. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 12:27:30 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <99dc7r$ao4$1@newpoisson.nosc.mil>
Source record: 167865

O.K. Dave: I've got Bill Orr's book, "Vertical Antennas" in front of me. The authors are William Orr, W6SAI and Stuart Cowan, W2LX. The book was published as late as 1993 by Radio Amateur Callbook (an imprint of Watson-Guptill Publications). Its ISBN is 0-8230-8710-7.

A great book for anyone getting started in verticals; e.g., separate chapters on radio ground/radials, Marconi antennas, antenna matching devices, ground planes, phased vertgical arrays, multiband vertical antennas, etc.

In the multiband chapter they do walk you through a multiband vertical for 80 through 15 meters. The vertical element is 20' (sorry, Ray - couldn't quite meet the requirements set by Dave that it be 16' so it would match the Gotham) and the coil is 35 turns, 2.5" diameter, 6 turns per inch (I seem to remember the coil supplied by Gotham as being similar in size). They do talk about approximating the coil tap(s) depending on the band and then using an SWR meter to select the final tap and thus minimize the SWR - yup, that's the way one usally does that. They show a radio ground symbol but do not spell out what that would be comprised of - that's discussed in the radio ground chapter. I would not drive an eight foot copper rod into the ground, connect it to the braided shield of your feedline coax and call it a day as you'll have very little efficiency. Figure on some sort of ground screen, radials, or whatever - just like they talk about in that chapter.

So, Dave - get that book or one like it (I believe an earlier post by AI6V mentions a couple of other books that might work for you) and you'll be wired for stereo.

An aside note: They spend some time on top loading as well which is my next step in my quest to extend my ground plane system. I've got the capacitive hat built but need the weather to cooperate some so I can install it and do some tuning and messing around to see if I can get my system to tune down to 80 meters.

Regards, Jim R.

"Jim Rodenkirch" <rodenkir@spawar.navy.mil> wrote in message news:994ut6$s18$1@newpoisson.nosc.mil...
And, Ray, Dave's mention of a "similar" antenna is what prompted my reply to him. The book that has that antenna is the Vertical antenna book written by W6SAI - believe his name was Bill Orr???

I've got it at home and had it sitting out to bring in today but - didn't; another example of CRS setting in! I'll have it here tomorrow to pass on to Dave as it has discussions on several antennas that are similar to that old Gotham thing.

That Gotham worked about as well as a wet noodle did. However, back then I was 12 to 14 years old and didn't know a radial from a radio - or something like that. My exposure to antenna theory and construction was extremely limited, as opposed to today where it's merely limited - LOL!

Yep, all dem radials and the tuning done at the antennas base make all the difference in the world.

For Dave: I'll have that book info tomorrow A.M. Regards, Jim R.

"R. Makul K1XV" <k1xv@arrl.net> wrote in message news:06e5bto2hekhdtajdkp8gip6uh3o5c05bq@4ax.com...
Jim: I did read it. Dave's primary goal is to build a REPLICA of a Gotham Vertical based on its original specifications, or plans for a SIMILAR antenna.
Jim, to me, a replica to a Gotham Vertical means one that is a simple multisection thin wall aluminum tube end fed through a B&W inductor at the bottom, attached to the hot side of an unbalanced antenna coax via an alligator clip so you can vary the inductance by changing the tap location on the coil with the alligator clip. The ground side of the coax attached to a ground rod. The whole thing then attached to the side of a house or to a non conducting support via "u" straps.
<snip>

5355. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 12:47:10 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB7514E.56E11F8@mwci.net>
Source record: 168026

Tom W8JI wrote:

> We have to be careful or we will perpetuate the myth that "magnetic"
> signals in a shielded loop pass right through the shield, while
> "electric" signals are shorted. That isn't true at all, and is easy to
> prove.

I agree. The entire electromagnetic signal goes through the Faraday shield, no sweat. But it does it vicariously. The EM signal is "re-created" on the inside. This is important to understand.

Ideally, the Faraday shield is "transparent", but it would be tough to claim that there are no small insidious shenanigans going on. Nothing is perfectly wonderful.

> The "shield" does not change the field impedance of the loop at all.
> It does not sort the "magnetic" part of an EM wave from the "electric"
> part of an EM wave.

I agree.

> It does not sort signals from noise.

I agree, unless there is *direct* capacitive coupling to a nearby noise generator.

> All it does is modify the balance of the structure, and improve
> balance if it is installed correctly.

I agree. The Faraday shield acts as a "barrier" for direct capacitive coupling, what is called "electrostatic" coupling. The electrostatic capacitance is the DC capacitance, which is the same as the RF capacitance of a pure physical capacitor (no L or R).

Bill W0IYH

5356. Re: Wellbrook Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 12:58:00 UTC
From: Alfred Burzynski <aburzynski@satx.rr.com>
Message-ID: <stIt6.686$4R.648650@typhoon.austin.rr.com>
Source record: 168029

"Ron" <radionut44@hotmail.com> wrote in message
news:3ab68247.124097104@news-server.triad.rr.com...
> Are there any companies in the US selling these antennas, specifically
> the 1530?

I wrote to Wellbrook in December 2000 regarding the same question. This is
the answer I received.
Al
KA5JGV

Dear Al,

The Loop is only available from me.

The price of the ALA 1530 is GBP 140 including shipping.

Please send International Money order (from Post Office) or a Sterling
bank Draft.

Credit card transaction; just send your full name, address and Card no
and expiry date to the Shortwave Shop in Christchurch. E-mail
sales@shortwave.co.uk or you can fax details +44 1202
490099

Delivery is about 20 days from receipt of order.

Kind Regards

Andy

Andy Ikin e-mail: sales@wellbrook.uk.com
andy@wellbrook.uk.com
aikin@globalnet.co.uk
URL: http://www.wellbrook.uk.com

Wellbrook Communications
Wellbrook House, Brookside Road,
Bransgore, Christchurch, Dorset BH23 8NA. UK.
Tel. 01425 674174 Int.+44 1425 674174

Manufacturers of Broadband Loop Antennas

5357. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 13:03:51 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB75537.8E3F7044@mwci.net>
Source record: 168027

Tom W8JI wrote:

> All it does is modify the balance of the structure, and improve
> balance if it is installed correctly.

One other thing. The Faraday shield does introduce some capacitance from the inside loop turns to ground. The tuning circuit should take this into account. The spacing between shield and coil should be not too close. The effect of the shield on the inductance of the coil is quite small, but maybe not exactly zero.

Bill W0IYH

5358. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 13:10:47 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <ECIt6.52$5V3.1430@newsfeed.slurp.net>
Source record: 168028
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Thank you for your reply. My attorney wants a few more so we can sue you for libel. I have no police record anywhere. W9FPJ
"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message news:985087900.3ab73f9ca526d@webmail.cotse.com...
> LITTLE BOY FELLATOR "Francis Dickhead Elliott" <elliotta@netusa1.net> brushed
> the raoches off of his keyboard in his ramshackle hovel and babbled in
> message news:Cgxt6.109$Rw3.1950@newsfeed.slurp.net...
> >
> > Thanks I will do that.
>
> Who will you get to do it FOR you, since you barely knbow how to turn that
> CHEAP-ASSED computer of your on? You'd better erase all that self-produced
> kiddie porn off your meager hard drive, before the FBI comes calling again.
>
> > But he shows up in a lot of groups.
>
> Poor baby. It's nice to see I MEAN SO FUCKING much to you that you keep track
> of my posts, fuckhead.
>
> >How sad he must really be. W9FPJ
>
> Not as half as sad as what the Indiana Department of Law Enforcement says about
> you;
> Francis has been a Bbbbbbbbbbbbaaaaaaaaddd boy.....
>
>
>
>
>
> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
>
>

5359. for sale 3 FT50RD

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 13:28:28 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <dTIt6.65$5V3.1316@newsfeed.slurp.net>
Source record: 168030

I have three Yaesu FT50RD hand held transmitters.

One is a 7 . Buy it for $160.oo.

#Two is a 7. Buy it for $160.oo

#Three is a 9. Buy it for 170.oo
All three units have original box and green serial number certificate.
The prices include shipping, handling, and insurance.
Reason for selling: Retired and Tooooo many handhelds.
They won't last long at these prices.
Guaranteed to not be D.O.A.
W9FPJ

5360. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 13:40:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB75DD7.FEDB6DE8@IEEE.org>
Source record: 168032
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> BINGO!!! Right *ON* the head!

Dick, maybe y'all can establish a new amateur radio club called:

WAW-WAW (Whiners Against Whiners Whining About Whiners)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5361. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 13:51:38 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB7606A.91B81E39@IEEE.org>
Source record: 168033

VE9SRB wrote:
> I think you're confusing processes again. The energy converted to heat
> would be dissipation. The energy radiated would be radiation. Again, we
> are discussing the concepts of what happens to the radiated wave as it
> travels away from its source.

Why does infrared radiation warm our skins but some frequencies above
and below infrared don't warm our skins? Is infrared radiation converted
to heat when it hits our skins or other objects?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5362. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 14:15:34 UTC
From: richardharrison@webtv.net
Message-ID: <3867-3AB76606-36@storefull-117.iap.bryant.webtv.net>
Source record: 168034

Tom, W8JI wrote:
"Not only does shielding NOT happen, even if it did happen it would make no predictable difference in signal-to-noise ratio."

I already quoted Terman and Griffith to the contrary. Now, I`ll add Charles E. Dean, then at Hazeltine Electronics Corporation (remember everything with the "RCA and Hazeltine Licensed" tag?) Little Neck L.I., N.Y. Dean wrote the "Receiving Systems" section of Keith Henney`s "Radio Engineering Handbook".

Dean says of a shield:
"A further improvement (noise in a loop antenna) can be made with an electrostatic shield. Such a shield stops lines of electric force that otherwise would reach the antenna, but will cary little or no circulating current so that the magnetic field is not affected," Dean gives an example of preventing shield current, thus making a Faraday shield, Dean gives references:
Stanford Goldman, "A Shielded Loop for Noise Reduction in Broadcast Reception", Electronics, Oct. 1938, pp. 20-22. Dudley E. Foster and C.W. Finnigan, "A Method of Measuring the Effectiveness of Electrostatic Loop Shielding", Proc. IRE, June, 1943 pp. 253-255.

So many experts, and they are all wrong?

Best regards, Richard Harrison, KB5WZI

5363. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 15:03:40 UTC
From: richardharrison@webtv.net
Message-ID: <966-3AB7714C-219@storefull-112.iap.bryant.webtv.net>
Source record: 168035

Walt, KB8ZOW wrote:
"I need advice about mounting an antenna on the rear of my (recumbent) bike."

A picture of such appears on page 170 of Don Stoner, W6TNS`s NARA Ham Radio Handbook (1991). Pictured is Steve Roberts, KV8OVA and his "Winnebiko ll". He may offer advice.

Best regards, Richard Harrison, KB5WZI

5364. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 15:18:48 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <sxKt6.7711$wQ3.582301@bgtnsc04-news.ops.worldnet.att.net>
Source record: 168036

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AB7606A.91B81E39@IEEE.org...
> VE9SRB wrote:
> > I think you're confusing processes again. The energy converted to heat
> > would be dissipation. The energy radiated would be radiation. Again,
we
> > are discussing the concepts of what happens to the radiated wave as it
> > travels away from its source.
>
> Why does infrared radiation warm our skins but some frequencies above
> and below infrared don't warm our skins? Is infrared radiation converted
> to heat when it hits our skins or other objects?
> --
> http://www.mindspring.com/~w6rca
>
>

Cecil:

That's a good question. Maybe its just one form of "heat" in the first place. Maybe our skin acts as a heat antenna. I wonder what the heat gain is in that case?

My point has been that "dissipation", IMO, infers a process where the EM energy is lost through a conversion process, like the creation of heat. We cannot recover this EM energy because it has undergone a "conversion" (probably using the wrong word here too) process.

I would agree, that since we can't capture all of the radiated energy, it is essentially "lost". However, the fact that it is "lost" in this case is a result of our inability to capture it. It is not lost because it has been converted to another form of energy. It still travels away from the antenna as an EM wave. That's why I think dissipation is an incorrect term to use in this case.

Enough said from my end, I will let my opinions dissipate ....

Steve, VE9SRB

5365. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 15:24:47 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB7763F.18FB56A0@toast.net>
Source record: 168037

Unclaimed Mysteries wrote:

> Bill Aycock <baycock@hiwaay.net> wrote in message
> news:3AB6BFA8.D83BD1A2@hiwaay.net...
> > MIne has been up at about 48.36 feet for some time. It works fine, but
> > the real fun is in watching birds try to land on it. When one hits it
> > just right, I turn the power off. HI.
>
> I've been lurking in this group for some time, and I can tell you H.A.M.
> operators have some very mean-spirited and retrograde attitudes, but this is
> the worst example of them all. Ever since Cowboy Bush stole the election the
> right-wingers and animal-haters have been licking their chops. Well, I draw
> the line HERE. I think what needs to happen now is for Mr Aycock to post an
> apology in this chatroom with a pledge not to commit such acts again. I've
> already made note of the laser antenna and it's potential dangers to
> wildlife. Needless to say, I'll be campaigning for an outright ban on this
> device.

What he's been doing isn't nearly as mean as waiting for a bird to fly through
and then turning the antenna on.

john

5366. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 15:42:49 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB77A79.234BBA65@toast.net>
Source record: 168039

W6RCecilA wrote:

> VE9SRB wrote:
> > I think you're confusing processes again. The energy converted to heat
> > would be dissipation. The energy radiated would be radiation. Again, we
> > are discussing the concepts of what happens to the radiated wave as it
> > travels away from its source.
>
> Why does infrared radiation warm our skins but some frequencies above
> and below infrared don't warm our skins? Is infrared radiation converted
> to heat when it hits our skins or other objects?

Such radiation would be absorbed or reflected or would pass through. Infrared heats the skin if it's absorbed. Of course, if the skin is in radiative balance with the environment it will emit as much infrared as it absorbs. It usually wouldn't be reflected unless you're aluminum. Other light waves, on striking the skin, would be converted into heat too, although some of the light is reflected. Some radio waves would pass through, as might cosmic rays and part of the x-rays. Of the radiation that is absorbed, I think there are two possibilities- that it ionises something, or that it's converted into heat.

john

5367. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 15:46:33 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3AB77B59.88D0AF@wb6hqk.ampr.org>
Source record: 168038

"William E. Sabin" wrote:
>
> Tom W8JI wrote:
>
> > The time-varying fields can NOT pass through a conductor several
> > skin depths thick. They get to the inside of the loop by "spilling
> > over" the cut in the shield.
>
> Beg to differ on this one. The field does not reach the inside by a current "spilling over the edge" and
> back along the inside surface. This "loop-current-over-the-open end" fallacy has been floating around for
> quite a few years.

If the shield is open circuited and the capacitance to the inner conductors is neglected, no circumferential currents will flow on the shield. If there is no current flowing on the shield, then the magnetic field will be as if the shield didn't exist and there would be no need for current "spilling over".

The EMF induced on the inner conductors is proportional to the time rate of change of the magnetic flux passing through the loop times the number of turns. This is true regardless of how the field is generated. Any current flowing on the inside conductors will produce a magnetic field independent of the existence of an open circuited shield. No requirement exists for either the electric or magnetic fields to 'flow through' the shield.

Based on my understanding of the scenario under discussion, an open circuted shield is transparant to the process of extracting energy from a magnetic field of the appropiate orientation as long as it is open circuited. The fields set up by current flowing on the inner conductor are the same as for any other common mode current.

> It is also not true that an EM wave cannot be transmitted *through* a Faraday shield. It happens all the
> time.

I suspect this statement is interpreted differently by the various participants of this forum. The existence of both a time varying electric and magnetic field are necessary for the existence of an electromagnetic wave. An electric field cannot exist inside a perfect conductor. Therefore, an E&M wave cannot pass through a perfectly conducting sheet of infinite extent. A Faraday shield has a strategically placed, nonconducting discontinuity, carefully located in a way to allow coupling between the two sides of the shield for some,

but not other time varying field configurations.

> Skin effect does not operate to prevent this coupling from the outside to the inside. At any particular
> location on the shield, there is no skin effect between the outside and the inside, measured directly
> through (perpendicular to the surface) the thickness of the shield, which is an excellent conductor.
> Skin effect doesn't work like that, it only works for a current that is flowing along the surface, not
> directly through the thickness.

Certainly no electric field can exist in any direction inside a perfect conductor. For this purpose, any real conductor more than several skin depths thick will behave as if it were a real conductor.

> Also, a net current does not flow along the length of the outer surface
> for the simple reason that it is open-circuited, just like any other conventional transformer, which is
> exactly what we are talking about here.

Agreed. As long as there is no current flowing on the outer surface, it has no effect upon the coupling between the inner conductors and the external magnetic field.

> The induced EMF and charge distribution on the outer surface exists identically on the inner surface.

The EMF induced across the gap in the outer surface will be nearly the same as that induced around the inner conductor (per turn), assuming the diameter of the loop is large compared to the radial distance between the outer surface and inner conductors. Charge distribution, and therefore electric field, depends critically on dimensions and is much harder to generalize in a few words, at least for me :-).

> This EMF and charge distribution on the inner surface creates an EM wave at the inside of the shield that then propagates to the turns of the inner multiturn loop.

I think the best way to look at a loop antenna which is small compared to a wavelength is to separately consider the effects of the electric and magnetic fields as they interact with the antenna structure. The size of the space between the shield and the inner conductors surely is much smaller than the dimensions necessary to support propagation of an electromagnetic wave.

> Depending on the load resistance connected to
> this multiturn loop, a "counter-wave" can also be created that reflects back to (and through) the shield.

Current in the inner conductors will create a magnetic field which is substantially the same with, or without the Faraday shield. The fields are predominantly reactive in the immediate vicinity of the loop structure and do not generally posses the characteristics of a

propagating electromagnetic wave. Unlike the electric machinery
profession where the concept of a 'flux wave' is illustrative and
commonly used, in the context of antenna theory, 'wave' usually refers
to a propagating electromagnetic wave.

> A length of coax shield that is not shorted to itself is an excellent Faraday shield and
does not stop
> the transmission of an EM wave.

Agreed.

> This wave is "re-created" in-phase at the inside of the shield. There is
> no mickey mouse phase shift due to a travel time around the open end of the shield and
back into the
> inside of the shield. The wave inside the shield is exactly in-phase (or very damn near)
with the wave on
> the outside of the shield.

The shield simply has no significant effect on the electric or magnetic
fields associated with an electromagnetic wave propagating perpendicular
to the plane of the loop because there is no current flowing along the
shield. No current flowing means no charges moving and therefore no
secondary electric fields of significance except perhaps across the gap.

> In an open-circuited length of coax Faraday shield there is no circulating current. It is
just like any
> other open-circuit winding on any other ordinary transformer.

Yep, at least if the capacitance between the shield and inner conductors
is neglected as is appropriate while initially developing an
understanding of the fundamental physics.

Typical practice for wideband receiving loops is to terminate the inner
conductors directly into the input of a high impedance preamplifier.
Typical amateur practice is to conjugatly match the loop to the reciever
(or transmission line) by providing a resonating capacitor and matching
network. The effect of resonating the loop is to increase the voltage at
the loop terminals to many times the voltage induced by the external
magnetic field alone. This increased voltage is due to the secondary
magnetic field generated by the circulating currents in the tuned
circuit.

In this resonant case, the capacitance between the outer shield and
inner conductors can be the majority of the tuning capacitance and
carries the circulating current associated with the resonant circuit.

> There is a simple and interesting way to see what is going on along the length of the
Faraday shield.
> Imagine that the shield is composed of a very large number of very small segments. Within
each segment
> there are two things 1) an induced EMF created by the incoming wave and 2) a charge
distribution due to
> electrons. These two fields cancel each other so that the "net composite" E field within

that tiny
> segment is zero, just as it's supposed to be. But because of the charges, each segment is like a small
> open-circuited battery. The total voltage is the sum of these many individual voltages. And because the
> net E field in each segment is zero, and because the shield is open-circuited, there is *no* net current
> flow along the surface.
> Now suppose the incoming EM wave suddenly reverses direction. Within each tiny segment the induced EMF
> and the charge arrangement both quickly reverse directions. The zero net E field is maintained at each
> and every location. This reversal occurs "locally" and there is no "sloshing" of electrons (current flow)
> from one end of the shield to the other. The EMF and charge distribution are both *uniform* along the
> length.

The EMF induced by a time varying magnetic field is only defined around
a closed path. As you say, the electric field inside the conductor is
zero, therefore the potential difference (EMF), which is defined as the
integral of the electric field, between two points on the same
conductor, is zero according to classical electromagnetics.

> Is there any dissipation in the copper due to these reversals? Yes, there is a small dissipation within
> each tiny segment due to the reorientations of electrons within that segment.

An electric field does exist external to the conductor. This electric
field causes a redistribution of charge on the surface of the conductor
(in the time varying case) which can be thought of as charging the
capacitance of the dielectric surrounding the conductor. Usually this
capacitance is considered parasitic and steps are taken to minimize it
and the associated conduction currents.

> In other words, an
> open-circuit transformer winding will dissipate a very small power due to high frequency cycling within
> each of the many tiny segments.

In my circles, it's considered to be I^2 * R loss associated with the
current required to charge the interwinding capacitance.

> There is another interesting thing. Text books tell us that a wave cannot penetrate a good conducting
> surface beyond a few skin effect depths. That would seem to refute what I have been saying here.

Agreed.

> However, if we look more closely at the textbook, it specifies that the surface must have an
> *unrestricted* current flow, in other words an infinitely large surface. The reason is that it is this

> current flow that creates the opposition field that creates the reflection. The wave is not just bouncing
> off of the surface like a golf ball against a stone wall. It is the surface current that creates the
> reflection. That is why we see skin effect mentioned with regard to depth of penetration of the wave into
> the surface.

The infinite conducting sheet is a fairly easy scenario to attack analytically as are certain closed volumes. In general, you must properly pose the entire problem, express it as a set of partial differential equations with appropriate boundary conditions, and then attempt to solve the entire system. However, I think it is completely rigorous to state that a wave cannot penetrate a good conducting surface beyond a few skin depths.

> A shield room that is buttoned up tight also approximates just such a surface so that surface current has
> an unrestricted continuous closed path.

Agreed.

I'll be off-line for a few days.

bart
wb6hqk

5368. Re: Installing a Cushcraft R7 Vertical - Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 15:56:19 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB77DA3.8BE67BA7@IEEE.org>
Source record: 168040

Don wrote:
> I will probably not run more than 100 watts through the antenna. Any one
> have experience with the this vertical (or similar) and the voltages that
> might be present on the antenna / counterpoise rods? Needless to say, after
> reading the instructions, I have to rethink the installation.

The voltages at the ends of radials while using 100 watts can run into
several hundred volts.
--
http://www.mindspring.com/~w6rca

5369. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 16:26:08 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ab78672$0$15026$cc9e4d1f@news.dial.pipex.com>
Source record: 168041

"Ian White, G3SEK" wrote
> Wes Stewart wrote:
> >>Branegan GM4IHJ speaks of 70 cm 25 dB (dish approx 4m), Gain Antenna
in
> >>his book Space Radio Handbook. later in the chapter he lamentes the loss
of
> >>rotators and the problems steering such "monsters".
> >
> I'm afraid the so-called "Space Radio handbook" is actually all about
> satellite communications - active satellites, that is. The author had no
> experience of EME, and no conception of the important differences in
> technologies required. The fact that a conventional rotator won't handle
> an EME-sized dish is only part of it.

Does RSGB not vet books that are to carry their logo?

> A 4m diameter dish for 70cm is a toy. It isn't big enough (in
> wavelengths) to be acting as an efficient reflector, and it's impossible
> to feed it effectively without significant blockage by the feed antenna
> itself.
>
> I can see exactly where the estimate of 25dB comes from, namely the
> naive use of a textbook formula that only applies for dishes that are
> many wavelengths in diameter - many more than 6, that is. Also the
> formula totally ignores feed efficiency and blockage, which are real
> killers for a small dish at UHF. In reality, you can expect well under
> 20dBi from such a dish.
>
> The transition between a dish being "big enough" and "too small" is very
> sharp. On 70cm it's somewhere around 5m diameter. A 6m (20ft) will
> really work well, but a 4m dish is a total waste of time.

So how many Hams operate 20' dishes?
Where can I see details of the fabrication and operation of such beasties.

If they are home made how do Hams get a good figure.

I do know one method for getting a superb parabola , and the technique would
be readily available to any ham willing to move a lot of earth and bricks
around.
Though perhaps a one off could be done with just an earth mould.
I have seen 40' commercial dishes made by this technique with excellent
figure and very stable and capable of being knocked about by the military.
I'm sure that a Ham could build one, the question is has anyone?

Frequency of Operation fo -|- 4.34E+08Hz -|-
Wavelength of Operation l -|- 0.69m -|-
Dish Diameter -|- 6.00m -|- 19.68ft
Dish height h -|- 10.00ft -|- 3.05m
Dish Radius r -|- 3.00m -|-
Dish Area A -|- = p r2 -|- 28.274m2
Dish Gain Ga -|- = 10 log10 4pA / l2 -|- 28.7dB
Beamwidth -|- = 2 tan-1(2 / 10^(Ga / 20) -|- 8°
23'
Half
-|- 4° 12'
Fraunhofer distance -|- = 2D2/l -|- 104m

To squeeze the extra dB to take you to a gain of 30 dB needs a dish nearly 7 m diameter, now that is beginning to get a bit of a problem.

Going up to 1296 gives a gain of 38 dB and a beam width of 2° 49'
which is beginning to become respectable. the method of fabricating a dish that I have in mind should easily produce a surface that will work well at the higher frequency.

Frequency of Operation fo -|- 1.30E+09Hz -|-
Wavelength of Operation l -|- 0.23m -|-
Dish Diameter -|- 6.00m -|- 19.68ft
Dish Gain Ga -|- = 10 log10 4pA / l2 -|- 38.2dB
Beamwidth -|- = 2 tan-1(2 / 10^(Ga / 20) -|- 2 49/60
Half beamwidth -|- -|- 1 24/60
Fraunhofer distance -|- = 2D2/l -|- 311m

Of course a real leap forward would be to go up to 13 cm; where the professionals work for this type of communication.
A dish gain of 44 dB and beamwidth 1° 31'
is beginning to approach the 0.5° apparent diameter of the Moon.

Frequency of Operation fo -|- 2.40E+09Hz -|-
Wavelength of Operation l -|- 0.13m -|-
Dish Diameter -|- 6.00m -|- 19.68ft
Dish Gain Ga -|- = 10 log10 4pA / l2 -|- 43.6dB
Beamwidth -|- = 2 tan-1(2 / 10^(Ga / 20) -|- 1 31/60
Half beamwidth -|- -|- 46/60
Fraunhofer distance -|- = 2D2/l -|- 576m

16 dB more gain and a much lower slot in the ionosphere with water attenuation still fairly low. This wavelength is the cross over point for optimum space communication.
Some care in making a Cassegrain Antenna will realise a noise improvement as the dish illumination over spill is now filled by the coolth of the sky instead of the warmth of the Earth.
The big problem seems to be windage and a structure strong enough to withstand the bad weather.
As only the Moon is to be tracked a fairly simple Equatorial Mount is possible. it will have only an Hour Angle drive motor and the Declination is set manually and lock off with a spanner. As low angle tracking with such a

small dish would pay quite a noise penalty from horizon noise the tracking mount can be further simplified by only needing to track between the 30 degree above horizon points the dish edge doesn't contact the ground so the dish can be mounted lower down, this will help the stiffness of the structure and make adjustment from the ground easier.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5370. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 17:38:08 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab791d2.456102813@news.accessunited.com>
Source record: 168042

On Tue, 20 Mar 2001 08:15:34 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom, W8JI wrote:
>"Not only does shielding NOT happen, even if it did happen it would make
>no predictable difference in signal-to-noise ratio."
>
>I already quoted Terman and Griffith to the contrary. Now, I`ll add
>Charles E. Dean, then at Hazeltine Electronics Corporation (remember
>everything with the "RCA and Hazeltine Licensed" tag?) Little Neck L.I.,
>N.Y. Dean wrote the "Receiving Systems" section of Keith Henney`s "Radio
>Engineering Handbook".

You can quote out-of-context whoever you like, but it doesn't change the way the antenna behaves. Everyone here seems to agree that the shield does not change the response of the antenna to anything that would happen more than a few loop diameters away, and I'm sure the "experts" you quote would agree also.

It is easy to confuse common-mode coupling problems, which are related to balance of the system, with response to noise or signals more than a loop diameter or two away. Unfortunately easy isn't always right.

The shield does absolutely nothing to sort the electric field from the magnetic field, all it can do is change system balance. There are a dozen other ways to accomplish the same thing.

You shield the loop, you don't shield it, and it responds to time-varying fields exactly the same way. The field impedance is exactly the same.

If you add a "shield", and ground it improperly (such as off the electrical center) the response to unwanted fields can actually increase. That is because it unbalances the system. Many articles incorrectly show this.

Enough of defending the old wive's tales. Let them die.

73 Tom

5371. AVOID TRIPOD WEB SERVICES

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 18:11:50 UTC
From: Brian Short <k7on@earthlink.net>
Message-ID: <MPG.1521ad8057f4907b989699@news.earthlink.net>
Source record: 168043
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

AVOID TRIPOD WEB SERVICES

Last weekend, Tripod removed all of my web
pages for "violating their acceptable use policies."

I could not figure what I had done, but I'm not
one to whine and I moved my pages to:

http://www.qsl.net/k7on/

Now, I receive the following:

Date: Tue, 20 Mar 2001 04:38:43 -0500 (EST)
From: membership@tripod.com
X-Authentication-Warning: bos-uhaul1.tripod.com: web set sender to
membership@tripod.com using -f
To: k7on@earthlink.net
subject: Your Tripod Membership

Dear Tripod Member,
We apologize for the removal of your site over the weekend. Due to some
technical errors, we mistakenly removed several member sites and are in
the process of restoring them. We did not single out you or your site,
please accept our apologies, your site has now been restored.

Sincerely,
The Tripod Team

--
http://www.qsl.net/k7on/
--

5372. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 18:40:01 UTC
From: dennis@wawa.juniper.net
Message-ID: <998861$3nh$1@heap.juniper.net>
Source record: 168044

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>VE9SRB wrote:
>> I think you're confusing processes again. The energy converted to heat
>> would be dissipation. The energy radiated would be radiation. Again, we
>> are discussing the concepts of what happens to the radiated wave as it
>> travels away from its source.
>
>Why does infrared radiation warm our skins but some frequencies above
>and below infrared don't warm our skins? Is infrared radiation converted
>to heat when it hits our skins or other objects?

Light will also heat your skin, as can be determined by going outside on a sunny day. The bulk of the radiation from the sun is at shorter wavelengths than infrared, and the carbon dioxide in the atmosphere blocks much of the lesser amount of direct infrared radiation we might receive, yet sitting in the sun still warms you. Much longer wavelength EM radiation, for example that present inside your microwave oven, will also heat you up, it just won't stop at the skin.

Light is EM radiation at the wavelengths predominately emitted by objects which are the temperature of the Sun. Infrared is EM radiation at the wavelengths predominately emitted by objects which are the temperature of our planet. As this represents the bulk of the naturally occuring EM radiation where we live it is unsurprising that we have both sense organs that are sensitive to these wavelengths and skin that is fairly opague (i.e. absorbing) at these wavelengths to allow us to moderate our internal temperatures.

That we associate "heat" with infrared wavelength EM radiation is really an accident of the temperature of our environment. If we lived in a colder place, "heat" would be associated with a longer wavelength of EM radiation. If we lived in a very cold place then heat would be RF.

Dennis Ferguson

5373. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 19:27:23 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB7AF1B.8DAFA24A@IEEE.org>
Source record: 168045

Dennis Ferguson wrote:
> Light will also heat your skin, as can be determined by going outside
> on a sunny day.

How do you know that's not infrared? Why does ultraviolet have a
delayed warming effect? Why can't I feel a laser beam? I've never
thought about all this before.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5374. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 19:45:15 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB7B34B.E2C8C61D@mwci.net>
Source record: 168046

Bart Rowlett wrote:

> I think the best way to look at a loop antenna which is small compared
> to a wavelength is to separately consider the effects of the electric
> and magnetic fields as they interact with the antenna structure. The
> size of the space between the shield and the inner conductors surely is
> much smaller than the dimensions necessary to support propagation of an
> electromagnetic wave.

Definitely do not agree. The inner surface of the shield "re-creates" an exact copy of the incident wave that continues on to the wires. The coupling to the wires is by electromagnetic wave propagation, whether the distance is 1/4 inch or 1/4 yard. To be more precise, the charge distribution on the inner surface begets an E field beyond the surface which is parallel to the surface (same as along the outer surface). But induced EMFs exist only within the shield. This isolated E field begets an orthogonal H field which encircles the center wire, which then begets a Poynting vector that is directed toward the center wire. This interpretation passes every test that I can think of. I am certain it is right.

> The EMF induced by a time varying magnetic field is only defined around
> a closed path. As you say, the electric field inside the conductor is
> zero, therefore the potential difference (EMF), which is defined as the
> integral of the electric field, between two points on the same
> conductor, is zero according to classical electromagnetics.

This is not correctly stated. For a path in the *open-circuited conductor* the induced EMFs are balanced by electric charges at each location. This is the *only* reason why the net E field in the conductor is zero. Take away the charges (free electrons) and the E field is *not* zero, period. Across the open gap the voltage measured is not due (directly) to EMFs, it is due to charges. This is the only thing that my voltmeter knows anything about. We have had this discussion before, and I have considered this matter carefully. I am sure that I and my high quality literature references are right, and I am not going to yield one inch on this matter. The charges are important players and cannot be ignored. The reason why the net E field is zero in the conductor portion is exactly as I have described it.

> > However, if we look more closely at the textbook, it specifies that the surface must have an
> > *unrestricted* current flow, in other words an infinitely large surface. The reason is that it is this
> > current flow that creates the opposition field that creates the reflection. The wave is not just bouncing
> > off of the surface like a golf ball against a stone wall. It is the surface current that creates the
> > reflection. That is why we see skin effect mentioned with regard to depth of penetration of the wave into

> > the surface.

This discussion regarding Faraday shields, wave reflections, depth of penetration and shield rooms etc is correct. Most of my discussion here on the internet is basically a repetition, with some additional insights since 1997, of my QEX article plus Letter that I sent you. My conviction is that there are no errors.

Bill W0IYH

5375. Re: AVOID TRIPOD WEB SERVICES

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 19:52:03 UTC
From: panzer240@hotmail.com
Message-ID: <Xns906AA161CA0A0me109g6@142.177.129.14>
Source record: 168047
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Brian Short <k7on@earthlink.net> wrote in
<MPG.1521ad8057f4907b989699@news.earthlink.net>:

>AVOID TRIPOD WEB SERVICES
>
>Last weekend, Tripod removed all of my web
>pages for "violating their acceptable use policies."
>
>I could not figure what I had done, but I'm not
>one to whine and I moved my pages to:
>
>http://www.qsl.net/k7on/
>
>Now, I receive the following:
>
>Date: Tue, 20 Mar 2001 04:38:43 -0500 (EST)
>From: membership@tripod.com
>X-Authentication-Warning: bos-uhaul1.tripod.com: web set sender to
>membership@tripod.com using -f
>To: k7on@earthlink.net
>subject: Your Tripod Membership
>
>Dear Tripod Member,
>We apologize for the removal of your site over the weekend. Due to some
>technical errors, we mistakenly removed several member sites and are in
>the process of restoring them. We did not single out you or your site,
>please accept our apologies, your site has now been restored.
>
>Sincerely,
>The Tripod Team

Ummmm..... gee looks like the people working at Tripod are human
after all and make mistakes just like you and me. At least they were men
enough to apologize and make things right. Whar's your beef or do you just
like to whine and moan.

Panzer

5376. Re: AVOID TRIPOD WEB SERVICES

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 19:53:29 UTC
From: Jeff Weinberg <jjweinb@earthlink.net>
Message-ID: <ZyOt6.13751$Im6.1452667@newsread1.prod.itd.earthlink.net>
Source record: 168048
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Sounds to me that it was a "sign" for you to move your pages to QSL.net.
That's where I have mine, and have been very happy there. I'd pass on
Tripod for the future, if it were me.

Jeff W.
W0QO

"Brian Short" <k7on@earthlink.net> wrote in message
news:MPG.1521ad8057f4907b989699@news.earthlink.net...
>
> AVOID TRIPOD WEB SERVICES
>
> Last weekend, Tripod removed all of my web
> pages for "violating their acceptable use policies."
>
> I could not figure what I had done, but I'm not
> one to whine and I moved my pages to:
>
> http://www.qsl.net/k7on/
>
> Now, I receive the following:
>
> Date: Tue, 20 Mar 2001 04:38:43 -0500 (EST)
> From: membership@tripod.com
> X-Authentication-Warning: bos-uhaul1.tripod.com: web set sender to
> membership@tripod.com using -f
> To: k7on@earthlink.net
> subject: Your Tripod Membership
>
> Dear Tripod Member,
> We apologize for the removal of your site over the weekend. Due to some
> technical errors, we mistakenly removed several member sites and are in
> the process of restoring them. We did not single out you or your site,
> please accept our apologies, your site has now been restored.
>
> Sincerely,
> The Tripod Team
>
> --
> http://www.qsl.net/k7on/
> --
>

5377. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 20:01:24 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB7B714.B685BE3D@mwci.net>
Source record: 168049

Resubmission:

William E. Sabin wrote:

> Bart Rowlett wrote:
>
> > I think the best way to look at a loop antenna which is small compared
> > to a wavelength is to separately consider the effects of the electric
> > and magnetic fields as they interact with the antenna structure. The
> > size of the space between the shield and the inner conductors surely is
> > much smaller than the dimensions necessary to support propagation of an
> > electromagnetic wave.
>
> Definitely do not agree. The inner surface of the shield "re-creates" an exact copy of the incident wave that continues on to the wires. The coupling to the wires is by
> electromagnetic wave propagation, whether the distance is 1/4 inch or 1/4 yard. To be more precise, the charge distribution on the inner surface begets an E field beyond
> the surface which is parallel to the surface (same as along the outer surface). But induced EMFs exist only within the shield. This isolated E field begets an orthogonal
> H field which encircles the center wire, which then begets a Poynting vector that is directed toward the center wire. This interpretation passes every test that I can
> think of. I am certain it is right.
>
> > The EMF induced by a time varying magnetic field is only defined around
> > a closed path. As you say, the electric field inside the conductor is
> > zero, therefore the potential difference (EMF), which is defined as the
> > integral of the electric field, between two points on the same
> > conductor, is zero according to classical electromagnetics.
>
> This is not correctly stated. For a path in the *open-circuited conductor* the induced EMFs are balanced by electric charges at each location. This is the *only* reason
> why the net E field in the conductor is zero. Take away the charges (free electrons) and the E field is *not* zero, period. Across the open gap the voltage measured is
> not due (directly) to EMFs, it is due to charges. This is the only thing that my voltmeter knows anything about. We have had this discussion before, and I have
> considered this matter carefully. I am sure that I and my high quality literature references are right, and I am not going to yield one inch on this matter. The charges
> are important players and cannot be ignored. The reason why the net E field is zero in the conductor portion is exactly as I have described it.
>
> > > However, if we look more closely at the textbook, it specifies that the surface must have an
> > > *unrestricted* current flow, in other words an infinitely large surface. The reason is that it is this
> > > current flow that creates the opposition field that creates the reflection. The wave

is not just bouncing
> > > off of the surface like a golf ball against a stone wall. It is the surface current that creates the
> > > reflection. That is why we see skin effect mentioned with regard to depth of penetration of the wave into
> > > the surface.
>
> This discussion regarding Faraday shields, wave reflections, depth of penetration and shield rooms etc is correct. Most of my discussion here on the internet is
> basically a repetition, with some additional insights since 1997, of my QEX article plus Letter that I sent you. My conviction is that there are no errors.
>
> Bill W0IYH

5378. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 20:10:47 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <rLu1pqAHl7t6EAct@ifwtech.plus.net>
Source record: 168050

Bill Sabin wrote:
>> However, if we look more closely at the textbook, it specifies that the
>surface must have an
>> *unrestricted* current flow, in other words an infinitely large surface. The
>reason is that it is this
>> current flow that creates the opposition field that creates the reflection.
>The wave is not just bouncing
>> off of the surface like a golf ball against a stone wall. It is the surface
>current that creates the
>> reflection. That is why we see skin effect mentioned with regard to depth of
>penetration of the wave into
>> the surface.
>
Bart Rowlett replied:
>The infinite conducting sheet is a fairly easy scenario to attack
>analytically as are certain closed volumes. In general, you must
>properly pose the entire problem, express it as a set of partial
>differential equations with appropriate boundary conditions, and then
>attempt to solve the entire system. However, I think it is completely
>rigorous to state that a wave cannot penetrate a good conducting surface
>beyond a few skin depths.
>
In 'Transmission Lines for Communications' by C W Davidson (ISBN 0 333
37238 1) there is a proof of the skin effect which - far from requiring
an infinite surface - demonstrates that the effect will take place on
any arbitrarily *small* surface across which RF current is flowing.

No special circuit topology is required - the analysis seems to say that
if the RF current is flowing, for any reason, then there will be a skin
effect.

Bill has a copy of those pages which I snail-mailed a year or two ago.
If you still have it, Bill, please could you comment on its validity?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5379. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 20:36:40 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <07ZyV3AY97t6EAd6@ifwtech.plus.net>
Source record: 168051

Gary Peach wrote:
>
>"Ian White, G3SEK" wrote
>> Wes Stewart wrote:
>> >>Branegan GM4IHJ speaks of 70 cm 25 dB (dish approx 4m), Gain Antenna
>in
>> >>his book Space Radio Handbook. later in the chapter he lamentes the loss
>of
>> >>rotators and the problems steering such "monsters".
>> >
>> I'm afraid the so-called "Space Radio handbook" is actually all about
>> satellite communications - active satellites, that is. The author had no
>> experience of EME, and no conception of the important differences in
>> technologies required. The fact that a conventional rotator won't handle
>> an EME-sized dish is only part of it.
>
>Does RSGB not vet books that are to carry their logo?
>
It was the best they could do at the time. As a satellite communications
book it is very good (or was for its time) because that is where the
author's undoubted expertise was. I feel it was a mistake to have over-
extended it to include moonbounce, on which it is very weak.

>> A 4m diameter dish for 70cm is a toy. It isn't big enough (in
>> wavelengths) to be acting as an efficient reflector, and it's impossible
>> to feed it effectively without significant blockage by the feed antenna
>> itself.
>>
>> I can see exactly where the estimate of 25dB comes from, namely the
>> naive use of a textbook formula that only applies for dishes that are
>> many wavelengths in diameter - many more than 6, that is. Also the
>> formula totally ignores feed efficiency and blockage, which are real
>> killers for a small dish at UHF. In reality, you can expect well under
>> 20dBi from such a dish.
>>
>> The transition between a dish being "big enough" and "too small" is very
>> sharp. On 70cm it's somewhere around 5m diameter. A 6m (20ft) will
>> really work well, but a 4m dish is a total waste of time.
>
>So how many Hams operate 20' dishes?

Or even larger? Probably well over a hundred, all around the world (I
don't propose to search the entire moonbounce address/equipment list to
check how many are 20ft or larger, because the total number of "dish"
entries past and present is 463!)

>Where can I see details of the fabrication and operation of such beasties.
>
Go to any search engine and just look for "moonbounce"... Google.com
just found 3640 pages!

>If they are home made how do Hams get a good figure.
>
If you mean surface accuracy, most people use ribbed mesh dishes up to
2.3GHz - and the majority of large dishes of this construction are
indeed home-made. The surface accuracy is achieved with a combination of
care in design, and patience in wiring the mesh (usually half-inch
chicken wire) on to the ribs.

>I do know one method for getting a superb parabola , and the technique would
>be readily available to any ham willing to move a lot of earth and bricks
>around.
>Though perhaps a one off could be done with just an earth mould.
>I have seen 40' commercial dishes made by this technique with excellent
>figure and very stable and capable of being knocked about by the military.
>I'm sure that a Ham could build one, the question is has anyone?
>
40ft solid dishes are beyond amateur construction - not so much the dish
as the support and foundations required to hold it up, steer it
accurately and keep it up - but there are several amateur 40ft mesh
dishes.

[...]

>Some care in making a Cassegrain Antenna will realise a noise improvement as
>the dish illumination over spill is now filled by the coolth of the sky
>instead of the warmth of the Earth.

Cassegrain feeds are not practical below about 10GHz, for dishes of
amateur size, because the subreflector tends to cause too much blockage.
It tends to be more practical to use a conventional prime-focus feed,
which also allows easier band changing. Also the design of prime-focus
feedhorns has advanced considerably in the past decade or so, and
therefore spillover is less of a problem.

>The big problem seems to be windage and a structure strong enough to
>withstand the bad weather.
>As only the Moon is to be tracked a fairly simple Equatorial Mount is
>possible. it will have only an Hour Angle drive motor and the Declination is
>set manually and lock off with a spanner. As low angle tracking with such a
>small dish would pay quite a noise penalty from horizon noise the tracking
>mount can be further simplified by only needing to track between the 30
>degree above horizon points the dish edge doesn't contact the ground so the
>dish can be mounted lower down, this will help the stiffness of the
>structure and make adjustment from the ground easier.

Forgive my saying this, but it is unnecessary to theorize as if it had
never been done. There are something like 30 years of intensive real-
world experience around - and the distillation of it is now on the web.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5380. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 20:43:10 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbfg61met0i303@corp.supernews.com>
Source record: 168052
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Richard McCollum" <rmccoll@radiks.net> wrote in message
news:MIat6.759$ei1.2552741@nntp3.onemain.com...
>
> 1. You are pretty badly out of context

I don't think so.

> but I meant it then and mean it now.

I have no doubt about that Richard. Fortunately there are few like you out there. How I, or any no code Tech, chooses to follow their interests in Ham Radio is up to us. We don't have to meet your personal list of "approved activities" to be considered "real" Ham Radio operators. If that does not sit well with your vision of things, too bad, cry in your coffee, and move on.

License class advancement is not the sole goal in Ham Radio just as it is not in other areas of life either. Not everyone wants, or needs, to reach the Extra Class level the same way as not everyone needs to get a Ph.D. in their chosen field.

You strike me as the type of Ham who feels one is not worthy of being called a Ham UNLESS one follows in the foot steps you seem to feel is the only path to that title. You also seem to be unwilling to let others follow their own course, their own interests, and make their own choices in Ham Radio. Your vision of the path to being a "real Ham" is not the only one, nor is it necessarily even a good one. So you attempt to do what little you can to impede to process by refusing to help, instead you elected to hinder the process by shifting the burden to others. Seems a pathetic attitude where if you can't have it your way, you just wash you hands of the whole thing, such as being a VE, when it has anything to do with no code Techs.

As far as my tag line goes, if you can't understand it, try harder. I know plenty of other Hams, and non Hams too, who know exactly what I'm talking about. I will give you a hint however, it's a tongue-in-cheek joke about CW. If you can't figure it out after that, then your a lost cause.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

5381. Which to put up...TA33 or A3S???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 21:05:40 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <jchfbtcq1gf85atmdcplte61snm4cd9i4b@4ax.com>
Source record: 168053

Hi you antenna experts, here's a "tough one".

I am about to install a new tower, a 72 foot crankup, and I have two antennas: a Mosley TA33 with 40 meter add-on (in known good working order) and a Cushcraft A3S with 40 meter add-on (in good cosmetic condition, untested).

I'm only going to put up ONE of them. Which one would YOU choose (please choose from the two available antennas...thanks).

All input is gratefully received.

Neil, K1VY
K1VY@arrl.net

P.S. In order to test the A3S on the ground, what's the proper procedure. I've heard there are potential trap problems...

5382. Re: antenna for 6 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 21:18:10 UTC
From: Skipp <skipp@pilot.ucdavis.edu>
Message-ID: <998heisjh1@woodrow.ucdavis.edu>
Source record: 168006

Hi back,

a two element phased array is not really that strange. you can do it many ways. The most practical method are two driven elements, seperated by .2 wavelenghts (similar to a 2 element beam/yagi) and fed with a special coax harness.

If you feed a tee in the antenna center, then have each leg go to it's respective antenna (but one leg has a 1/4 wave longer coax path...) you end up with a nice cardioid pattern which can be reference as an addcock antenna. A great direction finding antenna.

If you spit the feed near the center and feed with equal lenghts of 75 ohm coax from the tee, you get a colinear pattern. This is very similar to the pattern truckers get with cb antennas on each mirror of their truck tractor.

One does not have to use a gamma match, it just happens to be an easy method to match and feed an antenna. You can use a balun, end feed, hairpin, delta or loop. All my quarter wave antennas use a simple beta match. Nothing is in concrete...

cheers
skipp@pilot.ucdavis.edu

http://sonic.ucdavis.edu has ham radio pages and more...

5383. Re: WANTED: directional 2m/70cm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 21:39:17 UTC
From: conal@drunkenbard.com
Message-ID: <3ab7cbe7.314956964@news.newsreader.com>
Source record: 168054
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Mon, 12 Mar 2001 23:52:56 GMT, anonymous@freenewsland.com wrote:

>I'm looking for an antenna no more than a few feet long
>that will perform even better than the J-pole, and a
>directional antenna seems to be what I need. Fox hunt
>capability would be a nice added bonus.

What I'm looking for is a little more specific: I'm trying to find something in a directional 2m that would be suitable for mag-mounting on my car roof. (doesn't have to be remotely rotatable or terribly stable, I just want it to stand on its own while I'm sitting in a parking lot) I'd prefer something that can lay flat in the car while not in use, or could be rotated and folded down below the side rails of the roof rack (about 4" high) and bungeed down for short movements.

I'd also like a good directional antenna for SWL that could be set up while the car is stationary, but that can come later.

OBTW, the 2m directional would be primarily for listening. I'll have a 'daily use' antenna by the time I get around to setting it up.

Conal Fitzgerald
conal@drunkenbard.com
http://www.drunkenbard.com

5384. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 22:05:24 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3AB7D424.3DC4360E@netdoor.com>
Source record: 168056

You guys are slow,..mine has been up for at two years come april 1st.

ik7565@erols.com wrote:

> I should have mine installed by April 1st.
>
> 73 de N8IK
>
> JDer8745 wrote:
> >
> > I have been using one for a long time.
> >
> > Works lilke a charm.
> >
> > 73 de Jack, K9CUN

5385. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 22:16:24 UTC
From: dennis@wawa.juniper.net
Message-ID: <998kro$19lb$1@heap.juniper.net>
Source record: 168057

VE9SRB <srbest@att.net> wrote:
>"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
>> >This is the basis for the derivation of the familiar path loss formula.
>At
>> >an infinite distance, the thinning process will cause the energy density
>to
>> >go to zero, but this is not a "dissipation" process.
>>
>> I don't see how this could possibly be true.
>
>I am not sure what part of this you don't see as true. Perhaps you could
>explain.

The assertion that since the EM energy radiated by an antenna is
conserved, then it is not dissipated. All energy is conserved, so
by this definition it is hard to see how any energy is dissipated.

That is why I can't see how dissipation can be defined the way you
do. That is why I prefer to rely on the more fundamental thermodynamic
definition, that while energy is always conserved it is dissipated
when it undergoes an irreversible transformation. This, I think, is
the conventional understanding of the phrase "converted to heat". While
the phrase is ambiguous without a precise definition of "heat", it
describes what we normally consider to be the classic irreversible
energy transformation.

>The antenna is an isotropic source with 0 dBi gain. Why is the EM field
>density different at a distance of 10,000 km as compared to the EM field
>density at a distance of 1,000 km?

I presume this antenna is in space so what we're measuring is
purely path loss. While I'm pondering that one, then, you might
consider this one. What happens if I replace the antenna with
a resistor? Where does the power, which I presume you now think
is being dissipated, go?

The answer is that the power is entirely radiated in an EM field,
whose spectrum depends on the temperature of the resistor. If you
have an appropriate detector you'll be able to measure its
field strength. The relationship between the energy density at
1,000 km and the energy density at 10,000 km will be identical
whether the radiator is a resistor or an antenna. If you build
a sphere around the resistor you'll be able to detect all the
energy radiated by the resistor, just like the antenna. The energy
propagates away from the radiator in either case, and is not lost
in either case. Energy is conserved in either case, and in its

entirety ends up propagating away from the source as EM radiation
in either case.

So, what is the difference between the resistor and the antenna
which makes one dissipative and one not? What is the distinction?
I can't see one. In either case the power causes the antenna or
resistor to radiate EM radiation, and the energy which is radiated
has undergone an irreversible transformation in that it is impossible
to ever get it all back into the state is was in before reaching the
antenna/resistor. In both cases it is "converted to heat". What
happens after it leaves the resistor/antenna really isn't interesting
because the dissipation happened at, or close to, the resistor/antenna.

>> Irreversible processes are dissipative processes. The decrease in
>> the radiated energy density, and the resulting reduction in thermal
>> energy which can be extracted from the field by individual molecules,
>> is "dissipation" whether the EM energy actually finds molecules to
>> transfer the thermal energy to or not.
>
>Defining dissipation in this manner seems to be a personal preference. If
>you choose to define dissipation in this manner that's fine but it does not
>sufficiently explain the process that an EM wave undergoes as it travels.

Both the resistor and the antenna radiate EM waves. EM radiation
is a mechanism for heat transfer. What you are failing to address
is how you arrive at the apparent conclusion that EM radiation from
the resistor is dissipated while EM radiation from the antenna is not.

My definition may be a personal preference, but I prefer it because
it avoids having to resolve how the emission of some EM radiation could
be dissipative while the emission of other EM radiation is not. By
my definition they both are dissipation, and hence radiation
resistance is as dissipative as any other kind of resistance. You
have yet to resolve this dilemma using your definition.

Dennis Ferguson

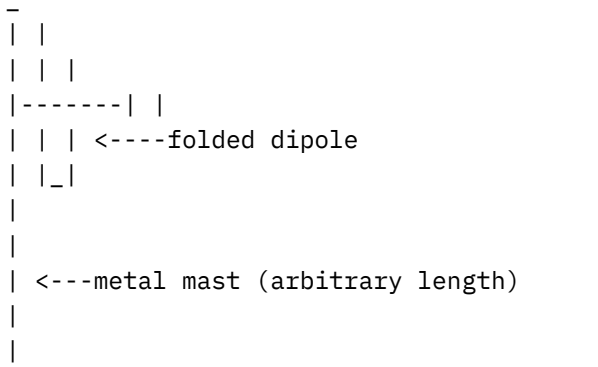
5386. J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 22:35:12 UTC
From: Administrator <u127z@hotmail.com>
Message-ID: <MPG.1521f98ea6f514d0989680@news.customcpu.com>
Source record: 168063

How do I prevent a J-pole coupling (2 m band) to the metal mast? When I model the antenna, the metal mast strongly affects the VSWR and radiation pattern. The length of the mast heavily affects the antenna. I also find this effect on all vertical antennas I've modelled - GP's, 5/8 verticals, etc. Adding more ground plane rods does not seem to help. I expeced more ground radials to 'screen' the metal mast and reduce mast coupling. But it does not. Some antenna manufacturers claim their end fed vertical 1/2 wave antenna to be 'ground plane or metal mast independent'. Is this talking bullshit?

Is the only way to use a vertical dipole instead, mounted on the side of the metal mast as below, in order to avoid coupling? I understand the distance from the mast shall be chosen for minimum radiation pattern distorsion.

Jan



5387. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 22:42:49 UTC
From: wsmith@cinci.rr.com
Message-ID: <3ab7db0b.32737714@news-server>
Source record: 168058

On Mon, 19 Mar 2001 19:31:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>wsmith@cinci.rr.com wrote:
>> Problem is, I already have the Diamond antenna, and also mounting a
>> flag (which I dislike) would be very difficult because of the fabric.
>
>Cars aren't looking for those kinds of bikes and very often don't
>see them. Do yourself a big favor and get a flag - maybe two flags.

Gentlemen, perhaps I haven't made it clear that I am asking for advice
about an antenna problem and not a bicycling problem. I have in excess
of 80,000 miles on bikes, and the last 8 years on recumbent bikes (the
ones that look like lawn chairs on wheels). I consiider myself to be
experienced AND safety concious and do not feel that I need a flag to
be safe. My lack of accidents or even close calls seems to back me
up.

My primary concern is if the fact that I want to have an antenna
running very closely in the same plane with the support for the
fabric, am I going to have reflection or directional problems. I can
use a rubber duck, but the range is not what I want. So I will again
ask for advice.

Walt Smith KB8ZQW

5388. Re: QST---QST--Fractal Antenna Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 22:52:40 UTC
From: beowold@beowold.org
Message-ID: <998mvo$32r$1@news.netmar.com>
Source record: 168059

In article <20010317211850.13654.00000015@ng-fm1.aol.com>, Fractenna
<fractenna@aol.com> writes:
>I'd like to pass along this invitation for all interested hams to join us on
>the fractal antenna reflector. This is the primo forum on the web for the
>discussion of fractal antennas. Moderated, lively, and filtered for spam and
>off topic comments this is the home of fun feedback on a ham-grown
technology.
>
>Dr. Cohen participates in this forum and it is the only one he responds to
on
>the web.
>
>To join:
>
>fractalantenna-subscribe@yahoogroups.com
>
>73
>Phil N1ZKT

Is this true? There is no traffic listed this month at all.

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5389. Re: HyTower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 23:22:49 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3ab7e656$0$88190$2c3e98f8@news.voyager.net>
Source record: 168060

i too have wanted a hytower for years but recently i talked with hygain
about getting one and they said that they were no longer going to be
available or mfg. kind of a loss to ham radio i think
ken w8ob

Mark Erbaugh wrote:
>
> I've always been fascinated with the HyTower antenna. One of my father's (a
> non-ham) friend was a ham and he had one in his small lot. I thought it was
> the neatest antenna, especially when I was a 15 newly licensed novice and my
> dad wouldn't let me put up antennas.
>
> Anyways, I notice that the HyTower is back in the MFJ / Hygain catalog and I
> am seriously considering one for the antenna farm at my new QTH. I realize
> that the entire tower is part of the antenna so mounting other antennas
> directly on it is probably not a good idea. However, is there a way to use
> it to support a wire antenna? I'm thinking about installing a Carolina
> Windom 160 and wonder if I can use the HyTower to support either one of the
> ends, using a length of rope to isolate the two antennas.
>
> If anyone has a HyTower available, I'd be interested in price and condition.
>
> My current plans for the antennas include:
>
> The HyTower as a vertical antenna
> The Carolina Windom as the horizontal antenna
> My current Force 12 C4S beam for 40, 20, 15 and 10.
>
> I'd use the Force 12 tower to support the center of the Windom.
> Ideally, I'd like to use the HyTower to support one end of the Windom and a
> mast of some sort for the other end. There are no trees at the new QTH and
> the Radio Works website cautions about installing the Windom's as inverted
> vees.
>
> 73,
> Mark, N8ME

5390. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 23:27:52 UTC
From: TimH <NOSPAM@detroit.net>
Message-ID: <OHRt6.4168$l5.3716964@newsfeed1.thebiz.net>
Source record: 168061

Walt, Cecil is right. You really oughta put a flag on that bike.

<wsmith@cinci.rr.com> wrote in message news:3ab7db0b.32737714@news-server...
> On Mon, 19 Mar 2001 19:31:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >wsmith@cinci.rr.com wrote:
> >> Problem is, I already have the Diamond antenna, and also mounting a
> >> flag (which I dislike) would be very difficult because of the fabric.
> >>
> >Cars aren't looking for those kinds of bikes and very often don't
> >see them. Do yourself a big favor and get a flag - maybe two flags.
>
> Gentlemen, perhaps I haven't made it clear that I am asking for advice
> about an antenna problem and not a bicycling problem. I have in excess
> of 80,000 miles on bikes, and the last 8 years on recumbent bikes (the
> ones that look like lawn chairs on wheels). I consiider myself to be
> experienced AND safety concious and do not feel that I need a flag to
> be safe. My lack of accidents or even close calls seems to back me
> up.
>
> My primary concern is if the fact that I want to have an antenna
> running very closely in the same plane with the support for the
> fabric, am I going to have reflection or directional problems. I can
> use a rubber duck, but the range is not what I want. So I will again
> ask for advice.
>
> Walt Smith KB8ZQW
>
>

5391. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 23:35:28 UTC
From: k1bqt@aol.com
Message-ID: <20010320183528.27584.00000121@ng-mj1.aol.com>
Source record: 168062

Dr. Fred Jervis, a former psychology professor of mine and founder of the Center for Constructive Change, once proclaimed persuing advanced academic degrees to be merely predictive of a person's above-average capacity to perseverate at meaningless tasks. I somehow managed to aquire a Master's degree, but it's one of those silly 2-year vocational certificates for BAs who otherwise lack marketable skills (hi).

73

Rick K!BQT

5392. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-20 23:45:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB7EB7D.C3DF0375@IEEE.org>
Source record: 168064

Dennis Ferguson wrote:
> Both the resistor and the antenna radiate EM waves.

What is the frequency of the EM waves radiated by the resistor?
--
http://www.mindspring.com/~w6rca

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5393. Re: Installing a Cushcraft R7 Vertical - Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 00:07:37 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AB7F0C9.1059@wt.net>
Source record: 168065

Don wrote:
>
> I recently acquired a Cushcraft R7 vertical antenna and was considering a
> "near the ground" installation. This is one of the verticals which does not
> require separate radials since it has build in counterpoise rods at the
> base. The instructions indicate that "dangerouly high voltages" can be
> present on the counterpoise rods, and recommends a mounting height of at
> least 8 feet.
>
> I will probably not run more than 100 watts through the antenna. Any one
> have experience with the this vertical (or similar) and the voltages that
> might be present on the antenna / counterpoise rods? Needless to say, after
> reading the instructions, I have to rethink the installation.
>
> Any help / comments are appreciated.
>
> Don
> K4WVA
> Roanoke, VA

You really want to get those 1/2 wave types as high as you can. They
will work quite a bit better than down low. They don't require ground
radials, but that doesn't mean the ground losses when mounted near the
ground are going to be low. They will be fairly high. Maybe not quite as
bad as a 1/4 wave with no radials though.
The short radials on the R7 are more used for a decoupling section,
rather than radials to reduce ground losses. For one thing, they would
need to be resonant to do this job on the elevated antenna. The radials
just minimise the currents on the shield of the coax so it doesn't
become part of the antenna. So in effect, it has NO radials used for
reducing ground losses. So you don't want it near ground level if you
want it to live up to it's potential. You might consider a radio shack
pushup mast. This would be perfect for one of these. They have a 19 ft
version which would do ok. If you went with the 36 ft mast, it would
perform very well. As far as the voltages, with a 100w radio, you are
probably looking at the 800-900 volt range at the high voltage points.
About the same as with a dipole at the ends I would think. The main
difference between these and the 1/4 wl ground planes, is the 1/2 wave
doesn't require the radial set to complete the antenna the way a 1/4
wave does.
Although lower, you still need to consider ground loss with the 1/2
wave. When I used to run a full size GP at 36 ft on 40m, a friend of
mine ran a R7 at about 15 or 20 ft. To VK land , his antenna did a
pretty credible job compared to my full size antenna. He was a tad

lower, but not a whole lot. MK
--
http://web.wt.net/~nm5k

5394. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 00:15:51 UTC
From: dennis@wawa.juniper.net
Message-ID: <998rrn$1s9e$1@heap.juniper.net>
Source record: 168067

VE9SRB <srbest@att.net> wrote:
>There seems to be some confusion as to the terms and processes we are
>discussing here. Consider the total energy delivered to the antenna.
>First, if the antenna is lossy, some portion of the energy delivered to the
>antenna will be "dissipated" in or at the antenna. Dissipation infers loss,
>in that the dissipated energy is lost and not available for radiation.

Steve,

How about this. Go out and buy the most sensitive set of infrared
goggles (i.e. a detector of infrared wavelength radiation) you can find.
Then, on a calm cool night, take a look at your antenna and feed line, as
well as the resistors and transistors or tubes in your transmitter,
when the latter is operating. The energy you say is lost is being
radiated as EM radiation, you can see some of it with the goggles.
The energy you say is not lost is also being radiated as EM radiation.
What is the difference? Are you defining "dissipated" as the radiation
you don't want, and "not dissipated" as the radiation you want? Spurs
and harmonics that you don't want are also "dissipated"? This is
certainly a possible definition of "dissipation", but I think a
definition which didn't depend on your feelings about the radiation
might be a better one.

>"Radiation" is the process through which the antenna converts the energy
>delivered to its terminals into a traveling EM wave in space. This process
>is "radiation", it is not "dissipation" nor is it "dispersion".

But "radiation" is also the mechanism through which a resistor sheds
the energy delivered to its terminals into a travelling EM wave in
space. EM radiation is heat in the process of being transfered away
from its source. Again, why would the EM radiation emitted by a
hot resistor be the result of "dissipation", while the EM radiation
emitted by the antenna is not the result of "dissipation"? What
happens to the radiation after it is dissipated (or not dissipated)
is pretty much identical in either case.

>The "dispersion" process that we have been discussing is what happens to the
>EM energy after leaves the antenna. Is it "dissipated" in space or is it
>"dispersed" in space?

Both the energy radiated by the antenna, and the energy radiated by the
resistor, ends up being "dispersed" in space. Why is one "dissipated",
and one not?

> Again, dissipation of the traveling energy infers a
>much different process than dispersion of the traveling energy. Dispersion

>in itself may be a poor choice of a word. "Spreading of Energy" may be a
>more appropriate term.

I don't think dissipation occurs as the radiation travels, I think dissipation is the process that created the radiation in the first place. What you describe above is what happens to both the energy radiated by the antenna and the energy radiated by the resistor. What's the difference between the EM waves emitted by the antenna and the EM waves emitted by the resistor, that one is dissipation and one isn't?

I think we've got to be on the same page by now. To be clear about the practical consequence of the differences in our opinions, my opinion leads to radiation resistance being as dissipative as any other kind of resistance, since it produces fundamentally the same result as any other kind of resistance, while your opinion appears to make some kinds of resistances dissipative and some not depending (solely, as far as I have yet determined) on your feelings about the resistance and the desireability of the radiation resulting from feeding the resistance power. I think my opinion makes a better definition.

Dennis Ferguson

5395. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 00:23:18 UTC
From: RanHefner <ranNOSPAMhefner@my-deja.com>
Message-ID: <998s9m$c3f$1@news.netmar.com>
Source record: 168068

Don't use a metal mast.

In article <MPG.1521f98ea6f514d0989680@news.customcpu.com>, Administrator
<u127z@hotmail.com> writes:
>How do I prevent a J-pole coupling (2 m band) to the metal mast? When I
>model the antenna, the metal mast strongly affects the VSWR and
>radiation pattern. The length of the mast heavily affects the antenna. I
>also find this effect on all vertical antennas I've modelled - GP's, 5/8
>verticals, etc. Adding more ground plane rods does not seem to help. I
>expeced more ground radials to 'screen' the metal mast and reduce mast
>coupling. But it does not. Some antenna manufacturers claim their end
>fed vertical 1/2 wave antenna to be 'ground plane or metal mast
>independent'. Is this talking bullshit?
>
>Is the only way to use a vertical dipole instead, mounted on the side of
>the metal mast as below, in order to avoid coupling? I understand the
>distance from the mast shall be chosen for minimum radiation pattern
>distorsion.
>
>Jan
>
> _
> | |
>| | |
>|-------| |
>| | | <----folded dipole
>| |_|
>|
>|
>| <---metal mast (arbitrary length)
>|
>|

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5396. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 00:27:21 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB7F569.C4B6F43C@mwci.net>
Source record: 168066

Ian White, G3SEK wrote:

> In 'Transmission Lines for Communications' by C W Davidson (ISBN 0 333
> 37238 1) there is a proof of the skin effect which - far from requiring
> an infinite surface - demonstrates that the effect will take place on
> any arbitrarily *small* surface across which RF current is flowing.
>
> No special circuit topology is required - the analysis seems to say that
> if the RF current is flowing, for any reason, then there will be a skin
> effect.

The key phrase is "current flowing". If current must be flowing, there must be a current path of some kind. For example a magnetic RF shield or a shield room relies on "eddy" currents. The shield doesn't work well unless there is a closed current path. The eddy current creates an opposing H field that cancels the impinging H field.

If the Faraday shield is open-circuited the wave is not absorbed or reflected but passes through very nicely as I described. If the Faraday shield is short-circuited the wave does not get through. It can only be because of the short-circuit current.

The boundary condition for tangential H fields between air and a conductor is that the difference is exactly equal to the value of the sheet current on the surface.

With respect to wave absorption, a quick look at all of my references seems to agree with your description of Chapman, but this is still bothering me. I will struggle with this some more and see if I can get it worked out. There is something wrong here about this reflection business. The same skin effect idea is applied to surface current flow and wave reflection.

> Bill has a copy of those pages which I snail-mailed a year or two ago.
> If you still have it, Bill, please could you comment on its validity?

I have never received this from you. It must have been sent to someone else.

Bill W0IYH

5397. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 00:48:50 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <998uejsmh1@slb5.atl.mindspring.net>
Source record: 167969

So, no flag then? How about lights?

5398. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:03:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <998ugq$ka8$1@neptunium.btinternet.com>
Source record: 167970

William E. Sabin wrote
> Most of my discussion here on the internet is
> basically a repetition, with some additional insights
> since 1997, of my QEX article plus Letter that I sent you.
> My conviction is that there are no errors.
==========

It should be easy enough for the editors to check. Look up Maxwell nearly a century and a half ago and Heaviside a century back.

Or, if there's no satisfaction to be obtained from the ancients, why not set up a relatively small single-turn screened loop, tune it to 1.9 MHz and listen with an ordinary receiver. Then set up an unscreened tuned loop of the same diameter, listen with the same receiver and note whether there is any difference on the S-meter.

It makes me wonder whether any of you guru's ever had a radio receiver.

Reg.

5399. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:04:13 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB7FE0D.447C2229@toast.net>
Source record: 167971

Dennis Ferguson wrote:

> VE9SRB <srbest@att.net> wrote:
> >There seems to be some confusion as to the terms and processes we are
> >discussing here. Consider the total energy delivered to the antenna.
> >First, if the antenna is lossy, some portion of the energy delivered to the
> >antenna will be "dissipated" in or at the antenna. Dissipation infers loss,
> >in that the dissipated energy is lost and not available for radiation.
>
> Steve,
>
> How about this. Go out and buy the most sensitive set of infrared
> goggles (i.e. a detector of infrared wavelength radiation) you can find.
> Then, on a calm cool night, take a look at your antenna and feed line, as
> well as the resistors and transistors or tubes in your transmitter,
> when the latter is operating. The energy you say is lost is being
> radiated as EM radiation, you can see some of it with the goggles.
> The energy you say is not lost is also being radiated as EM radiation.
> What is the difference? Are you defining "dissipated" as the radiation
> you don't want, and "not dissipated" as the radiation you want? Spurs
> and harmonics that you don't want are also "dissipated"? This is
> certainly a possible definition of "dissipation", but I think a
> definition which didn't depend on your feelings about the radiation
> might be a better one.
>
> >"Radiation" is the process through which the antenna converts the energy
> >delivered to its terminals into a traveling EM wave in space. This process
> >is "radiation", it is not "dissipation" nor is it "dispersion".
>
> But "radiation" is also the mechanism through which a resistor sheds
> the energy delivered to its terminals into a travelling EM wave in
> space. EM radiation is heat in the process of being transfered away
> from its source. Again, why would the EM radiation emitted by a
> hot resistor be the result of "dissipation", while the EM radiation
> emitted by the antenna is not the result of "dissipation"? What
> happens to the radiation after it is dissipated (or not dissipated)
> is pretty much identical in either case.
>
> >The "dispersion" process that we have been discussing is what happens to the
> >EM energy after leaves the antenna. Is it "dissipated" in space or is it
> >"dispersed" in space?
>
> Both the energy radiated by the antenna, and the energy radiated by the
> resistor, ends up being "dispersed" in space. Why is one "dissipated",

> and one not?
>
> > Again, dissipation of the traveling energy infers a
> >much different process than dispersion of the traveling energy. Dispersion
> >in itself may be a poor choice of a word. "Spreading of Energy" may be a
> >more appropriate term.
>
> I don't think dissipation occurs as the radiation travels, I think
> dissipation is the process that created the radiation in the first
> place. What you describe above is what happens to both the energy
> radiated by the antenna and the energy radiated by the resistor.
> What's the difference between the EM waves emitted by the antenna
> and the EM waves emitted by the resistor, that one is dissipation
> and one isn't?
>
> I think we've got to be on the same page by now. To be clear about
> the practical consequence of the differences in our opinions, my
> opinion leads to radiation resistance being as dissipative as any
> other kind of resistance, since it produces fundamentally the same
> result as any other kind of resistance, while your opinion appears
> to make some kinds of resistances dissipative and some not depending
> (solely, as far as I have yet determined) on your feelings about the
> resistance and the desireability of the radiation resulting from
> feeding the resistance power. I think my opinion makes a better
> definition.

One difference between the ir emitted as a result of heating and the rf emitted as radiation is that the ir is diffuse and contains little information, beyond increasing during transmit and then falling off. The rf, of course, follows the modulation more or less exactly. It also retains its frequency. The ir would be a broad group of frequencies that would increase slightly as the temperature rose. Maybe a useful way to distinguish dissipation from radiation would be the diffuseness of the resulting emitted energy.

john

5400. Isotron Antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:14:00 UTC
From: mrbrew <mrbrew64@excite.com>
Message-ID: <3AB80058.D1F94F85@excite.com>
Source record: 167972

I have the 10 meter isotron antenna a friend of mine gave to me,but he had no info on how to install it. If anyone has information on tuning,and where to mount it,,it would be greatly appreciated.
73
Mark

5401. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:23:40 UTC
From: richardharrison@webtv.net
Message-ID: <9098-3AB8029C-111@storefull-111.iap.bryant.webtv.net>
Source record: 167976

Dennis Ferguson wrote:
"So what is the difference between the resistor and the antenna which makes one dissipative and the other not?"

Very simple. Efficiency is the percentage of the input to an antenna, system, or device that we are able to get out as the desired output.

An antenna usually radiates most of the energy it accepts. We don`t rate antenna efficiency on how much of the radiated energy is actually used, or even how much is properly directed. We rate efficiency based on how much of the energy fed the antenna is radiated in all directions and how much is converted to heat. Heat being the stuff which friction, for example, generates.

The antenna`s desired output is a radio signal. When 85% of the energy fed an antenna is launched into space and 15% is converted into heat, all the energy put into the antenna is gone. The 15% which wasn`t radiated was dissipated (wasted) because it wasn`t the desired output from the antenna.

Best regards, Richard Harrison, KB5WZI

5402. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:33:25 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <LQS4OlAWeueq=hpyGbbVmyG=Z8ya@4ax.com>
Source record: 167973

RanHefner <ranNOSPAMhefner@my-deja.com> wrote:

>Don't use a metal mast.

You can get wooden dowels, 5' or 10' long, from any hardware store. Attach one,
or stuff one into, the top of your metal mast. The wooden pieces are plenty
strong for a little 2-meter j-pole.

Bob
k5qwg
>
>In article <MPG.1521f98ea6f514d0989680@news.customcpu.com>, Administrator
><u127z@hotmail.com> writes:
>>How do I prevent a J-pole coupling (2 m band) to the metal mast? When I
>>model the antenna, the metal mast strongly affects the VSWR and
>>radiation pattern. The length of the mast heavily affects the antenna. I
>>also find this effect on all vertical antennas I've modelled - GP's, 5/8
>>verticals, etc. Adding more ground plane rods does not seem to help. I
>>expeced more ground radials to 'screen' the metal mast and reduce mast
>>coupling. But it does not. Some antenna manufacturers claim their end
>>fed vertical 1/2 wave antenna to be 'ground plane or metal mast
>>independent'. Is this talking bullshit?
>>
>>Is the only way to use a vertical dipole instead, mounted on the side of
>>the metal mast as below, in order to avoid coupling? I understand the
>>distance from the mast shall be chosen for minimum radiation pattern
>>distorsion.
>>
>>Jan
>>
>> _
>> | |
>>| | |
>>|-------| |
>>| | | <----folded dipole
>>| |_|
>>|
>>|
>>| <---metal mast (arbitrary length)
>>|
>>|
>
>
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5403. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:37:24 UTC
From: wsmith@cinci.rr.com
Message-ID: <3ab80562.43577679@news-server>
Source record: 167975

On Tue, 20 Mar 2001 23:27:52 GMT, "TimH" <NOSPAM@detroit.net> wrote:

>Walt, Cecil is right. You really oughta put a flag on that bike

What? No smiley face? Sheez!

Fortunately, I am getting some valuable info off line.

Walt Smith

5404. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 01:40:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <9990nu$no5$1@neptunium.btinternet.com>
Source record: 167974

W6RCecilA wrote
> How do you know that's not infrared? Why does ultraviolet have a
> delayed warming effect? Why can't I feel a laser beam?
==========

Way back in the 1940's on several occasions I stood in front of a 50 KWatt, 3 GHz, pulsed radar parabolic dish when somebody switched it on.

In 1984 I stood in front of a defective CW, 1 KWatt microwave oven with open door and still working fine at 2.4 GHz.

My face felt slightly warm on all such occasions.

If on a hot day I face the sun I feel the heat.

On a cold day I notice the lack of heat.

So on a cold day I warm my poor old body at the gas fire in the living room.

On many occasions I have burned little holes in my fingers with electrical energy.

But I must confess my skin has the ability to detect only a rise in temperature. It gives me no clues whatsoever about the frequency of the electromagnetic radiation it is receiving. So I am obliged to accept radiation is all made of the same stuff. And as I am not a lossless transmission line it is all dissipated in me.

I was once within 15 feet of lightning striking the ground. I felt nothing. I witnessed only a small cloud of steam. I'm still around.

Reg

5405. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 02:01:30 UTC
From: richardharrison@webtv.net
Message-ID: <22183-3AB80B7A-9@storefull-116.iap.bryant.webtv.net>
Source record: 167979

Dennis Ferguson wrote:
"I think my opinion makes a better definition."

I have no problem with Dennis` opinion except it doesn`t conform with the definitions accepted by a wide majority of those people who work with antennas. They`ve accepted the idea that an antenna has two resistive parts in series. These are the radiation resistance and the loss resistance. The same current flows through both. The radiation resistance is a fictional resistance that would take the same power as that which is actually being radiated were the fictional resistance to replace the radiation load. The radiation resistance is a voltage to current ratio in which the voltage and current are in-phase. It is not a resistor. It is a non-dissipative resistance. There is a difference between a resistance and a resistor, no matter who said otherwise. However, not all non-dissipative resistances are fictional contrivances of convenience. A transmission line`s surge resistance is not a resistor, but it opposes unrestricted energy flow in a line.

Best regards, Richard Harrison, KN5WZI

5406. Titan Challenger

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 02:13:07 UTC
From: djohnson <dbjohnson@sympatico.ca>
Message-ID: <T6Ut6.425202$Pm2.6624596@news20.bellglobal.com>
Source record: 167977

I have put up a Titan Challanger to compare it to a G5RV. Bought this used. Titan will not resonant on 40 meters, 12 meters, and its 2:1 on 10 meters. The G5RV outperforms on receive by 2 s units on most bands. Anyone know what might be wrong with the Gap or is this all there is?

5407. Re: Laser Generated Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 02:13:35 UTC
From: thompson@mindspring.com
Message-ID: <99931g$m1p$1@slb7.atl.mindspring.net>
Source record: 167978

Which April are you talking about? Larsen E Rapp WIOU wants to help.
Dave K4JRB

> Well, I've seen the latest QST, and I'm really excited by the
possiblilities of
> these new Laser Gererated Antennas.
>
> I plan to have one up by April...
>
> Bob
> k5qwg

5408. Re: HyTower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 02:19:02 UTC
From: thompson@mindspring.com
Message-ID: <9993b1$a84$1@nntp9.atl.mindspring.net>
Source record: 167980

MFJ is not going to manufacture the Hy-Tower as the Rohn Spalding bottom tower is no longer made. Probably the best bet is to find one used or taking the plans (from the instructions) build your own. A ham in the mid west found a Hy-tower sans the tower that had never been out of the box. He substituted a larger Rohn Spalding BX tower with good results. This was written up in Electric Radio Magazine.
73 Dave K4JRB

> I've always been fascinated with the HyTower antenna. One of my father's (a
> non-ham) friend was a ham and he had one in his small lot. I thought it was
> the neatest antenna, especially when I was a 15 newly licensed novice and my
> dad wouldn't let me put up antennas.
>
> Anyways, I notice that the HyTower is back in the MFJ / Hygain catalog and I
> am seriously considering one for the antenna farm at my new QTH. I realize
> that the entire tower is part of the antenna so mounting other antennas
> directly on it is probably not a good idea. However, is there a way to use
> it to support a wire antenna? I'm thinking about installing a Carolina
> Windom 160 and wonder if I can use the HyTower to support either one of the
> ends, using a length of rope to isolate the two antennas.
>
> If anyone has a HyTower available, I'd be interested in price and condition.
>
> My current plans for the antennas include:
>
> The HyTower as a vertical antenna
> The Carolina Windom as the horizontal antenna
> My current Force 12 C4S beam for 40, 20, 15 and 10.
>
> I'd use the Force 12 tower to support the center of the Windom.
> Ideally, I'd like to use the HyTower to support one end of the Windom and a
> mast of some sort for the other end. There are no trees at the new QTH and
> the Radio Works website cautions about installing the Windom's as inverted
> vees.

>
> 73,
> Mark, N8ME
>
>
>

5409. Need copies of 3 old QST article's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 02:28:53 UTC
From: Jack <5406285@127.0.0.1>
Message-ID: <3ab811e5@feed.binaries.net>
Source record: 167981

I am in need of copies (or email copies
if you have scanner) for 3 article's
from old QST's.

Jan. 1983 QST, page 17. Automatic control for the Alliance HD-73 rotator.

Feb. 1996 QST, page 35. Build a Rotator
Pal.
and
Jan. 1999, QST, page 34. Rotator Magic.

What I am looking for is an article dealing with building a computer / rotor
interface. Thank's for any help as I
lost most of my back issues of QST and
CQ to a flood last year. I also know
about the commercially available interface's, but thought I would take a
crack at building one first to try and
have the fun of constructing it.
Please email any info to the address (s)
below.

TNX & 73's Jack Lovell WD9IFW
radioman@rochelle.net or
wd9ifw@arrl.net

Posted Via Binaries.net = SPEED+RETENTION+COMPLETION = http://www.binaries.net

5410. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 02:36:42 UTC
From: richardharrison@webtv.net
Message-ID: <27390-3AB813BA-20@storefull-112.iap.bryant.webtv.net>
Source record: 167982

Reg wrote:
"I was once within 15 feet of lightning striking the ground. I felt nothing. I witnessed only a small cloud of steam. I`m still around."

There is an old story which may explain Reg`s survival.

A priest and a nun were playing golf together. The priest was missing shots and muttering, "Damn it, missed again!".

The nun repeatedly chided the preist, warning him that God would not appreciate the intemperate language.

All of a sudden, there was a blinding flash of light and a deafening clap of thunder and the nun was struck dead. Out of the heavens came a thundering bellow: "Damn it, missed again!"

Best regards, Richard Harrison, KB5WZI

5411. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:19:15 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <92Vt6.245$dp4.4513@newsfeed.slurp.net>
Source record: 167984

If you want height and strength with your J-pole use a wooden or pvc plastic rod that will slide into the J-pole and the mast. Leave about 1 1/2" space between the mast and J-pole. This will isolate J-pole from the mast. Have fun. 73 W9FPJ
"Bob Miller" <bamiller@texas.net> wrote in message news:LQS4OlAWeueq=hpyGbbVmyG=Z8ya@4ax.com...
> RanHefner <ranNOSPAMhefner@my-deja.com> wrote:
>
> >Don't use a metal mast.
>
> You can get wooden dowels, 5' or 10' long, from any hardware store. Attach one,
> or stuff one into, the top of your metal mast. The wooden pieces are plenty
> strong for a little 2-meter j-pole.
>
> Bob
> k5qwg
> >
> >In article <MPG.1521f98ea6f514d0989680@news.customcpu.com>, Administrator
> ><u127z@hotmail.com> writes:
> >>How do I prevent a J-pole coupling (2 m band) to the metal mast? When I
> >>model the antenna, the metal mast strongly affects the VSWR and
> >>radiation pattern. The length of the mast heavily affects the antenna. I
> >>also find this effect on all vertical antennas I've modelled - GP's, 5/8
> >>verticals, etc. Adding more ground plane rods does not seem to help. I
> >>expeced more ground radials to 'screen' the metal mast and reduce mast
> >>coupling. But it does not. Some antenna manufacturers claim their end
> >>fed vertical 1/2 wave antenna to be 'ground plane or metal mast
> >>independent'. Is this talking bullshit?
> >>
> >>Is the only way to use a vertical dipole instead, mounted on the side of
> >>the metal mast as below, in order to avoid coupling? I understand the
> >>distance from the mast shall be chosen for minimum radiation pattern
> >>distorsion.
> >>
> >>Jan
> >>
> >> _
> >> | |
> >>| | |
> >>|-------| |
> >>| | | <----folded dipole
> >>| |_|

> >>|
> >>|
> >>| <---metal mast (arbitrary length)
> >>|
> >>|
> >
> >
> > ----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the
eb -----
> > http://newsone.net/ -- Free reading and anonymous posting to 60,000+
groups
> > NewsOne.Net prohibits users from posting spam. If this or other posts
> >made through NewsOne.Net violate posting guidelines, email
abuse@newsone.net
>

5412. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:19:44 UTC
From: dennis@wawa.juniper.net
Message-ID: <9996kg$2lpc$1@heap.juniper.net>
Source record: 167986

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>Dennis Ferguson wrote:
>> Both the resistor and the antenna radiate EM waves.
>
>What is the frequency of the EM waves radiated by the resistor?

It depends on the temperature of the resistor. If it is at or above
the temperature on our planet it will be in the infrared frequencies,
or light frequencies if you get it hot enough to glow. In space it
could be cooler, and the frequencies lower. Also, if it radiates
like a black body the spectrum will be pretty broad-band.

Dennis Ferguson

5413. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:23:58 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <C6Vt6.247$dp4.4118@newsfeed.slurp.net>
Source record: 167985
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Put up or shut up. I have no record, other than a traffic ticket, anywhere.
Put up or shut fool.
"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
news:985130253.3ab7e50d406a9@webmail.cotse.com...
> Francis "Dickhead Elliott" <elliotta@netusa1.net> whined like a little
girl in
> message news:ECIt6.52$5V3.1430@newsfeed.slurp.net...
> >
> > Thank you for your reply.
>
> Anytime, ASSHOLE.
>
> > My attorney wants a few more so we can sue you for libel.
>
> BWHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!!!!!! Who's your attorney, Dumbass? I
want
> to be sure to enter as evidence on the countersuit those libelous posts
you
> made regarding ME, DUMBASS. I have them archived, you fuckhead. And
they'll
> come out in the "trial," what will all that bad press do for you in your
> shithole community? BWHAHAHAHA!!!!
> Or shall I contact your local Public Defender's office to reach
> your "attorney," welfare-recipient?
>
> >I have no police record anywhere. W9FPJ
>
> Suuuuuuuuuree you don't....the record shows otherwise.
BWHAHAHAHAHAHHAHAHAHA!!!!
>
>
>
>
>
> > "KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
> > news:985087900.3ab73f9ca526d@webmail.cotse.com...
> > > LITTLE BOY FELLATOR "Francis Dickhead Elliott" <elliotta@netusa1.net>
> > brushed
> > > the raoches off of his keyboard in his ramshackle hovel and babbled in
> > > message news:Cgxt6.109$Rw3.1950@newsfeed.slurp.net...
> > > >
> > > > Thanks I will do that.
> > >

> > > Who will you get to do it FOR you, since you barely knbow how to turn
that
> > > CHEAP-ASSED computer of your on? You'd better erase all that
self-produced
> > > kiddie porn off your meager hard drive, before the FBI comes calling
> > again.
> > >
> > > > But he shows up in a lot of groups.
> > >
> > > Poor baby. It's nice to see I MEAN SO FUCKING much to you that you
keep
> > track
> > > of my posts, fuckhead.
> > >
> > > >How sad he must really be. W9FPJ
> > >
> > > Not as half as sad as what the Indiana Department of Law Enforcement
says
> > about
> > > you;
> > > Francis has been a Bbbbbbbbbbbbaaaaaaaaddd boy.....
> > >
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> > >
> > >
> > > 73 de Roger, KC8JBO
> > > EM99|
> > > Yaesu FT-920 | Inverted vee @ 40 Feet
> > > Yaesu FT-90R | Copper J-pole
> > >
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> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
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5414. Re: Need copies of 3 old QST article's

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:30:15 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AB82047.E8F28512@dialpoint.net>
Source record: 167983

While you are at it, look on the amsat.org website and got to the files section. Look for a program called fodtrack. It is a free program for tracking the sats. While you are not interisted in the sats, there is an interface using a parallel (printer) port of the computer in the file. You may want to look at how he uses the parallel port and a A/D chip to control the direction of the rotator.

> What I am looking for is an article dealing with building a computer / rotor
> interface. Thank's for any help as I
> lost most of my back issues of QST and
> CQ to a flood last year. I also know
> about the commercially available interface's, but thought I would take a
> crack at building one first to try and
> have the fun of constructing it.
>

5415. Re: HyTower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:35:27 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab820a4.19256860@news.accessunited.com>
Source record: 167987

On Tue, 20 Mar 2001 21:19:02 -0500, <thompson@mindspring.com> wrote:

>MFJ is not going to manufacture the Hy-Tower as the Rohn Spalding bottom
>tower is no longer made. Probably the best bet

Hygain IS going to manufacture the Hytower. They are looking at equal
substitutes for the Spalding sections that are no longer available
right now.

73 Tom

5416. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:38:37 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab82120.19380617@news.accessunited.com>
Source record: 167988

On Wed, 21 Mar 2001 01:03:02 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Or, if there's no satisfaction to be obtained from the ancients,
>why not set up a relatively small single-turn screened loop, tune
>it to 1.9 MHz and listen with an ordinary receiver. Then set up an
>unscreened tuned loop of the same diameter, listen with the same
>receiver and note whether there is any difference on the S-meter.

I've done that doezens of times Reg, and there is absolutely no
difference if you leave a gap in the screen.

If you close the gap, the loop goes dead.

There really isn't anything amazing about this, except that some
people somehow think the screen makes the loop immune to EMI.

Now a thought like that is amazing.

73 Tom

5417. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:53:16 UTC
From: dennis@wawa.juniper.net
Message-ID: <9998jc$2q3t$1@heap.juniper.net>
Source record: 167991

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>Dennis Ferguson wrote:
>> Light will also heat your skin, as can be determined by going outside
>> on a sunny day.
>
>How do you know that's not infrared? Why does ultraviolet have a
>delayed warming effect? Why can't I feel a laser beam? I've never
>thought about all this before.

I'm pretty sure it is not infrared, but I'm remembering this from Mechanical Engineering school a long time ago so feel free to consider it suspect. The sun's radiation spectrum peaks in the visible region so the intensity of infrared is way below light, and CO2 is opague at infrared so that not much of what there is makes it to the surface. The power density at infrared is very low. The surface of the planet is heated by the light and reradiates in the infrared, but the CO2 also absorbs the outgoing infrared and keeps the planet warmer than it otherwise might be.

I don't know about ultraviolet, but it may be that the skin isn't fully opague at ultraviolet so some of the heating is going on below the skin where you haven't got any nerves. You can definitely feel a visible light laser beam, you just have to have one at high enough power. The lasers that are below a couple of hundred mW are harmless, but we had a 5 W argon-ion laser (2 colors at the output, green and blue, nothing anywhere else in the spectrum) that felt kind of like a bee sting after a second or two on the skin, and which would burn pinholes in your clothes or set fire to paper if you weren't careful.

Dennis Ferguson

5418. Will MIR's descent produce scatter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:53:22 UTC
From: Keith K5WX <keithz_xspam@austin.rr.com>
Message-ID: <3AB825B1.5CBB81F8@austin.rr.com>
Source record: 167994

Will MIR's fiery descent produce a long enough and persistent enough ionized column of air such that something akin to meteor scatter will be possible in the Pacific? I've wondered about the same thing while watching the Shuttle re-enter at night. The ionized trail behind the Shuttle lasts almost a minute. The MIR should break apart and leave many burning trails...

Keith

5419. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 03:57:23 UTC
From: Jerry France <grf@ctaz.com>
Message-ID: <3AB82685.3836DC8@ctaz.com>
Source record: 167989
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Why would you be so stupid as to post all this crap on the antenna
newgroup. Please keep this crap in your own backyards. Thank you.

KC8JBO wrote:
>
> Francis "Dickhead Elliott" <elliotta@netusa1.net> whined like a little girl in
> message news:ECIt6.52$5V3.1430@newsfeed.slurp.net...
> >
> > Thank you for your reply.
>
> Anytime, ASSHOLE.
>
> > My attorney wants a few more so we can sue you for libel.
>
> BWHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!!!!!! Who's your attorney, Dumbass? I want
> to be sure to enter as evidence on the countersuit those libelous posts you
> made regarding ME, DUMBASS. I have them archived, you fuckhead. And they'll
> come out in the "trial," what will all that bad press do for you in your
> shithole community? BWHAHAHAHA!!!!
> Or shall I contact your local Public Defender's office to reach
> your "attorney," welfare-recipient?
>
> >I have no police record anywhere. W9FPJ
>
> Suuuuuuuuuree you don't....the record shows otherwise. BWHAHAHAHAHAHHAHAHAHA!!!!
>
> > "KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
> > news:985087900.3ab73f9ca526d@webmail.cotse.com...
> > > LITTLE BOY FELLATOR "Francis Dickhead Elliott" <elliotta@netusa1.net>
> > brushed
> > > the raoches off of his keyboard in his ramshackle hovel and babbled in
> > > message news:Cgxt6.109$Rw3.1950@newsfeed.slurp.net...
> > > >
> > > > Thanks I will do that.
> > >
> > > Who will you get to do it FOR you, since you barely knbow how to turn that
> > > CHEAP-ASSED computer of your on? You'd better erase all that self-produced
> > > kiddie porn off your meager hard drive, before the FBI comes calling
> > again.
> > >
> > > > But he shows up in a lot of groups.
> > >
> > > Poor baby. It's nice to see I MEAN SO FUCKING much to you that you keep

> > track
> > > of my posts, fuckhead.
> > >
> > > >How sad he must really be. W9FPJ
> > >
> > > Not as half as sad as what the Indiana Department of Law Enforcement says
> > about
> > > you;
> > > Francis has been a Bbbbbbbbbbbbaaaaaaaaddd boy.....
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> > >
> > > 73 de Roger, KC8JBO
> > > EM99|
> > > Yaesu FT-920 | Inverted vee @ 40 Feet
> > > Yaesu FT-90R | Copper J-pole
> > >
> > >
> >
> >
>
> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole

5420. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 04:02:40 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <999950dfr0@208.206.142.91>
Source record: 167992
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" wrote:
>
>
> License class advancement is not the sole goal in Ham Radio just as it is
> not in other areas of life either. Not everyone wants, or needs, to reach
> the Extra Class level the same way as not everyone needs to get a Ph.D. in
> their chosen field.
>

That's right. So kwitcher bitchin' about what you didn't get for what
you didn't do to get it.

5421. Re: Isotron Antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 04:03:01 UTC
From: ik7565@erols.com
Message-ID: <3AB827F5.7441E748@erols.com>
Source record: 167990

Let us know how it works. Always looking for a solution to my
antenna-challenged location.

73 de N8IK
Ian

mrbrew wrote:
>
> I have the 10 meter isotron antenna a friend of mine gave to me,but he
> had no info on how to install it. If anyone has information on
> tuning,and where to mount it,,it would be greatly appreciated.
> 73
> Mark

5422. Re: WANTED: directional 2m/70cm antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 04:05:15 UTC
From: ik7565@erols.com
Message-ID: <3AB8287B.F51851F4@erols.com>
Source record: 167993
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Try http://members.aol.com/_ht_a/Arrow146/index.html

73 de N8IK

Conal Fitzgerald wrote:
>
> On Mon, 12 Mar 2001 23:52:56 GMT, anonymous@freenewsland.com wrote:
>
> >I'm looking for an antenna no more than a few feet long
> >that will perform even better than the J-pole, and a
> >directional antenna seems to be what I need. Fox hunt
> >capability would be a nice added bonus.
>
> What I'm looking for is a little more specific: I'm trying to find
> something in a directional 2m that would be suitable for mag-mounting
> on my car roof. (doesn't have to be remotely rotatable or terribly
> stable, I just want it to stand on its own while I'm sitting in a
> parking lot) I'd prefer something that can lay flat in the car while
> not in use, or could be rotated and folded down below the side rails
> of the roof rack (about 4" high) and bungeed down for short movements.
>
> I'd also like a good directional antenna for SWL that could be set up
> while the car is stationary, but that can come later.
>
> OBTW, the 2m directional would be primarily for listening. I'll have
> a 'daily use' antenna by the time I get around to setting it up.
>
> Conal Fitzgerald
> conal@drunkenbard.com
> http://www.drunkenbard.com

5423. Re: Titan Challenger

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 04:10:46 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB829C6.31CF08E4@IEEE.org>
Source record: 167996

djohnson wrote:
> I have put up a Titan Challanger to compare it to a G5RV. Bought this used.
> Titan will not resonant on 40 meters, 12 meters, and its 2:1 on 10 meters.
> The G5RV outperforms on receive by 2 s units on most bands. Anyone know what
> might be wrong with the Gap or is this all there is?

That's about the same difference I get between my dipole and
a 40m vertical with eight radials.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5424. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 04:14:15 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <meagbtsthha964o52vrs0mkus90qjkv1li@4ax.com>
Source record: 167995

On Tue, 20 Mar 2001 17:45:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Dennis Ferguson wrote:
>> Both the resistor and the antenna radiate EM waves.
>
>What is the frequency of the EM waves radiated by the resistor?

Hi Cecil,

Roughly 430,000 GHz.

73's
Richard Clark, KB7QHC

5425. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 04:18:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB82B80.F2CB9FD9@IEEE.org>
Source record: 167997

Richard Clark wrote:
>
> <Cecil.A.Moore@IEEE.org> wrote:
> >What is the frequency of the EM waves radiated by the resistor?
>
> Roughly 430,000 GHz.

How does a resistor increase the frequency of the EM energy?
Is there a local oscillator inside?

Seems to me, there's not much of an energy conversion going
from electrical energy of a certain frequency to EM energy
of the same frequency.
--
http://www.mindspring.com/~w6rca

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5426. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 05:05:20 UTC
From: markwunderman@sprintmail.com
Message-ID: <3AB83681.743F6417@sprintmail.com>
Source record: 167998

From your photos it looks like it would not be difficult to mount a vertical on top of one of the two metal supports for the seat back fabric. If you are willing to put a gromet (brass, or even better a nylon one if you can find one) in the weather fly, you could run the antenna through the grommet without compromising the weatherproofing significantly. If the gromet were at the base of the antenna (touching the mount, i.e. ground) it should not adversely effect the antenna.

Mark
KE6QCT

wsmith@cinci.rr.com wrote:

> I need a little advice about mounting an antenna on the rear of my
> bike. I have used a Diamond 770 series dual band antenna on other
> bikes with very good sucess. However, I have a new recumbent bike that
> is giving me a little pause for thought. I have a couple of pictures
> of the bike at:
>
> http://albums.photopoint.com/j/AlbumIndex?u=1025520&a=12162755&f=0
>
> On my other bikes I had a simple bracket to hold the antenna at the
> rear end of the rack. But, as you can see, there is an aluminum
> upright now in place to hold the cold weather/streamlining fabric. My
> question is: If I mount the antenna bracket on the rack, what
> problems am I going to run into with the close proximity of the
> upright. I would think the maximum distance that I can separate the
> two is about 4 inches. I am running almost exclusively 2 meters.
>
> Thanks for any help.
>
> Walt Smith, KB8ZQW
> Harrison, Ohio
> Member BMHA

5427. Re: HyTower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 05:10:22 UTC
From: Jim McGrath <w2mmr@nc.rr.com>
Message-ID: <2JWt6.156027$Z8.33000961@typhoon.southeast.rr.com>
Source record: 168000

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ab820a4.19256860@news.accessunited.com...
> On Tue, 20 Mar 2001 21:19:02 -0500, <thompson@mindspring.com> wrote:
>
> >MFJ is not going to manufacture the Hy-Tower as the Rohn Spalding bottom
> >tower is no longer made. Probably the best bet
>
> Hygain IS going to manufacture the Hytower. They are looking at equal
> substitutes for the Spalding sections that are no longer available
> right now.
>
> 73 Tom

I was just looking at the 2001 MFJ catalog (page 55) - Hy Gain section - and see the AV-18HT @ $739.95. Is this the Hy-Tower?

73,

Jim - W2MMR

5428. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 05:12:43 UTC
From: ccom2@socket.net
Message-ID: <3ab837d8.27448007@news.socket.net>
Source record: 167999
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

please do not use such a trash mouth! take it to each other by email.
MIke

KC8JBO <rmccall-no-spam@cotse.com> wrote:

>Francis "Dickhead Elliott" <elliotta@netusa1.net> whined like a little girl in
>message news:ECIt6.52$5V3.1430@newsfeed.slurp.net...
>>
>> Thank you for your reply.
>
>Anytime, ASSHOLE.
>
>> My attorney wants a few more so we can sue you for libel.
>
>BWHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!!!!!! Who's your attorney, Dumbass? I want
>to be sure to enter as evidence on the countersuit those libelous posts you
>made regarding ME, DUMBASS. I have them archived, you fuckhead. And they'll
>come out in the "trial," what will all that bad press do for you in your
>shithole community? BWHAHAHAHA!!!!
>Or shall I contact your local Public Defender's office to reach
>your "attorney," welfare-recipient?
>
>>I have no police record anywhere. W9FPJ
>
>Suuuuuuuuuree you don't....the record shows otherwise. BWHAHAHAHAHAHHAHAHAHA!!!!
>
>
>
>
>
>> "KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
>> news:985087900.3ab73f9ca526d@webmail.cotse.com...
>> > LITTLE BOY FELLATOR "Francis Dickhead Elliott" <elliotta@netusa1.net>
>> brushed
>> > the raoches off of his keyboard in his ramshackle hovel and babbled in
>> > message news:Cgxt6.109$Rw3.1950@newsfeed.slurp.net...
>> > >
>> > > Thanks I will do that.
>> >
>> > Who will you get to do it FOR you, since you barely knbow how to turn that
>> > CHEAP-ASSED computer of your on? You'd better erase all that self-produced
>> > kiddie porn off your meager hard drive, before the FBI comes calling
>> again.
>> >

>> > > But he shows up in a lot of groups.
>> >
>> > Poor baby. It's nice to see I MEAN SO FUCKING much to you that you keep
>> track
>> > of my posts, fuckhead.
>> >
>> > >How sad he must really be. W9FPJ
>> >
>> > Not as half as sad as what the Indiana Department of Law Enforcement says
>> about
>> > you;
>> > Francis has been a Bbbbbbbbbbbbaaaaaaaaddd boy.....
>> >
>> >
>> >
>> >
>> >
>> > 73 de Roger, KC8JBO
>> > EM99|
>> > Yaesu FT-920 | Inverted vee @ 40 Feet
>> > Yaesu FT-90R | Copper J-pole
>> >
>> >
>>
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>
>73 de Roger, KC8JBO
>EM99|
>Yaesu FT-920 | Inverted vee @ 40 Feet
>Yaesu FT-90R | Copper J-pole
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5429. 80 Meter Apt Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 05:56:08 UTC
From: Chuck Berry <n7chs@uswest.net>
Message-ID: <3AB84278.866DBF32@uswest.net>
Source record: 168001

Looking for construction articles or antennas for 80M qrp from my
apartment.

thanks,
chuck
n7chs

5430. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 06:21:55 UTC
From: dennis@wawa.juniper.net
Message-ID: <999ha3$9fk$1@heap.juniper.net>
Source record: 168002

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>Richard Clark wrote:
>>
>> <Cecil.A.Moore@IEEE.org> wrote:
>> >What is the frequency of the EM waves radiated by the resistor?
>>
>> Roughly 430,000 GHz.
>
>How does a resistor increase the frequency of the EM energy?
>Is there a local oscillator inside?

This is where my physics gets weak, but I think thermal energy
manifests itself as molecular agitation and the radiation is
caused by the accelerations and decelerations of (the electrons
associated with?) the vibrating molecules. The frequency is
telling you something about how the thermally excited molecules
are moving. Contrast this with how the "good" radiation is
generated, it is still generated by the accelerations and
decelerations of charges but we use an electric potential
to move them instead.

>Seems to me, there's not much of an energy conversion going
>from electrical energy of a certain frequency to EM energy
>of the same frequency.

No, I think the conversion process is the same, that is we're
converting the kinetic energy of charged atomic-level particles
into radiation. It is only how we get the particles moving that
is different. In one case we control the frequency, in the
other case God does.

I'm not sure about this, however. I was hoping someone might
know enough to address this, since the fact that "good" radiation
is coherent while thermally-generated radiation isn't still
bothers me. I don't see how that matters to the thermodynamics,
but it might.

Dennis Ferguson

5431. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 06:30:47 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB84A97.CDA8EC5F@mwci.net>
Source record: 168003

Ian White, G3SEK wrote:

> In 'Transmission Lines for Communications' by C W Davidson (ISBN 0 333
> 37238 1) there is a proof of the skin effect which - far from requiring
> an infinite surface - demonstrates that the effect will take place on
> any arbitrarily *small* surface across which RF current is flowing.
>
> No special circuit topology is required - the analysis seems to say that
> if the RF current is flowing, for any reason, then there will be a skin
> effect.

I found the reference that I was looking for. It is Kraus "Electromagnetics. 4th edition" pages 556-559. I will scan the pages and email them to you or anyone else who wants them.

The idea is that if a plane wave in air strikes a metal surface *of infinite extent* (explicitly mentioned twice) such that the impedance in metal is very small and the impedance in air is 377 ohms, the wave is totally reflected and a pure standing wave is set up in air. The boundary conditions are that the tangential E field is zero and the tangential H field is doubled. This is completely analogous to a shorted transmission line that reflects the arriving wave. But for this to happen the conducting plate must support a sufficient current flow, either by being "infinite extent" or by having a closed path such as a magnetic shield structure of some kind.

Bill W0IYH

5432. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 06:53:21 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3AB84FE1.7C4AF033@ipeg.com>
Source record: 168004

wsmith@cinci.rr.com wrote:

> On Mon, 19 Mar 2001 19:31:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >wsmith@cinci.rr.com wrote:
> >> Problem is, I already have the Diamond antenna, and also mounting a
> >> flag (which I dislike) would be very difficult because of the fabric.
> >
> >Cars aren't looking for those kinds of bikes and very often don't
> >see them. Do yourself a big favor and get a flag - maybe two flags.
>
> Gentlemen, perhaps I haven't made it clear that I am asking for advice
> about an antenna problem and not a bicycling problem. I have in excess
> of 80,000 miles on bikes, and the last 8 years on recumbent bikes (the
> ones that look like lawn chairs on wheels). I consiider myself to be
> experienced AND safety concious and do not feel that I need a flag to
> be safe. My lack of accidents or even close calls seems to back me
> up.
>
> My primary concern is if the fact that I want to have an antenna
> running very closely in the same plane with the support for the
> fabric, am I going to have reflection or directional problems. I can
> use a rubber duck, but the range is not what I want. So I will again
> ask for advice.
>
> Walt Smith KB8ZQW

Walt,

The (I assume) fiberglass mast shouldn't be any significant problem. The flag (either plastic or cotton) should also have little or no effect even when wet. Small and generally insignificant interactions may occur from time to time depending on the moisture or insect saturation levels of mast and/or flag. 8-) Install it, use it and enjoy.

marty...
N7MX

5433. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 07:14:58 UTC
From: Brenda Ann <brendaannd@uswest.net>
Message-ID: <999k99$b62$1@news1.kornet.net>
Source record: 168005
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

I tried that, Mike.. and I'm looking into ways to do something about it..
but in the meantime, I figured out how to use a killfile......

5434. seeking advise on selecting VHF wireless microphone

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 07:39:44 UTC
From: Joshua Lo <joshualo@vtc.edu.hk>
Message-ID: <999l8kelp1@dragon.vtc.edu.hk>
Source record: 168007

Hi
Would anybody help me for selecting a suitable VHF wireless microphone?
Because I am using a SONY WCS 900MHz wireless microphone for voice pickup of the speaker during the meeting or sharing, but the performance is not satisfactory.
It is always interfered with the noises, even the distance between the transmitter and receiver is less than 1.5 meters and I have already tested the performance of three sets of this product, the result are the same. Not satisfactory.

I am now want to source for another set of Wireless Microphone (VHF). Would you please refer to the following working condition and the product information to give me some comments and advises?
Does the power of the transmitter have significant difference for 20mW and 50mW for my application?

Hi
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It always interfered with the noises, even the distance between the transmitter and receiver is less than 1.5 metres and
I have already tested the performance of three sets of this product, the result are the same. Not satisfactory.

I am now want to source for another set of Wireless Microphone (VHF). Would you please refer to the following
working condition and the product information to give me some comments and advises?
Does the power of the transmitter has significant difference for 20mW and 50mW for my application?

Woking condition: The maximun distance between transmitter and receiver is under 10 metres.
It may have one or two concrete wall and
peoples seperating from the transmitter and the receiver.
Portability: can use bettery for both
transmitter and receiver.

Product 1: SAMSON Camcorder VHF wireless microphone
Transmitter : model VT3L, RF Power 20mW;
Receiver: VM1 Double antenna,Single Conversion Super Heterodyne Diversity
(I don't know whether it is true diversity or phase diversity and the actual performance between these two),

sensitivity: =<6 micro volt @ 20dB S/N
Product 2: SHURE Camcorder VHF wireless microphone
Transmitter : model T1, RF Power 50mW;
Receiver: Non-diversity single antenna,
sensitivity: -109dBm (0.8 micro volt @ 12dB SINAD)

I will not consider to buy the following product, because it cannot use bettery for the receiver unit.
But do you have any comments for the comparison between product 1 & 3. Since there is only the difference between the
Receiver Sensitivities and with the same transmitter unit VT3L; and I had the experience (very good performance, with any noise)
in using a OLD model SAMSON VHF wireless microphone which is nearly the same as the product 3.

Product 3: SAMSON VHF wireless microphone
Transmitter : model VT3L, RF Power 20mW;
Receiver: VR3TD Double antenna,Single Conversion Super Heterodyne Microprocessor True Diversity
sensitivity: <3 micro volt for 20dB SINAD, < 10 micro volt for 50dB S/N

5435. Re: Will MIR's descent produce scatter?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 08:23:24 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AB864FC.22E9@wt.net>
Source record: 168013

Keith K5WX wrote:
>
> Will MIR's fiery descent produce a long enough and persistent enough
> ionized column of air such that something akin to meteor scatter will be
> possible in the Pacific? I've wondered about the same thing while
> watching the Shuttle re-enter at night. The ionized trail behind the
> Shuttle lasts almost a minute. The MIR should break apart and leave
> many burning trails...
>
> Keith

I would think so. No different from any other chunk of metal really. Man made or not. I've watched the shuttle fly over here a couple of times at night. Very awesome looking. I could see the plasma trail all the way from horizon to horizon as it passed from west to east. I could see the front of it glowing white hot. Looked like an airliner on fire from the distance. The plasma trial glowed a pinkish color and lasted quite a while before it dissipated. I'd say about 20-30 minutes in the case I saw to the north. I had it fly directly over another time at night, and could faintly hear it. And it was way high, doing about 10,000 mph at that moment. It made a faint humming sound from the wind noise. MK
--
http://web.wt.net/~nm5k

5436. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 08:58:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AB86D18.33D1@wt.net>
Source record: 168015

RanHefner wrote:
>
> Don't use a metal mast.

If the antenna had a common mode problem, it would just use the coax shield instead. So the lack of a metal mast not a real fix unless he's talking about one of these "hang off the side of the mast" jobs. Best way to go is keep the metal mast for the lightning advantage, and use a decoupling section on the j-pole. Some of the j-pole versions seem to show better decoupling than others depending on the matching and feed scheme. If a standard j pole has problems, you can always add decoupling.
>
> In article <MPG.1521f98ea6f514d0989680@news.customcpu.com>, Administrator
> <u127z@hotmail.com> writes:
> >How do I prevent a J-pole coupling (2 m band) to the metal mast? When I
> >model the antenna, the metal mast strongly affects the VSWR and
> >radiation pattern. The length of the mast heavily affects the antenna. I
> >also find this effect on all vertical antennas I've modelled - GP's, 5/8
> >verticals, etc. Adding more ground plane rods does not seem to help. I
> >expeced more ground radials to 'screen' the metal mast and reduce mast
> >coupling. But it does not. Some antenna manufacturers claim their end
> >fed vertical 1/2 wave antenna to be 'ground plane or metal mast
> >independent'. Is this talking bullshit?

Not really. What they should be saying is their antennas are well decoupled from the feedline. Only if the antenna has poor decoupling should the mast really be a problem . The height above ground will show more an effect on the pattern. And if there were no decoupling,and you had a common mode problem, you could have a wood mast and still have problems. It will just radiate from the shield of your coax. Very few common 1/2 wave designs have decoupling sections. I've never seen a single J pole design that did. Nor do most of the gamma loop fed versions sold. "ringos". But AEA did make one for marine use a few years ago that did have a decoupling section. I think it used sleeves if I remember right. With 1/4 GP's the more radials, the better decoupling, and also you can add a second section below to clean up whats left.
> >
> >Is the only way to use a vertical dipole instead, mounted on the side of
> >the metal mast as below, in order to avoid coupling? I understand the
> >distance from the mast shall be chosen for minimum radiation pattern
> >distorsion.

I'd never want to mount a vertical on the side of a mast unless a specific reason such as mounting dipoles in phase to get gain in a

direction. For omni use, I'd mount on top of the mast. I usually use base fed 1/2 waves.
You can add decoupling to any 1/2 wave vertical. And there are more than one ways to do it. One method I tried which seemed to work pretty well was a set of 1/4 wl radials a 1/4 wl below the feedpoint. The radials are grounded to the shield of the coax at that point with a union. I think you could also probably place chokes at thew correct points and do the same thing. You also have the sleeve or cones that can be used instead of radials. MK
--
http://web.wt.net/~nm5k

5437. Re: R5 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 09:15:16 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AB87124.74BC@wt.net>
Source record: 168014

Bob Miller wrote:
>
> "James A. Sullivan" <sja6@uswest.net> wrote:
>
> >I recently purchased a Cushcraft R5. I am having trouble getting a good
> >match on the bands 15, 17 and 20 meters. 10 and 12 meters work OK.
> >
> >What tips are there to setting this up?
> >
> >I have a 2 and 6 meter beam located 20 feet away. Will this affect the
> >R5?
> >
> >Jim Sullivan N7TCF
>
> You're sure it's an R5, and not an R3? I had what I believe what was an R3, for
> 20, 15 and 10 meters, but it wasn't really marked or anything.
>
> Bob
> k5qwg
The R3 used a remote tuning box, and a motorized tuner at the feedpoint.
20-10m. A friend of mine had one. Was a pretty good antenna. The R5 and
later versions all were tuned using stubs etc. No remote control box.
MK
--
http://web.wt.net/~nm5k

5438. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 09:19:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <kmTvQHBnIHu6EAmq@ifwtech.plus.net>
Source record: 168017

Bill Sabin wrote:
>
>> Bill has a copy of those pages which I snail-mailed a year or two ago.
>> If you still have it, Bill, please could you comment on its validity?
>
>I have never received this from you. It must have been sent to someone
>else.
>
Much is mailed across the Atlantic - both ways - and never arrives.
However, we now have the technology, so in order to support this
discussion I have temporarily quoted the relevant excerpt as a PDF which
is downloadable at http://www.ifwtech.com/g3sek/misc/skin.htm

I am not an EM physicist, but Davidson's derivation appears to show that
if an RF current is flowing across any arbitrarily small part of a
conducting surface - for any reason - then there will be a skin effect.

Davidson's derivation is far more general than many published in better-
known textbooks:

1. It only requires that an RF current is flowing at the surface, but
does not require to know why, it shows that the skin effect is not
exclusive to any particular type(s) of circuit.

2. Also, unlike some derivations (e.g. Terman) which assume a round
wire, Davidson's requires no special shape for the conductor (the
analysis area is assumed to be flat, but this is not a restrictive
condition because that area can also be made arbitrarily small).
Derivations such as Terman's remain valid, but are subsets of Davidson's
more general proof.

Since Davidson (if I interpret it correctly) has provided an independent
derivation of the skin effect, it can be taken as a "given" in analysing
the behavior of a circuit. Thus one can drive an analysis such as Bill's
"backwards" to establish/confirm what must therefore be happening in
terms of electromagnetic induction.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5439. Re: Isotron Antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 10:39:33 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB884E5.798171CF@oio.net>
Source record: 168008

Mark,
Like most antennas, get it up as high as possible. The real
trick is tunning it. The bar and plate under the coil is adjusted
closer/further away from the coil until you find resonance, or the
lowest SWR possible. It's very 'touchy', and it'll change when
it's at it's 'in use' position. Just keep makeing small changes
till it's 'right'. Have fun...
'Doc

5440. Re: HyTower

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 10:55:43 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab88807.45728231@news.accessunited.com>
Source record: 168010

On Wed, 21 Mar 2001 05:10:22 GMT, "Jim McGrath" <w2mmr@nc.rr.com>
wrote:

>I was just looking at the 2001 MFJ catalog (page 55) - Hy Gain section - and
>see the AV-18HT @ $739.95. Is this the Hy-Tower?

That's it.
73 Tom

5441. Re: Are F-connectors constant impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 10:57:38 UTC
From: Dave <rni220fgi@email.com>
Message-ID: <99a1l0$c7os$1@ID-49477.news.dfncis.de>
Source record: 168009

They sure don't look it! Never heard or seen a 50 ohm version. Is it that important?

JDer8745 <jder8745@aol.com> wrote in message news:20010319171644.02282.00002293@ng-fy1.aol.com...
> Howdy,
>
> And if they are, do they make 50-Ohm F connectors?
>
> Experienced users or knowledgable replies only, please.
>
> tnx es 73 de Jack, K9CUN
>
>

5442. Re: Titan Challenger

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 10:58:05 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab8885e.45814772@news.accessunited.com>
Source record: 168011

On Wed, 21 Mar 2001 02:13:07 GMT, "djohnson" <dbjohnson@sympatico.ca>
wrote:

>I have put up a Titan Challanger to compare it to a G5RV. Bought this used.
>Titan will not resonant on 40 meters, 12 meters, and its 2:1 on 10 meters.
>The G5RV outperforms on receive by 2 s units on most bands. Anyone know what
>might be wrong with the Gap or is this all there is?

That's about the way they work.

Verticals require a good ground system when near earth, plus the
antenna has other efficiency problems.

73 Tom

5443. Re: Are F-connectors constant impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 11:32:24 UTC
From: W3JDR <j.r@usa.com>
Message-ID: <cj0u6.1766$6Y3.591400@typhoon2.ba-dsg.net>
Source record: 168012

Depends what you mean by 'constant impedance'.

Strictly speaking, there is no such thing as constant impedance. Every medium, juncture, and termination in a transmission system has a frequency dependent impedance. What seperates the good devices from the poorer ones is how badly the impedance varies over the intended frequency range.

Another question that has to be answered is 'how good does it have to be"? In television applications, impedance match is very important, as even very small time-delayed reflections can result in visible 'ghosts' in the picture. In our ham radio communications environment, we seldom have such rigid requirements, and the most important goal is usually just to transfer as much of the energy as possible accross the connection.

The "F" connector was invented over 40 years ago by the Cable TV industry as an inexpensive connector for 75 ohm coax. To the best of my knowledge, 75 ohms is a practical part of the definition. "F" connectors come in many types & variations, just like any other coaxial connector. They are commonly used in CATV applications up to 1 GHz with return loss of 16-20 dB. Once again, it depends on the type and quality of the individual connector.

Joe
W3JDR

"JDer8745" <jder8745@aol.com> wrote in message
news:20010319171644.02282.00002293@ng-fy1.aol.com...
> Howdy,
>
> And if they are, do they make 50-Ohm F connectors?
>
> Experienced users or knowledgable replies only, please.
>
> tnx es 73 de Jack, K9CUN
>
>

5444. Re: AVOID TRIPOD WEB SERVICES

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 11:58:09 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3AB89751.AFACB68D@bloomer.net>
Source record: 168016
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

My dad always told me, "You get what you pay for." I guess since Tripod is free, you can't complain. I keep several pages on Tripod...never had a bit of trouble. I also keep every file on Tripod's site on my computer just in case there is ever a problem. Haven't had to use the backup plan yet and I've been with Tripod for about 3 years now. I guess it's a "sign" you should keep backup files of everything on your computer anyway. You HAVE been doing that haven't you? Ever "lost" anything on your computer at home?

--Scott N0EDV--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

Brian Short wrote:
>
> AVOID TRIPOD WEB SERVICES
>
> Last weekend, Tripod removed all of my web
> pages for "violating their acceptable use policies."
>
> I could not figure what I had done, but I'm not
> one to whine and I moved my pages to:
>
> http://www.qsl.net/k7on/
>
> Now, I receive the following:
>
> Date: Tue, 20 Mar 2001 04:38:43 -0500 (EST)
> From: membership@tripod.com
> X-Authentication-Warning: bos-uhaul1.tripod.com: web set sender to
> membership@tripod.com using -f
> To: k7on@earthlink.net
> subject: Your Tripod Membership
>
> Dear Tripod Member,
> We apologize for the removal of your site over the weekend. Due to some
> technical errors, we mistakenly removed several member sites and are in
> the process of restoring them. We did not single out you or your site,
> please accept our apologies, your site has now been restored.
>

> Sincerely,
> The Tripod Team
>
> --
> http://www.qsl.net/k7on/
> --

--

5445. Antene ATV

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 13:05:33 UTC
From: Lu&#65533;s Cavaleiro <ct2hky@clix.pt>
Message-ID: <KF1u6.3448$nw.10900490@newsserver.ip.pt>
Source record: 168018

Please send me an squeme of 23cm antene for ATV. This antene is necessary
having more Db because the repeater of ATV was a 30 Km.
Thank's advanced for your help.
Responde for:
ct2hky@clix.pt

5446. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 13:22:12 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ab8b267$0$15027$cc9e4d1f@news.dial.pipex.com>
Source record: 167921

"Reg Edwards" wrote ..
> In 1984 I stood in front of a defective CW, 1 KWatt microwave oven
> with open door and still working fine at 2.4 GHz.

Why not turn your back on it and warm the w hole of your body?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5447. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 13:27:57 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ab8b268$0$15027$cc9e4d1f@news.dial.pipex.com>
Source record: 167922

"W6RCecilA" wrote
> Seems to me, there's not much of an energy conversion going
> from electrical energy of a certain frequency to EM energy
> of the same frequency.

Yes! light bulbs (lamps) are notoriously inefficient.

The heavy ones are no better.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5448. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 13:33:34 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB8ADAE.D4EF440E@IEEE.org>
Source record: 167920

Dennis Ferguson wrote:
> I'm not sure about this, however. I was hoping someone might
> know enough to address this, since the fact that "good" radiation
> is coherent while thermally-generated radiation isn't still
> bothers me.

I'm not sure, but I don't think Maxwell's equations differentiate
between electrical energy and EM energy that are coherent.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5449. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 13:44:38 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbhc182e8h3gbc@corp.supernews.com>
Source record: 167919
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:999950dfr0@208.206.142.91...

> That's right. So kwitcher bitchin' about what you didn't get for what
> you didn't do to get it.

Translate that in to standard North American English with the correct
spelling, and grammar. I hear better English spoken by the downtown
"brothers" than what you wrote above.

--
Leland C. Scott
KC8LDO

5450. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 13:52:55 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB8B237.4A9603AD@IEEE.org>
Source record: 167923

```
Gary Peach wrote:
>
> "W6RCecilA" wrote
> > Seems to me, there's not much of an energy conversion going
> > from electrical energy of a certain frequency to EM energy
> > of the same frequency.
>
> Yes! light bulbs (lamps) are notoriously inefficient.

But Gary, that's NOT electrical energy and EM energy OF THE
SAME FREQUENCY. I'm talking about accelerating electrons
to generate photons coherently.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----
```

5451. coiled dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 14:39:26 UTC
From: "david s." <david@hedgewoodhomes.com>
Message-ID: <y23u6.4829$%N.27660@skycache.prestige.net>
Source record: 167927

okay I am looking for pointers and comments on an antenna that I am going to build so here are the specs

I am going to use a piece of cardboard concrete form that is 12" in diameter and 12' long.(this is just for shaping the antenna) 3' circumference and 72" on each side.
I am going to use 14awg bare solid copper
250' of 14 awg wire 250'/2=125'/3=41.667 72/41.667= 1.73
1" pvc frame to support the antenna once it is installed.

starting in the middle of the tube I am going to wrap 125' each side around the tube keeping the wraps spaced as even as I can for a total wire length of 250'. if my math is right should mean that the wire coils should be about 1.75 inches apart.

now many might realize that the wire is the right length for a dipole which is where I am getting my dimensions from however I do not have the room to put up a dipole I can put up something that is about 12' long and be horizontal.

I am hoping to use this with my Kenwood ts-450s/at I know the antenna is just a compromise but can anyone tell me if it will work won't work what problems I am going to encounter? will it work on all the hf bands? anything I should change? is it a crazy hair brained idea?
comments please

5452. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 14:40:24 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <s33u6.9084$wQ3.694982@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167924

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:998kro$19lb$1@heap.juniper.net...
> VE9SRB <srbest@att.net> wrote:
> >"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
> >> >This is the basis for the derivation of the familiar path loss
formula.
> >At
> >> >an infinite distance, the thinning process will cause the energy
density
> >to
> >> >go to zero, but this is not a "dissipation" process.
> >>
> >> I don't see how this could possibly be true.
> >
> >I am not sure what part of this you don't see as true. Perhaps you could
> >explain.
>
> The assertion that since the EM energy radiated by an antenna is
> conserved, then it is not dissipated. All energy is conserved, so
> by this definition it is hard to see how any energy is dissipated.
>
> That is why I can't see how dissipation can be defined the way you
> do. That is why I prefer to rely on the more fundamental thermodynamic
> definition, that while energy is always conserved it is dissipated
> when it undergoes an irreversible transformation. This, I think, is
> the conventional understanding of the phrase "converted to heat". While
> the phrase is ambiguous without a precise definition of "heat", it
> describes what we normally consider to be the classic irreversible
> energy transformation.
>
> >The antenna is an isotropic source with 0 dBi gain. Why is the EM field
> >density different at a distance of 10,000 km as compared to the EM field
> >density at a distance of 1,000 km?
>
> I presume this antenna is in space so what we're measuring is
> purely path loss. While I'm pondering that one, then, you might
> consider this one. What happens if I replace the antenna with
> a resistor? Where does the power, which I presume you now think
> is being dissipated, go?
>

I think that we are dealing with two issues here and an application of terms
in a manner generally accepted by those in the field. The question above
was presented to discuss the second issue, which is understanding the

process through which EM energy is spread out as it travels away from the antenna. In understanding "path loss", it must be understood that at any distance, the total energy in the EM wave, as measured over a sphere surrounding the antenna, does not decrease. From this perspective, there is no "dissipation" occurring as the wave travels.

I understand now that your use of the term dissipation goes back to the first issue which is the radiation process. I will address below ..

> The answer is that the power is entirely radiated in an EM field,
> whose spectrum depends on the temperature of the resistor. If you
> have an appropriate detector you'll be able to measure its
> field strength. The relationship between the energy density at
> 1,000 km and the energy density at 10,000 km will be identical
> whether the radiator is a resistor or an antenna. If you build
> a sphere around the resistor you'll be able to detect all the
> energy radiated by the resistor, just like the antenna. The energy
> propagates away from the radiator in either case, and is not lost
> in either case. Energy is conserved in either case, and in its
> entirety ends up propagating away from the source as EM radiation
> in either case.
>
> So, what is the difference between the resistor and the antenna
> which makes one dissipative and one not? What is the distinction?
> I can't see one. In either case the power causes the antenna or
> resistor to radiate EM radiation, and the energy which is radiated
> has undergone an irreversible transformation in that it is impossible
> to ever get it all back into the state is was in before reaching the
> antenna/resistor. In both cases it is "converted to heat". What
> happens after it leaves the resistor/antenna really isn't interesting
> because the dissipation happened at, or close to, the resistor/antenna.

Now we are at the first issue.

I understand your position that total energy is conserved in one form or another. I agree that in the case of the antenna, the thermal or IR energy it creates can be detected away from the antenna so it could be considered to be "radiated". This "radiation" however is not the form of radiation as defined by general antenna theory (gain, radiation patterns, etc). This is considered energy lost or dissipated because it is no longer in the form or at the EM frequency of interest. One distinction here is the fact that to detect this energy you do not use another EM antenna. Thermal heat you can detect with your skin. IR with the goggles you mention. Radiation of energy in this form is not the intended function of the antenna. The antenna's performance characteristics are not described to account for this radiation (except for the definition of radiation efficiency). The antenna does not perform in a reciprocal manner (transmit and receive) for this type of energy.

The real distinction here is that the EM energy radiated by the antenna is not irreversibly lost through the EM radiation process. The antenna will detect the EM energy as it passes by. It is functioning as an antenna.

The use of terms "dissipation" and "radiation" in this manner is generally accepted in the industry to account for the distinction in the antenna's behavior relative to the EM and thermal or IR energy. I don't disagree with your discussion of heat and IR. We simply apply the term dissipation differently.

>
> >> Irreversible processes are dissipative processes. The decrease in
> >> the radiated energy density, and the resulting reduction in thermal
> >> energy which can be extracted from the field by individual molecules,
> >> is "dissipation" whether the EM energy actually finds molecules to
> >> transfer the thermal energy to or not.
> >
> >Defining dissipation in this manner seems to be a personal preference.
If
> >you choose to define dissipation in this manner that's fine but it does
not
> >sufficiently explain the process that an EM wave undergoes as it travels.
>
> Both the resistor and the antenna radiate EM waves. EM radiation
> is a mechanism for heat transfer. What you are failing to address
> is how you arrive at the apparent conclusion that EM radiation from
> the resistor is dissipated while EM radiation from the antenna is not.
>
> My definition may be a personal preference, but I prefer it because
> it avoids having to resolve how the emission of some EM radiation could
> be dissipative while the emission of other EM radiation is not. By
> my definition they both are dissipation, and hence radiation
> resistance is as dissipative as any other kind of resistance. You
> have yet to resolve this dilemma using your definition.
>
> Dennis Ferguson

Again, the distinction goes back to the antenna's reciprocal ability to radiate and then detect the EM energy. Think of the distinction this way. Apply an EM voltage to an antenna, EM energy is radiated, it travel to another antenna, this antenna detects the EM energy and it develops an EM voltage at its terminals. Apply an EM voltage to a resistor, thermal and IR energy is created, this thermal and IR energy travel to another resistor, does the resistor detect this thermal and IR energy and convert it into an EM voltage? This is my distinction between dissipation and radiation.

Steve

5453. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 14:58:38 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ab8c1b7$0$62146$bbae4d71@news.net-link.net>
Source record: 167925

You will have some interaction, but as long as you can get some reasonable separation of at least several inches between the antenna and the tube frame you will be all right. The frame nearest the antenna could result in a "nulling" effect in the direction from the antenna to the frame tube. If you could relocate the mount to the highest point on the bike and ground everything, you would do better. Rather than a flag, what about a separate antenna mount farther back, or even way up front? You could even mount a safety strobe on the pole. Maybe even a neon bulb that would blink when you talk! Do you have a trailer for your bike? Mount the antenna on the trailer and put your big battery and amplifier in the trailer. You could even install a small beam. Carry a charger with you and plug it in when you stop at gas stations and restaurants.

Seriously though--thanks for the bike post--it reminds me that I better get busy and rig up my bike rack mount for the upcoming Kal-Haven Trailblazer ride in May. Now, just where to mount that Mirage B1016G amp and big deep cycle on my full suspension Cannondale Super V.....actually I am going to simply put a trunk lip mount on an aluminum QD luggage rack, fashion some sort of mount to hold a 4 or 7 AH SLA battery on the rack. I am either going to carry a VX-5R in a chest harness and run jumpers, or separate and attach an FT90R to the luggage rack and handlebar with a small remote speaker. Since this is a railroad bed trail and very flat and straight, I may do the latter.
wsmith@cinci.rr.com wrote in message <3ab7db0b.32737714@news-server>...
>On Mon, 19 Mar 2001 19:31:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
>wrote:
>
>>wsmith@cinci.rr.com wrote:
>>> Problem is, I already have the Diamond antenna, and also mounting a
>>> flag (which I dislike) would be very difficult because of the fabric.
>>
>>Cars aren't looking for those kinds of bikes and very often don't
>>see them. Do yourself a big favor and get a flag - maybe two flags.
>
>Gentlemen, perhaps I haven't made it clear that I am asking for advice
>about an antenna problem and not a bicycling problem. I have in excess
>of 80,000 miles on bikes, and the last 8 years on recumbent bikes (the
>ones that look like lawn chairs on wheels). I consiider myself to be
>experienced AND safety concious and do not feel that I need a flag to
>be safe. My lack of accidents or even close calls seems to back me
>up.
>
>My primary concern is if the fact that I want to have an antenna
>running very closely in the same plane with the support for the

>fabric, am I going to have reflection or directional problems. I can
>use a rubber duck, but the range is not what I want. So I will again
>ask for advice.
>
>Walt Smith KB8ZQW
>
>

5454. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 15:20:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99agoesda1@uranium.btinternet.com>
Source record: 167926

Another experiment -

The 'screen' or 'shield' does not need to totally enclose the main loop to produce identical effects.

If a single wire is run very near and parallel to the main loop, when the wire is open circuit it may just as well not be there insofar as reception of radio signals is concerned, just like the totally enclosing and open circuit screen.

When the wire is shorted to form another continuous loop the main loop becomes dead. It too behaves as a shorted turn, just as it does when the totally enclosing screen is shorted.

As Tom and others have said, the effect of the braid when an inner coaxial conductor is used as a receiving loop is to ensure the capacitance coupling of the loop to its environment is balanced about its neutral point. When the loop is in the vertical plane this ensures no signals or noise which arrive from the broadside directions are injected into the receiver. The screen ensures the bridge is balanced as in any other sort of capacitance bridge. The null is sharpened as when both magnitude and phase are adjusted for a balance.

As has already been said a well-designed loop out in the open does not need a screen. It's better to use the coax braid as the main loop and leave the inner unconnected.

Reg

5455. Re: Are F-connectors constant impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 15:52:55 UTC
From: jder8745@aol.com
Message-ID: <20010321105255.08301.00000271@ng-mn1.aol.com>
Source record: 167928

Joe,

Thank you for your input. They don't seem to find much usage in the ham world.

But, as you say, they are cheap and easy.

I think they wud be ok electrically for most ham usage, but they aren't so swell mechanically.

tnx es 73 de Jack, K9CUN

5456. Re: AVOID TRIPOD WEB SERVICES

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 16:15:19 UTC
From: None@dontevntry.oro
Message-ID: <99ak2n$k25$1@news.uky.edu>
Source record: 167929
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

In article <Xns906AA161CA0A0me109g6@142.177.129.14>, panzer240@hotmail.com says...
>
>Brian Short <k7on@earthlink.net> wrote in
><MPG.1521ad8057f4907b989699@news.earthlink.net>:
>
>>AVOID TRIPOD WEB SERVICES
>>
>>Last weekend, Tripod removed all of my web
>>pages for "violating their acceptable use policies."
>>
>>I could not figure what I had done, but I'm not
>>one to whine and I moved my pages to:
>>
>>http://www.qsl.net/k7on/
>>
>>Now, I receive the following:
>>
>>Date: Tue, 20 Mar 2001 04:38:43 -0500 (EST)
>>From: membership@tripod.com
>>X-Authentication-Warning: bos-uhaul1.tripod.com: web set sender to
>>membership@tripod.com using -f
>>To: k7on@earthlink.net
>>subject: Your Tripod Membership
>>
>>Dear Tripod Member,
>>We apologize for the removal of your site over the weekend. Due to some
>>technical errors, we mistakenly removed several member sites and are in
>>the process of restoring them. We did not single out you or your site,
>>please accept our apologies, your site has now been restored.
>>
>>Sincerely,
>>The Tripod Team
>
>
>Ummmm..... gee looks like the people working at Tripod are human
>after all and make mistakes just like you and me. At least they were men
>enough to apologize and make things right. Whar's your beef or do you just
>like to whine and moan.
>
>Panzer
I have to agree, I have had many problems with ISP (used to cover all the net stuff), and none ever owned up to being the cause of the problem. These folks

are to be praised for their honesty, not flamed. As I tell the students here, "you will make many mistakes, the only people that never make mistakes are those that never do anything".

5457. Beam antenna SWR changed!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 16:18:11 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ab8d45c$0$62143$bbae4d71@news.net-link.net>
Source record: 167930

I have had SWR changes on beam antennas lately. One antenna is Cushcraft X-7 with a 40 meter element kit (separate RG-213 coax feed and coax choke). The SWR on the 40 element is fine. The triband X-7 has 75 ohm &#65533;" CATV hardline feed with either 9913F or RG-213 jumpers. The X-7 has the Cushcraft match box choke. This antenna is at 100 feet. The other antenna is a Highgain TH3JR 3 element tribander at 50 feet. It is fed with RG-8 type coax. This antenna has a coax choke.

Both antennas have acceptable SWR on 10 meters. The X7 is 1.1:1 or lower at 29.000 MHz. The TH3JR is about the same. Neither antenna uses traps on 10 meters. Both antennas are now SWR of 5+ at 14 and 21 MHz.

Moisture in traps? The Highgain antenna has traps on all three elements, the Cushcraft antenna only has traps on the director element. We have had a lot of rain and wind lately. Perhaps a some traps have been moistened. Should I heat them with an amp!!!!

If I had feed line problems I don't think I would get good SWR on 10 meters--it would be bad everywhere.

I was thinking maybe something came loose, but on both antennas on different towers at the same time?

Any suggestions?

5458. Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 16:37:26 UTC
From: Rick Scott <kf7qz@yahoo.com>
Message-ID: <3AB8D8C6.1725DBCC@yahoo.com>
Source record: 167933

I see that Mr. Johnsons site is down, and I would like to order plans from him on his screwdriver. I would like to try my hand at building one. Or has anyone the plans that you dont need anymore.

The ones forsale are a bit steep in my opinion (not that its worth much), so that is not an option, besides I like to roll my own.

Rick KF7QZ
Everett, Washington.

5459. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 16:43:22 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3AB8DA2A.6C83@bellsouth.net>
Source record: 167931
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Now, now, Leland,

He was playing with words just as you were with your joke about CW. He
is just as entitled. LOL!

Jerry
K4KWH

Leland C. Scott wrote:
>
> "Dick Carroll" <dixie@townsqr.com> wrote in message
> news:999950dfr0@208.206.142.91...
>
> > That's right. So kwitcher bitchin' about what you didn't get for what
> > you didn't do to get it.
>
> Translate that in to standard North American English with the correct
> spelling, and grammar. I hear better English spoken by the downtown
> "brothers" than what you wrote above.
>
> --
> Leland C. Scott
> KC8LDO

5460. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 16:49:43 UTC
From: richardharrison@webtv.net
Message-ID: <15896-3AB8DBA7-11@storefull-112.iap.bryant.webtv.net>
Source record: 167934

On Mar. 17, 2001, 3:09am, Tom, W8JI wrote:
"Despite using a shielded loop, a FSM can indicate the electric field because it is INSEPARABLE from the time varying magnetic field."

No, The FSM can measure the magnetic field and because the relationship between E & H fields in space is fixed, if you know either one, you can scale the presentation in terms of the other. It is no more complicated to present volts per meter than using a current meter to read volts.

The declaration that electric and magnetic fields are inseparable is wrong.

Our experience tells us the opposite.

Our experience tells us that audio and power transformers can have strong external magnetic fields even when surrounded by non-magnetic conducting materials. High-permeability "mumetal" shields are used to enclose transformers to keep high-intensity magnetic fields in or out, but non-magnetic materials do not block magnetic fields.

We don`t mount the input transformer of a high-gain audio amplifier anywhere near a power transformer. Why? Because the non-magnetic conducting material around the transformer has little effect on the magnetic field. Even magnetic material has to have high-permeability and be ample to provide effective magnetic field shielding.

Our experience tells us that non-magnetic conducting materials do prevent capacitive coupling of signals. We use shielded wire, coil shields, etc. to keep unwanted signals in or out.

Grounded conducting material between transformers terminates capacitive lines of force at ground potential thus avoiding capacitive coupling between the transformers. Capacitive coupling between other signal or noise sources are likewise ended by a grounded shield. Capacitive shielding just does not block magnetic coupling without additional magnetic shielding.

These experiences are likewise applicable to the shield on a loop antenna with some adjustments. Debates about practcability are odd given the ample examples around.

Best regards, Richard Harrison, KB5WZI

5461. Mir,will be "seen"w/naked eye???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 16:50:00 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <uomhbtofhlvdghon9e4b1rvkvvlk7ljji3@4ax.com>
Source record: 167932

Saw this posted in the local news, and was wondering if we will be able to see the thing at nite, day, or at all, we live south of San Antonio,Tx.????? thanks for any and all input. news release below.

Russia sets Mir dump for Friday
MOSCOW (AP) - The Russian space agency on Tuesday issued the precise timetable for dumping the Mir,
saying the 15-year-old space station would be brought down into the South Pacific on Friday with a six-hour series of measured engine firings. After Mir descends to an altitude of 132 miles by early Thursday, Mission Control will switch on the station's computer and align Mir for descent. If the sometimes-unreliable computer and its orientation system work as expected, a Progress cargo ship docked at the station will fire its engines twice for about 20 minutes, around 3:30 a.m. Moscow time (7:30 p.m. ET Thursday) and an hour and a half later. Around 8 a.m. Moscow time (midnight Thursday ET), Progress engines will fire again to send the station hurtling into the ocean between Australia and Chile. Most of Mir is expected to burn up in the atmosphere, but up to 27.5 tons of debris are expected to reach the Earth's surface.

5462. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:25:47 UTC
From: kb7qhc@home.com
Message-ID: <3ab8d9d8.1638710601@news.seanet.com>
Source record: 167935

On Tue, 20 Mar 2001 22:18:08 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>>
>> <Cecil.A.Moore@IEEE.org> wrote:
>> >What is the frequency of the EM waves radiated by the resistor?
>>
>> Roughly 430,000 GHz.
>
>How does a resistor increase the frequency of the EM energy?
>Is there a local oscillator inside?
>
>Seems to me, there's not much of an energy conversion going
>from electrical energy of a certain frequency to EM energy
>of the same frequency.

Hi Cecil,

The deceleration of charge is through the physical interaction at the atomic scale. The bulk of mass has its energy state elevated above the ground condition and it returns to the ground condition through the radiation and dissipation of that charge boost by emitting IR (or actually a spectrum of wavelengths consistent with a black body radiator). The wavelength is dependant upon the energy levels and the de Broglie wavelength of the electron that eventually releases the photon.

de Broglie is the oscillator you are seeking.

The more energetic the stimulation, the more blue content in the spectral emission, extremes of blue leave the range of visual perception to become ultra-violet and then progressively more energetic toward X rays.

When this interaction occurs, electrons are moved out of their ground state contingent upon the atom they are circling. Some electrons are elevated higher than others due to this dependency. Within a body of complex molecules there are an array of different electron orbit changes that all collapse back to their ground state and contribute to a wide spectrum emission (dare I say radiation or dissipation?).

Consistent with conventional language and most of science:
Energy in - Energy out - dissipation.
And of course, the IEEE is hopelessly unable to pursue this discussion.

as for:
>Seems to me, there's not much of an energy conversion going
>from electrical energy of a certain frequency to EM energy
>of the same frequency.
You've been using that IEEE crutch too long. Where does it describe that the product of a conversion is identical to the input (in other words: what does conversion mean to you?).

73's
Richard Clark, KB7QHC

5463. Re: 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:28:40 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <00lhbtc65v0np38qkiv7iq9513brhnp0su@4ax.com>
Source record: 167937

On Mon, 19 Mar 2001 22:52:49 GMT, Dennis Kaylor <k4oxg@earthlink.net>
wrote:
>how much cheaper can you get than the hamstick for 6 meters i think its
>under $20 and a mag mount fromn radio shack or your local CB store

The 6M hamstick is not worth the trouble.
The one I had suffered from narrow bandwidth and the lock nuts
never really wanted to keep it locked.

For six there really is no reason to have a loaded antenna.

I used a split ball mount a combination of heavy duty/medium duty
springs, a 3" extension and a whip tip adapter to make my mobile
antenna.

It works well on 6M and 2M of course.

http://www.dbbear.com/k0emt

Then check out mobile under projects.

73,

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

5464. Re: Solarcon, Hygain and MFJ HF antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:28:42 UTC
From: B Nehl <k0emt@dbbear.com>
Message-ID: <tmlhbtcjoa64tal12v51ip2flblqvl0a23@4ax.com>
Source record: 167936

I have had great success working DX with the Antron 99.
The base of the antenna is about 10' above ground.
The Kenwood TS-570s feeds the antenna via 9913.
(Yeah, I know it's overkill.)

The 570 can tune the A99 from 6Meters to 17Meters.
It performs best on 10,12 and 15.
Performance on 6 is marginal. It is basically deaf 20M and below.

Btw, there are radial kits made for this antenna.
I have not tried any of them, and I don't know of anyone that has.

I hope that helps.

73,

Bryan
k0emt@dbbear.com
http://www.dbbear.com/k0emt

5465. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:29:56 UTC
From: richardharrison@webtv.net
Message-ID: <27257-3AB8E514-4@storefull-117.iap.bryant.webtv.net>
Source record: 167941

Tom, W8JI wrote:
"If you close the gap, the loop goes dead."

Now, that is a common experience. You break the shield on a cable and the conductors it contains can communicate with the world outside.

The shield on a loop must be open to avoid current in the shield. That is a feature of Faraday screens. They are broken to prevent induced circulation throughout the screen.

Induced current in the shield creates a field which opposes the incident field (Lenz).

Put the action and reaction together on a cable shield and not much is left on the inside of the shield.

Best regards, Richard Harrison, KB5WZI

5466. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:32:18 UTC
From: kb7qhc@home.com
Message-ID: <3ab9e441.1641375523@news.seanet.com>
Source record: 167938

On Wed, 21 Mar 2001 14:40:24 GMT, "VE9SRB" <srbest@att.net> wrote:

>This "radiation" however is not the form of radiation
>as defined by general antenna theory (gain, radiation patterns, etc).

Hi Steve,

Forgive me, but your statement above is downright provincial. You are simply ignoring the field that your antenna theory was derived FROM: Optics.

Due to the wavelength nature of the translation of energy, you are not allowed to abandon Infrared to the sphere of astrology simply because of scale.

73's
Richard Clark, KB7QHC

5467. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:42:28 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB8E804.F391B2BE@oio.net>
Source record: 167939

Rick,
I wouldn't know where to find it, but there has to be an explanation of the screwdriver antenna on the internet. They really aren't that complicated, the only difficult thing would be getting the coil form machined. Other than that, you should be able to find every thing else at your local hardware store.
'Doc

5468. Re: Beam antenna SWR changed!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 17:46:54 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB8E90E.D81C5B88@oio.net>
Source record: 167940

Rudy,
From what you describe, you may be correct about water in
the traps. It sounds like the antennas have the problem, not
the feedline. Using an amplifier to 'dry out' the traps isn't
the best idea in the world. Best would be to take the beams
down and look at them, it may not be the traps. (That's easy
to say, I'm not the one climbing the tower!)
'Doc

5469. (no subject)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 18:14:19 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB8EF7B.8DA72F4E@mwci.net>
Source record: 167942

Ian White, G3SEK wrote:

> Davidson's derivation appears to show that
> if an RF current is flowing across any arbitrarily small part of a
> conducting surface - for any reason - then there will be a skin effect.

The Appendix that you sent is quite routine. I have several references that
do pretty much the same thing. I don't see anything extraordinary about it.

About reflection:

Suppose that some fraction of an HF wave is striking a plate whose dimensions
are the same. As the E and H fields oscillate just beyond the surface they
cause electrons in the plate to set up various oscillating Ec fields (due to
charges), and therefore oscillating currents Jc (due to charges), inside the
plate. Recall that for every Jc there must be an Ec (Ohm's law).

These are required in order to cooperate with the incoming wave in order to
satisfy the boundary conditions (tangential and normal) for the incoming E
and H fields at the surface and within the body of the conductor.

We can see how these local induced currents can provide the "current for any
reason" that can create a reflected wave. The basic principles are:

1) induced E and H fields that are not allowed to exist in the plate are
reflected in order to satisfy the boundary relations for E and H fields at
and inside the plate

2) the induced currents create the reflected wave (it doesn't just "bounce"
off the surface)

3) the strength of the reflected wave is just enough to satisfy the boundary
conditions, and this is equivalent to almost "total reflection", allowing for
losses in the plate.

The plate is a short-circuit for the wave.

We can also see that the current flow obeys the rules of skin effect for
current, which is identical to the skin effect for reflection. These same
currents reverse the penetration.

My text "Fundamentals of Electric Waves by Skilling (prof at Stanford, 1948)
discusses this very elegantly, although it has taken a lot of struggle to dig
it out.

Also, I stand by the thoughts that I have presented on the subject of the
Faraday shield. I also stand by my comments on magnetic shielding. Terman
agrees on that subject.

Finally, the material from Kraus that I sent you is OK. To get an absolutely
complete reflection of the *entire* infinite wave front, the infinite
surface is mandatory. In the subject we are discussing here, only the part
of the wave that hits the plate is reflected.

Bill W0IYH

5470. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 18:33:02 UTC
From: Jim & Karen <jimllp@cet.com>
Message-ID: <3AB8F3DE.DBB12214@cet.com>
Source record: 167943

If you can find the book 40+5 Years of HF Mobileering by Don Johnson, W6AAQ (the inventor of the screwdriver antenna) it has all the details of that antenna. Worldradio Mag used to sell it. They presently sell Everything you Forgot to Ask About HF Mobileering by Don. Don't know if it has the Screwdriver Antenna in it or not.

Jim, W6LLP

5471. Re: Are F-connectors constant impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 18:40:57 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3ab8f5be_2@news.cybertours.com>
Source record: 167944

"JDer8745" <jder8745@aol.com> wrote in message
news:20010319171644.02282.00002293@ng-fy1.aol.com...
> Howdy,
>
> And if they are, do they make 50-Ohm F connectors?
>
> Experienced users or knowledgable replies only, please.
>
> tnx es 73 de Jack, K9CUN
>

I use them here with great results , feeding dipole and G5RV antennas with
75 ohm RG6 .. only remember they will only handle a few hundred watts.
73 Dave

5472. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 19:58:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99b111$77c$1@plutonium.btinternet.com>
Source record: 167945

Gary Peach wrote ...
>
> "Reg Edwards" wrote ..
> > In 1984 I stood in front of a defective CW, 1 KWatt microwave
oven
> > with open door and still working fine at 2.4 GHz.
>
> Why not turn your back on it and warm the w hole of your body?
==========
I tried to obtain a rotating spit but couldn't find a willing
manufacturer.

However my experiences exposed Dr Joseph Goebbles' lie, designed to demoralise British radar engineers and technicians, that exposure to high power centimetric radio waves caused sterilisation of the testes. It also became apparent that Goebbles was not taken in by BBC lies that RAF night-fighter pilots took to the air chewing raw carrots.

5473. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 20:14:35 UTC
From: Brenda Ann <brendaannd@uswest.net>
Message-ID: <99b1v8tn1@news1.kornet.net>
Source record: 167946
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

The first amendmant has never covered libel.

5474. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 20:17:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB90C44.1AC2C05@IEEE.org>
Source record: 167948

'Doc wrote:
> I wouldn't know where to find it, but there has to be an
> explanation of the screwdriver antenna on the internet. They
> really aren't that complicated, the only difficult thing
> would be getting the coil form machined. Other than that,
> you should be able to find every thing else at your local
> hardware store.

Do they have finger stock?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5475. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 20:27:02 UTC
From: "James S. Speck" <speck@qns.com>
Message-ID: <t88u6.278$Rx.3214@news.onenet.net>
Source record: 167947

I made a j-pole by shortening a 102" radio shack whip (cb) to 77" and forming a 19" one-inch spaced matching section at the lower end (locally heating the stainless until red with a propane torch, and hand bending). I would mount it on your bike by clamping the antenna to the rear sock support with metal clamps. I'd feed the stub somewhere about 5" up from the bottom of the "U" section with the coax (moving it as necessary to where it's matched). A couple of coils in the RG-58 A/U coax feedline will serve as a balun. This is an effective antenna I've used on single and tandem upright bikes. I've got a Green Gear Sat-ur-day which is so far no-radio. 73, Jim W5AI.

<wsmith@cinci.rr.com> wrote in message news:3ab63150.13092381@news-server...
> I need a little advice about mounting an antenna on the rear of my
> bike. I have used a Diamond 770 series dual band antenna on other
> bikes with very good sucess. However, I have a new recumbent bike that
> is giving me a little pause for thought. I have a couple of pictures
> of the bike at:
>
> http://albums.photopoint.com/j/AlbumIndex?u=1025520&a=12162755&f=0
>
> On my other bikes I had a simple bracket to hold the antenna at the
> rear end of the rack. But, as you can see, there is an aluminum
> upright now in place to hold the cold weather/streamlining fabric. My
> question is: If I mount the antenna bracket on the rack, what
> problems am I going to run into with the close proximity of the
> upright. I would think the maximum distance that I can separate the
> two is about 4 inches. I am running almost exclusively 2 meters.
>
> Thanks for any help.
>
> Walt Smith, KB8ZQW
> Harrison, Ohio
> Member BMHA

5476. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 20:43:53 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <txG5OjEf+uNXL3LSSHsldyStg8Ts@4ax.com>
Source record: 167949

Rick Scott <kf7qz@yahoo.com> wrote:

>I see that Mr. Johnsons site is down, and I would like to order plans
>from him on his screwdriver. I would like to try my hand at building
>one. Or has anyone the plans that you dont need anymore.
>
>The ones forsale are a bit steep in my opinion (not that its worth
>much), so that is not an option, besides I like to roll my own.
>
>
>Rick KF7QZ
>Everett, Washington.

A search at http://www.google.com for "screwdriver antenna" brings up 11 pages of listings, including the following: http://www.rsgb.org/news/radcom/screw.htm

I hope you're a good machinist :-)

Bob
k5qwg

5477. re:wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 20:46:53 UTC
From: Monte Keller <k9dzd@iquest.net>
Message-ID: <Ho8u6.4$Be2.947@news1.iquest.net>
Source record: 167950

any ideas on a good limited space antenna,,i am using a vertical...and been
thinking of trying a g5rv..i have about 100 feet to work with
and have some restrictions on height
thanks

monte k9dzd@iquest.net

5478. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:02:15 UTC
From: Rick Scott <kf7qz@yahoo.com>
Message-ID: <3AB916D7.2C675EF3@yahoo.com>
Source record: 167953

'Doc wrote:
>
> Rick,
> I wouldn't know where to find it, but there has to be an
> explanation of the screwdriver antenna on the internet. They
> really aren't that complicated, the only difficult thing
> would be getting the coil form machined. Other than that,
> you should be able to find every thing else at your local
> hardware store.
> 'Doc

Thanks Doc, I done an extensive research on the net and they are not avail. 1 single bad picture, and the author wants 10 bucks for a sheet of details. Other than that its all the people who manufacture and sell thier own screwdrivers.

I have an idea how it works, just wish I knew the details.

Thanks

Rick KF7QZ
Everett, Washington

5479. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:03:35 UTC
From: Rick Scott <kf7qz@yahoo.com>
Message-ID: <3AB91727.4FD4D84B@yahoo.com>
Source record: 167954

Jim & Karen wrote:
>
> If you can find the book 40+5 Years of HF Mobileering by Don Johnson,
> W6AAQ (the inventor of the screwdriver antenna) it has all the details
> of that antenna. Worldradio Mag used to sell it. They presently sell
> Everything you Forgot to Ask About HF Mobileering by Don. Don't know if
> it has the Screwdriver Antenna in it or not.
>
> Jim, W6LLP

No longer have it, been doing an internet search of it, but havnt found the book available. I dont know about the Everything book, from what I could garner on the internet though, it doesnt.

Thanks.

Rick KF7QZ
Everett, Washington

5480. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:05:54 UTC
From: kb7qhc@home.com
Message-ID: <3ab91597.1654005253@news.seanet.com>
Source record: 167951

On Wed, 21 Mar 2001 19:58:07 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Gary Peach wrote ...
>>
>> "Reg Edwards" wrote ..
>> > In 1984 I stood in front of a defective CW, 1 KWatt microwave
>oven
>> > with open door and still working fine at 2.4 GHz.
>>
>> Why not turn your back on it and warm the w hole of your body?
>===================================
>I tried to obtain a rotating spit but couldn't find a willing
>manufacturer.
>
>However my experiences exposed Dr Joseph Goebbles' lie, designed to
>demoralise British radar engineers and technicians, that exposure
>to high power centimetric radio waves caused sterilisation of the
>testes. It also became apparent that Goebbles was not taken in by
>BBC lies that RAF night-fighter pilots took to the air chewing raw
>carrots.
>

Hi All,

The problem with trolling, is you never know when the troll is
working, or simply posting.

What is described above appears to be yet another old wive's tale
embellished with imaginative "lies" from the nazis.

The danger of RF radiation is that it is NOT always perceived as
warming. In fact it can be perceived as cooling!

However, neither of these sensate conditions is very useful as an
indicator of dangerous fields. Why? Because the core of the human
body has very few nerves that distinguish temperature (why would
they?) and by the time your skin can detect a deep cavity temperature
rise, your goose is cooked.

There is a vast difference between being warmed by the sun, and being
warmed at the open door of a malfunctioning radar range.

Punchinello was simply lucky, others have died for lack of that same
luck.

73's
Richard Clark, KB7QHC

5481. G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:18:41 UTC
From: jack in the box <bb@ff.com>
Message-ID: <3AB91AB1.83215EAC@ff.com>
Source record: 167952

What kind of layout do I need to mount one of these antennas?

I have a couple of trees in the backyard about 50 feet apart.

How is it fed?

5482. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:36:30 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB91EDE.13AE8CC9@toast.net>
Source record: 167957

Dennis Ferguson wrote:

> I think we've got to be on the same page by now. To be clear about
> the practical consequence of the differences in our opinions, my
> opinion leads to radiation resistance being as dissipative as any
> other kind of resistance, since it produces fundamentally the same
> result as any other kind of resistance, while your opinion appears
> to make some kinds of resistances dissipative and some not depending
> (solely, as far as I have yet determined) on your feelings about the
> resistance and the desireability of the radiation resulting from
> feeding the resistance power. I think my opinion makes a better
> definition.

I see another important difference, related to the coherence or randomness of the radiation: the infra-red energy so emitted can't be collected for use except by a lower temperature system that it might shine on. The rf energy can be collected by a system at the same temperature as the transmitting system. Thus you have a system of energy transmission just like a rotating shaft (well, maybe a little lossier) or a laser beam (well, maybe not as well focused).

john

5483. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:38:59 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AB91FBA.47CCA98@earthlink.net>
Source record: 167955
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

KC8JBO wrote:

> "Amendment," RETARD... etc.

Admitting a problem is a first step to mental healing. Now repeat after me: "I am not well - I am a sick person, but even though I am mentally challenged, that doesn't mean I can't get well." Then go see your doctor. Veterinarian. Whatever. Psychopath.

WA7AA

--
Support freedom of speech, or I'll kill you!

5484. Re: G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 21:53:31 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AB922DB.E71745CE@dialpoint.net>
Source record: 167956

The G5RV is 100 feet long and is fed in the middle. YOu will need some space slightly longer than 100 feet to support it and and few feet on each end for what you use to hold it up with.

jack in the box wrote:
>
> What kind of layout do I need to mount one of these antennas?
>
> I have a couple of trees in the backyard about 50 feet apart.
>
> How is it fed?

5485. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 22:06:10 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab923d9.85623886@news.accessunited.com>
Source record: 167959

On Wed, 21 Mar 2001 10:49:43 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>On Mar. 17, 2001, 3:09am, Tom, W8JI wrote:
>"Despite using a shielded loop, a FSM can indicate the electric field
>because it is INSEPARABLE from the time varying magnetic field."

Let's for a moment assume your perspective is right Richard, and as you keep saying we can shield a loop and alter the response to time-varying electric fields from sources more than a few loops diameters away.

Let's assume the hand-waving works, and the electric field response vanishes like magic...and that Reg, Bill, Roy, Bart, and the rest of us are totally wrong.

Now, tell me what you gain with the hand-waving. How does that "magic" help the user of the antenna hear a signal and through the noise from next door?

73 Tom

5486. re:wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 22:07:20 UTC
From: k4ia@aol.com
Message-ID: <20010321170720.03017.00000180@ng-fs1.aol.com>
Source record: 167958

Go to page 138 of April QST or www.spiromfg.com and look at their 70 foot long
AS-2 ladder line fed dipole at $49.95. Works circles around my G5RV.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate,
International, Toll Free, Callback, Calling Cards, Pagers and more Tune to
http://www.ld.net/?bucksavers

5487. Re: coiled dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 22:15:01 UTC
From: 2w8ji@akorn.net
Message-ID: <3ab925a0.86078556@news.accessunited.com>
Source record: 167960

On Wed, 21 Mar 2001 14:39:26 GMT, "david s."
<david@hedgewoodhomes.com> wrote:

>starting in the middle of the tube I am going to wrap 125' each side around
>the tube keeping the wraps spaced as even as I can for a total wire length
>of 250'. if my math is right should mean that the wire coils should be about
>1.75 inches apart.
>
>now many might realize that the wire is the right length for a dipole which
>is where I am getting my dimensions from however I do not have the room to
>put up a dipole I can put up something that is about 12' long and be
>horizontal.
>
>I am hoping to use this with my Kenwood ts-450s/at I know the antenna is
>just a compromise but can anyone tell me if it will work won't work what
>problems I am going to encounter? will it work on all the hf bands? anything
>I should change? is it a crazy hair brained idea?
>comments please

It's not how long the wire is, it's how much area the antenna covers
and how you distribute the current over that area that matters.

If you pack 10,000 feet of wire in a ten foot linear area of sapce,
you have a ten foot long antenna....not a 10,000 foot wire. You do,
however, have the loss resistance of 10,000 feet of wire acting with
the current distributed in the system.

That's why fractals, electric heaters, and light bulbs have coiled or
zig-zagged wire wound in larger coils. They try to pack as much
resistance as they can in a small area. They are interested in
generating heat and loss, instead of signal.

That's also why the best electrically small antennas generally use
the least amount of wire possible to achieve resonance.

I'd plan on doing something else.

73 Tom

5488. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 23:23:17 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB937E5.80C1278F@toast.net>
Source record: 167961

"Ian White, G3SEK" wrote:

>
> Much is mailed across the Atlantic - both ways - and never arrives.
> However, we now have the technology, so in order to support this
> discussion I have temporarily quoted the relevant excerpt as a PDF which
> is downloadable at http://www.ifwtech.com/g3sek/misc/skin.htm

Your link doesn't work (the one above does, but the one from there doesn't).

john

5489. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-21 23:31:52 UTC
From: kb7qhc@home.com
Message-ID: <3ab93391.1661679088@news.seanet.com>
Source record: 167962

On Wed, 21 Mar 2001 15:36:30 -0600, John O'Flaherty
<oflahert@toast.net> wrote:

>
>I see another important difference, related to the coherence or randomness of the
>radiation: the infra-red energy so emitted can't be collected for use except by a
>lower temperature system that it might shine on. The rf energy can be collected
>by a system at the same temperature as the transmitting system. Thus you have a
>system of energy transmission just like a rotating shaft (well, maybe a little
>lossier) or a laser beam (well, maybe not as well focused).
>
>john
>
>

Hi John,

There a couple problems here. One, the issue of:
> the infra-red energy so emitted can't be collected for use except by a
>lower temperature system
is simply the conventional signal to noise ratio imposed on all data
communications. This is not a property of the sender. The
conventional fix is to cool the detector.

Another point is with your
> related to the coherence or randomness of the radiation
which, again, is not an issue of the source, but rather the load (in
this case, I presume, a matter of the loss in an antenna) where
elsewhere in this thread you mention:
> contains little information, beyond
>increasing during transmit and then falling off.
This last statement is simply the revelation of the pulse (transient)
response of the load (the loss in the antenna) to which the energy is
applied. In other words you are describing the output of a low pass
filter, not its input.

If you want the IR to follow the modulation faithfully, lower the
thermal mass (raise the roll-off frequency of the low pass filter).
Useful IR data bandwidth encompasses the entire VLF to SHF spectrum
easily and is used everyday to communicate data approaching terabit
speeds. There is nothing in the cards to make IR inferior as a
communications frequency.

73's
Richard Clark, KB7QHC

5490. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 00:39:32 UTC
From: JWheeler <"kd5bcu at sydcom dot net">
Message-ID: <3ab94977_3@corp.newsfeeds.com>
Source record: 167963
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dwight Stewart <stewartx@sccoast.net> wrote in message
news:B6DC3DC9.7233%stewartx@sccoast.net...

> Now, every single person that I've met who feels that way is more than
> willing to meet reasonable requirements (the written tests, for example),
so
> it is not an situation of wanting something for free. Instead, they all
> seem to be saying they want a fair price for what is offered (and learning
> Morse Code is not a fair price simply because you once had to pay it).
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net
>

Part of this I can agree with, and part I must disagree with. Learning Morse code is actually a fair price to have to pay; not because I had to pay it or because anyone else had to pay it. It is a fair price to pay because that is what is required (at least for now). That may change in the near future. You can't go to Wal-Mart and say, "I think the price for this doohickey is too high, and that isn't fair. You need to give it me for less." When you go to Wal-Mart and see something you want, you either dig through the pocket lint to find enough money to get it, or you tell yourself it's too high a price and wait for them Rollback the price. Either that or you try to steal it and get nailed by the little old lady at the door. You can stand there and gripe at them for their outrageous asking price until your face turns four shades of blue and your head falls off. It doesn't matter. You don't get to set the price. They do. So, you just have to decide what you willing to pay. The very same principle holds true for amateur radio.
I'm not advocating one side over the other. Personally, I paid the asking price at the time. I started out as a no-code tech, but I sat down and studied the code and passed it, albeit at only 5wpm. I know there are those out there who say I am no more of a ham than they consider the no-code tech (it makes no difference that I was in the process of studying 13wpm when the current restructuring went into effect). I have a very dear friend who moved about 100 miles away making contact via 2m quite complicated I keep hounding him to upgrade, but he just won't do it. He plans to wait until they drop the code requirement completely, and that is his right. The price right now is too high. That's his decidsion. You have to make yours.

The above is just an opinion, and do you know what they say about opinions? They are like @ssholes. Everyone has one and they usually stink.

JWheeler
kd5bcu at sydcom dot net

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5491. Question R8?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 01:08:21 UTC
From: vk4sx <vk4sx@dingoblue.net.au>
Message-ID: <3ab9508d$0$25475$7f31c96c@news01.syd.optusnet.com.au>
Source record: 167967

G'day Fellas,have a funny situation with a C/Craft R8, verticle,a steady
Climbing VSWR as you hold the key down on 7MHZ and 10mhz only ??
20/17/15/12/10 all perfect as from installation,has only started this and i
havn't pulled antenna down as yet till WX settles.
does it sound like the Matching Device ?? or the 30mtr trap.?? any ideas
it gives the impression when you key the MIc in rtty mode,as though there
was something Arching or shorting out as the VSWR meter climbs SLOWLY
Kind Regards
Dennis vk4sx

5492. Cushcraft R5 - were they all created equal?.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 01:27:56 UTC
From: TH <hmmm@bzzt.com>
Message-ID: <tbild6jgi6s888@corp.supernews.com>
Source record: 167964

I've had an old R5 vertical in storage for quite a few years and recently took it out for a re-furb and to use at my summer cottage. After downloading the instructions from the Cushcraft manual site, I realized that my R5 doesn't look anything like the one in the instruction manual. My trap assemblies are much different than those shown in the manual. Most notable is the 20 meter section which features a trombone-like tuning stub rather than a straight tube like is shown in the manual. Can anyone shed some light on the model I have, or maybe point me to an online manual somewhere?

Thanks,
TH
Sturbridge, MA

5493. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 01:30:06 UTC
From: arrow146@aol.com
Message-ID: <20010321203006.14484.00000287@ng-da1.aol.com>
Source record: 167965

>Subject: J-pole: how to avoid coupling to metal mast?
>From: Administrator u127z@hotmail.com
>Date: Tue, Mar 20, 2001 3:35 PM
>Message-id: <MPG.1521f98ea6f514d0989680@news.customcpu.com>
>
>How do I prevent a J-pole coupling (2 m band) to the metal mast? When I
>
>model the antenna, the metal mast strongly affects the VSWR and
>radiation pattern. The length of the mast heavily affects the antenna. I
>
>also find this effect on all vertical antennas I've modelled - GP's, 5/8
>
>verticals, etc. Adding more ground plane rods does not seem to help. I
>expeced more ground radials to 'screen' the metal mast and reduce mast
>coupling. But it does not. Some antenna manufacturers claim their end
>fed vertical 1/2 wave antenna to be 'ground plane or metal mast
>independent'. Is this talking bullshit?
>
>Is the only way to use a vertical dipole instead, mounted on the side of
>
>the metal mast as below, in order to avoid coupling? I understand the
>distance from the mast shall be chosen for minimum radiation pattern
>distorsion.

Hello, Jan

Try an OSJ (Open Stub J-Pole)

If properly made, it is not effected by mast length, or if it is even mounted
on a mast.

The trick is the right combination of element lengths and spacing.
Spacing being very important.

I have seen so many J-Pole plans that say the spacing is not too
important because you can adjust the feed point for a 50 match.
It is like putting a band aid on a bad design.
It's still a bad design.

I don't want to start a fight here, but just in case I have my flame suit on.

So build a better J-Pole <A
HREF="http://members.aol.com/_ht_a/Arrow146/inst/ijpole.html">J-Pole
Instructions</A>

73 Al Lowe N0IMW
ArrowAntenna.com

5494. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 01:54:34 UTC
From: richardharrison@webtv.net
Message-ID: <28856-3AB95B5A-21@storefull-113.iap.bryant.webtv.net>
Source record: 167966

Richard Clark wrote:
"There is a vast difference between being warmed at by the sun, and being warmed at the open door of a malfunctionng radar range."

I believe Radar Range is a Raytheon trademark, but we know you mean microwave oven.

Richard Clark makes a good point and I`m relating this story as an advisory.

About 50 years ago a radio amateur friend of mine, Norman, W5OQJ was experiencing chest congestion related to a winter cold..Norman was a very close friend and his wife was actually one of my cousins.

Norman was a projectionist at the local cinema. So, during his evening shift he decided to bake out his cold using radiation from the projector`s arc lamp. He may have bared his chest to one or the other of those projectors for perhaps hours.

After closing the theater and going home to bed, he woke up dead. I guess he was ultraviolated by the arc between those carbons.

Overexposure to ultraviolet is a baaad idea.

Best regards, Richard Harrison, KB5WZI

5495. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 02:11:17 UTC
From: richardharrison@webtv.net
Message-ID: <28855-3AB95F45-46@storefull-113.iap.bryant.webtv.net>
Source record: 167968

J. Wheeler, KD5BCU wrote:
"You can`t go to Wal-Mart and say, I think the price for this doohickey is too high, and that isn`t fair."

The FCC isn`t Wal-Mart. The purchaser of an amateur radio license is one of the owners of the FCC store and has every right to question the price and get it changed if he can persuade enough of his fellows to make it happen.

Best regards, Richard Harrison, KB5WZI

5496. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 03:05:14 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <85oibt87t0q664asvlt86u7nb6b0i1kubg@4ax.com>
Source record: 167819

On 21 Mar 2001 03:53:16 GMT, dennis@wawa.juniper.net (Dennis Ferguson) wrote:

>W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>>Dennis Ferguson wrote:
>>> Light will also heat your skin, as can be determined by going outside
>>> on a sunny day.
>>
>>How do you know that's not infrared? Why does ultraviolet have a
>>delayed warming effect? Why can't I feel a laser beam? I've never
>>thought about all this before.
>
>I'm pretty sure it is not infrared, but I'm remembering this from
>Mechanical Engineering school a long time ago so feel free to
>consider it suspect. The sun's radiation spectrum peaks in the
>visible region so the intensity of infrared is way below
>light, and CO2 is opague at infrared so that not much of
>what there is makes it to the surface. The power density at
>infrared is very low. The surface of the planet is heated by
>the light and reradiates in the infrared, but the CO2 also
>absorbs the outgoing infrared and keeps the planet warmer
>than it otherwise might be.
>
>I don't know about ultraviolet, but it may be that the skin isn't
>fully opague at ultraviolet so some of the heating is going on
>below the skin where you haven't got any nerves. You can definitely
>feel a visible light laser beam, you just have to have one at high
>enough power. The lasers that are below a couple of hundred mW are
>harmless, but we had a 5 W argon-ion laser (2 colors at the output,
>green and blue, nothing anywhere else in the spectrum) that felt kind
>of like a bee sting after a second or two on the skin, and which
>would burn pinholes in your clothes or set fire to paper if you
>weren't careful.
>
>Dennis Ferguson

Hi Dennis,

You have a mix of problems here.

For one, the assertion that IR is of no consequence from the Sun is dreadfully overstated. IR encompasses a very much broader range of wavelengths than the range of those that are visible. The Solar spectrum does peak in the visible, but the lowest IR wavelength radiation levels (at the surface of earth) is only down from the

visible peak by about 1 or more dB. This level is on the shoulder of a roll-off, but out another 300 nM the level is still down only about 4 dB. If we were to go further into the IR, we would find levels down only 6 dB 1000 nM from the upper edge of IR. The range of visible light is down 3 dB over an interval of only 200 nM. Thus, in their separate power bandwidth, IR still manages to be as bright as the visible Sun.

This includes the holes in the radiation spectrum due to the various constituents in the atmosphere. However, CO2 hardly makes an appearance until we get into the very deep IR where the Solar spectrum has already declined to a small level. The green house effect you describe above is called a red-shifted response where the applied power was at a shorter wavelength than the product wavelength. More appropriate to the discussion are the optical densities of O3, O2, and H2O which figure far more in the attenuation of power. Even so, what power is subtracted from the power bandwidth is largely confined to narrow band reject regions until you push out to 1400 nM.

And then there is the discussion of "weak" lasers.

The level of radiation from the Sun on the earth's surface, at the equator, at noon, on the equinox, is at least 100 mW/cM**2 for this complete black body spectrum. A laser beam is roughly 4 mM**2 and the ones (HeNe & LD) I am used to push about 5 - 10 mW into that area. Comparing the Sun to the Laser, the Laser is illuminating an area with roughly the same power as the Sun. HOWEVER, this power of the Laser is confined to a spectrum of maybe 10 nM wide, the Sun is 2000 nM wide. The Laser is thus radiometrically 200 times brighter than the Sun's red constituent when equal bandwidths are considered.

The reason why Cecil and I (and many tested for just this possibility) have never felt the radiation of the Laser is not because it is too dim at that (HeNe) color compared to the Sun. The answer is that man is not sensitive to that color - that's all. Now if you up that ante and lower the wavelength to the blues and ultraviolets, the far more energetic emissions will cause tissue damage whose wounds may feel like burns (or then again, maybe not - but damage is there all the same).

The shift of wavelength from red to blue imparts enough electron Volt potential to a target to begin to work on matter at the atomic level (stripping of electrons from orbits). The longer wavelengths are confined to perturbing molecules without changing their chemistry.

73's
Richard Clark, KB7QHC

5497. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 03:20:17 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <vdribt0je6mqcqcu9rbcbfeokqavi7777j@4ax.com>
Source record: 167820

On Wed, 21 Mar 2001 19:54:34 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>
>After closing the theater and going home to bed, he woke up dead. I
>guess he was ultraviolated by the arc between those carbons.
>
>Overexposure to ultraviolet is a baaad idea.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

You may remember fire watch duty in the navy. In the shipyards fire watches had to stand by the welders, but they couldn't watch. They were warned to only glance and also to not look at the walls. The arc (gas or electric) is very blue intense and the reflections off the white walls (or even gray) are very hazardous to vision.

Those who ignore these simple cautions were regularly admitted to sick bay with UV burns of the retina which "felt like sandpaper." The condition would pass in 4 hours to a couple of days. You only had to stand one watch to learn.

73's
Richard Clark, KB7QHC

5498. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 03:28:02 UTC
From: dennis@wawa.juniper.net
Message-ID: <99brg2lg1@heap.juniper.net>
Source record: 167821

VE9SRB <srbest@att.net> wrote:
>I think that we are dealing with two issues here and an application of terms
>in a manner generally accepted by those in the field.

Steve,

To be clear, I'm discussing the IEEE definition of dissipation that
Cecil mentioned, that is the conversion of electrical energy to heat.
Since this is an IEEE definition I assume it is generally accepted
by at least some of those in the field. What I'd like to know is if
the conversion of electrical energy to EM radiation at the transmitting
antenna, and its conversion back to electrical energy at the receiving
antenna, is actually a heat transfer process, since by the IEEE
definition that process would be dissipative. You might have another
definition for "dissipation" in mind, but I'm fixated on the IEEE
definition.

Everything you've said so far is absolutely true, but I also think
that everything you've said so far also precisely describes radiative
heat transfer. By the IEEE definition this process would be dissipation.
I don't think "dissipation" is necessarily bad, if the point of the
exercise is to convert electrical energy to a particular kind of heat
then that dissipation is good. If dissipation is conversion to heat,
however, then it is still dissipation.

>I understand your position that total energy is conserved in one form or
>another. I agree that in the case of the antenna, the thermal or IR energy
>it creates can be detected away from the antenna so it could be considered
>to be "radiated". This "radiation" however is not the form of radiation
>as defined by general antenna theory (gain, radiation patterns, etc).

??? Electromagnetic radiation is electromagnetic radiation. Maxwell's
equations describe how it behaves no matter what its wavelength. I
once wrote a thesis about scattering of light/IR by dielectric and
conducting spheres in a laser beam, and consumed many, many pen plotter
pens drawing the radiation patterns that looked a lot like antenna
radiation patterns (lots of lobes, however, since the spheres were
large compared to the wavelength).

> This
>is considered energy lost or dissipated because it is no longer in the form
>or at the EM frequency of interest.

Here again you define "dissipation" as the radiated energy you aren't
interested in. This may be your definition, but the IEEE definition
is "converted to heat" and the quesition of whether the radiation you

are interested in is also "heat" is still relevant. It is also a question which inherently requires a thermodynamic answer, the IEEE apparently doesn't define "heat".

> One distinction here is the fact that
>to detect this energy you do not use another EM antenna. Thermal heat you >can detect with your skin. IR with the goggles you mention. Radiation of >energy in this form is not the intended function of the antenna. The >antenna's performance characteristics are not described to account for this >radiation (except for the definition of radiation efficiency). The antenna >does not perform in a reciprocal manner (transmit and receive) for this type >of energy.

I don't think it is actually relevant to the thermodynamics whether the apparatus to convert electrical energy into heat, and the apparatus to convert the heat back into electrical energy, is identical or not.

>The real distinction here is that the EM energy radiated by the antenna is >not irreversibly lost through the EM radiation process. The antenna will >detect the EM energy as it passes by. It is functioning as an antenna.

Sorry, "irreversible" is a thermodynamic term and I should have defined it. Because a process is irreversible does not mean that none of the resulting energy can be converted back to the form it was originally in, it just means that it is impossible to convert all of it back into the form it was originally in with no other effects.

Here's an example. Suppose I run a DC current through a resistor. This conversion generates heat with 100% efficiency, the resistor gets hot. I put resistor in a boiler and generate steam with it. I run the steam through a steam turbine, which turns a DC generator, whose output is DC current. Voila, I have now converted electrical energy to heat to electrical energy again.

The reason the conversion to heat is irreversible is not that I can't do the inverse conversion, it is that even if all the components are 100% efficient I can never get the same electrical power out that I put in. In particular, if I need to close the circuit from the steam turbine back to the boiler, I'll need to cool the output of the low pressure end of the turbine. Hence only part of the high temperature heat energy generated by the resistor ends up as DC current again, the remainder ends up as low temperature heat.

The second law of thermodynamics requires this. Conversion of heat to electrical energy decreases entropy. Conversion of high temperature heat to low temperature heat increases entropy. The very best the process can do is to balance these two, such that there is no change to the total entropy. This is called the Carnot cycle efficiency, if I'm remembering correctly.

>The use of terms "dissipation" and "radiation" in this manner is generally >accepted in the industry to account for the distinction in the antenna's >behavior relative to the EM and thermal or IR energy. I don't disagree with

>your discussion of heat and IR. We simply apply the term dissipation
>differently.

But "we" doesn't seem to necessarily include the IEEE, which defines
dissipation as "conversion to heat" whether we like the heat or not.
I'm still fixated on that, and there is a practical consequence to
knowing whether this is a heat transfer process or not regardless.

>Again, the distinction goes back to the antenna's reciprocal ability to
>radiate and then detect the EM energy. Think of the distinction this way.
>Apply an EM voltage to an antenna, EM energy is radiated, it travel to
>another antenna, this antenna detects the EM energy and it develops an EM
>voltage at its terminals. Apply an EM voltage to a resistor, thermal and IR
>energy is created, this thermal and IR energy travel to another resistor,
>does the resistor detect this thermal and IR energy and convert it into an
>EM voltage? This is my distinction between dissipation and radiation.

I don't think the thermodynamics cares whether you can use the same
apparatus at the receiver or not, the issue is the ultimate efficiency
of any receiver you can construct. You are indeed doing a conversion at
the receiving antenna. Electric current moves electrons while EM radiation
doesn't involve any mass, they are different forms of energy. I can buy
solar panels for my roof and directly convert the heat transfered from the
sun, in the form of EM radiation at light wavelengths, into a voltage
at the output terminals, but the power I get will still be ultimately
limited to the Carnot cycle efficiency with the remaining energy
being re-radiated by the panels. The same applies to EM energy
at any wavelength, there will be a limit to the ultimate efficiency
of the receiver with the remainder being wasted by reradiation.

So, here's my bet. I'll bet that the exchange of energy from a
transmitting antenna to a receiving antenna is a heat transfer
like any other. Coherent, because that is convenient for the receiver,
but still fundamentally a heat transfer. Because of this I'll bet
that the operation of transmitting and receiving antennas isn't
reciprocal with respect to efficiency. That is, while it is
theoretically possible to build a transmitting antenna which is
100% efficient (i.e. the conversion to heat), I'll bet it is impossible
for the receiving antenna to convert all the energy it is extracting
from the incoming EM field back into electrical energy at its output
terminals (i.e. the conversion from heat). It will need to reradiate
some of it, and only the remainder will appear at the output. If
you built a sensitive enough detector and aimed it away from the
transmitter and towards the receiving antenna you could possibly
detect the receiving antenna reradiating this energy. No design
would be able to reduce this reradiation below the Carnot cycle
efficiency.

So if the above is true (I still don't know it is for sure, and
I'll admit to not having a clue how to estimate appropriate
temperatures to use to compute the efficiency) then by the
IEEE definition radiation is emitted from an antenna by

dissipation. It may be dissipation that you want to happen, but it is still dissipation by their definition. And this would also mean that, by their definition, radiation resistance is as dissipative as any other kind of resistance, this limiting dissipationless resistance to the transmission line kind. Your mileage may vary.

And, with this, I think I've run well past what I know about the topic.

Dennis Ferguson

5499. Re: Norman was dead !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 03:29:06 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AB97182.BC0FBAC3@bwcc.com>
Source record: 167822

Richard Harrison wrote:
> After closing the theater and going home to bed, he woke up dead.
He woke up dead.
He woke up dead.
He woke up dead?
Could I get back to you about that?

5500. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 03:43:16 UTC
From: ccom2@socket.net
Message-ID: <3ab9743a.44402111@news.socket.net>
Source record: 167823
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

He is baiting you all in to play his game, if no one comes
out to play he will go away like any brat when he is alone.
Mike

KC8JBO <rmccall-no-spam@cotse.com> wrote:

>"Dickhead Elliott" <elliotta@netusa1.net> whined and stamped his feet in a
>little girl tantrum in message news:C6Vt6.247$dp4.4118@newsfeed.slurp.net...
>>

5501. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 03:55:13 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB977A1.59C69300@oio.net>
Source record: 167825

W6RCecilA wrote:
>
> 'Doc wrote:
> > I wouldn't know where to find it, but there has to be an
> > explanation of the screwdriver antenna on the internet. They
> > really aren't that complicated, the only difficult thing
> > would be getting the coil form machined. Other than that,
> > you should be able to find every thing else at your local
> > hardware store.
>
> Do they have finger stock?

I don't know, but an auto parts house should...
'Doc

5502. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:00:05 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AB978C5.A81F434F@oio.net>
Source record: 167824

Bob,
Wheeooo... That's not exactly as simple as it could be!
In fact, I'd say it was quite a bit 'over-built', but, why
not...
'Doc

5503. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:06:43 UTC
From: JWheeler <"kd5bcu at sydcom dot net">
Message-ID: <3ab97a3a_4@corp.newsfeeds.com>
Source record: 167826
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Sounds like someone needs to get a life. Let's see what 'entertaining'
little comments this 'gentleman' can come up with for me.
KC8JBO <rmccall-no-spam@cotse.com> wrote in message
news:985226467.3ab95ce327403@webmail.cotse.com...
> SKANKY LESBIAN "Brenda Ann" <brendaannd@uswest.net> whined in message
> news:99b1v8tn1@news1.kornet.net...
> >
> > The first amendmant has never covered libel.
>
> OOOoooohhhhhhhh, we have ourselves a "jailhouse lawyer" in the yeast
infected
> BrenDUH here....
> I'm sorry that you are a lonely, fat girl living in the mid west and only
have
> corn husks to play with, if you know what I mean. Try and pick yourself up
a
> life or some clue or something.
> Understand what you speak of before you open your hotdog laden puss up and
> start yapping. Really. You seemed like a nice little twat, at first, but
all
> this talk of libel makes you sound pretty damn obsessed. I guess you were
> stalked or libeled or something earlier in life, and it sounds like YOUR
> problem.
> It sounds like it has made you sick to the point where you can't control
> yourself when you are word-spanked. That's too bad because your life is
going
> to be difficult. Word-spank happens all the time.
> Are you going to scream "Libeler" next time someone mentions you in line
at the
> hot dog stand? Scream "Libeler" next time someone beats your fat ass to
the Ice
> Cream truck? What the fuck, BrenDUH, are you going to be an idiot afraid
of
> every word-spank that pops up or are you going to try and be a woman and
eat
> all your hot dogs? Even though one belongs to the neighbor's dog?
>
> Use a killfile if you don't want to read something that a person writes.
Now,
> get back to your Twinkie before it melts, tubshitter. And no puking
tonight.
> You're only damaging your stomach and
> giving yourself bad breath.

>
> Like Georgie Arselicks the real life stalker says, "It's only words". Too
bad
> he, and you, can't handle the words.
>
>
>
>
> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
>

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5504. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:12:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB97B98.509B7A46@IEEE.org>
Source record: 167828
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

JWheeler wrote:
> You can't go to Wal-Mart and say, "I think the price for this
> doohickey is too high, and that isn't fair.

Not a good analogy. Wal-Mart is engaged in a relatively free market
with lots of competitors. If one doesn't like the price asked by
Wal-Mart, one can go to any number of competitors. If one doesn't
like the price asked by the FCC, what competitor can one go to?
Again, if one is to obtain amateur radio privileges, one is forced
to pay the price set by the FCC which holds a monopoly.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5505. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:13:07 UTC
From: JWheeler <"kd5bcu at sydcom dot net">
Message-ID: <3ab97bbb_3@corp.newsfeeds.com>
Source record: 167830

Ok... so it wasn't the BEST analogy, and I didn't say that you shouldn't do things to bring about change. It just seems a real waste of effort to go back and forth about who is right and wrong in the situation. Given time, it will change. Of that, I have no doubt.

JWheeler
Richard Harrison <richardharrison@webtv.net> wrote in message news:28855-3AB95F45-46@storefull-113.iap.bryant.webtv.net...
> J. Wheeler, KD5BCU wrote:
> "You can`t go to Wal-Mart and say, I think the price for this doohickey
> is too high, and that isn`t fair."
>
> The FCC isn`t Wal-Mart. The purchaser of an amateur radio license is one
> of the owners of the FCC store and has every right to question the price
> and get it changed if he can persuade enough of his fellows to make it
> happen.
>
> Best regards, Richard Harrison, KB5WZI
>

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5506. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:17:44 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AB97CE8.9914835@toast.net>
Source record: 167827

Richard Clark wrote:

> On Wed, 21 Mar 2001 15:36:30 -0600, John O'Flaherty
> <oflahert@toast.net> wrote:
>
> >
> >I see another important difference, related to the coherence or randomness of the
> >radiation: the infra-red energy so emitted can't be collected for use except by a
> >lower temperature system that it might shine on. The rf energy can be collected
> >by a system at the same temperature as the transmitting system. Thus you have a
> >system of energy transmission just like a rotating shaft (well, maybe a little
> >lossier) or a laser beam (well, maybe not as well focused).
> >
> >john
> >
> >
>
> Hi John,
>
> There a couple problems here. One, the issue of:
> > the infra-red energy so emitted can't be collected for use except by a
> >lower temperature system
> is simply the conventional signal to noise ratio imposed on all data
> communications. This is not a property of the sender. The
> conventional fix is to cool the detector.

Well, you don't need to cool a receiving antenna to pick up rf. I wasn't talking about signal to noise ratio, but the fact that dissipated energy can't be recovered except by expending more energy than that recovered. That makes dissipation irreversible. The process of radiating and then receiving energy is more akin to power transmission, albeit very lossy, than it is to dissipation.

> Another point is with your
> > related to the coherence or randomness of the radiation
> which, again, is not an issue of the source, but rather the load (in
> this case, I presume, a matter of the loss in an antenna) where
> elsewhere in this thread you mention:
> > contains little information, beyond
> >increasing during transmit and then falling off.
> This last statement is simply the revelation of the pulse (transient)
> response of the load (the loss in the antenna) to which the energy is
> applied. In other words you are describing the output of a low pass
> filter, not its input.
>
> If you want the IR to follow the modulation faithfully, lower the

> thermal mass (raise the roll-off frequency of the low pass filter).
> Useful IR data bandwidth encompasses the entire VLF to SHF spectrum
> easily and is used everyday to communicate data approaching terabit
> speeds. There is nothing in the cards to make IR inferior as a
> communications frequency.

I agree, but there you aren't talking about randomized thermal radiation, which contains no information but its own presence. That would be a power and information transmission system too, with its own inevitable losses and useless dissipation.

john

5507. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:18:22 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB97D0E.33E9E9D3@IEEE.org>
Source record: 167831

Rick Scott wrote:
> I have an idea how it works, just wish I knew the details.

A threaded shaft drive from the screwdriver motor causes the coil to
move up and down on a nut. Fixed finger stock and an aluminum tube
short out the unused part of the coil.
--
http://www.mindspring.com/~w6rca

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------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5508. Re: wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:20:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AB97D71.F94DEE6B@IEEE.org>
Source record: 167832

K4IA wrote:
> Go to page 138 of April QST or www.spiromfg.com and look at their 70 foot long
> AS-2 ladder line fed dipole at $49.95. Works circles around my G5RV.

On what bands?
--
http://www.mindspring.com/~w6rca

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5509. Re: Question R8?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:25:26 UTC
From: Delbert McCord <dmccord@usol.com>
Message-ID: <tbivjvrsl2ga12@corp.supernews.com>
Source record: 167829

I had a problem like that 3 months after I had purchased the R8 and installed it. It worked perfect on all bands and them the SWR started climbing the longer the transmitter was keyed down (I use psk a lot). Finally the SWR went to over 8 on all bands. I called Cushcraft and they said it probley was the feedline. I checked the feedline and I thought it was fine but Cushcraft said it HAD to be the feedline. I finally convinced Cushcraft to allow me to send in the matching box. They sent it back to me with a form letter saying it had been checked out and found to be working fine.

A day later I received a message on my answering machine saying the wrong matching box had been sent to me by mistake and they had just shipped me a new one. I installed the new matching unit and it has been working fine every since. (Since Jan 1 2001)

Hope this helps

> G'day Fellas,have a funny situation with a C/Craft R8, verticle,a steady
> Climbing VSWR as you hold the key down on 7MHZ and 10mhz only ??
> 20/17/15/12/10 all perfect as from installation,has only started this and
i
> havn't pulled antenna down as yet till WX settles.
> does it sound like the Matching Device ?? or the 30mtr trap.?? any ideas
> it gives the impression when you key the MIc in rtty mode,as though there
> was something Arching or shorting out as the VSWR meter climbs SLOWLY
> Kind Regards
> Dennis vk4sx
>
>

5510. Anyone ever made a sled for your tower??????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 04:33:49 UTC
From: Jack <poster@gate.net>
Message-ID: <3AB980AD.21F63AA2@gate.net>
Source record: 167833

A sled to take your antennas up and down the side of your tower. There
are
some that wrap around the tower and some that use a track.

Jack

5511. Re: Question R8?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 06:21:58 UTC
From: vk4sx <vk4sx@dingoblue.net.au>
Message-ID: <3ab99bd4$0$25514$7f31c96c@news01.syd.optusnet.com.au>
Source record: 167834

OK Tnxs Delbert,that is exactly what is happening,i will send C/craft a msg
and see what they reckon.
Rgds Dennis

"Delbert McCord" <dmccord@usol.com> wrote in message
news:tbivjvrsl2ga12@corp.supernews.com...
> I had a problem like that 3 months after I had purchased the R8 and
> installed it. It worked perfect on all bands and them the SWR started
> climbing the longer the transmitter was keyed down (I use psk a lot).
> Finally the SWR went to over 8 on all bands. I called Cushcraft and they
> said it probley was the feedline. I checked the feedline and I thought it
> was fine but Cushcraft said it HAD to be the feedline. I finally convinced
> Cushcraft to allow me to send in the matching box. They sent it back to me
> with a form letter saying it had been checked out and found to be working
> fine.
>
> A day later I received a message on my answering machine saying the wrong
> matching box had been sent to me by mistake and they had just shipped me a
> new one. I installed the new matching unit and it has been working fine
> every since. (Since Jan 1 2001)
>
> Hope this helps
>
>
>
> > G'day Fellas,have a funny situation with a C/Craft R8, verticle,a steady
> > Climbing VSWR as you hold the key down on 7MHZ and 10mhz only ??
> > 20/17/15/12/10 all perfect as from installation,has only started this
and
> i
> > havn't pulled antenna down as yet till WX settles.
> > does it sound like the Matching Device ?? or the 30mtr trap.?? any ideas
> > it gives the impression when you key the MIc in rtty mode,as though
there
> > was something Arching or shorting out as the VSWR meter climbs SLOWLY
> > Kind Regards
> > Dennis vk4sx
> >
> >
>
>

5512. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 07:24:46 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <s6Tk1pA+iau6EA2D@ifwtech.plus.net>
Source record: 167835

John O'Flaherty wrote:
>"Ian White, G3SEK" wrote:
>
>>
>> Much is mailed across the Atlantic - both ways - and never arrives.
>> However, we now have the technology, so in order to support this
>> discussion I have temporarily quoted the relevant excerpt as a PDF which
>> is downloadable at http://www.ifwtech.com/g3sek/misc/skin.htm
>
>Your link doesn't work (the one above does, but the one from there doesn't).

Sorry - it works now (Windoze/Unix filename problem).

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5513. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 07:45:40 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <D4iu6.4160$%J6.505704@dfiatx1-snr1.gtei.net>
Source record: 167836
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AB97B98.509B7A46@IEEE.org...

> SNIP
> If one doesn't like the price asked by the FCC, what competitor can one
go to?
> Again, if one is to obtain amateur radio privileges, one is forced to pay
the price set by the > FCC which holds a monopoly.
> --

So what? If you want it, pay the price. If not, don't. There's no other
hobby I know of which provides so many rewards for such a small investment.

Obtain a business license, driver license, hunting license, fishing
license, etc. These are all "monopoly" controlled. If you want one, you pay
the price (and they are a lot costlier than that of a ham ticket).

73 de W6DKN

5514. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 08:57:47 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6DF28BB.7434%stewartx@sccoast.net>
Source record: 167837
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

JWheeler wrote:

> Dwight Stewart wrote...
>
>> [snip]
>
> Part of this I can agree with, and part
> I must disagree with.

I agree and disagree with parts of it also, JW. As for my specific case, CW has never interested me, nor has HF. In other words, I'm pretty happy with what I have. Perhaps one day I'll make the effort to learn code (if I can every get away from the long list of other things that seem to eat up all my free time). In the meantime, I don't waste much time worrying about it.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5515. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 09:13:22 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AB9C288.6686DBB8@earthlink.net>
Source record: 167838
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

KC8JBO "wrote":

> FUCKHEADED MORON .....Go fuck yourself, aids-carrying spermswallower.
> .....Too bad you killed that child while driving under the influence.....

> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole

^^^^^^^^^^^^^^^^^
Check this out. The psycho is attempting to pretend he's a regular human being. Perhaps if you add one more crappy antenna to your "look-at-me-I-gots-me-a-raydeeo-I'm-a-big-boy-momma" list, people will stop crossing the street and hiding their children when they see you coming? And now, back to sheep groping, Roger. Utilize all of your four years of schooling and try to limit your spelling and grammar mistakes to less than five in your next psychotic episode.

Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

5516. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 09:28:52 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AB9C624.2D72BBA3@earthlink.net>
Source record: 167839
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:

> Wal-Mart is engaged in a relatively free market
> with lots of competitors. If one doesn't like the price asked by
> Wal-Mart, one can go to any number of competitors. If one doesn't
> like the price asked by the FCC, what competitor can one go to?
> Again, if one is to obtain amateur radio privileges, one is forced
> to pay the price set by the FCC which holds a monopoly.

Yep. Also, it's a damn shame the Department of Transportation holds a monopoly on traffic regulations in this country, 'cause I'd like to switch to one that'll allow me unlimited speed on highways, as well as the right to drive the wrong way in a one-way street while drunk like a skunk.

73 .... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

5517. Re: coiled dipole

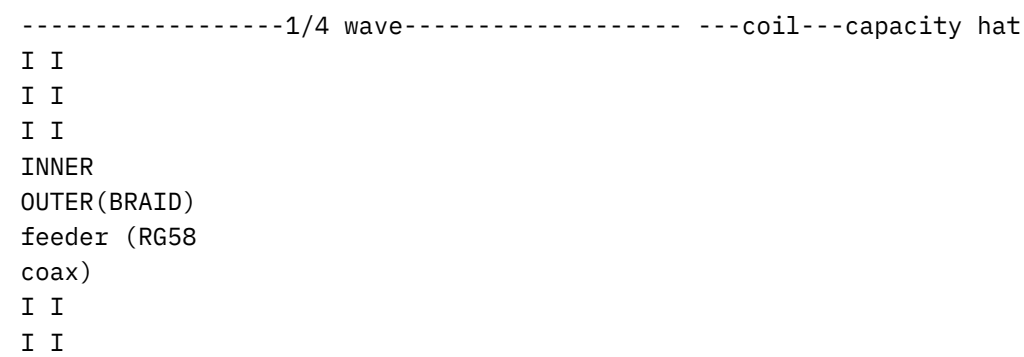
Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 10:05:05 UTC
From: Dave <rni220fgi@email.com>
Message-ID: <99ciu9$kf84$1@ID-49477.news.dfncis.de>
Source record: 167840

I made a bodge with a 1/4 wave on the 'active' side of the antenna and a coil on the 'earthy' side- with a bit of a capacity hat at the end (which reduced TVI no end, as it lowered the end volts I guess) for a lashup in my old digs.
Designed it for 7 MHz and it worked fine on that band.
Seem to recall I had a 1/4 wave x .95 (33 feet)- plus 6 foot spare on the earthy side (about 39-40 feet in total). Fed it with some old scrap RG58 and no balun.
I had a near perfect SWR measured at both ends of the feeder cable
As the other reply said- just try and get as much free space wire out there, and load it with inductance and capacity hat/dropping vertical bits of wire.

I am a great believer in spending virtually nothing on antennas, and reaping the enjoyment from a totally home made design- it is the only way to learn properly.
There is a guy local to me (mentioning no names) who has spent over £2000 on HF wire antennas and related test gear over the last four years- and his results never compare (even slightly) to mine.

All you NEED is an SWR bridge, and possibly a noise bridge too (one prefeably that can measure reactance of some sort) and you are in business

Diagram below. The coil was nearly a half wave of wire (66 feet, wound pretty tight, but plastic covered thin wire) and the hat was a vertical piece of wire, about 4 to 6 feet long. BTW: what freq's were you interested in?



vid s. <david@hedgewoodhomes.com> wrote in message news:y23u6.4829$%N.27660@skycache.prestige.net...
> okay I am looking for pointers and comments on an antenna that I am going to
> build so here are the specs
>
> I am going to use a piece of cardboard concrete form that is 12" in diameter

> and 12' long.(this is just for shaping the antenna) 3' circumference and
72"
> on each side.
> I am going to use 14awg bare solid copper
> 250' of 14 awg wire 250'/2=125'/3=41.667 72/41.667= 1.73
> 1" pvc frame to support the antenna once it is installed.
>
>
>
>
> starting in the middle of the tube I am going to wrap 125' each side
around
> the tube keeping the wraps spaced as even as I can for a total wire length
> of 250'. if my math is right should mean that the wire coils should be
about
> 1.75 inches apart.
>
> now many might realize that the wire is the right length for a dipole
which
> is where I am getting my dimensions from however I do not have the room to
> put up a dipole I can put up something that is about 12' long and be
> horizontal.
>
> I am hoping to use this with my Kenwood ts-450s/at I know the antenna is
> just a compromise but can anyone tell me if it will work won't work what
> problems I am going to encounter? will it work on all the hf bands?
anything
> I should change? is it a crazy hair brained idea?
> comments please
>
>
>

5518. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 12:08:27 UTC
From: billsohl@mindspring.com
Message-ID: <3ab9ea8b.874724@news.mindspring.com>
Source record: 167841
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Wed, 21 Mar 2001 22:12:08 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>JWheeler wrote:
>> You can't go to Wal-Mart and say, "I think the price for this
>> doohickey is too high, and that isn't fair.
>
>Not a good analogy. Wal-Mart is engaged in a relatively free market
>with lots of competitors. If one doesn't like the price asked by
>Wal-Mart, one can go to any number of competitors.

Additionally, it is market forces that set the price that
Wal-Mart uses...it is not just an executive decision to
charge $Xand the hell with the consumer. If X is too
high, WalMart goes chapter 11.

>If one doesn't
>like the price asked by the FCC, what competitor can one go to?
>Again, if one is to obtain amateur radio privileges, one is forced
>to pay the price set by the FCC which holds a monopoly.

And the "price" set by the FCC is not based on any
competitive concerns.

Cheers,
Bill K2UNK

5519. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 12:11:43 UTC
From: billsohl@mindspring.com
Message-ID: <3ab9eb5d.1084544@news.mindspring.com>
Source record: 167842
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Thu, 22 Mar 2001 07:45:40 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>news:3AB97B98.509B7A46@IEEE.org...
>
>> SNIP
>> If one doesn't like the price asked by the FCC, what competitor can one
>go to?
>> Again, if one is to obtain amateur radio privileges, one is forced to pay
>the price set by the > FCC which holds a monopoly.
>> --
>
>So what? If you want it, pay the price. If not, don't. There's no other
>hobby I know of which provides so many rewards for such a small investment.
>
>Obtain a business license, driver license, hunting license, fishing
>license, etc. These are all "monopoly" controlled. If you want one, you pay
>the price (and they are a lot costlier than that of a ham ticket).
>73 de W6DKN

As long as the "price" set by the FCC is rational you'll get no
argument from me. If the state you live in set a driver's license
price of $1000, would you just pay that or would you join the
voice of public discontent and demand rational fees.

Cheers,
Bill K2UNK

5520. Reflection

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 12:13:58 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AB9EC86.BEC08D3F@mwci.net>
Source record: 167843

> Ian White, G3SEK wrote:
>
> "Davidson's derivation appears to show that if an RF current
> is flowing across any arbitrarily small part of a conducting
> surface - for any reason - then there will be a
> skin effect."

Bill wrote:

> The Appendix that you sent is quite routine. I have several
> references that do pretty much the same thing. I don't see
> anything extraordinary about it.
>
> About reflection:
>
> Suppose that some fraction of an HF wave is striking a plate
> whose dimensions
> are the same. As the E and H fields oscillate just beyond the
> surface they
> cause electrons in the plate to set up various oscillating Ec
> fields (due to
> charges), and therefore oscillating currents Jc (due to
> charges), inside the
> plate. Recall that for every Jc there must be an Ec (Ohm's
> law).
>
> These are required in order to cooperate with the incoming
> wave in order to
> satisfy the boundary conditions (tangential and normal) for
> the incoming E
> and H fields at the surface and within the body of the
> conductor.
>
> We can see how these local induced currents can provide the
> "current for any
> reason" that can create a reflected wave. The basic principles
> are:
>
> 1) induced E and H fields that are not allowed to exist in the
> plate are
> reflected in order to satisfy the boundary relations for E and
> H fields at
> and inside the plate
>
> 2) the induced currents create the reflected wave (it doesn't

> just "bounce"
> off the surface)
>
> 3) the strength of the reflected wave is just enough to
> satisfy the boundary
> conditions, and this is equivalent to almost "total
> reflection", allowing for
> losses in the plate. The plate is a short-circuit for the
> wave.
>
> We can also see that the current flow obeys the rules of skin
> effect for
> current, which is identical to the skin effect for reflection.
> These same
> currents reverse the penetration.
>
> My text "Fundamentals of Electric Waves by Skilling (prof at
> Stanford, 1948)
> discusses this very elegantly, although it has taken a lot of
> struggle to dig
> it out.
>
> Also, I stand by the thoughts that I have presented on the
> subject of the
> Faraday shield. I also stand by my comments on magnetic
> shielding. Terman
> agrees on that subject.
>
> Finally, the material from Kraus that I sent you is OK. To get
> an absolutely
> *complete* reflection of the *entire* infinite wave front, the
> infinite
> surface is mandatory. In the subject we are discussing here,
> only the part
> of the wave that hits the plate is reflected.

Some other comments about reflection come to mind:

Suppose the lossless reflecting surface has certain dimensions. That surface will reflect perfectly. Ignore fringe effect anomalies at the edges of the surface.

Now let the surface become smaller and smaller. The remaining surface continues to reflect in just the same manner. We can pursue this process until the surface is extremely small, almost a single point in effect. Each very tiny segment reflects in the same manner as the larger surface.

The idea is that Maxwell's equations in differential form are "vector point" functions. At each very tiny segment of the surface they operate independently. The behavior over a large

region is the sum (integral) of the behaviors at each of the collection of points.

In other words there is no "sloshing" of electrons back and forth from one end of the reflecting surface to the other. This is identical to the statements about the Faraday shield, where we said that the balance between induced EMF and charge alignment occurs on a point-by-point basis (no sloshing back and forth of electrons between the ends).

The same is true of skin effect. At each location along the entire surface the "skin effect" is occurring independently of other points.

I think this point-by-point process is what is called the "finite element" approach.

Bill W0IYH

5521. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 13:38:14 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA0046.4CF738EA@IEEE.org>
Source record: 167845
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:
>
> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3AB97B98.509B7A46@IEEE.org...
>
> > SNIP
> > If one doesn't like the price asked by the FCC, what competitor can one
> go to?
> > Again, if one is to obtain amateur radio privileges, one is forced to pay
> the price set by the > FCC which holds a monopoly.
>
> So what? If you want it, pay the price. If not, don't. There's no other
> hobby I know of which provides so many rewards for such a small investment.

I wasn't making a moral judgment, just an observation based on the
way things are. Wal-Mart was not a good analogy to the government.

> Obtain a business license, driver license, hunting license, fishing
> license, etc. These are all "monopoly" controlled. If you want one, you pay
> the price (and they are a lot costlier than that of a ham ticket).

Yep, that's exactly what I said. In return for certain privileges granted,
the government forces citizens to meet certain requirements. That's what
governments do.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5522. SWR and antenna radiation effectiveness

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 13:39:57 UTC
From: KE4QJK <ke4qjk@qsl.net>
Message-ID: <Xgnu6.1456$iO4.43737@news3.mia>
Source record: 167844

I recently installed a G5RV jr (50' long). Desiring a better longwire antenna, started doing a lot of research. Read about such things as SWR, resonance etc.

Then came the questions:

1. how important is it an antenna be resonant if a trans-match makes the transceiver 'think' the antenna is resonant?

2. does an antenna with an SWR of say 1.5:1 perform (get out) better than say an antenna with an SWR of 5:1 but made to look OK with a trans-match?

Vic

5523. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 13:40:05 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA00B5.525F66DF@IEEE.org>
Source record: 167846
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
> Also, it's a damn shame the Department of Transportation holds a monopoly
> on traffic regulations in this country, 'cause I'd like to switch to one that'll
> allow me unlimited speed on highways, ...

Move to Germany. :-)
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5524. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 14:04:16 UTC
From: TLNixon@home.com
Message-ID: <3aba0611.83154128@news.moline1.il.home.com>
Source record: 167847

I think I still have all of the parts around here from a Gotham Vertical. I got it about 10 years ago at a close-out at an electronics parts store. Let me see what I can find.

Terry-WB0VQP

5525. Re: SWR and antenna radiation effectiveness

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 14:06:07 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA06CF.8E356C4F@IEEE.org>
Source record: 167848

KE4QJK wrote:
> 1. how important is it an antenna be resonant if a trans-match makes the
> transceiver 'think' the antenna is resonant?

Depends on the losses in the system. Each system component can have
losses. The trick is to minimize the losses to an acceptable level.
Losing half your power is about 1/2 S-unit.

> 2. does an antenna with an SWR of say 1.5:1 perform (get out) better than
> say an antenna with an SWR of 5:1 but made to look OK with a trans-match?

Depends on the kind of coax, the frequency, and the length of coax.
A half-size G5RV has about an SWR of 5:1 on 40m. 100 ft of RG-58 has
a matched line loss of ~1 dB on 40m. According to a chart in The ARRL
Handbook, a 5:1 SWR increases the loss by ~0.8 dB to a total of ~1.8 dB.
The tuner may have a loss of 0.5 dB. Total system losses are below 1/2
S-unit.

The half-size G5RV is designed to be 1.5WL on 10m. It works well on 40m,
20m, and 10m - not well on 15m.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5526. Re: Cushcraft R5 - were they all created equal?.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 14:17:45 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3ABA0988.F55DC992@ix.netcom.com>
Source record: 167849

TH -- the Cushcraft manual on-line for the R5 is at URL:
http://www.cushcraft.com/support/tlai.htm
--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!
==========
TH wrote:

> I've had an old R5 vertical in storage for quite a few years and recently
> took it out for a re-furb and to use at my summer cottage. After
> downloading the instructions from the Cushcraft manual site, I realized that
> my R5 doesn't look anything like the one in the instruction manual. My trap
> assemblies are much different than those shown in the manual. Most notable
> is the 20 meter section which features a trombone-like tuning stub rather
> than a straight tube like is shown in the manual. Can anyone shed some
> light on the model I have, or maybe point me to an online manual somewhere?
>
> Thanks,
> TH
> Sturbridge, MA

5527. Re: Anyone ever made a sled for your tower??????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 14:56:52 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABA12B4.C42DE335@oio.net>
Source record: 167850

Jack wrote:
>
> A sled to take your antennas up and down the side of your tower. There
> are
> some that wrap around the tower and some that use a track.
>
> Jack

Jack,
As a matter of fact, yes. Worked pretty good.
'Doc

5528. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 15:16:15 UTC
From: richardharrison@webtv.net
Message-ID: <12036-3ABA173F-121@storefull-116.iap.bryant.webtv.net>
Source record: 167851

Tom, W8JI wrote:
"How does that "magic" help the user of the antenna hear a signal and through the noise from next door?"

Put next door in the loop`s null.

Loops are shielded because it has been found advantageous to shield them.

Loop response depends on loop balance. The shield helps maintain electrostatic balance.

Radiation from afar has equal E&H fields. Radiation from near sources may not. It depends on the distance from the source. The relative strengths of the E&H reactive fields is a function of distance. The reactive electric field varies as the sixth-power of distance. The reactive magnetic field varies as the fourth power of distance. So, how much of each one depends on distance.

Re-radiating conductors have near fields. Get rid of one of the fields and reduce a contaminating influence on your direction determination or signal measurment.

If you are rotating a direction finding loop, its capacitance to nearby conductors is changing. Electrostatic shielding mitigates this effect.

Why argue against something which has been found to work. There are many cases in which it is not worth the trouble. Nearly every "All-American-5" a-c, d-c radio made for 50 years had a built-in loop antenna. It obviously was not considered important to shield most of those loops. On the other hand, most direction finding sets are equipped with shielded loop antennas.

Best regards, Richard Harrison, KB5WZI

5529. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 15:46:58 UTC
From: Meegan and Jim Wilson <wilson@afn.org>
Message-ID: <3ABA1E71.2A13DEA3@afn.org>
Source record: 167852

W6RCecilA wrote:
>
> Rick Scott wrote:
> > I have an idea how it works, just wish I knew the details.
>
> A threaded shaft drive from the screwdriver motor causes the coil to
> move up and down on a nut. Fixed finger stock and an aluminum tube
> short out the unused part of the coil.
> --

Ah, but the devil is in the details! It helps to know little things like using condensed milk as a cutting lubricant when rethreading the **specific** brass plumbing adapter from 1/8" NPT to 3/8-24 antenna thread. You gotta' get the Don Johnson book. That man has spent **way** too much time in his hardware store, but the details and insights he gives are invaluable.

Jim Wilson
WA5BRB

5530. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 15:49:10 UTC
From: richardharrison@webtv.net
Message-ID: <9398-3ABA1EF6-68@storefull-114.iap.bryant.webtv.net>
Source record: 167856

Richard Clark wrote:
"Those who ignored these simple cautions were regularly admitted to sick bay with UV burns of the retina which "felt like sandpaper."

That reminder brings back the sensation!

I worked in a shipyard and often held pieces in place while a welder tacked them. The welder had eye protectiom. I just looked away. Much of the time I worked in the yard I had sandpaper eyes. It is an apt description.

Best regards, Richard Harrison, KB5WZI

5531. Re: Anyone ever made a sled for your tower??????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:06:00 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aba2304$0$62153$bbae4d71@news.net-link.net>
Source record: 167853

It must have been a short free standing tower. Anybody come up with a way
to do this with a guyed tower and still keep the tower up when you bring the
antennas down?
'Doc wrote in message <3ABA12B4.C42DE335@oio.net>...
>
>
>Jack wrote:
>>
>> A sled to take your antennas up and down the side of your tower. There
>> are
>> some that wrap around the tower and some that use a track.
>>
>> Jack
>
>Jack,
> As a matter of fact, yes. Worked pretty good.
> 'Doc

5532. Re: Beam antenna SWR changed!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:11:39 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aba2456$0$62151$bbae4d71@news.net-link.net>
Source record: 167855

Yes it is easy to say! Big beams at heights they work real good at are a pain when stuff like this happens! I guess I will climb next week when the wx warms up and look over the X7. I keep checking daily as the wx warms up to see if a change--just a little so far. The X7 is the beam I really care about as I am going to replace the other one with 12/17 beam anyway, but how do you keep water out of the traps to begin with? I made double sure the drain holes were facing down.
'Doc wrote in message <3AB8E90E.D81C5B88@oio.net>...
>
>
>Rudy,
> From what you describe, you may be correct about water in
>the traps. It sounds like the antennas have the problem, not
>the feedline. Using an amplifier to 'dry out' the traps isn't
>the best idea in the world. Best would be to take the beams
>down and look at them, it may not be the traps. (That's easy
>to say, I'm not the one climbing the tower!)
> 'Doc

5533. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:14:51 UTC
From: 2w8ji@akorn.net
Message-ID: <3aba1fca.150130531@news.accessunited.com>
Source record: 167854

On Thu, 22 Mar 2001 09:16:15 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Loops are shielded because it has been found advantageous to shield >them.
>Loop response depends on loop balance. The shield helps maintain >electrostatic balance.

Gosh, and all along I kept saying all the shield does is change the balance of the loop.

If an unshielded loop is not properly balanced:

1.) A properly balanced shield will help balance the system.

2.) An improperly balanced shield can make it worse.

If an unshielded loop is properly balanced:

1.) A properly installed shield can never help.

2.) If the shield is improperly installed it can harm balance.

>Radiation from afar has equal E&H fields. Radiation from near sources >may not. It depends on the distance from the source. The relative >strengths of the E&H reactive fields is a function of distance. The >reactive electric field varies as the sixth-power of distance. The >reactive magnetic field varies as the fourth power of distance. So, how >much of each one depends on distance.

So what?

The field impedance is unpredictable of the noise source is unpredictable. The field impedance of the loop does not change one bit, shielded or unshielded. You change nothing, except possibly balance which you might make better, might not, ...or might make worse if you mess up the shield through improper construction or grounding.

>Re-radiating conductors have near fields. Get rid of one of the fields >and reduce a contaminating influence on your direction determination or >signal measurment.

If you "get rid of" one of the time-varying fields, you get rid of all of the time varying fields. The only way to stop the influence of the re-radiating conductor is to remove it, detune it, or cancel its effect through phasing.

>If you are rotating a direction finding loop, its capacitance to nearby >conductors is changing. Electrostatic shielding mitigates this effect.

If the loop is balanced, a surrounding conductor that is not symmetrically placed will ALWAYS unbalance it....shield or not.

>Why argue against something which has been found to work. There are many >cases in which it is not worth the trouble. Nearly every >"All-American-5" a-c, d-c radio made for 50 years had a built-in loop >antenna. It obviously was not considered important to shield most of >those loops. On the other hand, most direction finding sets are equipped >with shielded loop antennas.

I'm not arguing that a shield can't help balance of the loop, it can IF it is properly installed. We all know balance is important in a DF antenna. We all know (or should know) the shield does nothing to help S/N ratio....which is all the radio is concerned with.

What is disturbing (frustrating) is how some people think if a "shield" is thrown over a loop it suddenly makes that loop immune to or less dependent on its surroundings. The "shield" has absolutely no effect at all on re-radiation from surroundings.

Somehow people try to extend a simple balance issue into all sorts or arm-waving magic, like the shield makes the influence of surrounding objects magically vanish.

73 Tom

5534. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:14:59 UTC
From: richardharrison@webtv.net
Message-ID: <9398-3ABA2503-69@storefull-114.iap.bryant.webtv.net>
Source record: 167858

Dennis Ferguson wrote:
"---IEEE definition is "converted to heat" and the question of whether the radiation you are interested in is also "heat" is still relevant."

Microwave in my oven is converted to heat in my popcorn. That`s what I want. Is it dissipated?

Best regards, Richard Harrison, KB5WZI

5535. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:21:40 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3aba26b0$0$62141$bbae4d71@news.net-link.net>
Source record: 167857

This sounds kind of heave as does using the Diamond antenna and a mount for it. Perhaps a fiberglass safety flag with a J-pole made from 450 window line taped to the flag would work better? I am simply going to install a panel mount BNC connector to the aluminum luggage rack on my bike and mount a rubber duck antenna on it. The added "ground plane" will greatly improve performance over just the duck on the HT, and I have pretty good repeater coverage where I ride anyway. Mind you this can be used on my road or off-road bikes but just moving the rack to the other bike. Since Walt in on a recliner, perhaps he is not as weight conscious as some folks, and maybe a custom mounting bracket attached to the back and top of the seat would work best. It would get the antenna out of the way and up high as well. I saw a site somewhere a couple of years ago that had a ham operating HF on a recumbent bike, as well as APRS and vhf/uhf. I think he towed a trailer too.
James S. Speck wrote in message ...
>I made a j-pole by shortening a 102" radio shack whip (cb) to 77" and
>forming a 19" one-inch spaced matching section at the lower end (locally
>heating the stainless until red with a propane torch, and hand bending). I
>would mount it on your bike by clamping the antenna to the rear sock
support
>with metal clamps. I'd feed the stub somewhere about 5" up from the bottom
>of the "U" section with the coax (moving it as necessary to where it's
>matched). A couple of coils in the RG-58 A/U coax feedline will serve as a
>balun. This is an effective antenna I've used on single and tandem upright
>bikes. I've got a Green Gear Sat-ur-day which is so far no-radio. 73, Jim
>W5AI.
><wsmith@cinci.rr.com> wrote in message
news:3ab63150.13092381@news-server...
>> I need a little advice about mounting an antenna on the rear of my
>> bike. I have used a Diamond 770 series dual band antenna on other
>> bikes with very good sucess. However, I have a new recumbent bike that
>> is giving me a little pause for thought. I have a couple of pictures
>> of the bike at:
>>
>> http://albums.photopoint.com/j/AlbumIndex?u=1025520&a=12162755&f=0
>>
>> On my other bikes I had a simple bracket to hold the antenna at the
>> rear end of the rack. But, as you can see, there is an aluminum
>> upright now in place to hold the cold weather/streamlining fabric. My
>> question is: If I mount the antenna bracket on the rack, what
>> problems am I going to run into with the close proximity of the
>> upright. I would think the maximum distance that I can separate the
>> two is about 4 inches. I am running almost exclusively 2 meters.
>>

>> Thanks for any help.
>>
>> Walt Smith, KB8ZQW
>> Harrison, Ohio
>> Member BMHA
>
>

5536. Re: Norman was dead !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:40:40 UTC
From: richardharrison@webtv.net
Message-ID: <24185-3ABA2B08-138@storefull-115.iap.bryant.webtv.net>
Source record: 167862

Actually Norman`s wife, Flo, found his cold body beside her.

Denver Braughler wrote:
"He woke up dead? Could I get back to you about that?"

It could happen. In unlimited time, anything can happen again. An insensate soul would be unaware of time passage and awaken to a new world. To that soul it would be as if no time had passed. Only Shirley McLane might have any memory of the past.

Ultraviolation can be injurious.

Best regards, Richard Harrison, KB5WZI

5537. Re: Are F-connectors constant impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 16:42:26 UTC
From: Karl Beckman <Karl.Beckman@Motorola.com>
Message-ID: <99da26$9tq5@nntp.cig.mot.com>
Source record: 167859

The 50 ohm version is known as the "Mini-UHF" connector. It is not
interchangeable with an "F" connector. The outer shell is the same
diameter, so the center pin of the 50 ohm plug must be larger in diameter
and therefore won't fit into the 75 ohm receptacle.

--
Karl Beckman, P.E.
GMDS-Northern Div (216) 265-2092
--

"JDer8745" <jder8745@aol.com> wrote in message
news:20010319171644.02282.00002293@ng-fy1.aol.com...
> Howdy,
>
> And if they are, do they make 50-Ohm F connectors?
>
> Experienced users or knowledgable replies only, please.
>
> tnx es 73 de Jack, K9CUN
>
>

5538. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:03:26 UTC
From: kb7qhc@home.com
Message-ID: <3aba2fce.1726252579@news.seanet.com>
Source record: 167860

On Wed, 21 Mar 2001 22:17:44 -0600, John O'Flaherty
<oflahert@toast.net> wrote:

>that dissipated energy can't be recovered except
>by expending more energy than that recovered.

Hi John,

And thus the "radiated power" captured by the antenna must be
amplified by an order of 1,000,000 before that information can be
recovered. By your definition "radiated power" and "dissipated power"
converge.

73's
Richard Clark, KB7QHC

5539. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:09:51 UTC
From: kb7qhc@home.com
Message-ID: <3abb317e.1726684511@news.seanet.com>
Source record: 167861

On Thu, 22 Mar 2001 10:14:59 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Dennis Ferguson wrote:
>"---IEEE definition is "converted to heat" and the question of whether
>the radiation you are interested in is also "heat" is still relevant."
>
>Microwave in my oven is converted to heat in my popcorn. That`s what I
>want. Is it dissipated?
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Not till you eat the popcorn, not till you pass the popcorn, not till...

Dissipation began at the Big Bang and is ongoing as we write.

73's
Richard Clark, KB7QHC

5540. Mir,will be "seen"w/naked eye???

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:17:22 UTC
From: kc5cqa <kc5cqa@devtex.net>
Message-ID: <ssckbt0i91ekp4oif0cocus7ii8ri0pk1c@4ax.com>
Source record: 167863

Saw this posted in the local news, and was wondering if we will be able to see the thing at nite, day, or at all, we live south of San Antonio,Tx.????? thanks for any and all input. news release below.

Russia sets Mir dump for Friday
MOSCOW (AP) - The Russian space agency on Tuesday issued the precise timetable for dumping the Mir,
saying the 15-year-old space station would be brought down into the South Pacific on Friday with a six-hour series of measured engine firings. After Mir descends to an altitude of 132 miles by early Thursday, Mission Control will switch on the station's computer and align Mir for descent. If the sometimes-unreliable computer and its orientation system work as expected, a Progress cargo ship docked at the station will fire its engines twice for about 20 minutes, around 3:30 a.m. Moscow time (7:30 p.m. ET Thursday) and an hour and a half later. Around 8 a.m. Moscow time (midnight Thursday ET), Progress engines will fire again to send the station hurtling into the ocean between Australia and Chile. Most of Mir is expected to burn up in the atmosphere, but up to 27.5 tons of debris are expected to reach the Earth's surface.

5541. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:24:21 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3ABA359D.EE0EBC64@earthlink.net>
Source record: 167864
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:

> Zoran Brlecic wrote:
> > Also, it's a damn shame the Department of Transportation holds a monopoly
> > on traffic regulations in this country, 'cause I'd like to switch to one that'll
> > allow me unlimited speed on highways, ...
>
> Move to Germany. :-)

Speaking of which, if Silicon Valley is near San Francisco, does that mean that Germanium Valley is 0.5 miles lower?

WA7AA

--
Support freedom of speech, or I'll kill you!

5542. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:48:52 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99ddu4gka0@208.206.142.104>
Source record: 167866
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:
>
> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3AB97B98.509B7A46@IEEE.org...
>
> > SNIP
> > If one doesn't like the price asked by the FCC, what competitor can one
> go to?
> > Again, if one is to obtain amateur radio privileges, one is forced to pay
> the price set by the > FCC which holds a monopoly.
> > --
>
> So what? If you want it, pay the price. If not, don't. There's no other
> hobby I know of which provides so many rewards for such a small investment.
>
> Obtain a business license, driver license, hunting license, fishing
> license, etc. These are all "monopoly" controlled. If you want one, you pay
> the price (and they are a lot costlier than that of a ham ticket).
>

They're doing their best to establish that a ham radio license is a
"right".

5543. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:57:10 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3ABA3CF6.3444404@usa.alcatel.com>
Source record: 167867

It occurs to me that one can test the assertion made here regarding a tubular shield with equipment readily at hand. If the electric field component of a radio signal is the same on the
inside of an open-ended, tubular shield as it is on the outside, then if we place a device sensitive to the electric field component inside such a shield, reception of that signal will be
unaffected.

Try this: Using an antenna short enough to be responsive mainly to electric component of the
incident field, place a receiver and antenna ï¿½ the whole shebang ï¿½ inside a highly conductive
tube long enough to completely enclose the receiver and antenna, tip to base, and perhaps to
extend for some distance past it as well. Leave the ends of the tube open.

If the receiver output remains the same, then the E-field is indeed the same inside a tubular
shield as it is outside. If it is attenuated, then the E-field does NOT wrap around to enter the
tubular shield.

Make the shield is made of a flexible material and you can even bend it into a semicircle, simulating the shape of a loop half-shield up to the gap. But that demonstration is really not
needed. Indeed, the explanation should not be needed; hundreds of these shields are used ï¿½
despite the assertion that the field inside is the same as outside ï¿½ as attenuators, by T-hunters. If the electric field inside a tube were indeed the same as outside, they would not
work.

Cortland

5544. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 17:57:42 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3ABA3D16.45870781@toast.net>
Source record: 167868

Richard Clark wrote:

> On Wed, 21 Mar 2001 22:17:44 -0600, John O'Flaherty
> <oflahert@toast.net> wrote:
>
> >that dissipated energy can't be recovered except
> >by expending more energy than that recovered.
>
> Hi John,
>
> And thus the "radiated power" captured by the antenna must be
> amplified by an order of 1,000,000 before that information can be
> recovered. By your definition "radiated power" and "dissipated power"
> converge.

Referring to the bulk of the energy, true. But the teeny fraction that is recovered is the useful and interesting part.
It occurs to me to look at it from the other direction. If you have a rotating shaft, that carries power from point a to point b, you would say that it was a power transmission system, and that only the losses in the bearings were dissipation. Similarly, if you used a laser beam to carry information and/or energy from point a to point b, it would be a power and/or information transmission system, with some greater losses, but still with some efficiency. The transmission part would be different than the dissipation, which would be lost as randomized molecular motion or the resulting incoherent, randomized ir radiation. Then as you defocus the laser beam and lower its frequency, it becomes a radio antenna (I'm referring to an imaginary transformation, of course). Nothing fundamental has changed in this transformation- only quantitative stuff like the percentage of loss. The information is still recoverable. I think the term dissipation would refer to the randomization of the energy and the information it once carried.
But, then, I'm not a physicist, nor a radio engineer- just an amateur trying to think of a useful distinction. :-)

john

5545. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 18:19:31 UTC
From: Rick Scott <kf7qz@yahoo.com>
Message-ID: <3ABA4233.A76F1114@yahoo.com>
Source record: 167870

> Ah, but the devil is in the details! It helps to know little things
> like using condensed milk as a cutting lubricant when rethreading the
> **specific** brass plumbing adapter from 1/8" NPT to 3/8-24 antenna
> thread. You gotta' get the Don Johnson book. That man has spent
> **way** too much time in his hardware store, but the details and
> insights he gives are invaluable.
>
> Jim Wilson
> WA5BRB

Ive had a couple offers of the plans, thanks for the information. If I could find his book somewhere I belive I would buy it.

Rick KF7QZ
Everett, Washington

5546. radiators for loops

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 18:26:15 UTC
From: aduffy@sprint.ca
Message-ID: <3ABA43C7.D2978EED@sprint.ca>
Source record: 167869

Does anyone have an idea of the effect of using copper strips instead of the commonly used copper pipe to construct a loop antenna for 80m? ie the effect on bandwidth etc. The 2 strips I have are 4.5" wide (there is also safety edges on them) and 8' long for the main loop. This would basically be just under the equivalent to a 1.5" dia pipe slit and flattened. But you would have 2 radiating surfaces exposed as opposed to 1.

The reason I'm asking so I can modify a nice design I've come across to compensate for the difference if any (smaller circumference etc).

Also would it be better to induction feed the loop using the same flat material (if I'm correct in my assumption on how it works). Or to direct connect as I've seen in other plans (with some form of matching setup).

Also I was wondering if it was necessary to mount the "tuning capacitor" inside the loop or can it be mounted outside without changing any properties of the loop (I don't know if there is any interaction of the capacitor and the antenna or not)

And finally any ideas on controlling the cordless screwdriver to reduce it's rpm without using gear reduction (if possible). I already have an idea to limit rotation to a half rev but don't want the thing to rotate in half a sec or less! :-)

Thanks in advance!

Tony
VA3ATD
(B +5wpm)

5547. Re: Isotron Antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 19:05:51 UTC
From: gpewitt@execpc.com
Message-ID: <3aba4e5e$0$18887$272ea4a1@news.execpc.com>
Source record: 167871

Mark, I have 5 of them 80, 40, 20, 15, and 10 meters. The best way to
tune is to beg-borrow-or steal an MFJ-259 or equivelent antenna
analyzer. Works great. First tune the antenna direct and then run
the 259 through your antenna tuner set to your favorite frequency
and write down the antenna tuner settings for any frequencies you
want to work. Or even make a chart of all frequencies.
It will save you -much- time and frustration. Once you have done all
this you will get great results from the Isotrons. Good luck. 73
Gary

On Tue, 20 Mar 2001 19:14:00 -0600, mrbrew <mrbrew64@excite.com>
wrote:

>I have the 10 meter isotron antenna a friend of mine gave to me,but he
>had no info on how to install it. If anyone has information on
>tuning,and where to mount it,,it would be greatly appreciated.
>73
>Mark
>

Gary Pewitt N9ZSV
414 355 8147

5548. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 19:41:43 UTC
From: richardharrison@webtv.net
Message-ID: <15895-3ABA5577-156@storefull-112.iap.bryant.webtv.net>
Source record: 167873

Cortland Richmond wrote:
"If the electric field component of a radio signal is the same on the inside of an open-ended, tubular shield as it is on the outside, then if we place a device sensitive the electric field component inside such a shield, reception of that signal will be unaffected.

We probably all have performed such an experiment by driving through a tunnel while operating a car radio. The tunnel is a waveguide operated well below cutoff frequency in the AM band, and in the FM band the dianeter of the tunnel is much greater than a 1/2-wavelength.

AM signals disappear a short distance into the tunnel. FM signals may go all the way through. This doesn`t seem to me to be a good way to test what a shield does to a loop. I think a shielded/unshielded loop could be easily tested on FM and TV frequencies.

5549. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 19:53:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3ABA5841.99C8C676@eznec.com>
Source record: 167872

It's the term "electrostatic fields", not "electrostatic capacitance", that was under discussion. The title of section 2.7 of _Radio Engineering_ (Third Edition) is "Shielding of Magnetic and Electrostatic Fields". In it, Terman speaks of "electrostatic shielding", "electrostatic flux", "electrostaic effects", all when speaking solely of time varying fields. I couldn't find anywhere in the section where he speaks of an electric field (which is what I've always called the E part of an EM field). And as Richard has quoted, he plainly states that "It is possible to shield electrostatic flux without simultaneously affecting the magnetic field. . ." I've found that I'm more easily confused than most people, and I do find this a bit confusing. But everyone agrees that Terman is always right, so I'm sure I'll understand it if I continue to study the informed discussion going on here among those of you to whom this is clear.

I realize that your statement that "nobody is confused" is another "literary device", so I won't interpret it literally.

Roy Lewallen, W7EL

"William E. Sabin" wrote:
>
> Roy Lewallen wrote:
>
> > I'm afraid that people are confusing electrostatic fields with
> > time-varying electric fields.
>
> The term "electrostatic capacitance" refers, as a matter of convenience, to
> the ratio of charge to voltage in a *physical* capacitor. This C is thus
> distinctive from the C of free space, which is associated with EM waves. In
> a shielded loop, "static" C is the actual, physical capacitive coupling from
> a nearby object to the loop that is inside the Faraday shield. It's just a
> matter of convenience that Terman uses. Nobody is confused.
>
> In the case of the loop antenna, it is helpful to use a literary device of
> this kind to avoid ambiguity.
>
> Bill W0IYH

5550. Re: Anyone ever made a sled for your tower??????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 20:28:44 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABA607C.5F33BFDE@oio.net>
Source record: 167874

Rudy Marcelletti wrote:
>
> It must have been a short free standing tower. Anybody come up with a way
> to do this with a guyed tower and still keep the tower up when you bring the
> antennas down?

It was on a 70 foot Rohn-25 tower guyed at two levels, 35 feet,
and at 70 feet. The top guys attach to the bottom of the 'hazer'.
The guys at 35 feet are disconnected at the bottom, and brought in
to a 'face' of the tower. When the 'hazer' is rased/lowered, it
'rides down over the bottom guys with plenty of clearance. You
don't want to pick a windy day to raise/lower the thing, but it
worked just fine...
'Doc

5551. Re: Beam antenna SWR changed!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 20:34:15 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABA61C7.254F1786@oio.net>
Source record: 167875

Rudy,
If you can figure ~that~ one out, your gonna make a
lot of money (LOL)! I guess it's best to do as the
instructions say (or common sense), keep the holes on
the down-side. After that, prayer comes to mind...
'Doc

5552. Re: SWR and antenna radiation effectiveness

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 20:39:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99dp04svh1@neptunium.btinternet.com>
Source record: 167877

KE4QJK asked -
>
> 1. how important is it an antenna be resonant if a trans-match
makes the
> transceiver 'think' the antenna is resonant?
========================

It is not of the slightest importance. Resonance or non-resonance
of an antenna has nothing to do with its radiating efficiency.

========================

> 2. does an antenna with an SWR of say 1.5:1 perform (get out)
better than
> say an antenna with an SWR of 5:1 but made to look OK with a
trans-match?

========================
No. There's no difference. A transmatch located immediately at
the output of the transmitter has no effect whatever on performance
of the feedline or antenna. The transmatch merely adjusts the load
presented to the transmitter to some desired value such as 50 ohms.

Reg.

5553. Re: coiled dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 20:51:31 UTC
From: k1bqt@aol.com
Message-ID: <20010322155131.05519.00000361@ng-fm1.aol.com>
Source record: 167876

Hi David--

My guess is 250 feet of wire should resonate around 75 meters (not 160) when coiled in this fashion--and make for a really lossy antenna.

Take a close look at what your restrictions are and what you can do to get around them.

For example, better to zip a lawn edger across the yard in the middle of the night when nobody's looking and bury 200-300 of coax leading into the forest than to put up a lossy antenna near (or in) the building where it can interfere with everyone's consumer electronic toys. Then you can put up a real multiband antenna (like a G5RV) and not bother anyone. You may lose 3-4 dB in the long feedline, but that loss will do wonders for flattening out the antenna's SWR--and you'll get out just fine.

Rick K1BQT

5554. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 21:03:10 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA688E.33F86270@IEEE.org>
Source record: 167879

Rick Scott wrote:
> Ive had a couple offers of the plans, thanks for the information. If I
> could find his book somewhere I belive I would buy it.

I had it but my dog ate it.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5555. Re: Anyone Remember Gotham Base Loaded Verticals?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 21:04:27 UTC
From: temporary0191398@aol.com
Message-ID: <20010322160427.27193.00000792@ng-ch1.aol.com>
Source record: 167878

Well.....
I recall the Gotham vertical. Actually, it wasn't too bad an antenna. Just from memory, I believe it was about 20 feet tall, with a coil to ground at the base. The feedline tapped the coil near the bottom, and the vertical radiator tapped the coil at various points for various bands. The last one I remember seeing used a coke bottle as the bottom insulator!

--Wayne
W5GIE

5556. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 21:06:56 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA6970.D91B86B8@IEEE.org>
Source record: 167881
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> They're doing their best to establish that a ham radio license is a
> "right".

Nope, we're doing our best to establish that in order to gain certain
privileges (amateur radio privileges, driving privileges, flying
privileges, etc.) a citizen is forced to meet the requirements
dictated by the government.
--
http://www.mindspring.com/~w6rca

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5557. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 21:08:59 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA69EB.2894F262@IEEE.org>
Source record: 167880
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
> Speaking of which, if Silicon Valley is near San Francisco, does that mean that
> Germanium Valley is 0.5 miles lower?

No, but Geranium Valley is down there somewhere.
--
http://www.mindspring.com/~w6rca

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5558. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 21:38:38 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3ABA70DE.BF44A345@usa.alcatel.com>
Source record: 167882

How does a short piece of copper or aluminum tubing differ in operation from
the tunnel?

Cortland

Richard Harrison wrote:

> Cortland Richmond wrote:
> "If the electric field component of a radio signal is the same on the
> inside of an open-ended, tubular shield as it is on the outside, then if
> we place a device sensitive the electric field component inside such a
> shield, reception of that signal will be unaffected.
>
> We probably all have performed such an experiment by driving through a
> tunnel while operating a car radio. The tunnel is a waveguide operated
> well below cutoff frequency in the AM band, and in the FM band the
> dianeter of the tunnel is much greater than a 1/2-wavelength.
>
> AM signals disappear a short distance into the tunnel. FM signals may go
> all the way through. This doesn`t seem to me to be a good way to test
> what a shield does to a loop. I think a shielded/unshielded loop could
> be easily tested on FM and TV frequencies.

5559. Re: ultraviolation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 22:13:52 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3ABA7920.B44ABB2E@bwcc.com>
Source record: 167883

Richard Clark wrote:
> Those who ignore these simple cautions were regularly admitted to sick
> bay with UV burns of the retina which "felt like sandpaper."
That would not be the retina (not that the retina is not damaged too!).
Perhaps the conjunctiva, cornea, or sclera.
The retina is the internal surface in the back of the eyeball.

5560. Push up Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 22:28:40 UTC
From: Paul Hinman <paulhinman@home.com>
Message-ID: <3ABA7C9A.822ADCA2@home.com>
Source record: 167884

I have beeen told that what I need is a push up mast. I have not been able to determine what exactly a push up mast is, or where I could buy one. Can anyone clue me in?

Thanx - Paul VE6LDS

5561. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 22:31:14 UTC
From: kb7qhc@home.com
Message-ID: <3aba780a.1744744189@news.seanet.com>
Source record: 167885

On Thu, 22 Mar 2001 11:57:42 -0600, John O'Flaherty
<oflahert@toast.net> wrote:

>Richard Clark wrote:
>
>> On Wed, 21 Mar 2001 22:17:44 -0600, John O'Flaherty
>> <oflahert@toast.net> wrote:
>>
>> >that dissipated energy can't be recovered except
>> >by expending more energy than that recovered.
>>
>> Hi John,
>>
>> And thus the "radiated power" captured by the antenna must be
>> amplified by an order of 1,000,000 before that information can be
>> recovered. By your definition "radiated power" and "dissipated power"
>> converge.
>
>Referring to the bulk of the energy, true. But the teeny fraction that is
>recovered is the useful and interesting part.

Refering to the bulk of power is necessary and inescapeable.

>It occurs to me to look at it from the other direction. If you have a
>rotating shaft, that carries power from point a to point b, you would say
>that it was a power transmission system, and that only the losses in the
>bearings were dissipation. Similarly, if you used a laser beam to carry
>information and/or energy from point a to point b, it would be a power
>and/or information transmission system, with some greater losses, but
>still with some efficiency. The transmission part would be different than
>the dissipation, which would be lost as randomized molecular motion or the
>resulting incoherent, randomized ir radiation.

Incoherence does not follow as a necessary component of the situation.
This is not a product of information loss unless you absolutely
require the same frequency out as applied. But then almost no
commercial receiver detects baseband signals, they convert to one or
more intermediate frequencies.

>Then as you defocus the
>laser beam and lower its frequency, it becomes a radio antenna (I'm
>referring to an imaginary transformation, of course). Nothing fundamental
>has changed in this transformation- only quantitative stuff like the
>percentage of loss. The information is still recoverable. I think the term
>dissipation would refer to the randomization of the energy and the
>information it once carried.

>But, then, I'm not a physicist, nor a radio engineer- just an amateur
>trying to think of a useful distinction. :-)
>
>john

Hi John,

The expectation that the IR must exhibit coherence to NOT become dissipative is an extraordinary addition to the "definition" of dissipationlessness. However, aside from red-shifted responses, the modulated data is still all there. It is simply suppressed by the low pass filter of the thermal mass. This is indistinguishable from path loss for which receivers are already designed to accomodate. (I will admit we are now talking about two different receivers, but the physics is the same.)

As this and threads like this grow, so do the qualifiers appended to the "definition" to fit the problem to the answer. such a growing definition begs the question: why so much explanation to replace the simple observation that "the power never returns" which is sufficent, and unambiguous.

The IR argument is not one of utility, it simply offers a disjoint to the IEEE mandate and exposes the inherent weakness of their definition.

73's
Richard Clark, KB7QHC

5562. Re: Push up Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 22:57:40 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABA8364.59F3A39A@IEEE.org>
Source record: 167887

Paul Hinman wrote:
>
> I have beeen told that what I need is a push up mast. I have not been
> able to determine what exactly a push up mast is, or where I could buy
> one. Can anyone clue me in?

Go to the TV antenna section of Lowe's, Home Depot, or Radio Shack
and look at one.
--
http://www.mindspring.com/~w6rca

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5563. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 23:03:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3ABA84AE.21B2B639@eznec.com>
Source record: 167886

I agree with Richard. We have to be careful with our comparisons. A waveguide is a different critter than a coaxial cable. There's no way you can get, say, 10 MHz energy to go much more than a very small distance into a half inch diameter waveguide without tremendous attenuation. The tunnel behaves this way at AM, as Richard says. But put another conductor down the middle of it, and a different mode, or field distribution (TEM) is possible. So there's no problem getting 10 MHz down a half inch piece of coax. Go down the half inch waveguide a few inches and you won't be able to detect any 10 MHz energy, but there's plenty at any point inside the coax (except inside the conductors of course).

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Cortland Richmond wrote:
> "If the electric field component of a radio signal is the same on the
> inside of an open-ended, tubular shield as it is on the outside, then if
> we place a device sensitive the electric field component inside such a
> shield, reception of that signal will be unaffected.
>
> We probably all have performed such an experiment by driving through a
> tunnel while operating a car radio. The tunnel is a waveguide operated
> well below cutoff frequency in the AM band, and in the FM band the
> dianeter of the tunnel is much greater than a 1/2-wavelength.
>
> AM signals disappear a short distance into the tunnel. FM signals may go
> all the way through. This doesn`t seem to me to be a good way to test
> what a shield does to a loop. I think a shielded/unshielded loop could
> be easily tested on FM and TV frequencies.

5564. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 23:37:56 UTC
From: richardharrison@webtv.net
Message-ID: <27256-3ABA8CD4-86@storefull-117.iap.bryant.webtv.net>
Source record: 167888

Cortland Richardson wrote:
"How does a short piece of copper or aluminum tubing differ from a tunnel?"

Size and scale. Tunnel or tube can be conducting material and mode tubes.

A conducting tube must be at least 1/2-wavelength in one transverse dimension to support radio propagation unless the tube has another conductor such as coax has to support propagation at frequencies lower than the 1/2-wave cutoff frequency.

I was considering the whip antenna as a capacitive probe as it is short in terms of frequency.

Best regards, Richard Harrison, KB5WZI

5565. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-22 23:59:17 UTC
From: n4jzh@knology.net
Message-ID: <3aba91ac.180629540@news.knology.net>
Source record: 167889

On Wed, 21 Mar 2001 21:55:13 -0600, 'Doc <w5lz@oio.net> wrote:

>
>
>W6RCecilA wrote:
>>
>> 'Doc wrote:
>> > I wouldn't know where to find it, but there has to be an
>> > explanation of the screwdriver antenna on the internet. They
>> > really aren't that complicated, the only difficult thing
>> > would be getting the coil form machined. Other than that,
>> > you should be able to find every thing else at your local
>> > hardware store.
>>
>> Do they have finger stock?
>
> I don't know, but an auto parts house should...
> 'Doc

If he ate it the next question is....
Is he resonant?
N4JZH Donnie

5566. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 00:00:03 UTC
From: 2w8ji@akorn.net
Message-ID: <3aba905b.178951487@news.accessunited.com>
Source record: 167890

On Thu, 22 Mar 2001 09:57:10 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>It occurs to me that one can test the assertion made here regarding a tubular shield with
>equipment readily at hand. If the electric field component of a radio signal is the same
on the
>inside of an open-ended, tubular shield as it is on the outside, then if we place a device
>sensitive to the electric field component inside such a shield, reception of that signal
will be
>unaffected.

Try it.

Try to receive a signal with a ferrite rod antenna inside the tubular
shield (with no lengthwise slot in the shield). Tell me how well it
receives.

After all, you are saying the magnetic foeld will pass freely through
the metal shield.

Take your transitor radio, and place in the middle of a hunk of stove
pipe a few feet long open on each end.

73 Tom

5567. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 00:06:07 UTC
From: 2w8ji@akorn.net
Message-ID: <3aba91ef.179355751@news.accessunited.com>
Source record: 167891

On Thu, 22 Mar 2001 11:53:37 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It's the term "electrostatic fields", not "electrostatic capacitance",
>that was under discussion. The title of section 2.7 of _Radio
>Engineering_ (Third Edition) is "Shielding of Magnetic and Electrostatic
>Fields". In it, Terman speaks of "electrostatic shielding",
>"electrostatic flux", "electrostaic effects", all when speaking solely
>of time varying fields. I couldn't find anywhere in the section where he
>speaks of an electric field (which is what I've always called the E part
>of an EM field). And as Richard has quoted, he plainly states that "It
>is possible to shield electrostatic flux without simultaneously
>affecting the magnetic field. . ." I've found that I'm more easily
>confused than most people, and I do find this a bit confusing. But
>everyone agrees that Terman is always right, so I'm sure I'll understand
>it if I continue to study the informed discussion going on here among
>those of you to whom this is clear.

I'm puzzled by something.

If Terman is always right, and we can accept every word his says
literally, why did his books change from revision to revision?

Did someone else sign his name on the earlier editions? Could it be
that some concepts are difficult to explain in a few words?

73 Tom

5568. Re: Cushcraft R5 - were they all created equal?.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 00:08:12 UTC
From: TH <hmmm@bzzt.com>
Message-ID: <tbl606c1vtmh7b@corp.supernews.com>
Source record: 167893

Thanks Ron, but like I previously said, the online manual doesn't look anything like mine, which was purchased sometime in 1987 or 88. The online manual revision is dated 10/89.

TH

"AC6V" <ac6v@ix.netcom.com> wrote in message news:3ABA0988.F55DC992@ix.netcom.com...
> TH -- the Cushcraft manual on-line for the R5 is at URL:
> http://www.cushcraft.com/support/tlai.htm
> --
> 73 From Rod AC6V In San Diego
> 700 Ham Topics & 6,000 Links
> http://ac6v.com/
> I Doubt, Therefore I Might Be!!!
> ==========
> TH wrote:
>
> > I've had an old R5 vertical in storage for quite a few years and recently
> > took it out for a re-furb and to use at my summer cottage. After
> > downloading the instructions from the Cushcraft manual site, I realized that
> > my R5 doesn't look anything like the one in the instruction manual. My trap
> > assemblies are much different than those shown in the manual. Most notable
> > is the 20 meter section which features a trombone-like tuning stub rather
> > than a straight tube like is shown in the manual. Can anyone shed some
> > light on the model I have, or maybe point me to an online manual somewhere?
> >
> > Thanks,
> > TH
> > Sturbridge, MA
>

5569. Re: coiled dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 00:08:44 UTC
From: 2w8ji@akorn.net
Message-ID: <3aba932f.179676059@news.accessunited.com>
Source record: 167892

On 22 Mar 2001 20:51:31 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>Hi David--
>
>My guess is 250 feet of wire should resonate around 75 meters (not 160) when
>coiled in this fashion--and make for a really lossy antenna.

Why do you guess that?

73 Tom

5570. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 00:52:26 UTC
From: kb7qhc@home.com
Message-ID: <3aba9d24.1754242036@news.seanet.com>
Source record: 167894

On Thu, 22 Mar 2001 15:03:10 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I agree with Richard. We have to be careful with our comparisons. A
>waveguide is a different critter than a coaxial cable. There's no way
>you can get, say, 10 MHz energy to go much more than a very small
>distance into a half inch diameter waveguide without tremendous
>attenuation. The tunnel behaves this way at AM, as Richard says. But put
>another conductor down the middle of it, and a different mode, or field
>distribution (TEM) is possible. So there's no problem getting 10 MHz
>down a half inch piece of coax. Go down the half inch waveguide a few
>inches and you won't be able to detect any 10 MHz energy, but there's
>plenty at any point inside the coax (except inside the conductors of
>course).
>
>Roy Lewallen, W7EL
>

Hi roy,

There is a real correlative to this found in the traffic tunnel north
of the Golden Gate Bridge (on the way to Sausalito/Tiburon).

To allow drivers to hear their favorite AM broadcasts without losing
the feed during their time in the tunnel, the bridge engineers strung
up a wire that ran outside of the tunnel and then fed into it. That
is, they forced the signal into the interior by creating an offset
coaxial transmission line wherein the cars were always within a field.

73's
Richard Clark, KB7QHC

5571. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:14:43 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3ABAA382.E2CD125A@usa.alcatel.com>
Source record: 167895

Yes, at AMBC wavelengths a tunnel works the same as a conducting tube, or close to it, anyway. However, the probe orientation for a car going into one is normally perpendicular to the axis of the tunnel (we hope) whereas the the probe orientation for a radio and whip inserted into a tubular shield would be normal to the axis of the tube.

Cortland

Richard Harrison wrote:

> Cortland Richardson wrote:
> "How does a short piece of copper or aluminum tubing differ from a
> tunnel?"
>
> Size and scale. Tunnel or tube can be conducting material and mode
> tubes.
>
> A conducting tube must be at least 1/2-wavelength in one transverse
> dimension to support radio propagation unless the tube has another
> conductor such as coax has to support propagation at frequencies lower
> than the 1/2-wave cutoff frequency.
>
> I was considering the whip antenna as a capacitive probe as it is short
> in terms of frequency.
>
> Best regards, Richard Harrison, KB5WZI

5572. Re: ultraviolation

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:19:16 UTC
From: richardharrison@webtv.net
Message-ID: <12036-3ABAA494-166@storefull-116.iap.bryant.webtv.net>
Source record: 167902

Denver Braughler wrote:
"That would not be the retina (not that the retina is not damaged too!). Perhaps the conjunctiva, cornea, or sclera."

I suppose the nerves in the retina are specialized in sensitivity to light and may disregard other stimuli. As I said before, working in a shipyard produced almost chronic itchy, scratchy, sandy eyes for me and we knew the cause. It wasn`t severe enough to be disabling and we knew the cause but had no treatment. The welders had their masks, but we weren`t much on precautions then. Chipping hammers at work right along side, but no ear plugs. Insulators installing asbestos, but without masks, etc. The only antidote we had plenty of was the salt tablet dispenser. Those were everywhere to replace salt lost in the gallons of sweat we all produced.

If you needed something, the ready answer was: "There`s a war on, you know." I soon volunteered for the navy.

Best regards, Richard Harrison, KB5WZI

5573. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:21:40 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <Nvxu6.350$kP1.3998@newsfeed.slurp.net>
Source record: 167897
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

I really wanted to stay out this but ole weird Roger is in so many newsgroups and he is the type of guy that everyone would love (to put duct tape over his mouth). But I find myself wanting to show him what I was told about libel laws.

Libel is proven in a court of law when the words, spoken, uttered, written, and or published which caused the libeled to be embarrassed to the point of duress. Do you think Roger has reached that point?

Some one near Roger's city should try to find out if Roger, cross dressing as a person, and the gall of imitating as an Amateur Radio Operator, has a job. (I doubt it.)

Someone should find out if the EM99 in his signature is related to Emergency Management or the local police identifier number for one weird mental impaired first class nut.

Why. Because if someone could find this information out I am sure the employer would not keep him around and certainly not the Emergency Management Agency of "it's" county!

Times getting short Roger. Repent your wicked ways my son. The end is coming sooner then you think. (my son! If you were my son you would not be on the internet you would be sitting in the hospital recovering from having fallen into the computer monitor.)

W9FPJ

5574. Re: antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:22:40 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <Azxu6.110108$p66.31114897@news3.rdc1.on.home.com>
Source record: 167896

Which One?

73 DE VA3QRP

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"MWhite" <mwhite@simplynet.net> wrote in message
news:lozt6.1215$lr6.304317@paloalto-snr1.gtei.net...
> Does anyone have an opinion on the through glass antenna's.
>
>

5575. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:23:06 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <3xxu6.352$kP1.5492@newsfeed.slurp.net>
Source record: 167898
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Wal-Mart has a better cash flow. W9FPJ

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABA0046.4CF738EA@IEEE.org...
> W6DKN wrote:
> >
> > "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
> > news:3AB97B98.509B7A46@IEEE.org...
> >
> > > SNIP
> > > If one doesn't like the price asked by the FCC, what competitor can
one
> > go to?
> > > Again, if one is to obtain amateur radio privileges, one is forced to
pay
> > the price set by the > FCC which holds a monopoly.
> >
> > So what? If you want it, pay the price. If not, don't. There's no other
> > hobby I know of which provides so many rewards for such a small
investment.
>
> I wasn't making a moral judgment, just an observation based on the
> way things are. Wal-Mart was not a good analogy to the government.
>
> > Obtain a business license, driver license, hunting license, fishing
> > license, etc. These are all "monopoly" controlled. If you want one, you
pay
> > the price (and they are a lot costlier than that of a ham ticket).
>
> Yep, that's exactly what I said. In return for certain privileges granted,
> the government forces citizens to meet certain requirements. That's what
> governments do.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5576. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:25:42 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <uzxu6.354$kP1.4423@newsfeed.slurp.net>
Source record: 167900
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

You are right. But gosh this is so much fun! W9FPJ
<ccom2@socket.net> wrote in message
news:3ab9743a.44402111@news.socket.net...
> He is baiting you all in to play his game, if no one comes
> out to play he will go away like any brat when he is alone.
> Mike
>
>
>
> KC8JBO <rmccall-no-spam@cotse.com> wrote:
>
> >"Dickhead Elliott" <elliotta@netusa1.net> whined and stamped his feet in
a
> >little girl tantrum in message
news:C6Vt6.247$dp4.4118@newsfeed.slurp.net...
> >>
>

5577. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:26:26 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <dAxu6.355$kP1.4936@newsfeed.slurp.net>
Source record: 167899
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

I am not an ASSHOLE! I don't have one.
"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
news:985130253.3ab7e50d406a9@webmail.cotse.com...
> Francis "Dickhead Elliott" <elliotta@netusa1.net> whined like a little
girl in
> message news:ECIt6.52$5V3.1430@newsfeed.slurp.net...
> >
> > Thank you for your reply.
>
> Anytime, ASSHOLE.
>
> > My attorney wants a few more so we can sue you for libel.
>
> BWHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!!!!!! Who's your attorney, Dumbass? I
want
> to be sure to enter as evidence on the countersuit those libelous posts
you
> made regarding ME, DUMBASS. I have them archived, you fuckhead. And
they'll
> come out in the "trial," what will all that bad press do for you in your
> shithole community? BWHAHAHAHA!!!!
> Or shall I contact your local Public Defender's office to reach
> your "attorney," welfare-recipient?
>
> >I have no police record anywhere. W9FPJ
>
> Suuuuuuuuuree you don't....the record shows otherwise.
BWHAHAHAHAHAHHAHAHAHA!!!!
>
>
>
>
>
> > "KC8JBO" <rmccall-no-spam@cotse.com> wrote in message
> > news:985087900.3ab73f9ca526d@webmail.cotse.com...
> > > LITTLE BOY FELLATOR "Francis Dickhead Elliott" <elliotta@netusa1.net>
> > brushed
> > > the raoches off of his keyboard in his ramshackle hovel and babbled in
> > > message news:Cgxt6.109$Rw3.1950@newsfeed.slurp.net...
> > > >
> > > > Thanks I will do that.
> > >
> > > Who will you get to do it FOR you, since you barely knbow how to turn

that
> > > CHEAP-ASSED computer of your on? You'd better erase all that
self-produced
> > > kiddie porn off your meager hard drive, before the FBI comes calling
> > again.
> > >
> > > > But he shows up in a lot of groups.
> > >
> > > Poor baby. It's nice to see I MEAN SO FUCKING much to you that you
keep
> > track
> > > of my posts, fuckhead.
> > >
> > > >How sad he must really be. W9FPJ
> > >
> > > Not as half as sad as what the Indiana Department of Law Enforcement
says
> > about
> > > you;
> > > Francis has been a Bbbbbbbbbbbbaaaaaaaaddd boy.....
> > >
> > >
> > >
> > >
> > >
> > > 73 de Roger, KC8JBO
> > > EM99|
> > > Yaesu FT-920 | Inverted vee @ 40 Feet
> > > Yaesu FT-90R | Copper J-pole
> > >
> > >
> >
> >
>
> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
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5578. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:27:01 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3ABAA665.AC8CDCBD@hiwaay.net>
Source record: 167901

Now you have ME confused- is there a difference between "perpendicular
to the axis" and "normal to the axis" ?

We may have found a part of your problem.

Bill-W4BSG

Cortland Richmond wrote:
>
> Yes, at AMBC wavelengths a tunnel works the same as a conducting tube, or
> close to it, anyway. However, the probe orientation for a car going into
> one is normally perpendicular to the axis of the tunnel (we hope) whereas
> the the probe orientation for a radio and whip inserted into a tubular
> shield would be normal to the axis of the tube.
>
> Cortland
>
> Richard Harrison wrote:
>
> > Cortland Richardson wrote:
> > "How does a short piece of copper or aluminum tubing differ from a
> > tunnel?"
> >
> > Size and scale. Tunnel or tube can be conducting material and mode
> > tubes.
> >
> > A conducting tube must be at least 1/2-wavelength in one transverse
> > dimension to support radio propagation unless the tube has another
> > conductor such as coax has to support propagation at frequencies lower
> > than the 1/2-wave cutoff frequency.
> >
> > I was considering the whip antenna as a capacitive probe as it is short
> > in terms of frequency.
> >
> > Best regards, Richard Harrison, KB5WZI

5579. Antenna choice...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:53:39 UTC
From: Bruno Quesnel <quesnelb@ve2.ele.etsmtl.ca>
Message-ID: <3ABAACA3.5707A18C@ve2.ele.etsmtl.ca>
Source record: 167903

Hi to all,

I'm looking to get a HF antenna and found the MQ-1 antenna details
at www3.sympatico.ca/tgmc

Has anyone work with this antenna or any antennas from this company
? Any comments welcome.

Thanks in advance

--
Bruno Quesnel va2bmg@videotron.ca
Genie Electrique quesnelb@ve2.ele.etsmtl.ca
Electrical Engineering VA2BMG
Ecole de Technologies Superieure http://www.findu.com/cgi-bin/find.cgi?va2bmg

5580. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 01:57:09 UTC
From: richardharrison@webtv.net
Message-ID: <15895-3ABAAD75-202@storefull-112.iap.bryant.webtv.net>
Source record: 167905

Tom, W8JI wrote:
"Could it be that some concepts are difficult to explain in a few words?'

Yes, and some are even more difficult to explain with many words.

My first copy of Terman is the 1937 edition which updated his 1932 publication. I bought it used in 1947 at the university bookstore. The price marked is $4.75, not cheap for a used book then, but worth every cent. The 1955 edition of Terman is many more pages, but still remarkably free of errata.

Think how much growth of information transpired in the years between `32 and `55. Electronics progressed from new indirectly heated cathodes to transistors in that 23 years. Television went from a laboratory curiosity to a huge industry that captured the attention of many individuals for hours every day.

Many more pages were needed in 1955 just to barely cover the field.

Best regards, Richard Harrison, KB5WZI

5581. Re: Push up Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:07:39 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3ABAAFEB.A362706E@dialpoint.net>
Source record: 167904

The common push up mast is several pipes about 10 feet long each. They are made to telescope inside each other . while this is only an example and would be looser than the push up mast, picture 3 pieces of pipe. One 1 inch in diameter, one 2 inches and one 3 inches in diameter. You put them together and push up one pipe, it is made so it will stop and not come out the top and there is a pin you put in to keep it from comming back down. Then you push up the next pipe and pin it. Yo now have a 30 foot mast. When guy wires are used they will hold small beams and rotators. You can get them form aobut 20 feet to 50 feet tall.

Paul Hinman wrote:
>
> I have beeen told that what I need is a push up mast. I have not been
> able to determine what exactly a push up mast is, or where I could buy
> one. Can anyone clue me in?
>
> Thanx - Paul VE6LDS

5582. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:21:01 UTC
From: richardharrison@webtv.net
Message-ID: <28855-3ABAB30D-170@storefull-113.iap.bryant.webtv.net>
Source record: 167911

Courtland Richmond wropte:
"However, the probe orientation for a car going into one (a tunnel) is normally perpendicular to the axis of the tunnel---."

Yes, and that is completely normal for probes in waveguide and coax. Take the coax slotted (trough) line probe for example , or a waveguide 1/4-wave feedhorn radiator as used with some parabolas. These are perpendicular to the axis of the coax or waveguide, too.

Best regards, Richard Harrison, KB5WZI

5583. Re: Antenna choice...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:23:57 UTC
From: TH <hmmm@bzzt.com>
Message-ID: <tbldo5m4shn8bf@corp.supernews.com>
Source record: 167909

I had the original HQ-1 Mini-Quad made back in the 70's and early 80's, and provide the following info:

20 meters - totally worthless (rotation has no effect on signal strength)
15 meters - practically worthless
10 meters - fair
6 meters - decent

Spikes frequently break off
ceramic coil forms sometimes crack
I melted the potting compound off the coils with 500 watts PEP!

Other than that, it's a pretty good antenna!

"Bruno Quesnel" <quesnelb@ve2.ele.etsmtl.ca> wrote in message
news:3ABAACA3.5707A18C@ve2.ele.etsmtl.ca...
Hi to all,
I'm looking to get a HF antenna and found the MQ-1 antenna details at
www3.sympatico.ca/tgmc
Has anyone work with this antenna or any antennas from this company ?
Any comments welcome.
Thanks in advance
--
Bruno Quesnel va2bmg@videotron.ca
Genie Electrique quesnelb@ve2.ele.etsmtl.ca
Electrical Engineering VA2BMG
Ecole de Technologies Superieure
http://www.findu.com/cgi-bin/find.cgi?va2bmg

5584. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:30:57 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E01F8F.7589%stewartx@sccoast.net>
Source record: 167906
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill Sohl wrote:

> As long as the "price" set by the FCC
> is rational you'll get no argument from
> me. If the state you live in set a
> driver's license price of $1000, would
> you just pay that or would you join the
> voice of public discontent and demand
> rational fees.

But these people would argue that the "price" set by the FCC (the code testing requirement) is not rational - it is not rational to still maintain testing for morse code when all other radio services have long ago dropped a similar requirement, or when code has been virtually eliminated in all other radio communitions (commercial, military, governement, marine, and so forth).

The code test requirement once served a purpose - to provide a means of code education for those who might enter other radio services and to provide a pool of trained operators to serve as a backup for other radio services during emergencies. Those purposes no longer exist today - the other radio services don't need people educated in code and CW is a very poor backup for cellular telephones, satellites, and electronic mail.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5585. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:31:57 UTC
From: richardharrison@webtv.net
Message-ID: <28855-3ABAB59D-172@storefull-113.iap.bryant.webtv.net>
Source record: 167910

Cortland Richmond wrote:
"However, the probe orientation for a car going into one (a tunnel) is normally perpendicular to the axis of the tunnel---."

Yes, and that is completely normal for probes in coax and waveguide. Take ths slotted (trough) line for example, or a waveguide 1/4-wave feed horn radiator as used with some parabolas. These are perpendicular to the axis of the coax or waveguide, too.

Best regards, Richard Harrison, KB5WZI

If this is a duplicate, I apologize. My server crashed when I pushed the send button so I retyped it. I may not have remembered verbatim what I typed the first time, either.

5586. 160 Meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:34:35 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3ABAB672.56225CA5@pobox.com>
Source record: 167907

I am going to set up a sloper 160 meter antenna using my 55ft tower,
alpha delta center insulator and 122 ft of radio works flexweave wire.

The catch is at about 85 ft I must make a 45 degree band for the
remaining length.

A friend suggested folding back the wire.

Any suggestions?

Ps, reason for the bend, property line limitation.

TIA..

5587. Re: Antenna choice...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 02:36:06 UTC
From: vk4sx <vk4sx@dingoblue.net.au>
Message-ID: <3abab61d$0$25500$7f31c96c@news01.syd.optusnet.com.au>
Source record: 167908

Hello Bruno,name is Dennis VK4SX,Bruno last year i became ill, and was
concerned about my antenna arrays,so i took the plunge and removed my 6 band
6 element beam and replaced it with the TGM MQ-2 , the 6 mtr section
of the MQ-2 isn't being used as i have a 5el yagi,but as far as
20/17/15/12/10 mtrs goes,works very well is quite well made,easy to tune,or
course the trade off is bandwidth on 20 mtrs ??(abt 175khz under 2.1.1)has
respectable front to back,and shows some gain,catche's less wind than some
verticles weathers storms extremely well,i live on the east coast of
Queensland and my concern with my other antennas was if it all fell down
when i wasn't home,hence the TGM MQ-2..if you decide to utilize the 50mhz
section talk to Tom Mackay and see what balun he settled on to cover 14mhz
thru 50mhz ?? as most baluns fail above 30mhz.
ok hope this helps.
Kind Regards
Dennis
ps
pass my rgds to Tom

"Bruno Quesnel" <quesnelb@ve2.ele.etsmtl.ca> wrote in message
news:3ABAACA3.5707A18C@ve2.ele.etsmtl.ca...
Hi to all,
I'm looking to get a HF antenna and found the MQ-1 antenna details at
www3.sympatico.ca/tgmc
Has anyone work with this antenna or any antennas from this company ?
Any comments welcome.
Thanks in advance
--
Bruno Quesnel va2bmg@videotron.ca
Genie Electrique quesnelb@ve2.ele.etsmtl.ca
Electrical Engineering VA2BMG
Ecole de Technologies Superieure
http://www.findu.com/cgi-bin/find.cgi?va2bmg

5588. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 03:24:09 UTC
From: wsmith@cinci.rr.com
Message-ID: <3abac11b.52054115@news-server>
Source record: 167912

On Thu, 22 Mar 2001 11:21:40 -0500, "Rudy Marcelletti"
<rudym@net-link.net> wrote:

>This sounds kind of heave as does using the Diamond antenna and a mount for
>it. Perhaps a fiberglass safety flag with a J-pole made from 450 window
>line taped to the flag would work better? I am simply going to install a
>panel mount BNC connector to the aluminum luggage rack on my bike and mount
>a rubber duck antenna on it. The added "ground plane" will greatly improve
>performance over just the duck on the HT, and I have pretty good repeater
>coverage where I ride anyway. Mind you this can be used on my road or
>off-road bikes but just moving the rack to the other bike. Since Walt in on
>a recliner, perhaps he is not as weight conscious as some folks, and maybe a
>custom mounting bracket attached to the back and top of the seat would work
>best. It would get the antenna out of the way and up high as well. I saw a
>site somewhere a couple of years ago that had a ham operating HF on a
>recumbent bike, as well as APRS and vhf/uhf. I think he towed a trailer
>too.

I think I have come up with an answer. I went to the local hardware
and found some 3/8" fiber glass rod, which is the same diameter as the
aluminum rod supporting the fabric on my bike. I think when I replace
the present rod with this I won't have the reflection problems I was
concerned with. I will try to get it completed this weekend and I will
report back.

Thanks to all for the constructive help. (Even though I still won't
use a bike flag ;-))

Walt Smith

5589. Re: Antene ATV

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 04:41:45 UTC
From: richardharrison@webtv.net
Message-ID: <9397-3ABAD409-239@storefull-114.iap.bryant.webtv.net>
Source record: 167914

Luis, CT2HKY wrote:
"Please send me the scheme of a 23cm antenna for ATV."

The easiest high-gain (14dbd) antenna is probably the rhombic.

At 1.3 GHz you need a line-of-sight path. 30km is 18 miles, and line-of-sight depends on altitudes of the antennas at both terminals, and any obstacles in the path.

Arnold B. Bailey wrote an excellent book, "TV and Other Receiving Antennas". Reciprocity rules, so the designs can be adapted to emission as well as reception. Bailey includes a TV rhombic designed for 200 MHz. To scale it for 1.4 GHz, we shrink it by a factor of 6.5.

The shrunken rhombic is (4) straight conductors forming a diamond. The rhombic is formed from (2) wires. Each wire is 170 cm long. These wires are separated by 85 cm at the middle.

One end of the rhombic will be directed at the repeater Luis wants to use. Connect the wires aimed at the target together through a non-inductive resistor of about 600 ohms. It should be capable of dissipating about 1/2 of the power of the transmitter used.

At the radio end of the rhombic, the drivepoint impedance is also about 600 ohms. depending on the wire size used in the rhombic a 600-ohm wire spacing may be about 30 cm. An insulator may be used to get this drivepoint spacing. A tapered line may be used to reduce the impedance to a lower value. If this can be placed in the same plane as the rhombic, line radiation may add to the antenna gain. 2-wavelengths (46 cm) is a good length for a tapered line. This is not critical. It could be 2x this length or 1/2 this length and work well. The tapered line can cut the impedance to 150 to 300 ohms by making the spacing the same as those on your line connector (about as close as you can get the wires together without shorting them). The impedance may actually be lower than 150 ohms.

A 1/4-wave matching line section can also be used to lower the line impedance, or a more exact exponential tapered line section can be worked out, but the simple approximate approach will probably be fine.

An Australian tried a similar rhombic and tapered line matching section a few weeks ago and reported excellent results.

Best regards, Richard Harrison, KB5WZI

5590. Re: 160 Meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 05:07:10 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABAD9FE.A3460518@oio.net>
Source record: 167913

Jerry,
Go ahead and do it. You won't really know till you
give it a try, and a bend in the 'slopper' shouldn't
affect things too much (better than nothing, right?).
'Doc

5591. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 06:04:21 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3abae752$0$14451$1dc6e903@news.corecomm.net>
Source record: 167915
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Amateur radio covers a wide spectrum of methods and modes. Some people specialize in SSB, others AM, still others TV, low power, EME, and yes some CW.

Qualification for an amateur radio license covers that same spectrum. We are tested on the Rules and Regulations governing the service. We are tested on our understanding of proper and appropriate operating technique. We are tested on how a radio signal is generated and detected. We are also tested on modes of operation i.e. ssb, am sstv, atv, antenna design and operation. And. We are tested on our comprehension of digital modes of communication to include morse code. To say that we should not be tested on a segment of the service just because it is old, outmoded and not used for anything ignores the fact that code is part of our general knowledge and an important part of our heritage.
I, personally, have a tin ear with some hearing damage due to loud noise encountered during my working career. I passed the 5 wpm code test for Novice/Tech Plus Plus many years ago. As a novice I made a number of CW contacts poorly. I upgraded to Tech and remained such until last year when I was able to upgrade to Extra. No I am not a fully qualified Extra as defined by some but I did work to learn that which was required by the FCC to qualify for the license. I also learned more than that which is required. This is the price I paid for my chosen hobby. I have also used my knowledge so gained over the years as a communicator in Civil Defense, Civil Air Patrol, various places of employment for a total of atleast seven radio services. All of this because I took the time and effort to learn the code. I have not, to date, used my morse code knowledge for anything other than to take the test but I am glad that I do know it.

Let me say in closing that the comments of Dwight Stewart, while contrary to what I believe, are just a valid as mine and, who knows, may be right. I have noticed some comments in this thread that are mean spirited and meant to agitate not convey rational argument. So, by all means lets continue the dialogue but lets keep it civil.

David Nagel, WD9BDZ and other call signs

Dwight Stewart wrote:
>
> Bill Sohl wrote:
>
> > As long as the "price" set by the FCC
> > is rational you'll get no argument from

> > me. If the state you live in set a
> > driver's license price of $1000, would
> > you just pay that or would you join the
> > voice of public discontent and demand
> > rational fees.
>
> But these people would argue that the "price" set by the FCC (the code
> testing requirement) is not rational - it is not rational to still maintain
> testing for morse code when all other radio services have long ago dropped a
> similar requirement, or when code has been virtually eliminated in all other
> radio communitions (commercial, military, governement, marine, and so
> forth).
>
> The code test requirement once served a purpose - to provide a means of
> code education for those who might enter other radio services and to provide
> a pool of trained operators to serve as a backup for other radio services
> during emergencies. Those purposes no longer exist today - the other radio
> services don't need people educated in code and CW is a very poor backup for
> cellular telephones, satellites, and electronic mail.
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net

5592. RF AMMETERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 06:07:09 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <99ep9bedj1@bob.news.rcn.net>
Source record: 167916

would it be practical to use an rf ammeter before & an rf ammeter after a transmatch instead of an swr meter?

5593. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 06:50:40 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <3nCu6.2477$y_2.488155@dfiatx1-snr1.gtei.net>
Source record: 167917
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Well, at least you passed the test, which adds a lot of validity to your opinion, pro or con CW. I personally find it hard to validate the opinions of those who condemn what they have never achieved.

In a trial, there is a thing called an expert witness. This person is allowed to enter their personal opinion on a subject as evidence because of their experience and expertise in the field of questioning. However, a common layman's personal opinion is disallowed due to lack of expertise on the subject.

73 de W6DKN

"David G. Nagel" <nagel@core.com> wrote in message
news:3abae752$0$14451$1dc6e903@news.corecomm.net...
> Amateur radio covers a wide spectrum of methods and modes. Some people
> specialize in SSB, others AM, still others TV, low power, EME, and yes
> some CW.
>
> Qualification for an amateur radio license covers that same spectrum. We
> are tested on the Rules and Regulations governing the service. We are
> tested on our understanding of proper and appropriate operating
> technique. We are tested on how a radio signal is generated and
> detected. We are also tested on modes of operation i.e. ssb, am sstv,
> atv, antenna design and operation. And. We are tested on our
> comprehension of digital modes of communication to include morse code.
> To say that we should not be tested on a segment of the service just
> because it is old, outmoded and not used for anything ignores the fact
> that code is part of our general knowledge and an important part of our
> heritage.
> I, personally, have a tin ear with some hearing damage due to loud noise
> encountered during my working career. I passed the 5 wpm code test for
> Novice/Tech Plus Plus many years ago. As a novice I made a number of CW
> contacts poorly. I upgraded to Tech and remained such until last year
> when I was able to upgrade to Extra. No I am not a fully qualified Extra
> as defined by some but I did work to learn that which was required by
> the FCC to qualify for the license. I also learned more than that which
> is required. This is the price I paid for my chosen hobby. I have also
> used my knowledge so gained over the years as a communicator in Civil
> Defense, Civil Air Patrol, various places of employment for a total of
> atleast seven radio services. All of this because I took the time and
> effort to learn the code. I have not, to date, used my morse code
> knowledge for anything other than to take the test but I am glad that I
> do know it.
>

> Let me say in closing that the comments of Dwight Stewart, while
> contrary to what I believe, are just a valid as mine and, who knows, may
> be right. I have noticed some comments in this thread that are mean
> spirited and meant to agitate not convey rational argument. So, by all
> means lets continue the dialogue but lets keep it civil.
>
> David Nagel, WD9BDZ and other call signs

5594. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 06:51:37 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <WICu6.250$ya4.121352@nntp2.onemain.com>
Source record: 167918
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6E01F8F.7589%stewartx@sccoast.net...
> Bill Sohl wrote:
>
> > As long as the "price" set by the FCC
> > is rational you'll get no argument from
> > me. If the state you live in set a
> > driver's license price of $1000, would
> > you just pay that or would you join the
> > voice of public discontent and demand
> > rational fees.
>
>
> But these people would argue that the "price" set by the FCC (the code
> testing requirement) is not rational - it is not rational to still
maintain
> testing for morse code when all other radio services have long ago
dropped a
> similar requirement, or when code has been virtually eliminated in all
other
> radio communitions (commercial, military, governement, marine, and so
> forth).
>
> The code test requirement once served a purpose - to provide a means
of
> code education for those who might enter other radio services and to
provide
> a pool of trained operators to serve as a backup for other radio
services
> during emergencies. Those purposes no longer exist today - the other
radio
> services don't need people educated in code and CW is a very poor backup
for
> cellular telephones, satellites, and electronic mail.
>
>
> Dwight Stewart (W5NET)

Amen. It is obsolete, totally irrational, and part of the very definition
of an Amateur in the treaty and will be for the next five years or so.
Anything over 12 always was ridiculous.

Given that, what are you going to do about it? You could pass it, you
could simply shut up and wait, you could send out for a pastrami on white

with mayo, have sex, or expect rain. There are any number of wondrous things to be accomplished.

So for why are we treated to the self-serving observations on the obvious? Why not try to sell someone who matters? We are just a bunch of people who cared enough to DO it and know bullshit when we see it. I don't care if you pass it or not but please do not insult my intelligence.

Dick N&#65533;BK

5595. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 07:01:02 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3ABAF4AE.11382A85@toast.net>
Source record: 167769

Richard Clark wrote:

> On Thu, 22 Mar 2001 11:57:42 -0600, John O'Flaherty
> <oflahert@toast.net> wrote:
>
> >Richard Clark wrote:
> >
> >> On Wed, 21 Mar 2001 22:17:44 -0600, John O'Flaherty
> >> <oflahert@toast.net> wrote:
> >>
> >> >that dissipated energy can't be recovered except
> >> >by expending more energy than that recovered.
> >>
> >> Hi John,
> >>
> >> And thus the "radiated power" captured by the antenna must be
> >> amplified by an order of 1,000,000 before that information can be
> >> recovered. By your definition "radiated power" and "dissipated power"
> >> converge.
> >
> >Referring to the bulk of the energy, true. But the teeny fraction that is
> >recovered is the useful and interesting part.
>
> Refering to the bulk of power is necessary and inescapeable.
>
> >It occurs to me to look at it from the other direction. If you have a
> >rotating shaft, that carries power from point a to point b, you would say
> >that it was a power transmission system, and that only the losses in the
> >bearings were dissipation. Similarly, if you used a laser beam to carry
> >information and/or energy from point a to point b, it would be a power
> >and/or information transmission system, with some greater losses, but
> >still with some efficiency. The transmission part would be different than
> >the dissipation, which would be lost as randomized molecular motion or the
> >resulting incoherent, randomized ir radiation.
>
> Incoherence does not follow as a necessary component of the situation.
> This is not a product of information loss unless you absolutely
> require the same frequency out as applied. But then almost no
> commercial receiver detects baseband signals, they convert to one or
> more intermediate frequencies.

The incoherence is part of the randomness, or the lack of signal. After dissipation, there is nothing but some fuzzy warmth, and then only to colder objects. There is no necessity of sameness of frequency, but when you convert a single frequency or a limited set of frequencies carrying information into

heat, then you have a random mix of frequencies without information.

> >Then as you defocus the
> >laser beam and lower its frequency, it becomes a radio antenna (I'm
> >referring to an imaginary transformation, of course). Nothing fundamental
> >has changed in this transformation- only quantitative stuff like the
> >percentage of loss. The information is still recoverable. I think the term
> >dissipation would refer to the randomization of the energy and the
> >information it once carried.
> >But, then, I'm not a physicist, nor a radio engineer- just an amateur
> >trying to think of a useful distinction. :-)
> >
> >john
>
> Hi John,
>
> The expectation that the IR must exhibit coherence to NOT become
> dissipative is an extraordinary addition to the "definition" of
> dissipationlessness. However, aside from red-shifted responses, the
> modulated data is still all there. It is simply suppressed by the low
> pass filter of the thermal mass. This is indistinguishable from path
> loss for which receivers are already designed to accomodate. (I will
> admit we are now talking about two different receivers, but the
> physics is the same.)
>
> As this and threads like this grow, so do the qualifiers appended to
> the "definition" to fit the problem to the answer. such a growing
> definition begs the question: why so much explanation to replace the
> simple observation that "the power never returns" which is sufficent,
> and unambiguous.
>
> The IR argument is not one of utility, it simply offers a disjoint to
> the IEEE mandate and exposes the inherent weakness of their
> definition.

The IR really has nothing to do with it- heat at a certain temperature level is in the IR range. Heat at a much lower temperature would be random, incoherent RF. But there is a difference between heat and signal. It seems peculiar to say that the modulated information is still there. To the degree that you look at it as a low pass filter, and to the degree that the signal does get through, it is not dissipated. The signal that doesn't make it through the filter, and is dissipated, no longer exists as signal.

john

5596. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 07:08:15 UTC
From: richardharrison@webtv.net
Message-ID: <9398-3ABAF65F-104@storefull-114.iap.bryant.webtv.net>
Source record: 167770

Tom, W8JI wrote:
"We all know (or should know) the shield does nothing to help S/N ratio....which is all the radio is concerned with."

Another "expert" to weigh in on the side of the shielded loop is W.N. Christiansen, contributor of the "Aerials and Transmission Lines" section of F. Langford-Smith`s Radiotron Designer`s Handbook".

He says: "The reason for this is that a balanced or shielded loop responds to the magnetic component of the field of an aerial, whereas the capacitance type aerial responds to the electric component. In the radiation field they (E&H fields) are equal and mutually dependent. In the immediate vicinity of an aerial they are not equal, and the electric cxomponent increases more rapidly than does the magnetic field (component) as one approaches the aerial. Hence in the vicinity of a radiation source of r-f noise, a loop aerial will pick up less (noise) energy than will a vertical aerial."

OK. In the near field, which depends on the size of the aerial (noise radiator of opportunity), the electric component from a noise source is larger than the magnetic component. So, in the near field of a noise source, an antenna which is more responsive to the magnetic field than it is to the electric field will have a S/N advantage over an antenna which responds equally to both components of the near field. This has more to do with the size of the noise radiator than it does with the size of the loop (so much for a distance of "a couple of loop diameters").

We have a whole pantheon of "experts" contradicting Tom`s declaration that the electric field is "inseparable" from the magnetic field by the shield around a loop antenna. It is just an example of a Faraday screen or electrostatic shield. I believe Terman started with the electrostatic shield in an ordinary transformer as his first example. Adding another to the gallery of dead "experts" is unlikely to change Tom`s mind. Thanks anyway, Mr. Christiansen.

Best regards, Richard Harrison, KB5WZI

5597. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 07:14:57 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abb0971$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167771

"W6RCecilA" wrote ...
> Gary Peach wrote:
> > "W6RCecilA" wrote
> > > Seems to me, there's not much of an energy conversion going
> > > from electrical energy of a certain frequency to EM energy
> > > of the same frequency.
> >
> > Yes! light bulbs (lamps) are notoriously inefficient.
>
> But Gary, that's NOT electrical energy and EM energy OF THE
> SAME FREQUENCY. I'm talking about accelerating electrons
> to generate photons coherently.

In that case consider the X-Ray tube at 2% efficiency if you're lucky.

What was that about from DC to blue light?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5598. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 07:17:29 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abb0972$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167772

"Richard Harrisonwrote
> Microwave in my oven is converted to heat in my popcorn.
>That`s what I want. Is it dissipated?

Probably a few hours later, but if you eat too much pop corn
you're sure to become dissipated if not constipated
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5599. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 07:24:23 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abb0972$1$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167774

"John O'Flaherty" wrote
> I agree, but there you aren't talking about randomized thermal radiation,
which
> contains no information but its own presence.

Obviously you haven't done any Radio Astronomy where to the average listener
the signals are indistinguishable from noise.
In fact a great deal of information is carried by that noise if you know how
to extract it.

Think of a simple example of noise carrying information.
The thermostat on next-door's water heater,
Brrrp! they're having a shower again.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5600. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 07:28:43 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abb0973$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167776

"Richard Harrison" wrote
mea culpa, Yes of course I should have said per square metre.

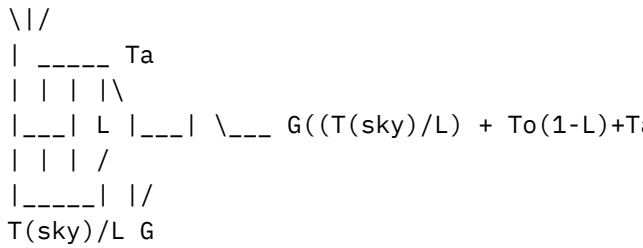
Interesting thing is when you apply Latitude correction.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5601. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 08:04:19 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abb0974$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167773

"Ian White, G3SEK"
I guess we have come some way off topic, and now that some time has passed for the original topic to digest I was a little disappointed that no-one came up with this simple solution (View in fixed font)

T(sky)



Where T(sky) is large compared to To and G approximates L
And Ta is equal to or less than To
Noise delivered to the output terminal of the antenna plus amplifier approximates T(sky) + To
Signal out is S G/L
Signal to noise degradation is T(sky)/[T(sky)+To]
or 10log(1+[To/T(sky)])

If G is much larger than L the antenna inefficiency loss then degradation of signal to noise does occur. I guess having a preset gain control on the amplifier to set it about equal to or very slightly greater than L will help.
This only works because T(sky) is very much larger than To

Obviously many Hams are quite afraid of a little simple maths;
shame really cos they are missing out on a most pleasurable part of the hobby.

As for exercising ideas, they are intended as thought provokers for those not as expert as the old hands that like to think that they are; sort of one stage further than RAE revisited.
The bit of kit that you designed and built yourself has infinitely more pleasure than the expensive factory made one.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5602. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 08:07:20 UTC
From: richardharrison@webtv.net
Message-ID: <15895-3ABB0438-242@storefull-112.iap.bryant.webtv.net>
Source record: 167775

Tom, W8JI wrote:
"Gosh, and all along I kept saying all the shield does is change the balance of the loop."

Well, there`s more to it than that. The shield can help keep the balance of the loop from changing. It also has another function, that is to make the loop insensitive to the electric field. A host of distinguished authors say so.

Terman, on page 38, "Electronic and Radio Engineering", 1955, says:
"It is possible to shield electrostatic (yes this means time-varying electric lines of force) flux without simultaneously affecting the magnetic field by surrounding the space to be shielded with a conducting cage that is made in such a way as to provide no low-resistance path for the flow of eddy currents, while at the same time offering a metallic terminal upon which electrostatic flux lines can termnate."

The insulated gap in a loop shield breaks the path for eddy currents (those pesky currents which go in circles, in this case it would be all the way around the shield loop were it not for the insulated gap in the shield). But, the insulated gap loop shield does offer a terminal for the electrostatic limes of force (and a terminal is an end, in this case for electrostatic lines of force).

So, we have a shielded loop which is responsive to the magnetic field but unresponsive to an electric field.

Tom can deny all he wants, but many authors say the same thing and some gave papers to the IRE on the subject about 70 years ago and these data have not been refuted and are references which later authors give for their work.

Best regards, Richard Harrison, KB5WZI

5603. Re: RF AMMETERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 08:48:41 UTC
From: richardharrison@webtv.net
Message-ID: <13804-3ABB0DE9-1@storefull-112.iap.bryant.webtv.net>
Source record: 167778

Marvin, N3BQA wrote:
"Would it be pratical to use an r-f ammeter before and after a
transmatch instead of an SWR meter?"

An ammeter can determine SWR if measurements are taken at points
sepatated by 1/4-wavelength on the line to get the ratio of maximum to
minimum current.

To get power at a point with an ammeter you have to know the impedance.
If you know the power and the impedance you can calculate the voltage,
and so it goes.

What anyone really needs is a Bird wattmeter.

Best regards, Richard Harrison, KB5WZI

5604. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 09:02:07 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <jiEu6.13535$dx2.435236@paloalto-snr1.gtei.net>
Source record: 167777
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Richard McCollum" <rmccoll@radiks.net> wrote in message
news:WlCu6.250$ya4.121352@nntp2.onemain.com...
>
> "Dwight Stewart" <stewartx@sccoast.net> wrote in message
> news:B6E01F8F.7589%stewartx@sccoast.net...
> > Bill Sohl wrote:
> >
> > > As long as the "price" set by the FCC
> > > is rational you'll get no argument from
> > > me. If the state you live in set a
> > > driver's license price of $1000, would
> > > you just pay that or would you join the
> > > voice of public discontent and demand
> > > rational fees.
> >
> >
> > But these people would argue that the "price" set by the FCC (the
code
> > testing requirement) is not rational - it is not rational to still
> maintain
> > testing for morse code when all other radio services have long ago
> dropped a
> > similar requirement, or when code has been virtually eliminated in all
> other
> > radio communitions (commercial, military, governement, marine, and so
> > forth).
> >
> > The code test requirement once served a purpose - to provide a means
> of
> > code education for those who might enter other radio services and to
> provide
> > a pool of trained operators to serve as a backup for other radio
> services
> > during emergencies. Those purposes no longer exist today - the other
> radio
> > services don't need people educated in code and CW is a very poor
backup
> for
> > cellular telephones, satellites, and electronic mail.
> >
> >
> > Dwight Stewart (W5NET)
>

> Amen. It is obsolete, totally irrational, and part of the very
definition
> of an Amateur in the treaty and will be for the next five years or so.
> Anything over 12 always was ridiculous.
>
> Given that, what are you going to do about it? You could pass it, you
> could simply shut up and wait, you could send out for a pastrami on white
> with mayo, have sex, or expect rain. There are any number of wondrous
> things to be accomplished.
>
> So for why are we treated to the self-serving observations on the
obvious?
> Why not try to sell someone who matters? We are just a bunch of people
> who cared enough to DO it and know bullshit when we see it. I don't care
> if you pass it or not but please do not insult my intelligence.
>
> Dick Nï¿½BK
>
>

Well said !

73 de W6DKN

5605. Homebrew Coax Colinear Tuning - Help Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 10:47:18 UTC
From: Nick Filer <nick@cs.man.ac.uk>
Message-ID: <99f9h4$sc3$1@m1.cs.man.ac.uk>
Source record: 167779

Last night I put together a coax (RG58) collinear for 435MHz. The design is 8 half waves connected as usual centre to braid, braid to centre (see diagram). On top I have a 1/4 wave of wire connected to the centre core. At the bottom I have a 1/4 wave of aluminium tube. The coax was cut into 235 mm lengths. Each length has as close I could measure/check it 4mm core, then 3-4 mm braid exposed at each end. This should give a transmission line of 227-228 mm, or conversely a 1/2 wave at 435Mhz or thereabouts. To keep it straight it is all attached to a long doweling rod.

Key: === - coax braid --------- - coax core +++++ top 1/4 wave

```
_________
========||======-----------======-----------======-----------========-
--------------++++
----------------||-----------======-----------======-----------=======--
-------------========
---------------- 1 2 3 4 5
6 7 8
^ ^
Feed inside 1/4 wave
Al tubing. Tight fit!
```

With the feed core connected to the lowest 1/2 wave's core and the braid to the braid I got an SWR of 3. The centre seems to be around 435MHz where I wanted it. It rises a bit at the edges of the UK's 70cm band which is 430-440MHz. I managed to pull the SWR down to 2.5 by adding a ferrite bead to the feed about 1 wavelength below the aluminium tube. Moving the tube up down a bit seems to have no effect on the SWR at all. I tried trimming the top 1/4 wave but this had no noticeable effect.

Any ideas how I go about tuning this thing. I have an SWR/power meter for the band and an analogue VOM?

My thoughts:

1. Would it be better to attach the antenna feed to the braid of the lowest element. That way the top 1/4 wave would be attached to the main feed.

1a. If so, would I connect the aluminium tube to the antenna feed or to the ground feed?

2. Given that RG58 braid is very fine and therefore my transmission lines are probably not very accurate +/- 1-2 mm in places. Would it be a good idea to find some way of ensuring the braid at each connection is the correct length. My initial idea is to cut a thin strip of aluminium cooking foil and wind it around the exposed braid at each connection. An alternative might be fine copper wire of any type wound around and perhaps soldered.

Any help/advice would be gratefully received.

Nick - M1NIC

5606. Re: coiled dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 11:01:48 UTC
From: Dave <rni220fgi@email.com>
Message-ID: <99fajq$110lo$1@ID-49477.news.dfncis.de>
Source record: 167780

The other obvious thing, is to make sure you use your space
efficiently....like sloping at an angle and going diagonally accross you
yard/garden whatever.
It is amazing how much more wire goes up in the air with a careful bit of
thinking.

david s. <david@hedgewoodhomes.com> wrote in message
news:y23u6.4829$%N.27660@skycache.prestige.net...
> okay I am looking for pointers and comments on an antenna that I am going
to
> build so here are the specs
>
> I am going to use a piece of cardboard concrete form that is 12" in
diameter
> and 12' long.(this is just for shaping the antenna) 3' circumference and
72"
> on each side.
> I am going to use 14awg bare solid copper
> 250' of 14 awg wire 250'/2=125'/3=41.667 72/41.667= 1.73
> 1" pvc frame to support the antenna once it is installed.
>
>
>
>
> starting in the middle of the tube I am going to wrap 125' each side
around
> the tube keeping the wraps spaced as even as I can for a total wire length
> of 250'. if my math is right should mean that the wire coils should be
about
> 1.75 inches apart.
>
> now many might realize that the wire is the right length for a dipole
which
> is where I am getting my dimensions from however I do not have the room to
> put up a dipole I can put up something that is about 12' long and be
> horizontal.
>
> I am hoping to use this with my Kenwood ts-450s/at I know the antenna is
> just a compromise but can anyone tell me if it will work won't work what
> problems I am going to encounter? will it work on all the hf bands?
anything
> I should change? is it a crazy hair brained idea?
> comments please
>

>
>

5607. Re: An ARRL letter that League members can use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 12:02:57 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <WUGu6.76$Mi4.878@newsfeed.slurp.net>
Source record: 167781

Is this fun or what? Look who is running scared! By the way thanks for the info sir roger. I will keep it handy. By the way I love to dance. Have not had a good dance since the Vietnam days......see ya!
"KC8JBO" <rmccall-no-spam@cotse.com> wrote in message news:985317054.3ababebee70aa@webmail.cotse.com...
> --
> Hostname: rash5a-163.kokomo.in.hypervine.net
> IP Address: 216.117.65.163
> Decimal Address: 3631563171
> --
> This is Francis' ISP.............
>
> --------------------------Whois Results--------------------------
>
> The Data in Network Solutions' WHOIS database is provided by Network
> Solutions for information purposes, and to assist persons in obtaining
> information about or related to a domain name registration record.
> Network Solutions does not guarantee its accuracy. By submitting a
> WHOIS query, you agree that you will use this Data only for lawful
> purposes and that, under no circumstances will you use this Data to:
> (1) allow, enable, or otherwise support the transmission of mass
> unsolicited, commercial advertising or solicitations via e-mail
> (spam); or (2) enable high volume, automated, electronic processes
> that apply to Network Solutions (or its systems). Network Solutions
> reserves the right to modify these terms at any time. By submitting
> this query, you agree to abide by this policy.
>
> Registrant:
> IDC (HYPERVINE2-DOM)
> 8500 W 110th St. Suite 500
> Overland Park, KS 66210
> US
>
> Domain Name: HYPERVINE.NET
>
> Administrative Contact, Billing Contact:
> Hoover, Jennifer (JHK1202) jhoover@ISMG.NET
> Internet Services Management Group
> 3625 Park Place, Suite 150
> Mishawaka , IN 46545
> (219) 247-3405 (FAX) (219) 247-3414
> Technical Contact:
> Day, Don (DDD535) dday@HYPERVINE.NET
> Internet Services Management Group

> 3625 Park Place, Suite 150
> Mishawaka , IN 46545
> (219) 247-3405 (FAX) (219) 247-3414
>
> Record last updated on 22-Nov-2000.
> Record expires on 05-Jul-2001.
> Record created on 05-Jul-1999.
> Database last updated on 22-Mar-2001 00:57:00 EST.
>
> Domain servers in listed order:
>
> NS1.IDIR.NET 209.172.192.2
> NS2.IDIR.NET 209.172.194.2
>
>
> ---------------------------Arin Results---------------------------
>
> Internet Direct Communications (NET-IDIR-BLK-2)
> 8500 W. 110th St, Suite 500
> Overland Park, KS 66210
> US
>
> Netname: IDIR-BLK-2
> Netblock: 216.117.0.0 - 216.117.111.255
> Maintainer: IDIR
>
> Coordinator:
> Network Operations Center (NOC107-ORG-ARIN) noc@IDIR.NET
> (913)982-9000
> Fax- (913)981-6001
>
> Domain System inverse mapping provided by:
>
> NS1.IDIR.NET 209.172.192.2
> NS2.IDIR.NET 209.172.194.2
>
> Record last updated on 25-Oct-2000.
> Database last updated on 21-Mar-2001 22:42:52 EDT.
>
> The ARIN Registration Services Host contains ONLY Internet
> Network Information: Networks, ASN's, and related POC's.
> Please use the whois server at rs.internic.net for DOMAIN related
> Information and whois.nic.mil for NIPRNET Information.
>
>
>
> "Dick Elliott" <elliotta@netusa1.net> wrote in message news:dAxu6.355
> $kP1.4936@newsfeed.slurp.net...
> > I am not an ASSHOLE!
>

> Oh, yes you are, ASSHOLE.
>
> >I don't have one.
>
> You speak out of it on a daily basis, Francis........
> BWHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!!!!
>
> Or are you admitting you wear DEPENDS??? BWHAHAHAHAHAHAHAHAHAHAHA!!!!!!
> Or id you lose your asshole to CANCER after years of being sodomized????
> BWHAHAHAHAHAHAHAHAHAHAHAHAHAHAHA!!!!!!
>
>
> 73 de Roger, KC8JBO
> EM99|
> Yaesu FT-920 | Inverted vee @ 40 Feet
> Yaesu FT-90R | Copper J-pole
>
>

5608. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 13:04:03 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <VVKTM9ADn0u6EAz$@ifwtech.plus.net>
Source record: 167782

Gary Peach wrote:
>
>"Ian White, G3SEK"
>I guess we have come some way off topic, and now that some time has passed
>for the original topic to digest I was a little disappointed that no-one
>came up with this simple solution (View in fixed font)
>
>T(sky)
>
>\|/
> | _____ Ta
> | | | |\
> |___| L |___| ___ G((T(sky)/L) + To(1-L)+Ta)
> | | | /
> |_____| |/
> T(sky)/L G
>
>Where T(sky) is large compared to To and G approximates L
>And Ta is equal to or less than To
>Noise delivered to the output terminal of the antenna plus amplifier
>approximates T(sky) + To
>Signal out is S G/L
>Signal to noise degradation is T(sky)/[T(sky)+To]
> or 10log(1+[To/T(sky)])
>
>If G is much larger than L the antenna inefficiency loss then degradation of
>signal to noise does occur. I guess having a preset gain control on the
>amplifier to set it about equal to or very slightly greater than L will
>help.
>This only works because T(sky) is very much larger than To
>
>Obviously many Hams are quite afraid of a little simple maths;
>shame really cos they are missing out on a most pleasurable part of the
>hobby.
>
That's a pretty good explanation. The only amendment I'd suggest is that T(sky) is not appropriate on the lower bands where antennas don't have much directivity - well, not much by UHF, microwave and radio astronomy standards - and will pick up noise from all directions. T(ambient) might be a better label.

For an in-depth tutorial on noise and practical noise figure measurements, try:
http://literature.agilent.com/litweb/pdf/5952-3706E.pdf

>As for exercising ideas, they are intended as thought provokers for those
>not as expert as the old hands that like to think that they are; sort of one
>stage further than RAE revisited.

I'm all for that (and have some track record in that area) but also I
strongly believe that, in amateur radio and much else, theory needs to
be tied to an awareness of the practical knowledge that already exists.
The real power comes from theory and practice working together.

>The bit of kit that you designed and built yourself has infinitely more
>pleasure than the expensive factory made one.

Hey, don't get me started on 'design' in amateur radio!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5609. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 13:50:09 UTC
From: 2w8ji@akorn.net
Message-ID: <3abb5019.228044971@news.accessunited.com>
Source record: 167783

On Fri, 23 Mar 2001 02:07:20 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Well, there`s more to it than that. The shield can help keep the balance >of the loop from changing. It also has another function, that is to make >the loop insensitive to the electric field. A host of distinguished >authors say so.

That is utter nonsense Richard.

The field impedance of the loop with a shield is EXACTLY the same as the field impedance of a loop without a shield.

Anyone who knows anything at all about EM waves should understand that.

>Terman, on page 38, "Electronic and Radio Engineering", 1955, says: >"It is possible to shield electrostatic (yes this means time-varying >electric lines of force) flux without simultaneously affecting the >magnetic field by surrounding the space to be shielded with a conducting >cage that is made in such a way as to provide no low-resistance path for >the flow of eddy currents, while at the same time offering a metallic >terminal upon which electrostatic flux lines can termnate."

You lifted that text out of context. Terman is talking about shielding common mode coupling in things like transformers and coils , not antennas.

There is a vast difference between these two situtaions because of the MODE of coupling.

Your mistake is in trying to apply common mode shielding, such as between two resonant coils inside an IF transformer, to a large loop antenna receiving a signal from several loop diameters away.

Clearly you have a mindset that somehow the time-varying electric and magnetic fields are independent. With such a mindset, the CFA antenna is a practical antenna. That incorrect view is at the root of all kinds of antenna nonsense.

>So, we have a shielded loop which is responsive to the magnetic field >but unresponsive to an electric field.

In your dreams.

1/10 of a wavelength from that loop, in open space, the reponse will become electric field dominant. Want to bet on it?

73 Tom

5610. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 14:11:40 UTC
From: 2w8ji@akorn.net
Message-ID: <3abb547e.229170066@news.accessunited.com>
Source record: 167784

On Fri, 23 Mar 2001 08:04:19 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>Obviously many Hams are quite afraid of a little simple maths;
>shame really cos they are missing out on a most pleasurable part of the
>hobby.

Hundreds of lines of math, all correctly done but using wrong
assumptions, is worthless. It impresses no one, except perhaps the
writer who becomes self-enamored with himself.

It may be fun to add and subtract all day, but to be useful in solving
problems it is critical we know what data to use and how to use it.

>As for exercising ideas, they(1) are intended as thought provokers for those(1)
>not as expert as the old hands that like to think that they(2) are; sort of one
>stage further than RAE revisited.

? Say what???

they(1) = does this mean ideas or something else??
those(1) = people not as expert as old hands???
they(2) = does this mean old hands or those(1)???

73 Tom

5611. Re: Homebrew Coax Colinear Tuning - Help Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 14:25:00 UTC
From: 2w8ji@akorn.net
Message-ID: <3abb59d8.230540797@news.accessunited.com>
Source record: 167785

On Fri, 23 Mar 2001 10:47:18 -0000, "Nick Filer" <nick@cs.man.ac.uk>
wrote:

>Last night I put together a coax (RG58) collinear for 435MHz. The design is
>8 half waves connected as usual centre to braid, braid to centre (see
>diagram). On top I have a 1/4 wave of wire connected to the centre core. At
>the bottom I have a 1/4 wave of aluminium tube. The coax was cut into 235 mm

Hi Nick,

This antenna requires the INSIDE of the cable have about the same
velocity factor as the OUTSIDE of the cable, or it will not work.

If you built the coaxial collinear out of RG-58 it will not work. Wad
it up and throw it away. or enclose it in something that makes the
wave on the outside of the cable travel the same speed as the wave
inside the cable.

This design was stolen from the Stationmaster antennas by
Phelps-Dodge.

In early model Phelps-Dodge antennas, the antenna was surrounded by a
thick layer of wax (about 1" thick). The size of the conductors was
chozen for the correct impedance, and the wax made the velocity of the
wave outside the cable the same as the velocity inside the cable.

In later ones, they went to an air-dielectric transmission line
suspended in an air gap between a thin fiberglass radome and the
cable. There was no dielectric outside the cable.

You can not sucessfully duplicate this antenna using regular RG style
cables hanging in air. Even if you get the SWR right, you'd have more
gain from a 1/4 wl groundplane.

73 Tom

5612. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 14:40:14 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3ABB604E.FAF6FB40@toast.net>
Source record: 167786

Gary Peach wrote:

> "John O'Flaherty" wrote
> > I agree, but there you aren't talking about randomized thermal radiation,
> which
> > contains no information but its own presence.
>
> Obviously you haven't done any Radio Astronomy where to the average listener
> the signals are indistinguishable from noise.
> In fact a great deal of information is carried by that noise if you know how
> to extract it.
>
> Think of a simple example of noise carrying information.
> The thermostat on next-door's water heater,
> Brrrp! they're having a shower again.

I would say, as a matter of definition, that signal is not noise, and the radio astronomers probably go to great lengths to differentiate the two. If they didn't, they'd be listening to their own ears.

john

5613. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:05:59 UTC
From: billsohl@mindspring.com
Message-ID: <3abb65a8.2182013@news.mindspring.com>
Source record: 167787
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Thu, 22 Mar 2001 21:30:57 -0500, Dwight Stewart
<stewartx@sccoast.net> wrote:

>Bill Sohl wrote:
>
>> As long as the "price" set by the FCC
>> is rational you'll get no argument from
>> me. If the state you live in set a
>> driver's license price of $1000, would
>> you just pay that or would you join the
>> voice of public discontent and demand
>> rational fees.
>
> But these people would argue that the "price" set by the FCC (the code
>testing requirement) is not rational - it is not rational to still maintain
>testing for morse code when all other radio services have long ago dropped a
>similar requirement, or when code has been virtually eliminated in all other
>radio communitions (commercial, military, governement, marine, and so
>forth).

That's true and I am one of those that believes the
price (code testing of any sort) is no longer rational.

> The code test requirement once served a purpose - to provide a means of
>code education for those who might enter other radio services and to provide
>a pool of trained operators to serve as a backup for other radio services
>during emergencies. Those purposes no longer exist today - the other radio
>services don't need people educated in code and CW is a very poor backup for
>cellular telephones, satellites, and electronic mail.

Agree completely.

Cheers,
Bill K2UNK

5614. Re: 160 Meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:07:40 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abb66da$0$88185$bbae4d71@news.net-link.net>
Source record: 167788

45 degree angle is much better than a 90 at the property line. Slip a
couple of "floating" insulators on the antenna wire before connecting your
end insulator. "Snake" the wire to the property line by first bending it to
left then right, or whatever direction you need to go, ending up with a
couple of mellower bends, say 20 and 25 degrees, in sort of a stretched out
Z shape. Might not skew the signal as much as one harsh bend.
jerry r wrote in message <3ABAB672.56225CA5@pobox.com>...
>I am going to set up a sloper 160 meter antenna using my 55ft tower,
>alpha delta center insulator and 122 ft of radio works flexweave wire.
>
>The catch is at about 85 ft I must make a 45 degree band for the
>remaining length.
>
>A friend suggested folding back the wire.
>
>Any suggestions?
>
>Ps, reason for the bend, property line limitation.
>
>TIA..
>

5615. Re: Beam antenna SWR changed!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:10:39 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abb678b$0$88185$bbae4d71@news.net-link.net>
Source record: 167790

Keep in your thoughts this Sunday and pray for someone with a 100 foot
cherry picker to get stuck in the ditch in front of my house next Saturday
morning! I will pull them out with my winch and barter the fee!
'Doc wrote in message <3ABA61C7.254F1786@oio.net>...
>
>
>Rudy,
> If you can figure ~that~ one out, your gonna make a
>lot of money (LOL)! I guess it's best to do as the
>instructions say (or common sense), keep the holes on
>the down-side. After that, prayer comes to mind...
> 'Doc

5616. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:15:11 UTC
From: billsohl@mindspring.com
Message-ID: <3abb668d.2410728@news.mindspring.com>
Source record: 167789
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Fri, 23 Mar 2001 00:04:21 -0600, "David G. Nagel" <nagel@core.com>
wrote:

>Amateur radio covers a wide spectrum of methods and modes. Some people
>specialize in SSB, others AM, still others TV, low power, EME, and yes
>some CW.
>
>Qualification for an amateur radio license covers that same spectrum. We
>are tested on the Rules and Regulations governing the service. We are
>tested on our understanding of proper and appropriate operating
>technique. We are tested on how a radio signal is generated and
>detected. We are also tested on modes of operation i.e. ssb, am sstv,
>atv, antenna design and operation. And. We are tested on our
>comprehension of digital modes of communication to include morse code.
>To say that we should not be tested on a segment of the service just
>because it is old, outmoded and not used for anything ignores the fact
>that code is part of our general knowledge and an important part of our
>heritage.

All true, but you don't consider that none of the other modes
are tested on a separate pass/fail basis as code is today.
I have no problem with adding some test questions to the
overall test/knowledge syllabus on code as a mode. There
is,however, no longer need to test anyone's individual
code ability as a stand-alone skill test on sending/receiving.
That's no different than not testing on ability to type
using a keyboard for packet or RTTY.

>I, personally, have a tin ear with some hearing damage due to loud noise
>encountered during my working career. I passed the 5 wpm code test for
>Novice/Tech Plus Plus many years ago. As a novice I made a number of CW
>contacts poorly. I upgraded to Tech and remained such until last year
>when I was able to upgrade to Extra. No I am not a fully qualified Extra
>as defined by some but I did work to learn that which was required by
>the FCC to qualify for the license. I also learned more than that which
>is required. This is the price I paid for my chosen hobby. I have also
>used my knowledge so gained over the years as a communicator in Civil
>Defense, Civil Air Patrol, various places of employment for a total of
>atleast seven radio services. All of this because I took the time and
>effort to learn the code. I have not, to date, used my morse code
>knowledge for anything other than to take the test but I am glad that I
>do know it.

You are an excellent example of why there is no longer any
need to mandate code skill testing. If and when you ever decide
to use code, you will be relearning much of the skill and ability.

>Let me say in closing that the comments of Dwight Stewart, while
>contrary to what I believe, are just a valid as mine and, who knows, may
>be right. I have noticed some comments in this thread that are mean
>spirited and meant to agitate not convey rational argument. So, by all
>means lets continue the dialogue but lets keep it civil.

That's all you'll get from me.

Cheers,
Bill K2UNK

5617. How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:16:46 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abb68f9$0$88180$bbae4d71@news.net-link.net>
Source record: 167791

If a trap, such as the 15 and 20 meter traps on my Cushcraft X7 beam, are mechanically sound, and are properly installed, with the drain holes down, just how does a trap go bad? Power levels have always been well within specs (no more than 600 watts PEP and traps are rated for 2KW). I am baffled. There are no moving parts!

5618. ARCHIVES

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:18:54 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <99fpk0$oa8$1@bob.news.rcn.net>
Source record: 167793

how do i get to the archives on this site

5619. Tire static?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:21:53 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abb6a2d$0$88186$bbae4d71@news.net-link.net>
Source record: 167792

Yesterday I noticed some increased noise on receive while cruising 70mph on the freeway (no toll roads in MI). When I exited and started slowing, the noise started to decrease. When I got down to about 30 or 40 mph it was gone. I shifted to neutral and rev'd the engine, but no noise (other than normal) so I figure it was the tires. The ham I was talking to said to put some graphite powder on the sidewalls. I never heard of this.

Do tires, steel belted radials in particular, create interference?

Is there any truth to the graphite idea?

Can tire static if that is what it is be effectively eliminated?

5620. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:26:51 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abb6b59$0$88186$bbae4d71@news.net-link.net>
Source record: 167794

Thanks to all for the constructive help. (Even though I still won't
use a bike flag ;-))
Walt Smith

Walt--you should fly a little "pirate flag" flag on the top of your antenna!
The fiberglass rod sounds like a good solution, however, why not just mount
the antenna to the aluminum tubing thereby incorporating the aluminum, which
I assume is mechanically attached to the frame, into the ground plane scheme
of things. The more metal you have under this antenna the better it will
work!

5621. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:28:19 UTC
From: billsohl@mindspring.com
Message-ID: <3abb691a.3064563@news.mindspring.com>
Source record: 167795
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On 22 Mar 2001 17:48:52 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>W6DKN wrote:
>>
>> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>> news:3AB97B98.509B7A46@IEEE.org...
>>
>> > SNIP
>> > If one doesn't like the price asked by the FCC, what competitor can one
>> go to?
>> > Again, if one is to obtain amateur radio privileges, one is forced to pay
>> the price set by the > FCC which holds a monopoly.
>> > --
>>
>> So what? If you want it, pay the price. If not, don't. There's no other
>> hobby I know of which provides so many rewards for such a small investment.
>>
>> Obtain a business license, driver license, hunting license, fishing
>> license, etc. These are all "monopoly" controlled. If you want one, you pay
>> the price (and they are a lot costlier than that of a ham ticket).
>
> They're doing their best to establish that a ham radio license is a
>"right".

The only "rights" involved are as follows:
1 - Everyone has a right to become a ham as long as they
meet FCC requirements.
2 - Everyone has a right to expect that the FCC requirments
are rational and justified.

Cheers,
Bill K2UNK

5622. Re: G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:35:05 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3ABB6F14.7020807@aol.com>
Source record: 167798

If you can get the supports into the trees high enough, you can possibly make do with only 50 feet, providing there is enough room past the trees to pull the extra wire tight.

This antenna generally has a 34 foot twinlead feeder. Like any other antenna get the feedpoint as high as possible, and try to arrange the feeder at a 90 degree angle with respect to the wire.

Center the feedpoint between your supports. You can then pull the "extra" wire past the trees and angle them down toward the ground. Anchoring the wire ends is now the problem. Fence posts can be used or ground anchors, other smaller trees, etc. The important thing is safety, keep the wire ends out of reach. Use good end insulators for attaching the guy(ceramic is best for this) to the support.

If the space is really limited to the 50 feet, you can also run the wire straight down the side of the tree (but not touching the tree). If your tree support is high enough....

Neither approach is ideal but you are going to need a tuner anyway. It beats no antenna, and should work better than a light bulb.....

73,
W4KAZ

5623. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:35:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABB6D58.87DD0D63@IEEE.org>
Source record: 167796
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:
> Well, at least you passed the test, which adds a lot of validity to your
> opinion, pro or con CW. I personally find it hard to validate the opinions
> of those who condemn what they have never achieved.

What about death?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5624. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:39:48 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABB6E44.369038CC@IEEE.org>
Source record: 167797

wsmith@cinci.rr.com wrote:
> Thanks to all for the constructive help. (Even though I still won't
> use a bike flag ;-))

My Mommie always said, those who won't listen will surely feel. :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5625. Re: RF AMMETERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:41:44 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABB6EB8.A3F4E6D6@IEEE.org>
Source record: 167800

marvin rosen wrote:
>
> would it be practical to use an rf ammeter before & an rf ammeter after a
> transmatch instead of an swr meter?

Does an RF ammeter measure traveling waves or standing waves?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5626. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:44:44 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABB6F6C.EA0DCBF1@IEEE.org>
Source record: 167799

Gary Peach wrote:
>
> "W6RCecilA" wrote ...
> > But Gary, that's NOT electrical energy and EM energy OF THE
> > SAME FREQUENCY. I'm talking about accelerating electrons
> > to generate photons coherently.
>
> In that case consider the X-Ray tube at 2% efficiency if you're lucky.

Or a dipole at 95%. :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5627. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 15:59:26 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abb72fc$0$88179$bbae4d71@news.net-link.net>
Source record: 167801
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Although I have had and am having a problem with Cushcraft antennas,
Cushcraft has always promptly responded to me via telephone or email and
have always promptly sent me parts that I needed. I would still buy and
plan to buy other Cushcraft products.
Travis Zdanski wrote in message <3A66ADE1.DF3@bellsouth.net>...
>Delbert McCord wrote:
>>
>> I have a R8 that is less than 6 months old and I am having problems
>> witht he antenna also. It was working Great and then all of a sudden
>> its like having a dummy load on the end of the coax!
>>
>> I checked the coax (Which is also new) and Its not shorted and gives
>> me a perfect SWR when I connect a dummy load out there on the end of
>> the coax. Cushcraft (After a bunch of phone tag) had me send them the
>> matching box back to them, they tested it and returned it saying its
>> fine. I used to get better than a 2 on every band with out my tuner
>> now I get over a 8 swr and I can receive better if I connect the coax
>> to my dogs collar!
>>
>> I spend over 400$ on that antenna, its the LAST $$$$ Cushcraft will
>> ever get from me!
>>
>> Worked great, Looks Great, Does not last
>> I can not afford almost 100$ a month for an antenna!
>>
>> Delbert McCord
>> KA8OCN
>>
>> On Tue, 14 Nov 2000 16:55:15 -0600, plmills@attglobal.net wrote:
>>
>> >Hello to all,
>> >
>> >First let me say that up until now I've been a happy camper
>> >using Cushcraft products. However, I've just learned something
>> >that may be of interest to anyone considering purchasing a
>> >new Cushcraft antenna.
>> >
>> >I recently bought an R-8 vertical. It was just damaged by
>> >lightning and I e-mailed Cushcraft tech support regarding
>> >parts availability....the answer was 2 sentences that suggested
>> >I buy a new antenna and try to collect on insurance. Needless
>> >to say, I was not happy with that so I wrote a letter to the
>> >Cushcraft manager of amateur products. This gentleman was kind

>> >enough to telephone me today. Essentially, the conversation
>> >focused on the fact that the parts I needed would be so expensive
>> >as to make buying a new antenna more practical. However, one
>> >interesting fact did come to light. Parts for the R-8 vertical
>> >had not been "priced" yet and were thus unavailable. Further,
>> >Cushcraft does not "price" replacement parts until the product
>> >has been out for 9 to 12 months. I'd suggest you keep this
>> >in mind....if you drop your new R-8 or new whatever, you may
>> >not be able to get parts for it for up to a year!!
>> >
>> >thanks & 73,
>> >Phil
>> >W5BVB
>
>Thanks for telling us all. I was this close to buying one of those
>today.

5628. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 16:01:35 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <zrKu6.622$KA6.114700@dfiatx1-snr1.gtei.net>
Source record: 167802
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

After I have experienced it first hand, I can give you a valid opinion on
the subject (provided we both end up in the same place :>) .

73 de W6DKN

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABB6D58.87DD0D63@IEEE.org...
> W6DKN wrote:
> > Well, at least you passed the test, which adds a lot of validity to
your
> > opinion, pro or con CW. I personally find it hard to validate the
opinions
> > of those who condemn what they have never achieved.
>
> What about death?
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5629. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 16:02:17 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABB7389.15559C47@IEEE.org>
Source record: 167803
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:
> After I have experienced it first hand, I can give you a valid opinion on
> the subject (provided we both end up in the same place :>) .

Do you tell your kids not to jump out in front of a moving truck?
Is it because you have experienced it or just used your rational
mind to evaluate it? I understand lots of things at which I have
no skill or experience.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5630. Re: Homebrew Coax Colinear Tuning - Help Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 16:11:51 UTC
From: Nick Filer <nick@cs.man.ac.uk>
Message-ID: <99fsho$d5o$1@m1.cs.man.ac.uk>
Source record: 167804

Thanks Tom,

I did wonder a little at the velocity factor difference between the outer and inner. Would putting inside a PVC tube help? This will lower the external VF to about 0.8 (I think). If velocity factor is non cumulative then this should reduce the SWR? Is there a type of tubing with a lower velocity factor? Presumably if the tubing has a VF of 0.66 then the antenna should work - even if the losses are high? I have a table somewhere that suggests that Polyethylene has a VF about the same as coax - it is often used as the dielectric. Perhaps this would be the ideal material for this particular antenna. I will try and improve it and then send it to the scrap heap if it is still weaker than my 2 meter J-Pole used on 70cm's.

The naive advantage I saw in a coax collinear was that it is cheap, straight, for 70cm's relatively short and supposed to be easy to match. My next attempt will probably be one of the many ladder-line designs though these require some matching.

Nick

Tom W8JI <2w8ji@akorn.net> wrote in message news:3abb59d8.230540797@news.accessunited.com...
> On Fri, 23 Mar 2001 10:47:18 -0000, "Nick Filer" <nick@cs.man.ac.uk>
> wrote:
>
> >Last night I put together a coax (RG58) collinear for 435MHz. The design is
> >8 half waves connected as usual centre to braid, braid to centre (see
> >diagram). On top I have a 1/4 wave of wire connected to the centre core. At
> >the bottom I have a 1/4 wave of aluminium tube. The coax was cut into 235 mm
>
> Hi Nick,
>
> This antenna requires the INSIDE of the cable have about the same
> velocity factor as the OUTSIDE of the cable, or it will not work.
>
> If you built the coaxial collinear out of RG-58 it will not work. Wad
> it up and throw it away. or enclose it in something that makes the
> wave on the outside of the cable travel the same speed as the wave
> inside the cable.
>
> This design was stolen from the Stationmaster antennas by
> Phelps-Dodge.

>
> In early model Phelps-Dodge antennas, the antenna was surrounded by a
> thick layer of wax (about 1" thick). The size of the conductors was
> chozen for the correct impedance, and the wax made the velocity of the
> wave outside the cable the same as the velocity inside the cable.
>
> In later ones, they went to an air-dielectric transmission line
> suspended in an air gap between a thin fiberglass radome and the
> cable. There was no dielectric outside the cable.
>
> You can not sucessfully duplicate this antenna using regular RG style
> cables hanging in air. Even if you get the SWR right, you'd have more
> gain from a 1/4 wl groundplane.
>
> 73 Tom

5631. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 16:41:51 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbmv5hn8jgeq24@corp.supernews.com>
Source record: 167805

"Jeff Farrar" <jeff@farrar.com> wrote in message
news:di7s6.24867$H5.5602831@news1.rdc2.pa.home.com...
> I live in a very hilly area.

My first guess is you don't want either antenna! All antennas achieve their power gain by redirecting radiation from one area to another. So in the case of a high gain antenna most of the RF will be radiated in a flat horizontal plane around the antenna. With a pattern like that you may find that other stations, and even repeaters, will be in an area of greatly reduced RF radiation, i.e. low signal strength, resulting in poor performance. A quarter wave ground plane, cheaper too, has a wider radiation pattern, which gives better coverage for your case. High gain vertical antennas are more useful when working out in open country, and the terrain is relativity flat.

--
73 de,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

5632. Re: RF AMMETERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 16:48:57 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbmvj2r38pmv3c@corp.supernews.com>
Source record: 167806

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABB6EB8.A3F4E6D6@IEEE.org...
> marvin rosen wrote:
> >
> > would it be practical to use an rf ammeter before & an rf ammeter after
a
> > transmatch instead of an swr meter?
>
> Does an RF ammeter measure traveling waves or standing waves?

I would imagine it would be standing waves. The few RF ammeters I have seen use a thermocouple element to sense the AC current. I can't see how an instrument like that can distinguish between a forward and reverse traveling wave of current.

--
--
73 de,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse Code is used exclusively by Electronics Based life forms to communicate amongst themselves using advanced Organic Digital Signal Processors, running state of the art Artificial Intelligence Software, to perform the highly complex transmit encryption, receive decryption and error correction functions."

5633. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 17:03:26 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbn0e6aid7qg53@corp.supernews.com>
Source record: 167807
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6DKN" <w6dkn@qsl.net> wrote in message
news:zrKu6.622$KA6.114700@dfiatx1-snr1.gtei.net...
> After I have experienced it first hand, I can give you a valid opinion on
> the subject (provided we both end up in the same place :>) .

The same can be said about pregnancy and child birth. If you can't get
pregnant, or give birth to a kid then I guess that person's views on
abortion are not valid either, right?

The argument that if you don't know CW you can't have a valid opinion about
it is crap. I'm sure you can't get pregnant, but I'll bet you still have a
valid opinion about abortion none the less, which is the same argument about
CW, but in a different context.

--
--
73 de,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

5634. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 17:18:58 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <i01nbt069oa02pp636dn70qcs9jm26ilcb@4ax.com>
Source record: 167808

For what its worth, MARC, the motorcycle amateur radio club did extensive antenna testing on 2M-440 for use on motorcycles. That's kind of worst case as a motorcycle provides very little ground plane as compared to an automobile. The top performing antenna for everyday use was the Comet HP32. If you wanted the absolute last foot of reach in a fringe area, the Comet Z780 was the one to have. Both outperformed the Diamonds.

Dick - W6CCD

On Thu, 15 Mar 2001 12:22:23 -0800, Roy Lewallen <w7el@eznec.com> wrote:

>I'd take Diamond's gain figures with a large grain of salt. I've had one
>Diamond antenna, a RHA627 I got for my Yaesu VX-5 HT, and it was
>noticeably worse on all three bands than the ducky that came with the
>radio, despite being much longer. If you can't trust the gain figures,
>there's not much basis for an objective comparison.
>
>Roy Lewallen, W7EL
>
>Jeff Farrar wrote:
>>
>> I am trying to decide between two different Diamond mobile antennas. The
>> two models are:
>>
>> Model Band Wavelength Gain Watts
>> Mount Height
>>
>> SG2000HD: 2M 2-1/4 & 1-3/8 5.2 150
>> UHF 62
>> NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
>> UHF 40.2

>> Questions:
>>
>> 1) Will I notice a difference between the two gains to make any real world
>> difference?
>> 2) The two antennas have a different wavelength construction. What type of
>> terrain is each one suited best for? I live in a very hilly area.
>>
>> Thanks

5635. Sinclair R-312CR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 18:08:30 UTC
From: Nevia <jgoldring@nadaspam.direcpc.om>
Message-ID: <zhMu6.35951$m8.264821@news.direcpc.com>
Source record: 167810
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Just picked up a Sinclair Duplexer, Model R-312CR
that appears to be a "reject" type of setup. Four cans and tunable rods in
the middle. I wanted to use this for a low
power repeater in our area and the tech who sold it to me said it would be
good for up to 50 watts but it really kills the sensitivity of the receiver.
Has anyone had any experience with these duplexers? Any pros or cons?

I am looking for any information pertaining to this duplexer. Thanks!

Anyone replying to me rather than the newsgroup should
remove NADASPAM from the email address.

jgoldring@nadaspam.direcpc.com

5636. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 18:11:34 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <qjMu6.446$ya4.179542@nntp2.onemain.com>
Source record: 167811
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" <no-spam@junk-mail.net> wrote in message
news:tbn0e6aid7qg53@corp.supernews.com...
>
> "W6DKN" <w6dkn@qsl.net> wrote in message
> news:zrKu6.622$KA6.114700@dfiatx1-snr1.gtei.net...
> > After I have experienced it first hand, I can give you a valid opinion
on
> > the subject (provided we both end up in the same place :>) .
>
> The same can be said about pregnancy and child birth. If you can't get
> pregnant, or give birth to a kid then I guess that person's views on
> abortion are not valid either, right?
>
> The argument that if you don't know CW you can't have a valid opinion
about
> it is crap. I'm sure you can't get pregnant, but I'll bet you still have
a
> valid opinion about abortion none the less, which is the same argument
about
> CW, but in a different context.
>
>
> --
> --
> 73 de,
>
> Leland C. Scott

Gentlemen, we are in the presence of a natural-born consultant; always
ready to supervise the process so long as he does none of the heavy
lifting.

5637. Re: RF AMMETERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 18:23:25 UTC
From: richardharrison@webtv.net
Message-ID: <19496-3ABB949D-28@storefull-118.iap.bryant.webtv.net>
Source record: 167814

Cecil, W6RCA wrote:
"Does an RF ammeter measure traveling waves or standing waves?"

An RF ammeter measures the combined currents, forward and reflected, at the point of the ammeter`s insertion in the transmission line.

An RF voltmeter measures the combined voltages, forward and reflected at the point of the RF voltmeter`s attachment across the transmission line.

At a current minimum point on the transmission line, (voltage maximum point), the impedance of the line is resistive.

At a current maximum point on the transmission line, (voltage minimum point), the impedance of the line is resistive.

At a current minimum point on the transmission line the value of the resistance of the line is:
SWR x Zo.

At a current maximum point on the transmission line the value of the resistance of the line is:
SWR / Zo.

So, with a slotted line, some basic instruments and some calculations you can tell what`s going on with your transmission line. I still prefer my Bird wattmeter.

Best regards, Richard Harrison, KB5WZI

5638. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 18:33:55 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbn5nlckk8s448@corp.supernews.com>
Source record: 167812
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Richard McCollum" <rmccoll@radiks.net> wrote in message news:qjMu6.446
> Gentlemen, we are in the presence of a natural-born consultant;

Just a wee bit jealous Richard?

--
--
73 de,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

5639. Re: RF AMMETERS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 18:42:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3ABB9913.C53D9117@eznec.com>
Source record: 167813

It depends on what you're trying to measure. What are you trying to
measure?

Roy Lewallen, W7EL

marvin rosen wrote:
>
> would it be practical to use an rf ammeter before & an rf ammeter after a
> transmatch instead of an swr meter?

5640. conseil sur achat de parabole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 18:56:31 UTC
From: A FACKEURE <a.fackeure@freesbee.fr>
Message-ID: <Y8Mu6.16219$c9.709962@loualaba.paris.none.net>
Source record: 167809

BONJOUR
JE VOUDRAI ACHETER UNE PARABOLE POUR AVOIR LES CHAINES FRANCAISES NON PAYANTES ET LES CHAINES ETRANGERES NON PAYANTES
QUI PEUX ME CONSEILLER?
DE PLUS J AI 3 TELEVISEURS, FAUT T IL 3 DEMODULATEURS SI JE VEUX REGARDER SIMULTANEMENT 3 CHAINES DIFFERENTES ?

MERCI POUR VOS REPONSES

ANDRE

5641. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:02:56 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abba82a$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167720

"Ian White, G3SEK" wrote ...
> Gary Peach wrote:
> >"Ian White, G3SEK"
...
> That's a pretty good explanation. The only amendment I'd suggest is that
> T(sky) is not appropriate on the lower bands where antennas don't have
> much directivity - well, not much by UHF, microwave and radio astronomy
> standards - and will pick up noise from all directions. T(ambient) might
> be a better label.

I agree that to some "T(sky)" might be the subject of some discussion,
but from my 5' 6" up is up.
I don't like the idea of T(ambient) because it is too readily confused with
To
which especially in the IEEE definitions of noise figure has the specific
value of 290°K despite the fact that Rules and things are calibrated at 20°C
or 25°C = 293°K and 298°K respectively.
The nice round number 300 makes illustrative calculations a little easier
too.

> For an in-depth tutorial on noise and practical noise figure
> measurements, try:
> http://literature.agilent.com/litweb/pdf/5952-3706E.pdf

> >As for exercising ideas, they are intended as thought provokers for those
> >not as expert as the old hands that like to think that they are; sort of
one
> >stage further than RAE revisited.
>
> I'm all for that (and have some track record in that area)

You surely do, keep up the good work.

> but also I
> strongly believe that, in amateur radio and much else, theory needs to
> be tied to an awareness of the practical knowledge that already exists.

I must agree with that as I started my Radio life as an empiracist of 14 and
remain such until 19 when I started to learn better. I think that since
becoming more theorist I enjoy Ham Radio MORE, and commend the hard work to
one and all.

> The real power comes from theory and practice working together.

I'll drink to that, what's yours?

> >The bit of kit that you designed and built yourself has infinitely more
> >pleasure than the expensive factory made one.
>
> Hey, don't get me started on 'design' in amateur radio!

Oh! not half, how about a design study for an AE,
suitable for a typical Urban Garden, for 136 kHz

Something that will permit the legal limit of 1 Watt ERP,
without sticking in 7 kW. :)

73 de
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5642. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:15:53 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <JhNu6.1733$9i1.134444@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167815

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:99brg2lg1@heap.juniper.net...
> VE9SRB <srbest@att.net> wrote:
> >I think that we are dealing with two issues here and an application of
terms
> >in a manner generally accepted by those in the field.
>
> Steve,
>
> To be clear, I'm discussing the IEEE definition of dissipation that
> Cecil mentioned, that is the conversion of electrical energy to heat.
> Since this is an IEEE definition I assume it is generally accepted
> by at least some of those in the field. What I'd like to know is if
> the conversion of electrical energy to EM radiation at the transmitting
> antenna, and its conversion back to electrical energy at the receiving
> antenna, is actually a heat transfer process, since by the IEEE
> definition that process would be dissipative. You might have another
> definition for "dissipation" in mind, but I'm fixated on the IEEE
> definition.
>
> Everything you've said so far is absolutely true, but I also think
> that everything you've said so far also precisely describes radiative
> heat transfer. By the IEEE definition this process would be dissipation.
> I don't think "dissipation" is necessarily bad, if the point of the
> exercise is to convert electrical energy to a particular kind of heat
> then that dissipation is good. If dissipation is conversion to heat,
> however, then it is still dissipation.
>
> >I understand your position that total energy is conserved in one form or
> >another. I agree that in the case of the antenna, the thermal or IR
energy
> >it creates can be detected away from the antenna so it could be
considered
> >to be "radiated". This "radiation" however is not the form of
radiation
> >as defined by general antenna theory (gain, radiation patterns, etc).
>
> ??? Electromagnetic radiation is electromagnetic radiation. Maxwell's
> equations describe how it behaves no matter what its wavelength. I
> once wrote a thesis about scattering of light/IR by dielectric and
> conducting spheres in a laser beam, and consumed many, many pen plotter
> pens drawing the radiation patterns that looked a lot like antenna
> radiation patterns (lots of lobes, however, since the spheres were
> large compared to the wavelength).

>
> > This
> >is considered energy lost or dissipated because it is no longer in the
form
> >or at the EM frequency of interest.
>
> Here again you define "dissipation" as the radiated energy you aren't
> interested in. This may be your definition, but the IEEE definition
> is "converted to heat" and the quesition of whether the radiation you
> are interested in is also "heat" is still relevant. It is also a
> question which inherently requires a thermodynamic answer, the
> IEEE apparently doesn't define "heat".
>
> > One distinction here is the fact that
> >to detect this energy you do not use another EM antenna. Thermal heat
you
> >can detect with your skin. IR with the goggles you mention. Radiation
of
> >energy in this form is not the intended function of the antenna. The
> >antenna's performance characteristics are not described to account for
this
> >radiation (except for the definition of radiation efficiency). The
antenna
> >does not perform in a reciprocal manner (transmit and receive) for this
type
> >of energy.
>
> I don't think it is actually relevant to the thermodynamics whether the
> apparatus to convert electrical energy into heat, and the apparatus
> to convert the heat back into electrical energy, is identical or not.
>
> >The real distinction here is that the EM energy radiated by the antenna
is
> >not irreversibly lost through the EM radiation process. The antenna will
> >detect the EM energy as it passes by. It is functioning as an antenna.
>
> Sorry, "irreversible" is a thermodynamic term and I should have defined
> it. Because a process is irreversible does not mean that none of the
> resulting energy can be converted back to the form it was originally
> in, it just means that it is impossible to convert all of it back
> into the form it was originally in with no other effects.
>
> Here's an example. Suppose I run a DC current through a resistor.
> This conversion generates heat with 100% efficiency, the resistor
> gets hot. I put resistor in a boiler and generate steam with it.
> I run the steam through a steam turbine, which turns a DC generator,
> whose output is DC current. Voila, I have now converted electrical
> energy to heat to electrical energy again.
>
> The reason the conversion to heat is irreversible is not that I

> can't do the inverse conversion, it is that even if all the components
> are 100% efficient I can never get the same electrical power out that
> I put in. In particular, if I need to close the circuit from the
> steam turbine back to the boiler, I'll need to cool the output of the
> low pressure end of the turbine. Hence only part of the high
> temperature heat energy generated by the resistor ends up as
> DC current again, the remainder ends up as low temperature heat.
>
> The second law of thermodynamics requires this. Conversion of heat
> to electrical energy decreases entropy. Conversion of high
> temperature heat to low temperature heat increases entropy. The
> very best the process can do is to balance these two, such that
> there is no change to the total entropy. This is called the Carnot
> cycle efficiency, if I'm remembering correctly.
>
> >The use of terms "dissipation" and "radiation" in this manner is
generally
> >accepted in the industry to account for the distinction in the antenna's
> >behavior relative to the EM and thermal or IR energy. I don't disagree
with
> >your discussion of heat and IR. We simply apply the term dissipation
> >differently.
>
> But "we" doesn't seem to necessarily include the IEEE, which defines
> dissipation as "conversion to heat" whether we like the heat or not.
> I'm still fixated on that, and there is a practical consequence to
> knowing whether this is a heat transfer process or not regardless.
>
> >Again, the distinction goes back to the antenna's reciprocal ability to
> >radiate and then detect the EM energy. Think of the distinction this
way.
> >Apply an EM voltage to an antenna, EM energy is radiated, it travel to
> >another antenna, this antenna detects the EM energy and it develops an EM
> >voltage at its terminals. Apply an EM voltage to a resistor, thermal and
IR
> >energy is created, this thermal and IR energy travel to another resistor,
> >does the resistor detect this thermal and IR energy and convert it into
an
> >EM voltage? This is my distinction between dissipation and radiation.
>
> I don't think the thermodynamics cares whether you can use the same
> apparatus at the receiver or not, the issue is the ultimate efficiency
> of any receiver you can construct. You are indeed doing a conversion at
> the receiving antenna. Electric current moves electrons while EM
radiation
> doesn't involve any mass, they are different forms of energy. I can buy
> solar panels for my roof and directly convert the heat transfered from the
> sun, in the form of EM radiation at light wavelengths, into a voltage
> at the output terminals, but the power I get will still be ultimately
> limited to the Carnot cycle efficiency with the remaining energy

> being re-radiated by the panels. The same applies to EM energy
> at any wavelength, there will be a limit to the ultimate efficiency
> of the receiver with the remainder being wasted by reradiation.
>
> So, here's my bet. I'll bet that the exchange of energy from a
> transmitting antenna to a receiving antenna is a heat transfer
> like any other. Coherent, because that is convenient for the receiver,
> but still fundamentally a heat transfer. Because of this I'll bet
> that the operation of transmitting and receiving antennas isn't
> reciprocal with respect to efficiency. That is, while it is
> theoretically possible to build a transmitting antenna which is
> 100% efficient (i.e. the conversion to heat), I'll bet it is impossible
> for the receiving antenna to convert all the energy it is extracting
> from the incoming EM field back into electrical energy at its output
> terminals (i.e. the conversion from heat). It will need to reradiate
> some of it, and only the remainder will appear at the output. If
> you built a sensitive enough detector and aimed it away from the
> transmitter and towards the receiving antenna you could possibly
> detect the receiving antenna reradiating this energy. No design
> would be able to reduce this reradiation below the Carnot cycle
> efficiency.
>
> So if the above is true (I still don't know it is for sure, and
> I'll admit to not having a clue how to estimate appropriate
> temperatures to use to compute the efficiency) then by the
> IEEE definition radiation is emitted from an antenna by
> dissipation. It may be dissipation that you want to happen,
> but it is still dissipation by their definition. And this
> would also mean that, by their definition, radiation resistance
> is as dissipative as any other kind of resistance, this limiting
> dissipationless resistance to the transmission line kind. Your
> mileage may vary.
>
> And, with this, I think I've run well past what I know about the
> topic.
>
> Dennis Ferguson

Hi Dennis:

Rather than interjecting my comments throughout your discussion above, I thought it would be easier to do it here.

As you state above, EM radiation is EM radiation. Some of my comments regarding antennas were simply written to point out that we define the antenna's radiation properties in terms of how it radiates the EM energy delivered to its terminals.

My discussion of dissipation was somewhat ambiguous because of the separation of thermal and IR energy. In this context, my definition of dissipation was considered to include thermal energy and the radiated EM

energy of no interest (IR). You point out that the IEEE defines dissipation as the conversion of energy to heat. Both definitions are essentially the same and understanding heat is the issue.

The issue is energy conversion, transfer and detection. I think we all understand what happens to the EM energy delivered to the antenna. A portion of the EM energy is radiated. The EM energy not radiated is converted to another form and is considered to be dissipated as heat. We account for this energy dissipation in defining the antenna's radiation efficiency. In discussion the resulting IR radiation that occurs with the energy conversion, we are now really discussing a heat transfer process. The energy dissipated in the antenna (heat), or resistor if you prefer, can be transferred in several ways - convective, conductive, Ebuillient and radiative. IR is simply the process by which long-wave electromagnetic radiation transports heat from a surface to its surroundings.

Steve VE9SRB

5643. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:21:34 UTC
From: Jeff Farrar <jeff@farrar.com>
Message-ID: <2nNu6.44086$H5.9709634@news1.rdc2.pa.home.com>
Source record: 167816

Did MARC happen to do a write up of their test results? It would be
interesting to see.

Thanks.

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:i01nbt069oa02pp636dn70qcs9jm26ilcb@4ax.com...
> For what its worth, MARC, the motorcycle amateur radio club did
> extensive antenna testing on 2M-440 for use on motorcycles. That's
> kind of worst case as a motorcycle provides very little ground plane
> as compared to an automobile. The top performing antenna for everyday
> use was the Comet HP32. If you wanted the absolute last foot of reach
> in a fringe area, the Comet Z780 was the one to have. Both
> outperformed the Diamonds.
>
> Dick - W6CCD
>
> On Thu, 15 Mar 2001 12:22:23 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >I'd take Diamond's gain figures with a large grain of salt. I've had one
> >Diamond antenna, a RHA627 I got for my Yaesu VX-5 HT, and it was
> >noticeably worse on all three bands than the ducky that came with the
> >radio, despite being much longer. If you can't trust the gain figures,
> >there's not much basis for an objective comparison.
> >
> >Roy Lewallen, W7EL
> >
> >Jeff Farrar wrote:
> >>
> >> I am trying to decide between two different Diamond mobile antennas.
The
> >> two models are:
> >>
> >> Model Band Wavelength Gain
Watts
> >> Mount Height
> >>
> >> SG2000HD: 2M 2-1/4 & 1-3/8 5.2
150
> >> UHF 62
> >> NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
> >> UHF 40.2
>
>

> >> Questions:
> >>
> >> 1) Will I notice a difference between the two gains to make any real
world
> >> difference?
> >> 2) The two antennas have a different wavelength construction. What
type of
> >> terrain is each one suited best for? I live in a very hilly area.
> >>
> >> Thanks
>

5644. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:24:32 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <QpNu6.1743$9i1.135455@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167817

"Richard Clark" <kb7qhc@home.com> wrote in message
news:3ab9e441.1641375523@news.seanet.com...
> On Wed, 21 Mar 2001 14:40:24 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >This "radiation" however is not the form of radiation
> >as defined by general antenna theory (gain, radiation patterns, etc).
>
> Hi Steve,
>
> Forgive me, but your statement above is downright provincial. You are
> simply ignoring the field that your antenna theory was derived FROM:
> Optics.
>
> Due to the wavelength nature of the translation of energy, you are
> not allowed to abandon Infrared to the sphere of astrology simply
> because of scale.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard:

Provincial? I don't quite understand.

My choice of wording might have been poor. The point that I was trying to make is that we define the antenna's radiation properties in terms of how it radiates the EM energy delivered to its terminals.

Steve

5645. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:25:04 UTC
From: Jeff Farrar <jeff@farrar.com>
Message-ID: <kqNu6.44087$H5.9710252@news1.rdc2.pa.home.com>
Source record: 167818

Also, I couldn't find the HP32 on Comet's site. Is this an older model?

Thanks again.

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:i01nbt069oa02pp636dn70qcs9jm26ilcb@4ax.com...
> For what its worth, MARC, the motorcycle amateur radio club did
> extensive antenna testing on 2M-440 for use on motorcycles. That's
> kind of worst case as a motorcycle provides very little ground plane
> as compared to an automobile. The top performing antenna for everyday
> use was the Comet HP32. If you wanted the absolute last foot of reach
> in a fringe area, the Comet Z780 was the one to have. Both
> outperformed the Diamonds.
>
> Dick - W6CCD
>
> On Thu, 15 Mar 2001 12:22:23 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >I'd take Diamond's gain figures with a large grain of salt. I've had one
> >Diamond antenna, a RHA627 I got for my Yaesu VX-5 HT, and it was
> >noticeably worse on all three bands than the ducky that came with the
> >radio, despite being much longer. If you can't trust the gain figures,
> >there's not much basis for an objective comparison.
> >
> >Roy Lewallen, W7EL
> >
> >Jeff Farrar wrote:
> >>
> >> I am trying to decide between two different Diamond mobile antennas.
The
> >> two models are:
> >>
> >> Model Band Wavelength Gain
Watts
> >> Mount Height
> >>
> >> SG2000HD: 2M 2-1/4 & 1-3/8 5.2
150
> >> UHF 62
> >> NR770HA 2M/70cm 1-1/2, 2 5/8 3.0/5.5 200
> >> UHF 40.2
>
>
> >> Questions:

> >>
> >> 1) Will I notice a difference between the two gains to make any real
world
> >> difference?
> >> 2) The two antennas have a different wavelength construction. What
type of
> >> terrain is each one suited best for? I live in a very hilly area.
> >>
> >> Thanks
>

5646. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:25:21 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abba82b$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167721

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >Obviously many Hams are quite afraid of a little simple maths;
> >shame really cos they are missing out on a most pleasurable part of the
> >hobby.
>
> Hundreds of lines of math, all correctly done but using wrong
> assumptions, is worthless. It impresses no one, except perhaps the
> writer who becomes self-enamored with himself.

Well Tom I'm very sorry if I've upset you, that certainly was not my intension. After all this is supposed to be a "HOBBY", from which one is to derive pleasure. I would not wish to take my pleasure at the expense of a fellow Ham. As I'm a bit long in the tooth for making impressions I am sorry that you should mistake that as my motive for taking up this topic.

> It may be fun to add and subtract all day, but to be useful in solving
> problems it is critical we know what data to use and how to use it.

There, in the true spirit of Ham Radio, you can help me Tom; keep me on the straight and narrow by not only pointing out the error of my ways, but where a correction is required supplying the correct data and substantiating it so that I may follow through and do better the next time.
After all in a contest it would be your word against mine without some supportive evidence.

> >As for exercising ideas, they(1) are intended as thought provokers for
those(1)
> >not as expert as the old hands that like to think that they(2) are; sort
of one
> >stage further than RAE revisited.
>
> ? Say what???
>
> they(1) = does this mean ideas or something else??

It means Ideas.

> those(1) = people not as expert as old hands???

You chopped that one word short and changed the meaning Tom.

The old hands like to think that after devoting so many years they are expert.
However when I get around to thinking that I know it all will be the time for me to give it away.

With everything known what is left to be done?

> they(2) = does this mean old hands or those(1)???

What it means is what it ses:

"As for exercising ideas, they are intended as thought provokers for those not as expert as the old hands that like to think that they are; sort of one stage further than RAE revisited"

I am firmly of the opinion that a large number of Hams put in just enough study to qualify for a licence and then never look at another text book or consider the wonder of playing with nature ever again. Many think that the Radio Amateurs Examination is the pinnacle of learning; whereas it is not even the foot hills to the high country beyond. Why they deprive themselves of the greater pleasure by becoming just train number collectors I have never been able to understand.

In humility, 73
Gary

5647. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:28:46 UTC
From: richardharrison@webtv.net
Message-ID: <13804-3ABBA3EE-69@storefull-112.iap.bryant.webtv.net>
Source record: 167719

Tom, W8JI wrote:
"After all, you are saying the magnetic field will pass freely through the metal shield."

That is what metal Faraday screens do.

Tom`s implication is that the statement in quotation marks is untrue. Tom also implies Terman is not to be trusted, that his books had to be revised to correct mistakes, thus new editions were required by errata. Tom says magnetic and capacitive coupling are "inseparable". So, I requote another authority.

B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission Fundamentals" wrote:

"The process of radiation is not the only means by which energy can be transferred from one circuit to another; if the magnetic lines of force which arise from the flow of current in one circuit happen to pass around, or link, the conductors of another circuit, then there is a mutual inductance between the two circuits. If this mutual inductance is of Lm henries, the voltage induced in circuit 2 by the flow of I1 amp in circuit 1 will be

E2 = j omega Lm I1 volts

Similarly, if the electric lines of force arising from portions of one circuit which are above ground potential terminate upon portions of another circuit which are separated from ground by some impedance, the resulting capacitive coupling will allow some interchange of energy between the two circuits. Both the inductive and capacitive types of coupling can be controlled by the proper application of shielding"

Griffith goes on to present a Faraday screen to eliminate capacitive coupling. Then, he presents a total shield for EM waves but uses a capacitor between two circuits to allow capacitive coupling while disallowing magnetic coupling between two circuits.

In other words, inductive and capacitive coupling are SEPARABLE. Tom is wrong.

Best regards, Richard Harrison, KB5WZI

5648. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:48:56 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abba82d$0$12249$cc9e4d1f@news.dial.pipex.com>
Source record: 167722

"John O'Flaherty" wrote ...
> Gary Peach wrote:
> > "John O'Flaherty" wrote
> I would say, as a matter of definition, that signal is not noise, and the
radio
> astronomers probably go to great lengths to differentiate the two.

As a matter of fact the signals from distance sources is excess noise.
For amny years they looked at the tiny excess by using long time constant integrators and Misee Pulsars completely.

In the case of the interferometer a large aperture may be simulated by using two or more AE separted by a large distance; say the width of the Pacific Ocean.
The noise may be sampled at either end of the interferometer by using atomic clocks and digitally recording the noise at sample intervals. At a later time the two recordings are combined on a computer and the data is time shifted one with respect to the other until a correleation occurs, (a peak in the excess noise or a dip in the excess noise on both recordings, like a code), at that time when corelation occurs the inteference pattern may be analysed and the nature of the Radio source determined, is it a single body or multiple body etc. The apparent diameter etc.

> If they didn't, they'd be listening to their own ears.

If you have ever been out in the open, (400 miles from the nearest person) you can in fact hear your own ears in the silence, if you concentrate it becomes deafening.

Of course you can also fool yourself very easily when listening to noise hour after hour. I have done this on a number of occassions when a Spacecraft has either been commanded down or may have been damaged (Marine VIII) or the solar panels cracked in the lunar night, (Surveyor). and you attempt to awaken it to ensure that it is infact dead. a long and tiring vigil. Reminds me of when I was a kid and listened night after night for a VK without much luck, and finally a little luck. Of course all that noise could have been avoided if I had listened in the early morning instead.

73,
Gary7SLL

5649. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 19:54:49 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99g9m9$k3r$0@208.206.142.100>
Source record: 167723
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Richard McCollum wrote:
>
> "Dwight Stewart" <stewartx@sccoast.net> wrote in message
> news:B6E01F8F.7589%stewartx@sccoast.net...
> > Bill Sohl wrote:
> >
> > > As long as the "price" set by the FCC
> > > is rational you'll get no argument from
> > > me. If the state you live in set a
> > > driver's license price of $1000, would
> > > you just pay that or would you join the
> > > voice of public discontent and demand
> > > rational fees.
> >
> >
> > But these people would argue that the "price" set by the FCC (the code
> > testing requirement) is not rational - it is not rational to still
> maintain
> > testing for morse code when all other radio services have long ago
> dropped a
> > similar requirement, or when code has been virtually eliminated in all
> other
> > radio communitions (commercial, military, governement, marine, and so
> > forth).
> >
> > The code test requirement once served a purpose - to provide a means
> of
> > code education for those who might enter other radio services and to
> provide
> > a pool of trained operators to serve as a backup for other radio
> services
> > during emergencies. Those purposes no longer exist today - the other
> radio
> > services don't need people educated in code and CW is a very poor backup
> for
> > cellular telephones, satellites, and electronic mail.
> >
> >
> > Dwight Stewart (W5NET)
>
> Amen. It is obsolete, totally irrational, and part of the very definition
> of an Amateur in the treaty and will be for the next five years or so.
> Anything over 12 always was ridiculous.
```

>
> Given that, what are you going to do about it? You could pass it, you
> could simply shut up and wait, you could send out for a pastrami on white
> with mayo, have sex, or expect rain. There are any number of wondrous
> things to be accomplished.
>
> So for why are we treated to the self-serving observations on the obvious?
> Why not try to sell someone who matters? We are just a bunch of people
> who cared enough to DO it and know bullshit when we see it. I don't care
> if you pass it or not but please do not insult my intelligence.
>
> Dick Nï¿½BK

Seems pretty clear that the target audience which they strive so hard
to convince is---themselves.

Dick Wï¿½EX

5650. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:06:31 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3ABBACC7.599BD654@hiwaay.net>
Source record: 167725

Cortland missed the point and introduced another ploy- the comparison to T-hunting.

My point was concerning his distinction between "Normal" and "Perpendicular"- Have I missed a distiction that he did not describe very well, or is there another confusion? In my book, "normal" and "Perpendicular" really mean the same thing(in his original sentence) and have nothing to do with "vertical" and "horizontal".

Puzzled- Bill-W4BSG

Off the NG, Cortland Richmond wrote:

From: "Cortland Richmond" <Cortland.Richmond@usa.alcatel.com>
Organization: Alcatel USA, Inc.
X-Mailer: Mozilla 4.72 [en]C-CCK-MCD (WinNT; I)
X-Accept-Language: en
To: Bill Aycock <baycock@hiwaay.net>
Subject: Re: Faraday shield antenna?

No, this is not a problem. The electric field incident on a tunnel mouth is
vertically polarized and the tunnel is horizontal. The T-hunters setup uses a
vertical tube.

Cortland

Bill Aycock wrote:

> Now you have ME confused- is there a difference between "perpendicular
> to the axis" and "normal to the axis" ?
>
> We may have found a part of your problem.
>
> Bill-W4BSG

5651. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:07:42 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3ABBAD0E.7BF89E56@toast.net>
Source record: 167724

Gary Peach wrote:

> "John O'Flaherty" wrote ...
> > Gary Peach wrote:
> > > "John O'Flaherty" wrote
> > > I would say, as a matter of definition, that signal is not noise, and the
> radio
> > > astronomers probably go to great lengths to differentiate the two.
>
> As a matter of fact the signals from distance sources is excess noise.
> For amny years they looked at the tiny excess by using long time constant
> integrators and Misee Pulsars completely.
>
> In the case of the interferometer a large aperture may be simulated by using
> two or more AE separted by a large distance; say the width of the Pacific
> Ocean.
> The noise may be sampled at either end of the interferometer by using atomic
> clocks and digitally recording the noise at sample intervals. At a later
> time the two recordings are combined on a computer and the data is time
> shifted one with respect to the other until a correleation occurs, (a peak
> in the excess noise or a dip in the excess noise on both recordings, like a
> code), at that time when corelation occurs the inteference pattern may be
> analysed and the nature of the Radio source determined, is it a single body
> or multiple body etc. The apparent diameter etc.

> I would only suggest that once they've found that peak or dip, they have
> separated a signal from the noise- they've found some deviation from complete
> randomness. Some of the other things they look for are pulsars, for example,
> which exhibit periodic variation. The only case where they are looking at
> noise without signal, or, as I mentioned, where the noise signals only its own
> presence, is in looking at the cosmic background radiation. And I seem to
> remember from an article in Scientific American a few years ago that they had
> discovered inhomogeneities even in this cosmic background, and concluded from
> them that the universe isn't uniformly dense at the largest scale we can see.

>
> > If they didn't, they'd be listening to their own ears.
>
> If you have ever been out in the open, (400 miles from the nearest person)
> you can in fact hear your own ears in the silence, if you concentrate it
> becomes deafening.
>
> Of course you can also fool yourself very easily when listening to noise
> hour after hour. I have done this on a number of occassions when a
> Spacecraft has either been commanded down or may have been damaged (Marine

> VIII) or the solar panels cracked in the lunar night, (Surveyor). and you
> attempt to awaken it to ensure that it is infact dead. a long and tiring
> vigil. Reminds me of when I was a kid and listened night after night for a
> VK without much luck, and finally a little luck. Of course all that noise
> could have been avoided if I had listened in the early morning instead.

I know what you mean. When I put attenuators over my ears (the name of the things won't come to me right now) I can hear what appears to be white noise, and also I can hear my own pulse.
As a child, I'd sit in my basement reading next to the furnace, a forced air unit that made a fair amount of noise. I noticed that my mind would make familiar phrases out of the noise, like the sound of my mother calling my name.

john

5652. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:22:01 UTC
From: kb7qhc@home.com
Message-ID: <3abbae25.1824131662@news.seanet.com>
Source record: 167726

On Fri, 23 Mar 2001 19:48:56 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>If you have ever been out in the open, (400 miles from the nearest person)
>you can in fact hear your own ears in the silence, if you concentrate it
>becomes deafening.
>
>Of course you can also fool yourself very easily when listening to noise
>hour after hour.

Hi Gary,

To the first paragraph above I would add that you can also hear your
own heart beat.

To the second, well, that reminds me of my time at sea looking at the
radar, seeing only sea return (white noise), and being convinced there
was a "skunk" (our term for a contact) out there, but no, over there,
nope - actually over there - nope not there but here.... And then we
happened upon a fishing fleet within a squall (I could see the
squall). The Captain screamed back to CIC, there's a vessel off the
port bow! We had to explain that wood does not show up very well on
radar (the fleet was not metal hulled) as we finally began to pick
them up within 3 miles of us. It was a very poor radar (mostly for in
port navigation - Raytheon Pathfinder). Actually, it took all of 15
minutes of nervous observation and then we were back in the noise.

73's
Richard Clark, KB7QHC

5653. Re: conseil sur achat de parabole

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:24:08 UTC
From: richardharrison@webtv.net
Message-ID: <28244-3ABBB0E8-36@storefull-111.iap.bryant.webtv.net>
Source record: 167727

Andre seems to want to use a parabolic antenna to simultaneously receive three different broadcasts. This is practical if the signal sources are in the same general direction.

How different they are in direction determines the directivity and thus the gain which can be used. If the sources are in very nearly the same direction, a large dish with high gain and directivity can be used.

So, here is an example of a parabola with a diameter of about 3 wavelengths. The gain can be about 12 db. The beamwidth is about 30 degrees. The bandwidth is about 12% of the center frequency.

These data may be inapplicable to Andre`s case. We don`t have enough information.

Best regards, Richard Harrison, KB5WZI

5654. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:49:19 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99gcsf$13t$0@208.206.142.100>
Source record: 167728
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Leland C. Scott" wrote:

> The argument that if you don't know CW you can't have a valid opinion about
> it is crap.

It's not an argument, Leland, it's a fact. It is only considered an
argument
by those of you who have some reason to ignore the facts.
Only by learning it, gaining skill in how to do it, and working
radiotelegraphy can you come to know the essential facts concerning it
as a working communications mode.
You codefree types would much rather not even consider it to be a
communications mode, and for darn sure you would never bring yourself to
acknowledge that it is truly the most simple, easily implemented mode of
radiocommunication, useful under the most wide range of daunting
circumstances when virtually all other modes in common use are in the
toilet, or not even available due to their heavy overhead amd
infrastructure requirements. Nothing else even comes close.

So don't try to convince us that you will ever be a "Real Ham" ï¿½ until
you, too, are at least minimally qualified as a CW operator. Till that
time you will be an Amateur Radio licensee.

5655. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:50:27 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99gcuj$13t$1@208.206.142.100>
Source record: 167729
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
"Leland C. Scott" wrote:
>
> "Richard McCollum" <rmccoll@radiks.net> wrote in message news:qjMu6.446
> > Gentlemen, we are in the presence of a natural-born consultant;
>
> Just a wee bit jealous Richard?
>

Haw Haw HAW!!!
```

5656. Re: How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:51:59 UTC
From: David Robbins <k1ttt@berkshire.net>
Message-ID: <3ABBB76F.5262512B@berkshire.net>
Source record: 167730

when they go bad they start slapping around the rotor and extorting protection money!

spiders can get in the small holes and their nests collect moisture and short out the trap. lightning could blow them. on some cc beams they use a steel screw to connect loading coils to the elements, the screws rust and make poor connections(replace with ss bolt and seal from wx). vibration from wind (even light breezes) could fatigue the wire or connections. pollution (say from a nearby furnace or fireplace flue) can get in and corrode them, salt mist from nearby oceans can get in also.

Rudy Marcelletti wrote:
>
> If a trap, such as the 15 and 20 meter traps on my Cushcraft X7 beam, are
> mechanically sound, and are properly installed, with the drain holes down,
> just how does a trap go bad? Power levels have always been well within
> specs (no more than 600 watts PEP and traps are rated for 2KW). I am
> baffled. There are no moving parts!

--
David Robbins K1TTT
e-mail: mailto://k1ttt@berkshire.net
web: http://www.berkshire.net/~robbins/k1ttt.html or http://www.k1ttt.net
AR-Cluster node: 145.69MHz or telnet://k1ttt.net

5657. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 20:56:14 UTC
From: kb7qhc@home.com
Message-ID: <3abcb08c.1824746717@news.seanet.com>
Source record: 167731

On Fri, 23 Mar 2001 19:24:32 GMT, "VE9SRB" <srbest@att.net> wrote:

>
>"Richard Clark" <kb7qhc@home.com> wrote in message
>news:3ab9e441.1641375523@news.seanet.com...
>> On Wed, 21 Mar 2001 14:40:24 GMT, "VE9SRB" <srbest@att.net> wrote:
>>
>> >This "radiation" however is not the form of radiation
>> >as defined by general antenna theory (gain, radiation patterns, etc).
>>
>> Hi Steve,
>>
>> Forgive me, but your statement above is downright provincial. You are
>> simply ignoring the field that your antenna theory was derived FROM:
>> Optics.
>>
>> Due to the wavelength nature of the translation of energy, you are
>> not allowed to abandon Infrared to the sphere of astrology simply
>> because of scale.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Hi Richard:
>
>Provincial? I don't quite understand.
>
>My choice of wording might have been poor. The point that I was trying to
>make is that we define the antenna's radiation properties in terms of how it
>radiates the EM energy delivered to its terminals.
>
>Steve
>

Hi Steve,

IR conforms to every convention of beam forming, gain, and radiation
patterns. It is in fact because of Optics that antenna
characteristics have the qualities we describe. You cannot then turn
and deny IR having those same attributes.
>> >This "radiation" however is not the form of radiation
>> >as defined by general antenna theory (gain, radiation patterns, etc).
IR is radiation (how many forms are there?), no qualifiers are
required or implied. Maxwell's equations are standard study in the
field of Optics and fully consistent with all applications at all

scales and frequencies.

This objection is, of course, null and void if the IEEE has kidnapped
the term Beam to deny its earlier usage relating to light.

>My choice of wording might have been poor.
Try again with better words.

>The point that I was trying to
>make is that we define the antenna's radiation properties in terms of how it
>radiates the EM energy delivered to its terminals.
There is no failure of logic when IR is brought to the table. There
are only three differences that could be drawn from this.

1. IR does not radiate in the same pattern. This is fully consistent
with the scale of the radiating structure and the scale of the
radiation wavelength. At IR, the physical structure is easily a
billion wavelengths in size. There should be no surprise that in
conforming to conventional antenna theory that such radiation is
omnidirectional. This does not disqualify IR as being a source of
radiation.

2. The modulation products are suppressed by the radiating structure
presenting thermal mass that acts as a low pass filter. This does not
disqualify IR as being a source of radiation.

3. IR radiation is not at the same frequency. - Duh - This does not
disqualify IR as being a source of radiation.

All merely concede the fact that IR finds itself in a poor radiation
system. And here we observe the irony of discussing the efficiency of
dissipation (which is a real consideration for engineers, I had a
dissipation budget for my flight data recorder design). This is also
classic consideration when you go out and buy heat sinks - they too
are engineered to "match" loads of Thermal Resistance.

73's
Richard Clark, KB7QHC

5658. Downloadable IOTA List - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:04:33 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <RLPu6.5130$P4.375295@newsread1.prod.itd.earthlink.net>
Source record: 167734
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

The downloadable IOTA list has been updated effective 23-Mar-2001 -
22:07UTC

Available as a 15k zip file on the IOTA List page of the web site listed
below

--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages
http://www.ab7sl.com

5659. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:05:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3ABBC8C1.9BCFEF80@eznec.com>
Source record: 167732

I really hate to see such a fundamental misunderstanding get perpetuated, so I'll stick my head up again.

Maxwell's equations say that it's impossible to have a time-varying electric field without also having a time-varying magnetic field, or vice-versa. No amount of shielding or other manipulation can change this. If any "expert" seems to be saying otherwise, either the "expert" is being misinterpreted (most likely), or he's just plain wrong. I'm sure it's this fundamental, irrevocable relationship that Tom refers to. To dispute it is to dispute Maxwell's equations, which have worked well for all of us since their formulation.

Now, it IS possible to change how much of the energy in an EM wave is in the electric field and how much is in the magnetic. The ratio of E/H is called the "field impedance" or "wave impedance", and this doesn't have a fixed value. In free space, far from a radiator, all fields have an E/H ratio of 120*pi, or 377 ohms. But in other media, or close to a radiator, they don't. The field very close to a short dipole has a high E/H ratio; very close to a small loop, the E/H ratio is low. This, I suppose, is why small loops are called "magnetic loops" by amateurs. Small loops don't respond to just magnetic fields, or dipoles just to electric fields. If you apply a signal to a small loop, what happens? Very close to the loop, the E/H ratio is low. But as you move away from the loop, the E/H ratio increases, to a value actually higher than 377 ohms. This typically happens at a distance much less than a wavelength. Beyond this distance, it decreases, to finally approach 377 ohms. (A short dipole does exactly the same thing, but with E/H starting out high, reaching a minimum at much less than a wavelength, then increasing again to approach 377 ohms.) Reciprocally, if a wave from a source a wavelength away approaches the loop, the ratio of its E to H field decreases very close to the loop. If the source is very far away, it doesn't matter what kind of source it was. For example, suppose we apply a signal to a small dipole. Near the dipole, the E/H ratio is large, but at, say, half a wavelength away, the E/H ratio is nearly that of free space. If we apply the same signal to a small loop and look at the field a half wavelength away, we see essentially the same E/H ratio as for the dipole. So we can't tell, at that distance from the source, what kind of radiator the field is coming from. Now let's receive that signal with a short dipole and a loop. As the wave approaches either antenna, the E/H ratio changes appropriately for that antenna. The result is that both will receive the signal equally well. The small transmitting loop produced a dominantly magnetic field (small E/H), but only very, very close to the antenna. Beyond that, it looks like the field from any other antenna.

The following values are illustrative. They were calculated for a 2 meter circumference loop and 2 meter long dipole at 3 MHz, done with EZNEC's near field analysis. Anyone with EZNEC, even the demo version, or other modeling program capable of near field calculations can duplicate these results. The results have been confirmed with another analytic technique. The first column is the distance from the center of the antenna. The values in the second and third columns is the field impedance in ohms at that distance.

Meters Loop Dipole
2 54 2622
4 104 1363
6 164 862
8 237 597
10 323 440
12 411 345
14 486 291
16 534 265
18 553 257
20 550 258
22 537 264
24 521 273
26 505 281
28 491 290
30 478 297
50 415 342
100 386 368
150 381 373
200 379 374
250 378 375
300 378 376

Thinking of the loop as a receiving antenna, you can see that if a source were a couple of meters (1/50 wavelength) away, the loop would respond more strongly to the magnetic field produced by that source, since the field impedance is lower than 377 ohms. Two loops placed 2 meters apart would couple well, and a dipole and loop would couple poorly. But look what happens in the region 12 meters (about 1/8 wavelength) and beyond -- the loop is actually more responsive to the ELECTRIC field, and the dipole to the MAGNETIC field. This technically holds true at all distances greater than about 1/8 wavelength, although the difference becomes insignificant within a half to one wavelength or so. (The exact place this reversal takes place depends on the size of the antenna in wavelengths.)

Many of the references cited by Richard have dealt with the shielding of transformer windings, where the source and receiving radiators are separated only by a tiny fraction of a wavelength. In this case, each is well within the other's near field, and the field impedances can be extremely low. Looking at the situation, you could reasonably say that the electric field is negligible in most cases, and treat the magnetic field as though the electric field were zero. And you can alter the wave

impedance by shielding. That is, you can alter the E/H ratio. But to say you can completely exclude one field without excluding the other is to contradict Maxwell's equations.

Again, care should be made in making comparisons. Two transformer windings spaced a few millimeters apart at 60 Hz isn't at all a good example of what happens when receiving a signal from many wavelengths away with a small loop.

Tom has run some experiments showing that the reception of shielded and unshielded loops is the same. Do any of you who claim that the shielding has an effect have experimental evidence to the contrary?

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Tom, W8JI wrote:
> "After all, you are saying the magnetic field will pass freely through
> the metal shield."
>
> That is what metal Faraday screens do.
>
> Tom`s implication is that the statement in quotation marks is untrue.
> Tom also implies Terman is not to be trusted, that his books had to be
> revised to correct mistakes, thus new editions were required by errata.
> Tom says magnetic and capacitive coupling are "inseparable". So, I
> requote another authority.
>
> B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission
> Fundamentals" wrote:
>
> "The process of radiation is not the only means by which energy can be
> transferred from one circuit to another; if the magnetic lines of force
> which arise from the flow of current in one circuit happen to pass
> around, or link, the conductors of another circuit, then there is a
> mutual inductance between the two circuits. If this mutual inductance is
> of Lm henries, the voltage induced in circuit 2 by the flow of I1 amp in
> circuit 1 will be
>
> E2 = j omega Lm I1 volts
>
> Similarly, if the electric lines of force arising from portions of one
> circuit which are above ground potential terminate upon portions of
> another circuit which are separated from ground by some impedance, the
> resulting capacitive coupling will allow some interchange of energy
> between the two circuits. Both the inductive and capacitive types of
> coupling can be controlled by the proper application of shielding"
>
> Griffith goes on to present a Faraday screen to eliminate capacitive
> coupling. Then, he presents a total shield for EM waves but uses a

> capacitor between two circuits to allow capacitive coupling while
> disallowing magnetic coupling between two circuits.
>
> In other words, inductive and capacitive coupling are SEPARABLE. Tom is
> wrong.
>
> Best regards, Richard Harrison, KB5WZI

5660. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:07:58 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <2PPu6.1823$IA1.145105@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167733

"Richard Clark" <kb7qhc@home.com> wrote in message
news:3abcb08c.1824746717@news.seanet.com...
> On Fri, 23 Mar 2001 19:24:32 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >
> >"Richard Clark" <kb7qhc@home.com> wrote in message
> >news:3ab9e441.1641375523@news.seanet.com...
> >> On Wed, 21 Mar 2001 14:40:24 GMT, "VE9SRB" <srbest@att.net> wrote:
> >>
> >> >This "radiation" however is not the form of radiation
> >> >as defined by general antenna theory (gain, radiation patterns, etc).
> >>
> >> Hi Steve,
> >>
> >> Forgive me, but your statement above is downright provincial. You are
> >> simply ignoring the field that your antenna theory was derived FROM:
> >> Optics.
> >>
> >> Due to the wavelength nature of the translation of energy, you are
> >> not allowed to abandon Infrared to the sphere of astrology simply
> >> because of scale.
> >>
> >> 73's
> >> Richard Clark, KB7QHC
> >
> >Hi Richard:
> >
> >Provincial? I don't quite understand.
> >
> >My choice of wording might have been poor. The point that I was trying
to
> >make is that we define the antenna's radiation properties in terms of how
it
> >radiates the EM energy delivered to its terminals.
> >
> >Steve
> >
>
> Hi Steve,
>
> IR conforms to every convention of beam forming, gain, and radiation
> patterns. It is in fact because of Optics that antenna
> characteristics have the qualities we describe. You cannot then turn
> and deny IR having those same attributes.

>

Hi Richard:
(some slight levity intended here)

I did not deny that IR or other forms of EM radiation (e.g. light) have
these same attributes.

> >> >This "radiation" however is not the form of radiation
> >> >as defined by general antenna theory (gain, radiation patterns, etc).
> IR is radiation (how many forms are there?), no qualifiers are
> required or implied. Maxwell's equations are standard study in the
> field of Optics and fully consistent with all applications at all
> scales and frequencies.
>

Ow. You made this point several times. You can stop busting me anytime
now.

>
> This objection is, of course, null and void if the IEEE has kidnapped
> the term Beam to deny its earlier usage relating to light.
>
> >My choice of wording might have been poor.
> Try again with better words.
>

Better words:

The radio frequency electromagnetic radiation characteristics or properties
of a radio frequency antenna are described or characterized based upon the
manner in which the radio frequency antenna radiates the radio frequency
electromagnetic energy delivered to its terminals. A lossy radio frequency
antenna will also radiate Infrared electromagnetic radiation as a result of
converting some portion of the radio frequency electromagnetic energy into
"heat". The Infrared radiation will obey the boundary conditions and
relationships established by Maxwell's equations. However, it is unlikely
that the antenna's radiation properties at the IR frequencies, in terms of
pattern shape and gain, will identically match the antenna's radiation
properties at the RF frequency.

> >The point that I was trying to
> >make is that we define the antenna's radiation properties in terms of how
it
> >radiates the EM energy delivered to its terminals.
> There is no failure of logic when IR is brought to the table. There
> are only three differences that could be drawn from this.
>
> 1. IR does not radiate in the same pattern. This is fully consistent
> with the scale of the radiating structure and the scale of the
> radiation wavelength. At IR, the physical structure is easily a
> billion wavelengths in size. There should be no surprise that in
> conforming to conventional antenna theory that such radiation is

> omnidirectional. This does not disqualify IR as being a source of
> radiation.
>

IR is not the "source" of radiation. It is the portion of the EM frequency
spectrum at which the radiation occurs.

> 2. The modulation products are suppressed by the radiating structure
> presenting thermal mass that acts as a low pass filter. This does not
> disqualify IR as being a source of radiation.
>

IR is not the "source" of radiation. It is the portion of the EM frequency
spectrum at which the radiation occurs.

> 3. IR radiation is not at the same frequency. - Duh - This does not
> disqualify IR as being a source of radiation.
>

- Duh - ????? Well, - Der - IR is not the "source" of radiation. It is
the portion of the EM frequency spectrum at which the radiation occurs.

I am under the impression (if I am wrong I am certain that you will correct
me) that the source of Infrared radiation is the billions of vibrating
electrons in the object radiating at IR. These electrons vibrate because
they are at a higher state of energy. The technical term might be "heat"

Talk to you soon,

Steve

> All merely concede the fact that IR finds itself in a poor radiation
> system. And here we observe the irony of discussing the efficiency of
> dissipation (which is a real consideration for engineers, I had a
> dissipation budget for my flight data recorder design). This is also
> classic consideration when you go out and buy heat sinks - they too
> are engineered to "match" loads of Thermal Resistance.
>
> 73's
> Richard Clark, KB7QHC

5661. Re: Difference in Diamond Mobile Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:17:22 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <1hinbto4puvqpm5trb79p2mrnq3i3606ri@4ax.com>
Source record: 167735

You can find what information is available at:
http://members.home.net/wdpushie/antennas.htm The data is somewhat
old now, but I think it is still valid. There are no lab reports,
just subjective comparisons as to how far away from repeaters you
could still maintain contact. You can also contact the club President
directly. Info on web site. He loves to talk antennas.

The HP32 may have been superseded by something else. If you check
around on the site it may explain what. I dropped out of MARC a few
years ago when we sold our Gold Wing so haven't kept up on the latest
with them. They have tons of good information relative to motorcycle
mobiling which is applicable to use in automobiles.

Dick - W6CCD

On Fri, 23 Mar 2001 19:25:04 GMT, "Jeff Farrar" <jeff@farrar.com>
wrote:

>Also, I couldn't find the HP32 on Comet's site. Is this an older model?
>
>Thanks again.
>
>"Dick Hughes" <rhughes33@cableone.net> wrote in message
>news:i01nbt069oa02pp636dn70qcs9jm26ilcb@4ax.com...
>> For what its worth, MARC, the motorcycle amateur radio club did
>> extensive antenna testing on 2M-440 for use on motorcycles. That's
>> kind of worst case as a motorcycle provides very little ground plane
>> as compared to an automobile. The top performing antenna for everyday
>> use was the Comet HP32. If you wanted the absolute last foot of reach
>> in a fringe area, the Comet Z780 was the one to have. Both
>> outperformed the Diamonds.
>>
>> Dick - W6CCD

5662. Re: Sinclair R-312CR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:20:31 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3ABBCC31.1F27712E@worldnet.att.net>
Source record: 167737
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Nevia:
Could you be a little more descript about the duplexer? My sinclair catalog does not list it.

Basically there are two common types of duplexers, the hybrid ring and the pass/reject type.
The hybrid ring as a closed ring phasing harness for each cavity and there are coaxial taps on it to interconnect the rings. The cavities have only one port vs two for the pass-reject type.

Sinclair discontinued the hybrid ring sometime in the mid 80's and no longer supports it
It was too costly to manufacture and provided no out of band attenuation thus requiring additional filtering..

You did not state the dimensions of the cavities. Generally speaking the larger the can, the higher the Q. Most are about 7 inches in diamter and about 26 inches in length.

For two meters and the 600KHz separation at your power level, you need a duplexer with at least 95-100db isolation to avoid desense. To get this sort of separation you need at least a six cavity duplexer of the pass/reject type. The best results that I have ever been able to acheive was 80 db with only four cans It is simply not enough.

The four can hybrid ring variety can get you over 120 db of isolation if properly tuned. The dimensions of the phasing harness are critical and most commercial band duplexers will not work in the two meter band unless of course you manufacture new harnesses for the frequencies you want to work.

Also there are no standardized input to output frequency offsets for the 152-174MHz band and if this duplexer came out of commercial service it may have been setup up for a megahertx or more separation in which case it probably worked well.

Nevia wrote:

> Just picked up a Sinclair Duplexer, Model R-312CR
> that appears to be a "reject" type of setup. Four cans and tunable rods in
> the middle. I wanted to use this for a low
> power repeater in our area and the tech who sold it to me said it would be
> good for up to 50 watts but it really kills the sensitivity of the receiver.
> Has anyone had any experience with these duplexers? Any pros or cons?
>
> I am looking for any information pertaining to this duplexer. Thanks!
>

> Anyone replying to me rather than the newsgroup should
> remove NADASPAM from the email address.
>
> jgoldring@nadaspam.direcpc.com

5663. Paper on Gamma match

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:21:19 UTC
From: Piero Tognolatti <tognolatti@ing.univaq.it>
Message-ID: <3ABBCC5F.BB4506E2@ing.univaq.it>
Source record: 167736

I am looking for the following article:
H.T. Tolles, "How to design Gamma-matching networks," Ham Radio, pp.
46-55, May 1973.
It is not easy to find Ham Radio volumes in Italy.
Is there anyone that can find it, scan and send it to me as an e-mail?
Thank you in advance.
73 de I0KPT
--
.....
Piero Tognolatti

e-mail: tognolatti@ing.univaq.it

5664. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:24:23 UTC
From: 2w8ji@akorn.net
Message-ID: <3abbcbe4.259741106@news.accessunited.com>
Source record: 167738

On Fri, 23 Mar 2001 13:28:46 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>In other words, inductive and capacitive coupling are SEPARABLE. Tom is >wrong.

Richard,

Thank you for your personal opinion about my abilities.

Coming from a person who thinks time-varying electric fields need not accompany time-varying electric foelds, I'll take that as a compliment!!!

73 Tom

5665. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:29:30 UTC
From: JWheeler <"kd5bcu at sydcom dot net">
Message-ID: <3abbce39_1@corp.newsfeeds.com>
Source record: 167739
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill Sohl <billsohl@mindspring.com> wrote in message
> And the "price" set by the FCC is not based on any
> competitive concerns.
>
> Cheers,
> Bill K2UNK
>

Actually, the price the FCC sets is based on international treaty. Of course, that treaty will likely change in the next few years by dropping the code requirement, and the FCC will follow suit. Those that want HF priviledges will either pay the price and learn code or they can simply wait a few years until HF priviledges go on 'clearance'.

JW

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5666. Re: Sinclair R-312CR

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:40:05 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3ABBD0C7.E9DFFFD0@worldnet.att.net>
Source record: 167740
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Nevia:
Could you be a little more descript about the duplexer? My sinclair catalog
does not list it. I assume it is a reslock type which is a pass/reject type. Reslock duplexers were popular for VHF mobile telephone use because of their compact size. I have never seen one successfully used for two meter repeater duplexing.

Basically there are two common types of duplexers, the hybrid ring and the
pass/reject type.
The hybrid ring as a closed ring phasing harness for each cavity and there are
coaxial taps on it to interconnect the rings. The cavities have only one port
vs two for the pass-reject type.

Sinclair discontinued the hybrid ring sometime in the mid 80's and no longer
supports it
It was too costly to manufacture and provided no out of band attenuation thus
requiring additional filtering..

You did not state the dimensions of the cavities. Generally speaking the larger
the can, the higher the Q. Most are about 7 inches in diamter and about 26
inches in length.

For two meters and the 600KHz separation at your power level, you need a duplexer with at least 95-100db isolation to avoid desense. To get this sort of
separation you need at least a six cavity duplexer of the pass/reject type. The
best results that I have ever been able to acheive was 80 db with only four
cans It is simply not enough.

The four can hybrid ring variety can get you over 120 db of isolation at 600KHz if properly tuned. The dimensions of the phasing harness are critical and most
commercial band hybrid ring duplexers will not work in the two meter band unless of course
you manufacture new harnesses for the frequencies you want to work.

Also there are no standardized input to output frequency offsets for the
152-174MHz commercial band and if this duplexer came out of commercial
service it may have
been setup up for a megaHertz or more separation in which case it
probably
worked well for that service.

In tuning a duplexer you should never use transmitter power to do it.
What I do is to use a sensitive receiver with an S-meter and a signal
generator with a calibrated attenuator. I separate the cans and tune
them one at a time and set the pass properties for minimum attenuation
and the reject notch for maximum attenuation using the appropriate
frequecies, of course.

Good luck with it and 73...Dick K7RNZ

Nevia wrote:

> Just picked up a Sinclair Duplexer, Model R-312CR
> that appears to be a "reject" type of setup. Four cans and tunable rods in
> the middle. I wanted to use this for a low
> power repeater in our area and the tech who sold it to me said it would be
> good for up to 50 watts but it really kills the sensitivity of the receiver.
> Has anyone had any experience with these duplexers? Any pros or cons?
>
> I am looking for any information pertaining to this duplexer. Thanks!
>
> Anyone replying to me rather than the newsgroup should
> remove NADASPAM from the email address.
>
> jgoldring@nadaspam.direcpc.com

5667. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:46:18 UTC
From: 2w8ji@akorn.net
Message-ID: <3abbce3c.260341219@news.accessunited.com>
Source record: 167741

On Fri, 23 Mar 2001 13:28:46 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom`s implication is that the statement in quotation marks is untrue.
>Tom also implies Terman is not to be trusted, that his books had to be
>revised to correct mistakes, thus new editions were required by errata.

Isn't that why there are revisions? To make things clearer, and to correct errors? Or am I mistaken?

Actually Terman isn't the problem, other than his unfortunate use of some words that can be confusing.

The problem is you are extracting information about coupling inside transformers and small closed systems, and applying it to antennas.

Terman clearly was not discussing antennas in the text you quoted.

>Tom says magnetic and capacitive coupling are "inseparable". So, I
>requote another authority.

That is another example of how you change words to suit your own ideas. I never said that, and you can not copy and paste where I did.

>B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission
>Fundamentals" wrote:
>
>"The process of radiation is not the only means by which energy can be
>transferred from one circuit to another; if the magnetic lines of force
>which arise from the flow of current in one circuit happen to pass
>around, or link, the conductors of another circuit, then there is a
>mutual inductance between the two circuits. If this mutual inductance is
>of Lm henries, the voltage induced in circuit 2 by the flow of I1 amp in
>circuit 1 will be

In the above text, the author clearly states he is talking about linked systems. Again you are using text describing transfomers as an explaination about antennas.

You'd better wake up and get on the right page. I long ago stated the boundary was a few loop diameters away.

>In other words, inductive and capacitive coupling are SEPARABLE. Tom is
>wrong.

Must be another "Tom", this Tom never said inductive and capacitive coupling were the same.

This Tom simply said you can not shield a loop and alter its field impedance. You can not change its response to time-varying electric fields at any distance from the antenna...other than the change offered by improving or changing the system's balance.

73 Tom

5668. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 22:47:45 UTC
From: 2w8ji@akorn.net
Message-ID: <3abbd1c7.261248348@news.accessunited.com>
Source record: 167742

On Fri, 23 Mar 2001 13:04:03 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>That's a pretty good explanation. The only amendment I'd suggest is that
>T(sky) is not appropriate on the lower bands where antennas don't have
>much directivity - well, not much by UHF, microwave and radio astronomy
>standards - and will pick up noise from all directions. T(ambient) might
>be a better label.

Don't forget the ionosphere, since it shields the earth from galactic
noise.

73 Tom

5669. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 23:02:48 UTC
From: 2w8ji@akorn.net
Message-ID: <3abbd232.261354818@news.accessunited.com>
Source record: 167743

On Fri, 23 Mar 2001 19:25:21 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>> It may be fun to add and subtract all day, but to be useful in solving
>> problems it is critical we know what data to use and how to use it.
>
>There, in the true spirit of Ham Radio, you can help me Tom; keep me on the
>straight and narrow by not only pointing out the error of my ways, but where
>a correction is required supplying the correct data and substantiating it so
>that I may follow through and do better the next time.
>After all in a contest it would be your word against mine without some
>supportive evidence.

I've done that, and you've simply either not read what I wrote or
igored it. For example, I gave measured data several times and then
you asked me for measured data.

>The old hands like to think that after devoting so many years they are
>expert.
>However when I get around to thinking that I know it all will be the time
>for me to give it away.

.....and then you say.....

>I am firmly of the opinion that a large number of Hams put in just enough
>study to qualify for a licence and then never look at another text book or
>consider the wonder of playing with nature ever again. Many think that the
>Radio Amateurs Examination is the pinnacle of learning; whereas it is not
>even the foot hills to the high country beyond. Why they deprive themselves
>of the greater pleasure by becoming just train number collectors I have
>never been able to understand.
>
>In humility, 73
> Gary

How dare you imply that a "large number" of Hams are lazy.

What is so special about you, that allows you to judge other people by
what they do in life?

Please share all of your wonderful accomplishments in life with us, so
that the poor deprived "train number collectors" among us can grovel
at your feet.

That "humility thing" , it's a joke...right?

73 Tom

5670. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 23:18:37 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <otfVwuANn9u6EAnf@ifwtech.plus.net>
Source record: 167744

Gary Peach wrote:
>
>"Ian White, G3SEK" wrote ...
>> Gary Peach wrote:
>> >"Ian White, G3SEK"
>...
>> That's a pretty good explanation. The only amendment I'd suggest is that
>> T(sky) is not appropriate on the lower bands where antennas don't have
>> much directivity - well, not much by UHF, microwave and radio astronomy
>> standards - and will pick up noise from all directions. T(ambient) might
>> be a better label.
>
>I agree that to some "T(sky)" might be the subject of some discussion,
>but from my 5' 6" up is up.
>I don't like the idea of T(ambient) because it is too readily confused with
>To
>which especially in the IEEE definitions of noise figure has the specific
>value of 290ï¿½K

There shouldn't be any confusion; and if there is, the confusion is
about T0.

In modern definitions of noise figure, T0 has no relationship to ambient
temperature - it is simply an arbitrary reference temperature. (T0 is
defined as 290K, but you could construct a completely self-consistent
definition of "noise figure" using any other reference temperature above
absolute zero.)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5671. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 23:19:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <hNNXY2AHo9u6EAES@ifwtech.plus.net>
Source record: 167745

Tom W8JI wrote:
>On Fri, 23 Mar 2001 13:04:03 +0000, "Ian White, G3SEK"
><G3SEK@ifwtech.com> wrote:
>
>>That's a pretty good explanation. The only amendment I'd suggest is that
>>T(sky) is not appropriate on the lower bands where antennas don't have
>>much directivity - well, not much by UHF, microwave and radio astronomy
>>standards - and will pick up noise from all directions. T(ambient) might
>>be a better label.
>
>Don't forget the ionosphere, since it shields the earth from galactic
>noise.

Good point - and all the more reason not to call it "sky" noise when it
isn't.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5672. cb mobile antenna for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 23:32:57 UTC
From: cm13141@aol.com
Message-ID: <20010323183257.15689.00000529@ng-fp1.aol.com>
Source record: 167746

Anyone know how well a cheap radio shack cb mobile antenna will work on 10 meters?I am thinking of using it with my kenwood ts-930s till my Gap multi band vertical i orderd gets here.I plan on mounting the CB antenna on a fence post in my backyard and feed it with 50' of RG8,I have a tucker t-1000 antenna tuner to help tun it and also my rig has a tuner.Anyone have any thoughts on this or advice to make this work?I would like to get on the air some while waiting for my Gap.
Thanks,
James

5673. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 23:42:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99gmsnsep1@uranium.btinternet.com>
Source record: 167747

Tom wrote -
> Hundreds of lines of math, all correctly done but using wrong
> assumptions, is worthless. It impresses no one, except perhaps
the
> writer who becomes self-enamored with himself.
>
> It may be fun to add and subtract all day, but to be useful in
solving
> problems it is critical we know what data to use and how to use
it.
>
==========
Tom, sorry to say I have to agree with your assessment.

Waffle, waffle, waffle, bafflegab, etc., may sound very impressive.
But when nearing the bottom line it becomes necessary to put some
numbers into the equations, and there are no numbers forthcoming,
the whole thing collapses like a pack of cards.

Reg

5674. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-23 23:54:17 UTC
From: kb7qhc@home.com
Message-ID: <3abbd72d.1834635296@news.seanet.com>
Source record: 167748

On Fri, 23 Mar 2001 22:07:58 GMT, "VE9SRB" <srbest@att.net> wrote:

>
>I am under the impression (if I am wrong I am certain that you will correct
>me) that the source of Infrared radiation is the billions of vibrating
>electrons in the object radiating at IR. These electrons vibrate because
>they are at a higher state of energy. The technical term might be "heat"
>
>Talk to you soon,
>
>Steve
>

Hi Steve,

Forgive the stern admonishments - levity is welcome.

Consider this from the Encyclopedia Britannica:
http://www.britannica.com/bcom/eb/article/printable/8/0,5722,108498,00.html
"Normally the electrons, subjected to a force because of an
electric field, accelerate and progressively acquire greater speed.
Their velocity is, however, limited in a wire because they lose some
of their acquired energy to the wire in collisions with other
electrons and in collisions with atoms in the wire. The lost energy is
either transferred to other electrons, which later radiate, or the
wire becomes excited with tiny mechanical vibrations referred to as
phonons. Both processes heat the material. "

I hope you will note that heat occurs as a product of both processes
and that one process will allow that heat to radiate and one (phonons)
not. Again, this is what I speak of when I mentioned the irony of
the efficiency of dissipation (and hence the deeply buried humor of my
previous post). As RF Photons, in times and threads past, were so
wildly fanciful in their discussion, I hesitated to bring up the
issues of dissipation efficiency and Phonons (which are truly
vibratory - and described as extremely high frequency sound).

The IEEE definitions fall far behind the curve of current science of
heat. Hardly surprising for a dictionary that appeals to heat to
explain dissipation, but cannot, in turn, define heat. As for this
cynical observation, I must defer to Cecil and his copy (for which I
believe he supported this claim). Cecil, am I wrong? Even more, is
there an entry for Phonons?

73's
Richard Clark, KB7QHC

5675. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:01:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99go12$1ms$1@uranium.btinternet.com>
Source record: 167749

Why do most people find it necessary to quote Terman ? Did he
write the radio hams bible ? I thought the ham's bible was a
compendium of the ARRL publications over the last 75 years.

If you can't provide a logical argument to illustrate your point
then you automatically lose the argument by dragging in Terman for
support. Why not just quote Terman in the first place ?

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Richard Harrison <richardharrison@webtv.net> wrote in message
news:15895-3ABB0438-242@storefull-112.iap.bryant.webtv.net...
> Tom, W8JI wrote:
> "Gosh, and all along I kept saying all the shield does is change
the
> balance of the loop."
>
> Well, there`s more to it than that. The shield can help keep the
balance
> of the loop from changing. It also has another function, that is
to make
> the loop insensitive to the electric field. A host of
distinguished
> authors say so.
>
> Terman, on page 38, "Electronic and Radio Engineering", 1955,
says:
> "It is possible to shield electrostatic (yes this means
time-varying
> electric lines of force) flux without simultaneously affecting
the
> magnetic field by surrounding the space to be shielded with a
conducting
> cage that is made in such a way as to provide no low-resistance
path for
> the flow of eddy currents, while at the same time offering a
metallic
> terminal upon which electrostatic flux lines can termnate."
>

> The insulated gap in a loop shield breaks the path for eddy
currents
> (those pesky currents which go in circles, in this case it would
be all
> the way around the shield loop were it not for the insulated gap
in the
> shield). But, the insulated gap loop shield does offer a terminal
for
> the electrostatic limes of force (and a terminal is an end, in
this case
> for electrostatic lines of force).
>
> So, we have a shielded loop which is responsive to the magnetic
field
> but unresponsive to an electric field.
>
> Tom can deny all he wants, but many authors say the same thing
and some
> gave papers to the IRE on the subject about 70 years ago and
these data
> have not been refuted and are references which later authors give
for
> their work.
>
> Best regards, Richard Harrison, KB5WZI
>

5676. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:38:17 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3abbec63$0$12818$1dc6e903@news.corecomm.net>
Source record: 167750
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill;

A comment you made below seems to fit the solution to the problem. If the code test was made part of the scoring of the written test just like the various segments of the present written then those who want to do code can study the code and have a section of the test that they will pass and have other sections that they can slide on and still get their passing grade.

Dave Nagel, WD9BDZ

Bill Sohl wrote:
>
> On Fri, 23 Mar 2001 00:04:21 -0600, "David G. Nagel" <nagel@core.com>
> wrote:
>
> >Amateur radio covers a wide spectrum of methods and modes. Some people
> >specialize in SSB, others AM, still others TV, low power, EME, and yes
> >some CW.
> >
> >Qualification for an amateur radio license covers that same spectrum. We
> >are tested on the Rules and Regulations governing the service. We are
> >tested on our understanding of proper and appropriate operating
> >technique. We are tested on how a radio signal is generated and
> >detected. We are also tested on modes of operation i.e. ssb, am sstv,
> >atv, antenna design and operation. And. We are tested on our
> >comprehension of digital modes of communication to include morse code.
> >To say that we should not be tested on a segment of the service just
> >because it is old, outmoded and not used for anything ignores the fact
> >that code is part of our general knowledge and an important part of our
> >heritage.
>
> All true, but you don't consider that none of the other modes
> are tested on a separate pass/fail basis as code is today.
> I have no problem with adding some test questions to the
> overall test/knowledge syllabus on code as a mode. There
> is,however, no longer need to test anyone's individual
> code ability as a stand-alone skill test on sending/receiving.
> That's no different than not testing on ability to type
> using a keyboard for packet or RTTY.
>
>
> That's all you'll get from me.
>

> Cheers,
> Bill K2UNK

5677. Re: cb mobile antenna for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:44:58 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABBEE09.FC3AD646@bellsouth.net>
Source record: 167751

Build a dipole !
costs about $4.00, you learn something and they work good!
James

5678. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:45:01 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <h6Su6.10425$q66.240615@paloalto-snr1.gtei.net>
Source record: 167752
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABB7389.15559C47@IEEE.org...
> W6DKN wrote:
> > After I have experienced it first hand, I can give you a valid opinion
on
> > the subject (provided we both end up in the same place :>) .
>
> Do you tell your kids not to jump out in front of a moving truck?
> Is it because you have experienced it or just used your rational
> mind to evaluate it? I understand lots of things at which I have
> no skill or experience.
> --

Common sense and basic survival instinct are completely different than
trying to impose your personal opinions to the general public on a subject
in which you have no first hand knowledge or experience.

A perfect example of this is the anti-gun crowd - the vast majority of them
have never even fired a gun, and yet they would have you believe that based
on their feelings and opinions, you should have to give up your guns.

I understand how a nuclear reactor works, but I would never be allowed to
testify in court as to the value of such a device to the general public.
This is because no matter how well intended, the fact remains that my
opinion on the subject is moot due to the fact that I do not possess the
expertise necessary to present a legally valid opinion.

73 de W6DKN

5679. Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:55:08 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABBF06B.F43A8A76@bellsouth.net>
Source record: 167753

Planning on installing HF in the car.

I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic antenna tuner. I have a friend out there using this configuration, He has instant access to 80M-6M via the tuner.

My question is... Is there anyone else out there using this? How does it compare to other antennas...

I'm interested in any side by side results anyone may have..

Thanks
James Hilins

5680. Re: Homebrew Coax Colinear Tuning - Help Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:55:56 UTC
From: 2w8ji@akorn.net
Message-ID: <3abbedfd.268471376@news.accessunited.com>
Source record: 167754

On Fri, 23 Mar 2001 16:11:51 -0000, "Nick Filer" <nick@cs.man.ac.uk>
wrote:

>I did wonder a little at the velocity factor difference between the outer
>and inner. Would putting inside a PVC tube help?

Anything would help, the question is will it help enough.

>This will lower the
>external VF to about 0.8 (I think). If velocity factor is non cumulative
>then this should reduce the SWR?

Impedances are another issue. What you have are a bunch of half-wave
sections that radiated (the outside of the shields) fed by being tied
across a transmission line at points that are out-of-phase.

If the outside of the cable isn't 1/2 wl long, it is reactive.

If it is 1/2 wl long (electrically) it is resistive....but what is the
impedance end-to-end? How do all those 1/2 wl sections share current?
What is the total impedance of the whole system?

I can't answer any of that without days of work, I can only describe
how it works. My guess is that the engineering is more complex than
the people who copied the antenna ever knew.

I've know several people who tried to build the antennas, and no one
who ever actually made one work with reasonable gain.

>velocity factor? Presumably if the tubing has a VF of 0.66 then the antenna
>should work - even if the losses are high? I have a table somewhere that
>suggests that Polyethylene has a VF about the same as coax -

VF also depends on how thick the dielectric is, compared to the air
the field passes through.

73 Tom

5681. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 00:57:05 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <BhSu6.2010$IA1.159474@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167755

"Richard Clark" <kb7qhc@home.com> wrote in message
news:3abbd72d.1834635296@news.seanet.com...
> On Fri, 23 Mar 2001 22:07:58 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >
> >I am under the impression (if I am wrong I am certain that you will
correct
> >me) that the source of Infrared radiation is the billions of vibrating
> >electrons in the object radiating at IR. These electrons vibrate because
> >they are at a higher state of energy. The technical term might be "heat"
> >
> >Talk to you soon,
> >
> >Steve
> >
>
> Hi Steve,
>
> Forgive the stern admonishments - levity is welcome.
>

Hi Richard,

I assumed your approach was a bit of levity as well. The -Duh- was well
placed.

> Consider this from the Encyclopedia Britannica:
>
http://www.britannica.com/bcom/eb/article/printable/8/0,5722,108498,00.html
> "Normally the electrons, subjected to a force because of an
> electric field, accelerate and progressively acquire greater speed.
> Their velocity is, however, limited in a wire because they lose some
> of their acquired energy to the wire in collisions with other
> electrons and in collisions with atoms in the wire. The lost energy is
> either transferred to other electrons, which later radiate, or the
> wire becomes excited with tiny mechanical vibrations referred to as
> phonons. Both processes heat the material. "
>
> I hope you will note that heat occurs as a product of both processes
> and that one process will allow that heat to radiate and one (phonons)
> not. Again, this is what I speak of when I mentioned the irony of
> the efficiency of dissipation (and hence the deeply buried humor of my
> previous post). As RF Photons, in times and threads past, were so
> wildly fanciful in their discussion, I hesitated to bring up the
> issues of dissipation efficiency and Phonons (which are truly

> vibratory - and described as extremely high frequency sound).
>

I read the full excerpt from the quoted web page and it was clear that it was about dissipation of energy in a wire in the form of heat (electrons colliding - vibrating was another poor choice of words on my part). It was not clearly defined as to what they meant by radiation. At this point, I am assuming that it was referring to radiation in the IR portion of the EM spectrum.

> The IEEE definitions fall far behind the curve of current science of
> heat. Hardly surprising for a dictionary that appeals to heat to
> explain dissipation, but cannot, in turn, define heat. As for this
> cynical observation, I must defer to Cecil and his copy (for which I
> believe he supported this claim). Cecil, am I wrong? Even more, is
> there an entry for Phonons?
>

Quite honestly I have not read the IEEE Dictionary.

Heat is an energy conversion process where electrons (phonons, whatever) collide with one another. It is considered energy lost. This lost energy is transferred to surrounding objects in numerous ways. Convection, conduction and Infrared radiation. Because the human body detects thermal convection and conduction, we perceive and generally define heat in this manner.

Infrared radiation is also a heat transfer process, where energy is transferred to the surrounding environment through EM radiation. The transfer of energy as Infrared radiation is beyond our detection abilities so we don't perceive it as "heat".

Given that that IR is a heat transfer process as is thermal convection and conduction, the IEEE definition for dissipation being a conversion of energy to heat is accurate.

> 73's
> Richard Clark, KB7QHC

5682. Re: How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 01:12:45 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <jtSu6.443$Mi4.4252@newsfeed.slurp.net>
Source record: 167756

I used to live in a small country town when I first got into ham radio. Lacking the funds to put a "gosh almighty" tower and antenna system I opted for a Cushcraft Antenna all band vertical. It was put on the South Side of the house and sat there faithfully for about seven years. When I took it down I noticed that the wind, carrying "elements" in the air, sand, dirt, ice and snow, had taken it's toll on the coverings of the traps. I replaced two that were really nasty and cleaned up the trap itself with new fasteners and heatshrink tubing. If the covering is not in bad condition you can, with a hobby knife, cut away carefully where the connections are and do the housekeeping needed. Have fun. 73 W9FPJ

5683. FOR SALE, FOR SALE, FOR SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 01:33:08 UTC
From: Dick Elliott <elliotta@netusa1.net>
Message-ID: <_MSu6.452$Mi4.5087@newsfeed.slurp.net>
Source record: 167757

I have three Yaesu FT50RD dual band hand held transmitters.

#One is a 7 - Buy it for $160.oo.

#Two is a 7 - Buy it for $160.oo

#Three is a 9 - Buy it for 170.oo

All three units, never been abused, have original box, wall chargers, and
green serial number certificate.

They won't last long at these prices.

Guaranteed to not be D.O.A.

EMAIL DIRECT FOR DETAILS AND OR BARGAINING.

W9FPJ

5684. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 01:37:57 UTC
From: kb7qhc@home.com
Message-ID: <3abbf502.1842272157@news.seanet.com>
Source record: 167758

On Sat, 24 Mar 2001 00:57:05 GMT, "VE9SRB" <srbest@att.net> wrote:

>
>Given that that IR is a heat transfer process as is thermal convection and
>conduction, the IEEE definition for dissipation being a conversion of energy
>to heat is accurate.

Hi Steve,

ALL that you wrote (and which I did not include) is absolutely true.

The specific point is that we are pivoting about the meaning of
dissipation which has been identified (by some) to mean NOT radiation.
It is this error to which I am responding.

73's
Richard Clark, KB7QHC

5685. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 01:54:11 UTC
From: Patricia Gibbons <wa6ube@tactical-link.com>
Message-ID: <99guqf$2p2$1@slb7.atl.mindspring.net>
Source record: 167759

You will have better results if the automatic
tuner is connected to a center-loaded whip antenna
that is tuned reasonably close to the band you want
to operate.. the tuner will then re-resonate the antenna
system as you tune from one segment of an amateur
band to another .. this would be especially effective
on the lover freqs such as 75 and 40 meters..

An 8 or 9-foot whip, with no external loading coils,
will be very inefficient on these lower frequencies when
the automatic tuner is trying to re-tune a short whip.

Moving most of the loading to the center of the whip allows
better radiation efficiency from the lower 1/3 of the antenna's
length which is where most of the real radiating is being accomplished..

Trish
--
Patricia E. Gibbons & Carla Satra
Tactical Link Systems
<ICQ#: 72818195>
<http://www.tactical-link.com>
see my comvan at:
<http://www.qrz.com/callsign.html?callsign=wa6ube>
.....
My Public Key is available at:
<http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
Key ID: 0xEDECB44F
This key is RSA, NOT Diffie-Hellman !!

jhilins <jhilins@bellsouth.net> wrote in message
news:3ABBF06B.F43A8A76@bellsouth.net...
> Planning on installing HF in the car.
>
> I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> antenna tuner. I have a friend out there using this configuration, He
> has instant access to 80M-6M via the tuner.
>
> My question is... Is there anyone else out there using this? How does it
> compare to other antennas...
>
> I'm interested in any side by side results anyone may have..
>
> Thanks
> James Hilins

>

5686. Re: How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 01:56:03 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3ABBFEB3.B08BEFD8@bctv.com>
Source record: 167760

Bugs can get into the trap through the drain holes . . .

. . .unless you pump the things full of high-temp RTV before you run
them up the mast . . .

Rudy Marcelletti wrote:
>
> If a trap, such as the 15 and 20 meter traps on my Cushcraft X7 beam, are
> mechanically sound, and are properly installed, with the drain holes down,
> just how does a trap go bad? Power levels have always been well within
> specs (no more than 600 watts PEP and traps are rated for 2KW). I am
> baffled. There are no moving parts!

5687. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 02:04:49 UTC
From: 2w8ji@akorn.net
Message-ID: <3abbf7eb.271013774@news.accessunited.com>
Source record: 167761

On Sat, 24 Mar 2001 00:01:22 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Why do most people find it necessary to quote Terman ? Did he
>write the radio hams bible ? I thought the ham's bible was a
>compendium of the ARRL publications over the last 75 years.

It isn't quoting Terman, or anyone else, that is the problem Reg.
The problem is quoting out of context.

Terman's (and other's) discussion of common mode coupling, because of a lack of up-close balance, is somehow being misapplied in a vain attempt to prove the silly notion that adding a shield to a loop somehow changes the field impedance of the loop, or causes the loop to not respond to time-varying electric fields.

The best example I can think of is a small loop antenna I did for a medical application. The 27.120 MHz loop antenna was in a small pan, with a plastic cover. Inside was a single layer spiral with a flat plate parallel to the pan attached at the center. The outer end was grounded, and the spiral was shunt fed.

The flat plate was made into a variable capacitor by being tuned with a "flapper plate" that was grounded to the pan.

Over the top of this whole mess, I had a Faraday shield etched on PC board material.

What the Faraday shield did was prevent the capacitor from coupling to the hind-end of the test subjects. (I was required to use the rear end of average-build females between the age of 18 and 40 as the standard load for impedance matching.) The radiation fields outside the loop weren't changed one iota by the shield. Either measuring with an E-field probe or an H-field probe two feet away the results remained identical. Hamburger, saline solution, or a probe inside the test subject all indicated exactly the same E and H fields just inches from the loop shield or no shield.

The only thing that changed is the capacitor was not detuned as much when a fleshy object (or saline solution) was placed 1 inch or less away from the capacitor.

Now I could have handled that problem ten different ways and had the same results, but this was mechanically the easiest. The applicator received and transmitted exactly the same way, it was only near the loop...where system balance was screwed up like a rubber watch...that things changed.

As a matter of fact I had another loop that simply inverted the position of the grounded and hot plates that produced identical results. That applicator could be placed against the same target, and it wouldn't detune any more than the Faraday shielded applicator. It wasn't used because it wasn't as easy to build.

As a matter of fact to get maximum nulling of stray capacitance, the Faraday shield had every other "wire" run in from the opposite edge. It was double-sided board, with the opposite face traces rotated 90 degrees. Without balancing the shield this way, it made almost no difference at all in the effect when something was placed near the applicator!

Why people think this common-mode balance problem extends beyond the immediate area of the antenna, or somehow changes the response of the antenna to sources more than a loop diameter or two away is beyond me!

73 Tom

5688. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 02:25:11 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <bATu6.2237$9i1.169959@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167762

"Richard Clark" <kb7qhc@home.com> wrote in message
news:3abbf502.1842272157@news.seanet.com...
> On Sat, 24 Mar 2001 00:57:05 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >
> >Given that that IR is a heat transfer process as is thermal convection
and
> >conduction, the IEEE definition for dissipation being a conversion of
energy
> >to heat is accurate.
>
>
> Hi Steve,
>
> ALL that you wrote (and which I did not include) is absolutely true.
>
> The specific point is that we are pivoting about the meaning of
> dissipation which has been identified (by some) to mean NOT radiation.
> It is this error to which I am responding.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

I think the conversation with you, Dennis and the group has been interesting. I have always thought of dissipation as lost energy converted to heat. Until going through this discussion, I have not really thought of dissipation in terms of any EM "radiation" occurring. I still prefer to use the term radiation to describe the desired radiation effect and dissipation to describe the energy lost. It is significant to not lose sight of the EM IR radiation process occurring with the heat dissipation process.

The only remaining point that I have issue with is describing the desired EM radiation process as a dissipation process. This may be a matter of semantics or personal preference.

That's it for me.

Steve

5689. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 02:33:30 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <_HTu6.115921$p66.33084982@news3.rdc1.on.home.com>
Source record: 167763

I'm using ham sticks ... (base loaded antennas) and they work rather nice
...

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
news:99guqf$2p2$1@slb7.atl.mindspring.net...
> You will have better results if the automatic
> tuner is connected to a center-loaded whip antenna
> that is tuned reasonably close to the band you want
> to operate.. the tuner will then re-resonate the antenna
> system as you tune from one segment of an amateur
> band to another .. this would be especially effective
> on the lover freqs such as 75 and 40 meters..
>
> An 8 or 9-foot whip, with no external loading coils,
> will be very inefficient on these lower frequencies when
> the automatic tuner is trying to re-tune a short whip.
>
> Moving most of the loading to the center of the whip allows
> better radiation efficiency from the lower 1/3 of the antenna's
> length which is where most of the real radiating is being accomplished..
>
>
> Trish
> --
> Patricia E. Gibbons & Carla Satra
> Tactical Link Systems
> <ICQ#: 72818195>
> <http://www.tactical-link.com>
> see my comvan at:
> <http://www.qrz.com/callsign.html?callsign=wa6ube>
> ....
> My Public Key is available at:
> <http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> Key ID: 0xEDECB44F
> This key is RSA, NOT Diffie-Hellman !!
>

> jhilins <jhilins@bellsouth.net> wrote in message
> news:3ABBF06B.F43A8A76@bellsouth.net...
> > Planning on installing HF in the car.
> >
> > I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> > antenna tuner. I have a friend out there using this configuration, He
> > has instant access to 80M-6M via the tuner.
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> > My question is... Is there anyone else out there using this? How does it
> > compare to other antennas...
> >
> > I'm interested in any side by side results anyone may have..
> >
> > Thanks
> > James Hilins
> >
>
>

5690. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 02:42:57 UTC
From: "John (KB3CDF)" <murphman@erols.com>
Message-ID: <99h1js$6g1$1@bob.news.rcn.net>
Source record: 167764

Try reading any of the books written by Don Johnson:

"40 Years of HF Mobileering"
"40 + Year of HF Mobileering"
"Everything You Wanted to Know About HF Mobileering but Forgot to
Ask".

He invented the DK3 antenna ...aka. Screwdriver.

IMHO, tuners make the radio Happy. Happy antennas (physically
"sized" to resonance) radiate. Location on the vehicle makes a big
difference as well.

Beat the CC&R's!!! Go Mobile!!!
~~~
KB3CDF/M

jhilins <jhilins@bellsouth.net> wrote in message
news:3ABBF06B.F43A8A76@bellsouth.net...
> Planning on installing HF in the car.
>
> I am planning on using a IC-706 feeding a 108" CB whip VIA a
automatic
> antenna tuner. I have a friend out there using this configuration,
He
> has instant access to 80M-6M via the tuner.
>
> My question is... Is there anyone else out there using this? How
does it
> compare to other antennas...
>
> I'm interested in any side by side results anyone may have..
>
> Thanks
> James Hilins
>
~~~

5691. Antenna - restricted setup question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 02:43:56 UTC
From: Bruno Quesnel <quesnelb@ve2.ele.etsmtl.ca>
Message-ID: <3ABC09EC.F9075F22@ve2.ele.etsmtl.ca>
Source record: 167765

Hi to all,

I'm in the process of renewing my HF antenna. The one I was using
was a Hygain vertical covering the 6-20M bands. I live in Montreal and
with the waether of the past few days, it fell down on the roof.
Unfortunatly, I can't asses the damages to the antenna, but will see
later.

Right now, I've got a old TV antenna tower that holds a VHF/UHF
vertical pretty fine for the past 2 years. I've also got a 3 foot
tripod installed for holding the HF vertical (It actually bent on the
mast holding the antenna to the tripod). The house dimensions is about
20X24, with the tower on one corner in the backyard.

I'd like to replace the vertical antenna with a orizontal type
antenna. You probobly saw my posting earlier asking for the MQ1.
Thanks for the response. Basically, I'm looking for a compact HF
antenna but horizontal. I've been looking at the 3 elements/tribander
yagis from the different mfg but I think that all the antennas are to
big for my setup.

Unfortunatly, because of the backyard organisation, changing the
tower for a free standing is pretty much out of the question (thermopump
on one side and the fence on the other). So I either need a light
weight antenna to fit on the tower or to invest in a quadpod to replace
the tripod on top of the roof..???

Or for the mean time getting a dipole would do a "decent job" (not
as a good job as a beam). Would the investment in a dipole be fair
considering my situation or other situation be good for the limitted
space I have ???

Thanks in advance to all

--
Bruno Quesnel va2bmg@videotron.ca
Genie Electrique quesnelb@ve2.ele.etsmtl.ca
Electrical Engineering queb1604@ele.etsmtl.ca
Ecole de Technologie Superieure VA2 BMG

5692. Gary Coffman

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 02:58:37 UTC
From: g3kew@aol.com
Message-ID: <20010323215837.24997.00000527@ng-cp1.aol.com>
Source record: 167766

Gary, where have you been? I believe I speak for more than myself when I say that I have missed in recent weeks your enlightening contributions to the newsgroup. I was beginning to think we had lost you. Welcome back!

5693. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 03:58:17 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <bk2obtct9atgkkh4bbudv3l43tg0fvkk59@4ax.com>
Source record: 167767

On Fri, 23 Mar 2001 14:05:53 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>
>Tom has run some experiments showing that the reception of shielded and
>unshielded loops is the same. Do any of you who claim that the shielding
>has an effect have experimental evidence to the contrary?
>
>Roy Lewallen, W7EL

Hi Roy,

Good of you to offer the clear balance in this debate.

As for your question, I cannot provide evidence to the contrary, but I would make an observation and pose my own question.

In the Nav, we had an FM radio in the lab that only played when the water-tight door was open (you are never far from saltwater soaked ground on/in a ship). It had the conventional whip antenna. If we had simply turned that to a loop antenna, then we would've been rockin'?

Ah, but the question smells of a bait, and I am trying to figure out why. It must be a question of what "shield" means.

For the loop alone, there are two ways to shield it.

1. The FM radio and loop occupy a toroidal conductive hollow volume.

2. The FM radio and loop occupy a spheric conductive hollow volume.

Any significance? For number 2, my own expectation is, no, my lab's FM radio with a loop in a conductive room would not work any better. This looks like Richard's shield. I cannot attest to the efficacy of shield 1, which looks like Tom's shield (or this is just guessing in the extreme).

73's
Richard Clark, KB7QHC

5694. Sony ICF-2001 shortwave radio NR. Last Day!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 04:17:43 UTC
From: Headhamster <headhamster@earthlink.net>
Message-ID: <HdVu6.5966$P4.454341@newsread1.prod.itd.earthlink.net>
Source record: 167768
Cross-posted to: alt.radio,alt.radio.cb.skip,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.cb,rec.radio.shortwave,rec.radio.swap,sci.electronics.equipment

Sony ICF-2001 shortwave radio NR!

Sony ICF-2001 for auction on ebay. Radio receives AM / FM / SSB / CW. Has
sleep timer, memories, direct frequency entry, etc.

Please take a look!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1222973759

5695. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 04:30:00 UTC
From: Doug Hall <k4dsp@pobox.com>
Message-ID: <2f8obtonilir4oprq054hu46dsirg6156n@4ax.com>
Source record: 167669

On Fri, 23 Mar 2001 19:55:08 -0500, jhilins <jhilins@bellsouth.net>
wrote:

>Planning on installing HF in the car.
>
>I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
>antenna tuner. I have a friend out there using this configuration, He
>has instant access to 80M-6M via the tuner.
>
>My question is... Is there anyone else out there using this? How does it
>compare to other antennas...
>
>I'm interested in any side by side results anyone may have..
>
>Thanks
>James Hilins

I posted this a couple of weeks ago. Here it is again - perhaps it
will be helpful to you:
==========
Hi All,
For those who contemplate HF mobile at some point I thought you'd
be interested in this comparison between a couple of different HF
mobile antenna systems.
I compared a Radio Shack 102" stainless steel whip ($14.99) and
Icom AH-4 autotuner ($309.95) to a center loaded antenna called the
"Carolina Bug Katcher" ($99.95) from Lakeview Antennas
(www.hamstick.com) Since the whip is only resonant on (or near) 10m I
used the Icom AH-4 tuner with the whip. The bugcatcher, which covers
40-10m, doesn't need a tuner, but I left the tuner in line anyway just
to keep the system the same all the way back to the antenna mount.
The purpose of the exercise was to see if the whip and tuner would
be an acceptable alternative to the bug catcher. The whip/tuner is
nice because I can change bands without stopping the car and changing
coil taps. This is attractive when it's cold/rainy/dark. Also, the
whip isn't as "ugly" as the bugcatcher, or at least that's what my
daughter says. But beauty is in the eye of the beholder.
The test setup was as follows: The radio was an Icom 706Mk2G
mounted in my car. The antenna mount is on the rear bumper. Each
antenna was tested on the same mount, same feedline, etc. In other
words, the system was the same except for the actual radiator being
compared. I parked the car in a large open area away from other
vehicles, and used a COM-120B service monitor in the lab at my office
to monitor the field strength. I then transmitted a carrier on each
band with each antenna with the radio set to the same power level. A

friend of mine recorded the field strength readings on the spectrum display on the service monitor in the lab. Here are the results:

Band Bugcatcher Whip Winner
==== ========== ==== ======
40m -62dBm -76dBm Bugcatcher, by 14dB
30m -64dBm -76dBm Bugcatcher, by 12dB
20m -44dBm -52dBm Bugcatcher, by 8dB
17m -66dBm -74dBm Bugcatcher, by 8dB
15m -59dBm -69dBm Bugcatcher, by 10dB
12m -50dBm -58dBm Bugcatcher, by 8dB
10m -58dBm -56dBm Whip/tuner, by 2dB
6m -65dBm -64dBm Whip/tuner, by 1dB

Note: The readings are likely subject to an error or a dB or two. But the data tells a pretty convincing story, and should probably come as no surprise. Base loading just can't compete with center loading when it comes to efficiency.
Using 100w into the whip on 40 and 30m (the bands I use most) would be like running only 4 or 5 watts with the bugcatcher. Or put another way, I'd have to run over 2500w on the whip to match the bugcatcher's 100w signal. It's not until you get to 10m and 6m (where the whip is no longer electrically "short") that the performance is similar. And of course, the gain of the bugcatcher is there on receive as well. You can't work what you can't hear.
Your mileage may vary. Comments are welcome. The usual disclaimer applies - I have no association with any of the companies listed here except as a customer. Also, the Carolina Bug Katcher is no longer available according to Lakeview's web page. But a similar antenna is available from Henry Allen K5BUG at www.texasbugcatcher.com
73,
Doug, K4DSP/M

5696. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 04:33:13 UTC
From: richardharrison@webtv.net
Message-ID: <26257-3ABC2389-26@storefull-115.iap.bryant.webtv.net>
Source record: 167670

Roy, W7EL wrote:
"Two transformer windings spaced a few millimeters apart at 60 Hz isn`t at all a good example of what happens when receiving a signal from many wavelengths away with a small loop."

OK. Suppose we have a couple of r-f coils sited end to end on the same axis and close enough for cnsiderable mutual inductance (coupling). That is, that current in one coil generates a voltage across the other coil. If we put a metal box around one of the coils and ground it, coupling between the coils is nearly, if not completely, killed. Why?

The electric charges in the directly excited (primary) coil produce electric field lines of force which end on the shield and it shorts them out so they can`t act on the secondary. We make symmetrical ground connections so the charge equalization current has no effect.

Well, the shield ends the capacitive coupling between primary and secondary, but why does the metal shield kill the magnetic coupling between the coils?

The short answer is Lenz`s law. Lenz says that induced current in a circuit must produce a magnetic field which opposes its creator. If the shield is perfectly conducting, the opposing field equals the field which produces it. Aluminum is an imperfect conductor, but it is good enough for most r-f shielding purposes, and it is economical.

So, we see that a solid conducting shield can inhibit both electric and magnetic r-f fields. Such shields are seen almost everywhere. If they didn`t so work, they wouldn`t be so used.

We should all be aware of the Faraday screen (shield) which is designed to thwart Lenz`s law from a macro viewpoint, so that the metallic shield becomes porous for magnetic coupling between the primary and secondary coils in our example.

Bars or wires shorted together on one end and grounded, but insulated from each other at the other end, can sieve out the electric field while allowing the magnetic field to pass right through. Millions of Faraday shields are installed and doing their job. There is no need for investigation. This is a long proven practice. Once again, the Faraday screen`s purpose is to block capacitive coupling while allowing magnetic coupling.

By breaking the circuit in the shield for a circulating current, the shield can`t produce an effective opposing field and the magnetic coupling of primary and secondary is accomplished.

So, the declaration that separation of the magnetic and capacitive coupling is impossible and that the fields are inseparable is wrong. No matter who says it or how many times.

This has nothing to do with propagation of radio waves in a vacuum or even the basics of a loop antenna. It (the Faraday shield) is just a block to the electric field. The propagation of waves in the vacuum does require that each wave be in operation to beget the other half of the energy transport pair. E&H are both essential. But we can kill one and the other regenerates its partner. We short and open transmission lines, don`t we?

An antenna can be equipped with a Faraday screen to block an electric field while allowing magnetic fierld excitation, just as happens with the Faraday shielded coil. A Farady shielded secondary coil`s induced current simultaneously produces a secondary voltage, and the electric force field that goes with it.

A Faraday shielded antenna might just as well be a transmitting antenna. We know the E field of an antenna comes from its high-voltage points, while its H field comes from its high-current points. By ohms law we know that high-impedance is associated with high-voltage and low-impedance is associated with low-voltage. We also know that low-impedance antennas radiate just as well as high-impedance antennas. In the radiation process everything works out and the impedance of the wave adjusts to 377 ohms and the E&H fields regenerate each other as required.

There is no problem of blocking the electrostatic influence of signal, noise, and miscellaneous discontinuities by using a Faraday shield on a small loop antenna.

Best regards, Richard Harrison, KB5WZI

5697. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 04:48:49 UTC
From: richardharrison@webtv.net
Message-ID: <26256-3ABC2731-74@storefull-115.iap.bryant.webtv.net>
Source record: 167671

Reg wrote:
"Why do most people find it necessary to quote Terman?"

It seems self-evident to me that Terman asks nothing to be taken on faith and published his conclusions where anyone could challenge them and offer corrections. "Radio Engineering' has been out there since 1932 and I know of no substantial corrections made or needed. Every time I thought there might be some error, I`ve been proved wrong. Terman must have got it right.

Best regards, Richard Harrison, KB5WZI

5698. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 05:16:09 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABC2D99.8BCCB79F@IEEE.org>
Source record: 167672

John O'Flaherty wrote:
> As a child, I'd sit in my basement reading next to the furnace, a forced air
> unit that made a fair amount of noise. I noticed that my mind would make
> familiar phrases out of the noise, like the sound of my mother calling my name.

On a long nightime road trip, I can hear country and western music
playing in the background of the road noise. You might say my analog
filter is ringing.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5699. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 05:30:21 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABC30EC.E44BBBF7@IEEE.org>
Source record: 167673
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> Only by learning it, gaining skill in how to do it, and working
> radiotelegraphy can you come to know the essential facts concerning it
> as a working communications mode.

So all the digital communications experts who don't possess actual
Morse code skill don't know the "essential facts" about Morse code?
If Shannon didn't possess Morse code skill, do you think he didn't
understand the theory? You think the FCC doesn't understand Morse
code? You're still beating that poor old dead horse. Hams who want
to use Morse code use it. Hams who don't want to use Morse code
don't use it. Every ham has a choice of his/her favorite mode(s).
--
http://www.mindspring.com/~w6rca

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------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5700. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 05:37:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABC32A7.98626DAE@IEEE.org>
Source record: 167674

jhilins wrote:
>
> Planning on installing HF in the car.
>
> I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> antenna tuner. I have a friend out there using this configuration, He
> has instant access to 80M-6M via the tuner.
>
> My question is... Is there anyone else out there using this? How does it
> compare to other antennas...

It works pretty well on 20m-10m. It works better if you use a three
foot bottom section to extend the whip to 12 ft. It was one to two
S-units down from my homemade bugcatcher on 40m and 3-4 S-units
down on 75m, i.e. near worthless.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5701. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 05:48:01 UTC
From: masterchief516@home.com
Message-ID: <lyWu6.481876$ge4.168931114@news2.rdc2.tx.home.com>
Source record: 167675

I thought the GOOD screwdriver antennas do NOT use finger stock.

This is not a troll post so please correct me if I'm wrong.

Donald

>Do they have finger stock?
>--

5702. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 06:01:55 UTC
From: richardharrison@webtv.net
Message-ID: <26258-3ABC3853-17@storefull-115.iap.bryant.webtv.net>
Source record: 167676

Richard Clark wrote:
"---reminds me of my time at sea looking at the radar---."

Our radar operation was comical, too. It was a Raytheon SO-2 "navigational radar". We kept the spare magnetron in the ship`s safe because it was considered a war secret, part of a secret weapon.

We often traveled in convoy. The problem was maintainng position in the convoy when those on watch were drowsy. We had several close calls when we almost ran down the ship ahead of us.

I got an emergency full astern call in the engine room one night. At sea we customarily switched off power to the prop shaft brakes because we would not be maneuvering, and they consumed a lot of electrical power even on stand-by. The engines were 10-cylinder opposed-piston Fairbanks-Morse locomotive engines. We reversed shaft rotation by stopping the engine, shifting the lobes on the camshaft and restarting the engine in reversed rotation. Well, in the crisis, I forgot about the shaft brake and just reversed the engine. It cranked, started, and ran fine except for a big bang when I admitted the starting air, and the engine room immediately filled with smoke, an oilly mist , water vapor, and who knew what else. Couldn`t see a thing for a while, but everything ran all right. After some years, I figured it out. I blew the overpressure valve on the starting-air system and emptyed all the crud in the air bottles with extreme engine cylinder pressure.

The bridge watch would wake up, scream down the voice tube to the radar operator, and desperately ask te distance to the vessel ahead. The radar operator would arise and dutifully go stick his head out the porthole and return to scream his estimate back to the bridge. Due to the sea return (ground clutter) there was no way to get a valid radar distance reading in such close quarters. But everyone kept up the pretense.

Best regards, Richard Harrison, KB5WZI

5703. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 06:13:08 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abc4f30$0$15026$cc9e4d1f@news.dial.pipex.com>
Source record: 167684

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >> It may be fun to add and subtract all day, but to be useful in solving
> >> problems it is critical we know what data to use and how to use it.
> >
> >There, in the true spirit of Ham Radio, you can help me Tom; keep me on
the
> >straight and narrow by not only pointing out the error of my ways, but
where
> >a correction is required supplying the correct data and substantiating it
so
> >that I may follow through and do better the next time.
> >After all in a contest it would be your word against mine without some
> >supportive evidence.
>
> I've done that, and you've simply either not read what I wrote or
> igored it. For example, I gave measured data several times and then
> you asked me for measured data.

Well obviously I did not consider that your data neither answered my
question nor supported your contention that I was taking too hot a value for
the sky temperature, despite several references to the contrary; so let me
put the question to you straight so that there shall be no
missunderstanding.

What do you make the sky temperature at 1.75 MHz?
What is the measured efficiency of the Antenna that you use to measure the
sky temperature.

I'm afraid that your quotation of the signal level in a bandwidth without
some qualification is not prima facie evidence of sky temperature.
Certainly the numbers can be transformed to an equivalent temperature, but
by how much must that figure be modified to accomodate the inefficiency of
the measuring apparatus?

> >The old hands like to think that after devoting so many years they are
> >expert.
> >However when I get around to thinking that I know it all will be the time
> >for me to give it away.
>
> ....and then you say..........
>
> >I am firmly of the opinion that a large number of Hams put in just enough
> >study to qualify for a licence and then never look at another text book
or

> >consider the wonder of playing with nature ever again. Many think that
the
> >Radio Amateurs Examination is the pinnacle of learning; whereas it is not
> >even the foot hills to the high country beyond. Why they deprive
themselves
> >of the greater pleasure by becoming just train number collectors I have
> >never been able to understand.
> >
> >In humility, 73
> > Gary
>
> How dare you imply that a "large number" of Hams are lazy.

I do not imply, I accuse,
just listen to the rubbish that is exchanged on air.

I attempted to give a short talk to a group of about fifty Hams, it was all
fundemental stuff on noise, yet apart from one Ham, (a profesional
Engineer), I was faced by a sea of blank faces, and no glimmer of interest
in an absorbing subject.
Hams that I encounter at rallies etc. do little to encourage me that any
seek a higher understanding of their chosen preoccupation.
In the main Hams are lazy, Hancock's lampoon is not so far off the mark.

However there are brilliant exceptions that go completely unnoticed because
it takes a little talent to recoginse genius.

> What is so special about you, that allows you to judge other people by
> what they do in life?

Fair question, there is nothing about me which is not present in any other,
all they have to do is dig a little to find it. I only lament the fact that
they have not had the good fortune to look a little further, to go that
extra mile.

> Please share all of your wonderful accomplishments in life with us, so
> that the poor deprived "train number collectors" among us can grovel
> at your feet.

Pr. 8:10 Take my instructions instead of silver,
and knowledge rather than choice gold;
11 for wisdom is better than jewels,
and all that you may desire cannot compare with her. -
RSV

Accomplishments:
For some of which SEE www.gary.peach.dial.pipex.com

I refer to train numbers because the bands are saturated with contest after
contest; the sum total of which is nil.
Contests could have a useful purpose to serve with some changes to the rules
and colation of the wealth of data that it would be possible to glean from
the logs of the contestants.

But for years that opportunity has been missed, and I suspect that apathy will assign contests to that roll for many more years. As such the Ham is just a train number collector accumulating worthless bits of paper that do little if anything towards the understanding of radio communication or physics.

Just what does the rubber stamp QSO acheive?

The man that issues a 599 knowing it to be untrue is a liar and a cheat.

How worthless it is to the genuine investigator that wants to evaluate some new antenna or equipment on air, what a time waster such practices are.

It is high time that we cleaned up our act.

Any just Ham will know that what I say is true and that I probably risk censure for being foolish to point out that the king has no clothes.

> That "humility thing" , it's a joke...right?

We have an idiom in England "to get up someone's nose",
I seem unintentionally to have done so with you Tom.

I am sorry that you feel that this exchange should degenerate into a personal slanging match. I will discuss technical topics without rancor, but this is the last exchange, (before your natural right to reply), on personal traits. To resort to such ad hominem tactics is to admit defeat, not that I ever intended this exchange to become a contest of personalities.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5704. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 06:22:08 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abc4f32$0$15026$cc9e4d1f@news.dial.pipex.com>
Source record: 167681

"Ian White, G3SEK" wrote ...
> Gary Peach wrote:
> >"Ian White, G3SEK" wrote ...
> >> Gary Peach wrote:
> >> >"Ian White, G3SEK"
> >> That's a pretty good explanation. The only amendment I'd suggest is
that
> >> T(sky) is not appropriate on the lower bands where antennas don't have
> >> much directivity - well, not much by UHF, microwave and radio astronomy
> >> standards - and will pick up noise from all directions. T(ambient)
might
> >> be a better label.
> >
> >I agree that to some "T(sky)" might be the subject of some discussion,
> >but from my 5' 6" up is up.
> >I don't like the idea of T(ambient) because it is too readily confused
with
> >To
> >which especially in the IEEE definitions of noise figure has the specific
> >value of 290°K
>
> There shouldn't be any confusion; and if there is, the confusion is
> about T0.

No doubt there will be confusion, if at all possible then Murphy's Law
demands that confusion shall reign supreme. :)

> In modern definitions of noise figure, T0 has no relationship to ambient
> temperature - it is simply an arbitrary reference temperature. (T0 is
> defined as 290K, but you could construct a completely self-consistent
> definition of "noise figure" using any other reference temperature above
> absolute zero.)

Quite so provided that everyone understands that and agrees with the figure
that you have chosen. (which historically they do). The value of 290°K is a
convenience because it is near or around the temperature to be found
normally in the laboratory or field installation and thus takes no
additional apparatus or plant to reach that temperature. Slight deviations
from 17°C make little difference in practice to the measurement of large
noise figures that were encountered at around the time when the whole system
was proposed. Perhaps in the light of low noise figure amplifiers being
readily available some revision of the agreed standards might be
appropriate, but unless the Ham fraternity wish to break away from the
accepted standards anything which is discussed here is unlikely to influence

the convention.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5705. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 06:29:43 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abc4f33$0$15026$cc9e4d1f@news.dial.pipex.com>
Source record: 167685

"Reg Edwards" wrote
> Tom wrote -
> > Hundreds of lines of math, all correctly done but using wrong
> > assumptions, is worthless. It impresses no one, except perhaps
> > the writer who becomes self-enamored with himself.
> >
> > It may be fun to add and subtract all day, but to be useful in
> > solving problems it is critical we know what data to use and how
> > to use it.
> >
> ====================
> Tom, sorry to say I have to agree with your assessment.
>
> Waffle, waffle, waffle, bafflegab, etc., may sound very impressive.
> But when nearing the bottom line it becomes necessary to put some
> numbers into the equations, and there are no numbers forthcoming,
> the whole thing collapses like a pack of cards.

Ah! found an ally at last , or should I say comrade, Reg?

Perhaps you can help me out by filling in the un-known numbers instead of
sitting in the bleachers on your hands.
I know that you have measured the efficiencies of all of your antennae Reg,
so what do you measure the sky temperature at 1.75 MHz?
or at least near bye at 1.8 - 2 MHz.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5706. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 06:37:26 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <GgXu6.5164$KA6.461531@dfiatx1-snr1.gtei.net>
Source record: 167677
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABC30EC.E44BBBF7@IEEE.org...
> Dick Carroll wrote:
> > Only by learning it, gaining skill in how to do it, and working
> > radiotelegraphy can you come to know the essential facts concerning it
> > as a working communications mode.
>
> So all the digital communications experts who don't possess actual
> Morse code skill don't know the "essential facts" about Morse code?
> If Shannon didn't possess Morse code skill, do you think he didn't
> understand the theory? You think the FCC doesn't understand Morse
> code? You're still beating that poor old dead horse. Hams who want
> to use Morse code use it. Hams who don't want to use Morse code don't use
it.

The keyword here is "Hams". As used in your sentence, the implication is
that a person you classify as a "Ham" possesses the skills to use CW if
they choose to do so.

> Every ham has a choice of his/her >favorite mode(s).

Agreed, according to your definition of a "Ham". But what about those
persons who do not possess the skill to operate CW? They do not fit the
definition of a "Ham" as you use it here... because they cannot operate CW
if they wanted to because of lack of skills.

Which is basically what the whole discussion is about... There are some who
may have access to the bands, but since they do not possess the skills
necessary to operate CW, by definition they can't be included in the group
commonly referred to as Hams...

73 de W6DKN

5707. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 06:40:34 UTC
From: richardharrison@webtv.net
Message-ID: <26256-3ABC4162-87@storefull-115.iap.bryant.webtv.net>
Source record: 167680

Cecil, W6RCA wrote:
"You`re still beating that poor old dead horse."

Why doesn`t Dick Carroll stuff the Morse horse and put it in a museum,
the way Roy Rogers did old "Trigger"

Best regards, Richard Harrison, KB5WZI

5708. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 07:05:21 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <RGXu6.10169$QA3.351599@typhoon.mw.mediaone.net>
Source record: 167679
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:99gcsf$13t$0@208.206.142.100...
> It's not an argument, Leland, it's a fact.

Prove it beyond doubt then. If the facts exist then list them or provide the
necessary references to find them. I'm waiting.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

5709. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 07:06:42 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abc4f34$0$15026$cc9e4d1f@news.dial.pipex.com>
Source record: 167682

"Richard Clark" wrote ...
> Gary Peach wrote:
> >If you have ever been out in the open, (400 miles from the nearest
person)
> >you can in fact hear your own ears in the silence, if you concentrate it
> >becomes deafening.
> >
> >Of course you can also fool yourself very easily when listening to noise
> >hour after hour.
>
> To the first paragraph above I would add that you can also hear your
> own heart beat.

If you had a heart beat like mine you wouldn't listen, ther are ectopic
beats and listening can make the whole thing go haywire. Some sort of
positive feed back starts to occur, most unpleasent and it plays havoc with
the BP which drops rapidly because the pump becomes very inefficient, So be
warned, be careful.

> To the second, well, that reminds me of my time at sea looking at the
> radar, seeing only sea return (white noise), and being convinced there
> was a "skunk" (our term for a contact) out there, but no, over there,
> nope - actually over there - nope not there but here.... And then we
> happened upon a fishing fleet within a squall (I could see the
> squall). The Captain screamed back to CIC, there's a vessel off the
> port bow! We had to explain that wood does not show up very well on
> radar (the fleet was not metal hulled) as we finally began to pick
> them up within 3 miles of us. It was a very poor radar (mostly for in
> port navigation - Raytheon Pathfinder). Actually, it took all of 15
> minutes of nervous observation and then we were back in the noise.

I presume that was before small vessels carried Luneberg Lens or even the
old simple corner reflectors?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5710. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 07:08:18 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <CJXu6.10170$QA3.351714@typhoon.mw.mediaone.net>
Source record: 167678
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:99gcuj$13t$1@208.206.142.100...
>
> Haw Haw HAW!!!

Having fun at Richard's expense.

--
73's,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

5711. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 07:23:58 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abc4f35$0$15026$cc9e4d1f@news.dial.pipex.com>
Source record: 167683

"VE9SRB" wrote
> "Richard Clark" wrote ...
> > , "VE9SRB wrote:
...
> I think the conversation with you, Dennis and the group has been
> interesting. I have always thought of dissipation as lost energy
converted
> to heat. Until going through this discussion, I have not really thought
of
> dissipation in terms of any EM "radiation" occurring. I still prefer to
use
> the term radiation to describe the desired radiation effect and
dissipation
> to describe the energy lost. It is significant to not lose sight of the
EM
> IR radiation process occurring with the heat dissipation process.

Just think of the universe as one huge dummy load, the energy does
eventually decay into incoherent EM thermal form instead of remaining as
coherent EM radiation, but it does so slowly and geometrically and it is
shared over such a huge volume that the energy density becomes extremely
small at the point where it is no longer distinguishable from all the other
stochastic electromagnetic events.
I guess what characterises it is that it is a vector quantity with direction
as well as magnitude. The direction in the absence of a mirror keeps on
going away from the point of origin. In the case of a perfect mirror only
reflection takes place. In the more common case of an imperfect mirror some
reflection occurs and also some absorption which transforms immediately into
the non coherent form of EM energy - thermal energy.

It's a bit like a drunk on Pay-night, it (all EM radiation) eventually
becomes incoherent.

Entropy

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5712. Re: Cushcraft R5 - were they all created equal?.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 07:57:05 UTC
From: sja6@qwest.net
Message-ID: <3abc52b5.384646802@news.qwest.net>
Source record: 167686

I have a manual for your version of the R5, dated 1989. It has
different dimensions and tuning caps than the later one.

I will scan it and send you a copy.

Jim Sullivan N7TCF

On Wed, 21 Mar 2001 20:27:56 -0500, "TH" <hmmm@bzzt.com> wrote:

>I've had an old R5 vertical in storage for quite a few years and recently
>took it out for a re-furb and to use at my summer cottage. After
>downloading the instructions from the Cushcraft manual site, I realized that
>my R5 doesn't look anything like the one in the instruction manual. My trap
>assemblies are much different than those shown in the manual. Most notable
>is the 20 meter section which features a trombone-like tuning stub rather
>than a straight tube like is shown in the manual. Can anyone shed some
>light on the model I have, or maybe point me to an online manual somewhere?
>
>Thanks,
>TH
>Sturbridge, MA
>
>
>

5713. Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 08:02:01 UTC
From: DumbassWoger <Kiddie@moonwiver.com>
Message-ID: <99hk58$6f6$0@dosa.alt.net>
Source record: 167687
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Just why the heck would anybody in his/her right mind pay the ARRL to be a
member? For what?
Who cares?
The ARRL is losing members day in and day out. They have to ask themselves,
"Why?"

The real reason for this loss of members is simple.
1. It costs too much and you get nothing back.
2. The magazine is too full of voting and political agendas.
3. Nobody really cares about the ARRL.
4. The ARRL really doesn't care about you.
5. The ARRL has an agenda that does not help Hams.

"Leland C. Scott" <no-spam@junk-mail.net> wrote in message
news:CJXu6.10170$QA3.351714@typhoon.mw.mediaone.net...
>
> "Dick Carroll" <dixie@townsqr.com> wrote in message
> news:99gcuj$13t$1@208.206.142.100...
> >
> > Haw Haw HAW!!!
>
> Having fun at Richard's expense.
>
> --
> 73's,
>
> Leland C. Scott
> KC8LDO
>
> ARRL member
> NCI member
>
> "You ask what Morse Code is good for? I'll tell you. Morse
> Code is used exclusively by Electronics Based life forms to
> communicate amongst themselves using advanced Organic
> Digital Signal Processors, running state of the art Artificial
> Intelligence Software, to perform the highly complex
> transmit encryption, receive decryption and error correction
> functions."
>
>

5714. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 08:06:54 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <GI6eiTBeWFv6EALs@ifwtech.plus.net>
Source record: 167688

Gary Peach wrote:
>> There shouldn't be any confusion; and if there is, the confusion is
>> about T0.
>
>No doubt there will be confusion, if at all possible then Murphy's Law
>demands that confusion shall reign supreme. :)
>
But that's no excuse for staying with something else that is confusing
because it's incorrect.

>> In modern definitions of noise figure, T0 has no relationship to ambient
>> temperature - it is simply an arbitrary reference temperature. (T0 is
>> defined as 290K, but you could construct a completely self-consistent
>> definition of "noise figure" using any other reference temperature above
>> absolute zero.)
>
>Quite so provided that everyone understands that and agrees with the
>figure that you have chosen. (which historically they do).

Thank goodness!

>The value of
>290ï¿½K is a convenience because it is near or around the temperature to
>be found normally in the laboratory or field installation and thus takes
>no additional apparatus or plant to reach that temperature. Slight
>deviations from 17ï¿½C make little difference in practice to the
>measurement of large noise figures that were encountered at around the
>time when the whole system was proposed. Perhaps in the light of low
>noise figure amplifiers being readily available some revision of the
>agreed standards might be appropriate,

Yes, you've identified the problem. 290K was originally chosen by Friis
as being conveniently around room temperature, which would be the
physical temperature of the resistive termination inside the noise
source. When typical noise temperatures were up in the thousands of K, a
difference of a few K didn't matter.

It began to matter when noise temperatures started to tumble to as low
as a few K. In order to avoid significant measurement errors, the
reference temperature T0 now has to be defined separately from the
physical temperature of the noise source, so that the difference between
the two can be allowed for.

>but unless the Ham fraternity
>wish to break away from the accepted standards anything which is
>discussed here is unlikely to influence

>the convention.

I don't know where you get the idea that "the ham fraternity wishes to break away from accepted standards". I am in very direct contact with that segment of the ham fraternity that needs to think about noise temperature: everybody accepts the definition that 290K is a reference temperature, unconnected with ambient temperature.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5715. Re: G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 09:17:35 UTC
From: "Thomas P. Conway" <tomk7rel1@home.com>
Message-ID: <PCZu6.55683$Xt3.8458322@news1.rdc1.az.home.com>
Source record: 167689

There is also a 55 foot version of the G5RV which I ordered from AES out of
Las Vegas. It can also be ordered from HRO.

Tom (K7REL)
Scottsdale, AZ

"jack in the box" <bb@ff.com> wrote in message
news:3AB91AB1.83215EAC@ff.com...
> What kind of layout do I need to mount one of these antennas?
>
> I have a couple of trees in the backyard about 50 feet apart.
>
> How is it fed?
>

5716. Re: re:wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 09:25:52 UTC
From: "Thomas P. Conway" <tomk7rel1@home.com>
Message-ID: <AKZu6.55684$Xt3.8461243@news1.rdc1.az.home.com>
Source record: 167690

Thee is also a 55 foot version of the G5RV if space is a problem, for 40 meters and up. You can order it through AES or Ham Radio Outlet.

- Tom
(K7REL)

Scottsdale, AZ

"Monte Keller" <k9dzd@iquest.net> wrote in message
news:Ho8u6.4$Be2.947@news1.iquest.net...
> any ideas on a good limited space antenna,,i am using a vertical...and
been
> thinking of trying a g5rv..i have about 100 feet to work with
> and have some restrictions on height
> thanks
>
> monte k9dzd@iquest.net
>
>
>

5717. TUNER FOR THE AM BCB

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 10:51:21 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <99hua8$1oh$1@bob.news.rcn.net>
Source record: 167691

would it be practical/possible to make an artificial ground (tuner) for the
am bcb for receiver experimentation?

5718. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:10:31 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E1EAD6.76D9%stewartx@sccoast.net>
Source record: 167692
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Richard McCollum wrote:

> Given that, what are you going to do
> about it? You could pass it, you
> could simply shut up and wait, you
> could send out for a pastrami on white
> with mayo, have sex, or expect rain.
> There are any number of wondrous things
> to be accomplished.

Well, Dick, I've already said what I'm going to do about it directly (since I have no interest in HF right now, I'm going to do nothing). However, in the context of what you said above, I don't like pastrami, so that's out. But I do expect to enjoy the radio capabilities I have, barbeque steaks on the grill, enjoy the coming summer, and hope the rain goes away so I can sit around on my boat and soak up some harmful UV rays. In addition, I intend to address this topic occassionally when it comes up in this newsgroup.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5719. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:13:42 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABC8165.8AEC0D51@bellsouth.net>
Source record: 167694

Any ideas on how to center load such a antenna? Or maybe better yet for strength purposes construct a loading coil?

JIm

5720. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:17:54 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABC8261.3CFAD8C0@bellsouth.net>
Source record: 167693

Understood,
Maybe I should have given more details...

The vehicle is a Jeep and the antenna will be mounted to the roof. This antenna is going to take a lot of abuse as the top of it will be ~15ft in the air!

A screw driver would never take the wind load, needless to say the physical beating from tree limbs

Jim

5721. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:27:45 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABC84AF.5C7279A4@bellsouth.net>
Source record: 167695

Nicely done !
Did you happen to try to sweep the radiation patterns? I believe the whip has a very high take off angle at lower freqs?

Have any ideas on how one might center load a whip?

Maybe I should have given more details...

The vehicle is a Jeep and the antenna will be mounted to the roof. This antenna is going to take a lot of abuse as the top of it will be ~15ft in the air!

A screw driver would never take the wind load, needless to say the physical beating from tree limbs

Jim

5722. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:35:08 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABC866A.8CB7AD1B@bellsouth.net>
Source record: 167696

If you constructed the J-Pole correctly, and found the correct feed point, you should not nave any problems with coupling.

HOWEVER:

VHF J-poles do have a tendency to radiate the coax ! This may be wheat your experiencing. Get a dozen or so tight fitting ferrite beads and slide them on up near the feed point and see how this works !

Jim

5723. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:42:43 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E1F260.76DA%stewartx@sccoast.net>
Source record: 167697
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Richard McCollum wrote:

> So for why are we treated to the self-
> serving observations on the obvious?
> Why not try to sell someone who matters?
> We are just a bunch of people who cared
> enough to DO it and know bullshit when
> we see it. I don't care if you pass it
> or not but please do not insult my
> intelligence.

Sorry, I hit the send button before responding to this. Anyway, unless your name is Bill, I wasn't trying to "sell" you on anything. And, since you want to be so huffy about this, let me add that I was also one of those who cared enough to do it - when I was about thirteen in the Boy Scouts. Since then, I grew out of flashing messages with my Boy Scout flashlight and beeping messages to kids on the playground with my little decoder ring. Since then, I learned the best way to communicate is to talk, and I have used my knowledge about radio to improve my station enough to do that effectively without having to resort to an 18th century telegraph key. Perhaps you should learn more about radio so you can do the same. :-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5724. Re: G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 11:59:19 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABC8C15.12FAB8F3@bellsouth.net>
Source record: 167698

SCRAP the G5RV !
Here's how to make a better antenna from the same material.

First of all a G5RV needs a antenna tuner to work !

Here's how to build a better antenna.

Start with 200' of wire and at least 50' of latter line (More the better)
cut the wire in half and attach each half to the ladder line to make a dipole. (use a center insulator for strength)
Get the center point up as high as possible, run the wires to the two trees you have get the ends up as high as possible. (Use masts in the trees if necessary)
If you can continue through the trees, bend the wire if possible and terminate without cutting, if you can't bend 90 at the tree and bring the wire down until it almost touches the ground. Cut if necessary.

Now the ladder line must drop vertically from the wire, use as long a run as possible. If possible bring the ladder line into the shack and connect directly to your tuner.

A lot of people don't like bringing ladder line into the shack. If this is true with you, then bring the ladder line to a point just out side the shack, get a 4:1 balun and transition to coax (Use nothing lower grade than 100% shielded RG8, preferable RG213 or LMR400.

It is helpful to add 12 to 15 ferrite beads to the coax get them up close to the balun.

Bring the coax or ladder line in and connect directly to your tuner. I use a configuration close to this except I off center feed it, it will load up on all bands 160M-6M using only the internal antenna tuner built into my IC-756.

The key here is
#1 height (Use trees and poles in the trees if necessary)
#2 wire length longer is better (Don't be afraid to bend it but high ant straight is better)
#3 use a long piece of ladder line it will become part of the antenna on lower freqs (Keep it a vertical drop from the antenna, and don't allow it to parallel the antenna)

You will start noticing significant gain starting ton 40M-and a huge sig on 6M. (Caution 6M will be directional off the ends of the antenna!)

5725. Re: Antenna - restricted setup question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:06:52 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABC8DDC.44B22FC4@oio.net>
Source record: 167699

Bruno,
For a temporary antenna a dipole should work just fine.
They're pretty versitle as to how you put them up, so you
may find that it may be just what you need. The cost of
making a dipole just depends on what you may have in the
junk-box. Definitely cheaper than a beam!
'Doc

5726. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:11:45 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABC8F01.2BFDBF9A@oio.net>
Source record: 167700

James,
I haven't read the rest of the posts so this is probably
a 're-run'. A 108" whip with a tuner is almost worthless
on the lower HF bands. On 20 meters an up it may work fine,
but forget 80-30 meters.
'Doc

5727. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:16:32 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABC9020.2B121A52@mwci.net>
Source record: 167701

Ian White, G3SEK wrote:

> Yes, you've identified the problem. 290K was originally chosen by Friis
> as being conveniently around room temperature, which would be the
> physical temperature of the resistive termination inside the noise
> source. When typical noise temperatures were up in the thousands of K, a
> difference of a few K didn't matter.

In reviewing Friis's original article on noise figure in the Proceedings of IRE, I did not see a specific temperature mentioned. However, an IRE standards committee, headed by Prof Haus at MIT, recommended a standard lab temperature of 290K.

The ARRL Handbook, 1995-2001, chapter 17, (just as one example, there are others) discusses a more generalized noise factor that is not pegged to a specific temperature. It is referred to as a "system" noise factor Fs, where the system includes the noise temperature of the antenna and the equipment temperature (indoors and outdoors). The Friis-like formula for total system noise temperature takes into account the temperature of every element of the system, including W8JI's liquid nitrogen front end for his 160M Beverage antenna.

If we use this method, a typical receiver at 2 MHz would have a system Fs less than 1 dB, which means that nothing that we do the receiver itself can make a difference. But at 10 GHz the same receiver noise figure would obviously be very important.

Bill W0IYH

5728. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:21:59 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABC9167.8D6F44B@oio.net>
Source record: 167702

Jim,
Considering where your going to mount it, the 108"
whip may be your best bet. The screwdrivers, 'bug
catchers', etc, sure wouldn't work well on the roof,
or maybe I should say 'wouldn't last long'.
'Doc

5729. Re: cb mobile antenna for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:24:42 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABC920A.D189A31B@oio.net>
Source record: 167703

James,
If you put a groundplane under it, it ought to
work fine till your antenna gets there.
'Doc

5730. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:31:26 UTC
From: richardharrison@webtv.net
Message-ID: <11752-3ABC939E-116@storefull-114.iap.bryant.webtv.net>
Source record: 167705

On Tue. Mar 20, 2001, 11:00am Tom,W8JI wrote:

"Hi Bill,

We have to be careful or we will perpetuate the myth that "magnetic" signals in a shielded loop pass right through the shield, while "electric" signals are shorted. That isn`t true at all, and it is easy to prove.

The "shield" does not change the field impedance of the loop at all. It does not sort the "magnetic" part of the EM wave from the "electric" part of an EM wave. It does not sort signals from noise.

All it does is modify the balance of the structure, and improve balance if it is installed correctly.

73 Tom"

The shield on a loop is a Faraday shield and it does what all Faraday shields do, and that is no myth. It does exactly what Tom says it does not do. Well, Tom may have the "field impedance" right. I haven`t checked, but any antenna that extracts energy from a passing wave affects the field. The shield may not perturb the passing wave any more or less than the loop without the shield. But that isn`t the dispute.

Best regards, Richard Harrison, KB5WZI

5731. FS HyGain HAM-4 rotor control NOS

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:38:07 UTC
From: w3nrs@aol.com
Message-ID: <20010324073807.20387.00001091@ng-mq1.aol.com>
Source record: 167704

Have a quantity of left over Telex HyGain Ham-4 rotor controls that were acquired when Telex sold out to MFJ. These are new old stock and are guaranteed to be as stated. All have been checked out and perform as expected. There are three versions available, newer style with terminal strip on back, newer style with jones plug on back, and newer style with jones plug and 220 VAC 50/60 Hz operation.
All are available with either North or South centered meter scales.
$125.00 plus shipping.
Clem W3NRS w3nrs@aol.com

5732. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:53:33 UTC
From: 2w8ji@akorn.net
Message-ID: <3abc8ac7.308615633@news.accessunited.com>
Source record: 167706

On Sat, 24 Mar 2001 06:13:08 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>What do you make the sky temperature at 1.75 MHz?

No, unfortunately I did it on 1.83 MHz or so.

Naturally, it is quietest at mid-day.

Using 3.5 kHz bandwidth, noise floor was -123 dBm (with no feedline
loss) in my 75 ohm system on a winter night when the band was wide
open to Europe. The antenna was pointed NE with a HPBW of about 40
degrees, and is about 1% or so efficient.

>What is the measured efficiency of the Antenna that you use to measure the
>sky temperature.

We've been through that. Since my vertical is close to 100% efficient
(a 200ft tower with 100 200 ft long radials) it's easy to verify the
signal levels of the receiving antenna.

>I'm afraid that your quotation of the signal level in a bandwidth without
>some qualification is not prima facie evidence of sky temperature.

Neither is you math, especially when real-world measurements and text
on noise levels at HF disagree with your "results".

>> How dare you imply that a "large number" of Hams are lazy.
>
>I do not imply, I accuse,
> just listen to the rubbish that is exchanged on air.

OK, so you think Hams "talk trash".

>I attempted to give a short talk to a group of about fifty Hams, it was all
>fundemental stuff on noise, yet apart from one Ham, (a profesional
>Engineer), I was faced by a sea of blank faces, and no glimmer of interest
>in an absorbing subject.

Maybe you are wrongly blaming the subject matter or the audience, when
the speaker was actually at fault?

>Hams that I encounter at rallies etc. do little to encourage me that any
>seek a higher understanding of their chosen preoccupation.
>In the main Hams are lazy, Hancock's lampoon is not so far off the mark.

OK, so you think Hams are lazy. So far we know you think Hams are
lazy, talk trash, and no interest in what you think are absorbing

subjects.

>However there are brilliant exceptions that go completely unnoticed because
>it takes a little talent to recoginse genius.

OK, so this is where you point out someone who is a brilliant
exception, and the best example offered is yourself. Hams don't know
know you are brilliant because they are "untalented".

So while you are brilliant, Hams (so fa)r are lazy, talk trash, and
have no interest in what you think are absorbing subjects.

>> What is so special about you, that allows you to judge other people by
>> what they do in life?
>
>Fair question, there is nothing about me which is not present in any other,
>all they have to do is dig a little to find it. I only lament the fact that
>they have not had the good fortune to look a little further, to go that
>extra mile.

This is a repeat, but I'm getting the message. Hams are lazy (you've
repeated that twice now) while in your opinion you go the extra mile.

So far I understand you consider yourself to be brilliant and "go the
extra mile" while Hams are lazy, lazy, trash-talking people who have
no interest in anything you consider absorbing.

>> Please share all of your wonderful accomplishments in life with us, so
>> that the poor deprived "train number collectors" among us can grovel
>> at your feet.
>
>Pr. 8:10 Take my instructions instead of silver,
> and knowledge rather than choice gold;
> 11 for wisdom is better than jewels,
> and all that you may desire cannot compare with her. -
>RSV

OK, so you are saying your words are what proves you have great value
to all of us.

>Accomplishments:
>For some of which SEE www.gary.peach.dial.pipex.com

Why did I suspect you would have a web page named after yourself?

>I refer to train numbers because the bands are saturated with contest after
>contest; the sum total of which is nil.

Ahh, so it is contestors that are especially dumb. Got it.

>Contests could have a useful purpose to serve with some changes to the rules
>and colation of the wealth of data that it would be possible to glean from
>the logs of the contestants.
>But for years that opportunity has been missed, and I suspect that apathy

>will assign contests to that roll for many more years. As such the Ham is
>just a train number collector accumulating worthless bits of paper that do
>little if anything towards the understanding of radio communication or
>physics.

Understood clearly. You've said that three times. You think Hams are
lazy apathetic people...and worthless.

>Just what does the rubber stamp QSO acheive?
>The man that issues a 599 knowing it to be untrue is a liar and a cheat.

OK, and you also think Hams are liars and cheats. Damn, I lost track
of all the flaws we have! Even so, it is nice of a God-like creature
like yourself to point them out.

>How worthless it is to the genuine investigator that wants to evaluate some
>new antenna or equipment on air, what a time waster such practices are.
>It is high time that we cleaned up our act.

I hope you run for president of the RSGB or ARRL someday, or better
yet the UN! We need someone honest and brilliant like youself to tell
us what our flaws our. Without a top-notch mind like yours, and such
clear concise speaking, the rest of us are truely lost!

>Any just Ham will know that what I say is true and that I probably risk
>censure for being foolish to point out that the king has no clothes.

I don't think your being honest about how you feel about Hams...and
how you respect and admire yourself in comparison....will get you in
trouble.

>> That "humility thing" , it's a joke...right?
>
>We have an idiom in England "to get up someone's nose",
>I seem unintentionally to have done so with you Tom.

I have to admit, you seem a bit snotty. Is that what the phrase means?

>I am sorry that you feel that this exchange should degenerate into a
>personal slanging match. I will discuss technical topics without rancor, but
>this is the last exchange, (before your natural right to reply), on personal
>traits. To resort to such ad hominem tactics is to admit defeat, not that I
>ever intended this exchange to become a contest of personalities.

Good enough Gary. Thanks for being honest.

Now that I see your opinion of others (and yourself) I understand
exactly where you come from in your "helpful" posts. It helps me
understand why you don't respond to external input, and make 300 line
posts of gibberish.

Thanks for making it all clear.

73 Tom

5733. Re: How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 12:56:16 UTC
From: k3ky@erols.spamnocom
Message-ID: <3abc910a.277738844@news.erols.com>
Source record: 167707

I'm picturing a Larsen cartoon entitled "When good traps go bad" :o)
I used to have an older Cushcraft A3S. I eventually replaced both
pairs of traps in the driven element. This definitely improved things,
as the SWR came down noticeably. Some have complained of poor
service from Cushcraft- I can report that the person I spoke with was
both knowledgeable and quite helpful. This was in the mid-90s.

A couple of interesting details about traps in tribanders:
You can test them by running the driven element in isolation,
i.e. removed from the rest of the antenna (in the case of the TH-7
etc. this test would be run twice, once for each of the two elements)
In isolation, the DE should have a 'low' SWR. It is pretty much that
simple. Of course, you do have to make sure the resonances are
where they belong. Bad traps will display an obviously high SWR
at resonance. Usually the only option is to either rebuild (difficult)
or replace each bad trap (best IMO). You do need to have the
element under test up off the ground a ways, but probably 6-10
feet would suffice for 20 meters up. Resonance will move a bit
lower than that at full height.
Another interesting detail- traps in the reflector or director
elements rarely go bad. The reason is, the RF current is much
higher in the DE than the induced currents in parasitic elements.
This means, in turn, that the peak RF voltages between the coil
winding and ground (the metal case of the trap) are lower in
parasitic element traps, so they are less likely to break down.

Here is how they 'go bad': Not only do spiders build nests in traps,
but here on the US east coast we have a tiny native wasp that
apparently is very fond of hiding places with small circular
openings- like the weep holes in traps. These little critters drag
grass clippings up in there. I would not have believed this story
before I learned how to service traps, but when I opened my
bad traps, there were the grass clippings. Here's what happens:
when it rains, water gets sucked up into the trap by capillary
action. You end up with a sodden mass of stuff in the bottom
of the trap. At high power, sufficient RF voltage can develop that
you start getting little arcs from the coil winding to ground. Over
time, the coil wires lose their insulation and develop little burnt
spots. These are invariably found only along the bottom of the
coil. Some can approach the size of a coin when they get
really bad. So if you have DE traps that fail the SWR test, open
them up and look for any burnt spots. Look very carefully, as
they can also be small. Replace any bad DE traps and you
should be back to normal, so long as there are no other
electrical problems in the antenna. (Another problem that

shows up is intermittant opens in traps, caused by aluminum
coil wires that 'cold flow' under the pressure of a screw heads
compression) If the antenna is old enough that the DE traps are
going bad, it is a good idea to service (open and clean) all
parasitic element traps as well- but they would likely not fail
the SWR tests (try it). Reflector resonances should probably
be 3-5 percent lower frequency at resonance, directors 3-5
percent high.
BTW I can't tell you the exact failure mechanism, i.e. why the
coils with the burnt spots should be 'bad', but the before and
after SWR tests make all obvious. In my traps, the winding was
spaced out as I remember, so I can't see why the removal of
enamel insulation should be so detrimental. But it is. I guess
the coil Qs go way down. Heck, traps are lossy enough anyway
and represent compromise and tradeoff in antenna design.
They need to be in good shape. It's hard to beat monobanders
if you have the space for them. 73, David K3KY

On Fri, 23 Mar 2001 10:16:46 -0500, "Rudy Marcelletti"
<rudym@net-link.net> wrote:

>If a trap, such as the 15 and 20 meter traps on my Cushcraft X7 beam, are
>mechanically sound, and are properly installed, with the drain holes down,
>just how does a trap go bad? Power levels have always been well within
>specs (no more than 600 watts PEP and traps are rated for 2KW). I am
>baffled. There are no moving parts!
>
>

5734. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:01:23 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <YT0v6.650$WM4.1053439@nntp1.onemain.com>
Source record: 167708
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6E1EAD6.76D9%stewartx@sccoast.net...
> Richard McCollum wrote:
>
> > Given that, what are you going to do
> > about it? You could pass it, you
> > could simply shut up and wait, you
> > could send out for a pastrami on white
> > with mayo, have sex, or expect rain.
> > There are any number of wondrous things
> > to be accomplished.
>
>
> Well, Dick, I've already said what I'm going to do about it directly
> (since I have no interest in HF right now, I'm going to do nothing).
> However, in the context of what you said above, I don't like pastrami,
so
> that's out. But I do expect to enjoy the radio capabilities I have,
> barbeque steaks on the grill, enjoy the coming summer, and hope the rain
> goes away so I can sit around on my boat and soak up some harmful UV
rays.
> In addition, I intend to address this topic occassionally when it comes
up
> in this newsgroup.
>
>
> Dwight Stewart (W5NET)
>
>

Feel free; you don't need my permission to do anything. Just make your
choices, live with them, and spare us the self-justification.

Dick

5735. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:24:20 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABCA004.5CDF0F19@mwci.net>
Source record: 167709

Richard Harrison wrote:

> The shield on a loop is a Faraday shield and it does what all Faraday
> shields do, and that is no myth. It does exactly what Tom says it does
> not do. Well, Tom may have the "field impedance" right. I haven`t
> checked, but any antenna that extracts energy from a passing wave
> affects the field. The shield may not perturb the passing wave any more
> or less than the loop without the shield. But that isn`t the dispute.

There is a wise saying: "When you look into the abyss, the abyss looks back at you". Kafka?

This applies to receiving antennas. When a wave couples a signal into the antenna, it couples some of that signal back into the space near the antenna. This can modify the Z0 impedance near the antenna. Roy's very nice work on the impedances vs distance is a good example. The rod antenna' s voltage reflects an E field (lower Z0), the loop antenna's current reflects an H field (higher Z0).

Bill W0IYH

5736. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:30:46 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <ak1v6.118494$p66.33995526@news3.rdc1.on.home.com>
Source record: 167710

Well copying what someone else did takes the fun out of the installation
hehe ... I thought the whole point to the hobby was to learn from
experience.

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"John (KB3CDF)" <murphman@erols.com> wrote in message
news:99h1js$6g1$1@bob.news.rcn.net...
> Try reading any of the books written by Don Johnson:
>
> "40 Years of HF Mobileering"
> "40 + Year of HF Mobileering"
> "Everything You Wanted to Know About HF Mobileering but Forgot to
> Ask".
>
> He invented the DK3 antenna ...aka. Screwdriver.
>
> IMHO, tuners make the radio Happy. Happy antennas (physically
> "sized" to resonance) radiate. Location on the vehicle makes a big
> difference as well.
>
> Beat the CC&R's!!! Go Mobile!!!
> ~~~
> KB3CDF/M
>
>
>
> jhilins <jhilins@bellsouth.net> wrote in message
> news:3ABBF06B.F43A8A76@bellsouth.net...
> > Planning on installing HF in the car.
> >
> > I am planning on using a IC-706 feeding a 108" CB whip VIA a
> automatic
> > antenna tuner. I have a friend out there using this configuration,
> He
> > has instant access to 80M-6M via the tuner.
> >
> > My question is... Is there anyone else out there using this? How

> does it
> > compare to other antennas...
> >
> > I'm interested in any side by side results anyone may have..
> >
> > Thanks
> > James Hilins
> >
>
>

5737. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:33:31 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <Lm1v6.118495$p66.33999818@news3.rdc1.on.home.com>
Source record: 167711

Ya have to also remeber to take into account the location. I know up here
having a coil/tap setup would be awful on those icy/snowy days as it will
short the coil quite nicely.

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"Doug Hall" <k4dsp@pobox.com> wrote in message
news:2f8obtonilir4oprq054hu46dsirg6156n@4ax.com...
> On Fri, 23 Mar 2001 19:55:08 -0500, jhilins <jhilins@bellsouth.net>
> wrote:
>
> >Planning on installing HF in the car.
> >
> >I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> >antenna tuner. I have a friend out there using this configuration, He
> >has instant access to 80M-6M via the tuner.
> >
> >My question is... Is there anyone else out there using this? How does it
> >compare to other antennas...
> >
> >I'm interested in any side by side results anyone may have..
> >
> >Thanks
> >James Hilins
>
> I posted this a couple of weeks ago. Here it is again - perhaps it
> will be helpful to you:
> ==
> Hi All,
> For those who contemplate HF mobile at some point I thought you'd
> be interested in this comparison between a couple of different HF
> mobile antenna systems.
> I compared a Radio Shack 102" stainless steel whip ($14.99) and
> Icom AH-4 autotuner ($309.95) to a center loaded antenna called the
> "Carolina Bug Katcher" ($99.95) from Lakeview Antennas
> (www.hamstick.com) Since the whip is only resonant on (or near) 10m I
> used the Icom AH-4 tuner with the whip. The bugcatcher, which covers
> 40-10m, doesn't need a tuner, but I left the tuner in line anyway just

> to keep the system the same all the way back to the antenna mount.
> The purpose of the exercise was to see if the whip and tuner would
> be an acceptable alternative to the bug catcher. The whip/tuner is
> nice because I can change bands without stopping the car and changing
> coil taps. This is attractive when it's cold/rainy/dark. Also, the
> whip isn't as "ugly" as the bugcatcher, or at least that's what my
> daughter says. But beauty is in the eye of the beholder.
> The test setup was as follows: The radio was an Icom 706Mk2G
> mounted in my car. The antenna mount is on the rear bumper. Each
> antenna was tested on the same mount, same feedline, etc. In other
> words, the system was the same except for the actual radiator being
> compared. I parked the car in a large open area away from other
> vehicles, and used a COM-120B service monitor in the lab at my office
> to monitor the field strength. I then transmitted a carrier on each
> band with each antenna with the radio set to the same power level. A
> friend of mine recorded the field strength readings on the spectrum
> display on the service monitor in the lab. Here are the results:
>
> Band Bugcatcher Whip Winner
> ==== ========== ==== ======
> 40m -62dBm -76dBm Bugcatcher, by 14dB
> 30m -64dBm -76dBm Bugcatcher, by 12dB
> 20m -44dBm -52dBm Bugcatcher, by 8dB
> 17m -66dBm -74dBm Bugcatcher, by 8dB
> 15m -59dBm -69dBm Bugcatcher, by 10dB
> 12m -50dBm -58dBm Bugcatcher, by 8dB
> 10m -58dBm -56dBm Whip/tuner, by 2dB
> 6m -65dBm -64dBm Whip/tuner, by 1dB
>
> Note: The readings are likely subject to an error or a dB or two. But
> the data tells a pretty convincing story, and should probably come as
> no surprise. Base loading just can't compete with center loading when
> it comes to efficiency.
> Using 100w into the whip on 40 and 30m (the bands I use most) would
> be like running only 4 or 5 watts with the bugcatcher. Or put another
> way, I'd have to run over 2500w on the whip to match the bugcatcher's
> 100w signal. It's not until you get to 10m and 6m (where the whip is
> no longer electrically "short") that the performance is similar. And
> of course, the gain of the bugcatcher is there on receive as well. You
> can't work what you can't hear.
> Your mileage may vary. Comments are welcome. The usual disclaimer
> applies - I have no association with any of the companies listed here
> except as a customer. Also, the Carolina Bug Katcher is no longer
> available according to Lakeview's web page. But a similar antenna is
> available from Henry Allen K5BUG at www.texasbugcatcher.com
> 73,
> Doug, K4DSP/M
>

5738. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:39:47 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <Sr1v6.653$WM4.1071139@nntp1.onemain.com>
Source record: 167712
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6E1F260.76DA%stewartx@sccoast.net...
> Richard McCollum wrote:
>
> > So for why are we treated to the self-
> > serving observations on the obvious?
> > Why not try to sell someone who matters?
> > We are just a bunch of people who cared
> > enough to DO it and know bullshit when
> > we see it. I don't care if you pass it
> > or not but please do not insult my
> > intelligence.
>
>
> Sorry, I hit the send button before responding to this. Anyway,
unless
> your name is Bill, I wasn't trying to "sell" you on anything. And,
since
> you want to be so huffy about this, let me add that I was also one of
those
> who cared enough to do it - when I was about thirteen in the Boy Scouts.
> Since then, I grew out of flashing messages with my Boy Scout flashlight
and
> beeping messages to kids on the playground with my little decoder ring.
> Since then, I learned the best way to communicate is to talk, and I have
> used my knowledge about radio to improve my station enough to do that
> effectively without having to resort to an 18th century telegraph key.
> Perhaps you should learn more about radio so you can do the same. :-)
>
>
> Dwight Stewart (W5NET)
>

No one is getting huffy but I do have a certain difficulty calling a
manure pile a 'fertilizer storage facility'. New does not imply good, old
does not imply bad. All things in context.

The context here is a lot of breast beating self-justification for not
taking the code test. We can talk coulda, shoulda, hafta from now til
Independence Day but the cosmic interplay of choice and chance has made it
a requirement to do 5wpm in the easiest manner possible for at least the
next five years.

What you choose to do about it if anything is purely up to you. You don't have to justify it to me or anyone else. If it is a self-worth issue, it is YOUR self-worth issue. So stop with the justifications already. It is not about the mode, it is not about VHF-UHF vs HF, it is about a code test that is more of an inconvenience than a hurdle for most people. Obfuscation merely irritates.

It is particularly irritating when the audience is composed of people who, for whatever reason and by whatever method, passed a code test. There is a time and place to call golf a stupid game -- the gallery at the Masters is more than likely not that time or place. Preaching the Gospel on the road between Mecca and Medina is not the best context either. So why in hell are you doing it?

Dick NBK

5739. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:49:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99i8me$l2h$1@slb2.atl.mindspring.net>
Source record: 167713

Dennis:

Very elegant elaboration below. Bravo!

I for one concur with your interpertation of "dissipation".

I continue to say "dissipationless resistance" begone!

IEEE Dictionary "revise, revise, revise".

Best Regards,

-Peter K1PO

"Dennis Ferguson" <dennis@wawa.juniper.net> wrote in message
news:998rrn$1s9e$1@heap.juniper.net...
> VE9SRB <srbest@att.net> wrote:
> >There seems to be some confusion as to the terms and processes we are
> >discussing here. Consider the total energy delivered to the antenna.
> >First, if the antenna is lossy, some portion of the energy delivered to
the
> >antenna will be "dissipated" in or at the antenna. Dissipation infers
loss,
> >in that the dissipated energy is lost and not available for radiation.
>
> Steve,
>
> How about this. Go out and buy the most sensitive set of infrared
> goggles (i.e. a detector of infrared wavelength radiation) you can find.
> Then, on a calm cool night, take a look at your antenna and feed line, as
> well as the resistors and transistors or tubes in your transmitter,
> when the latter is operating. The energy you say is lost is being
> radiated as EM radiation, you can see some of it with the goggles.
> The energy you say is not lost is also being radiated as EM radiation.
> What is the difference? Are you defining "dissipated" as the radiation
> you don't want, and "not dissipated" as the radiation you want? Spurs
> and harmonics that you don't want are also "dissipated"? This is
> certainly a possible definition of "dissipation", but I think a
> definition which didn't depend on your feelings about the radiation
> might be a better one.
>
> >"Radiation" is the process through which the antenna converts the energy
> >delivered to its terminals into a traveling EM wave in space. This
process
> >is "radiation", it is not "dissipation" nor is it "dispersion".
>

> But "radiation" is also the mechanism through which a resistor sheds
> the energy delivered to its terminals into a travelling EM wave in
> space. EM radiation is heat in the process of being transfered away
> from its source. Again, why would the EM radiation emitted by a
> hot resistor be the result of "dissipation", while the EM radiation
> emitted by the antenna is not the result of "dissipation"? What
> happens to the radiation after it is dissipated (or not dissipated)
> is pretty much identical in either case.
>
> >The "dispersion" process that we have been discussing is what happens to
the
> >EM energy after leaves the antenna. Is it "dissipated" in space or is it
> >"dispersed" in space?
>
> Both the energy radiated by the antenna, and the energy radiated by the
> resistor, ends up being "dispersed" in space. Why is one "dissipated",
> and one not?
>
> > Again, dissipation of the traveling energy infers
a
> >much different process than dispersion of the traveling energy.
Dispersion
> >in itself may be a poor choice of a word. "Spreading of Energy" may be a
> >more appropriate term.
>
> I don't think dissipation occurs as the radiation travels, I think
> dissipation is the process that created the radiation in the first
> place. What you describe above is what happens to both the energy
> radiated by the antenna and the energy radiated by the resistor.
> What's the difference between the EM waves emitted by the antenna
> and the EM waves emitted by the resistor, that one is dissipation
> and one isn't?
>
> I think we've got to be on the same page by now. To be clear about
> the practical consequence of the differences in our opinions, my
> opinion leads to radiation resistance being as dissipative as any
> other kind of resistance, since it produces fundamentally the same
> result as any other kind of resistance, while your opinion appears
> to make some kinds of resistances dissipative and some not depending
> (solely, as far as I have yet determined) on your feelings about the
> resistance and the desireability of the radiation resulting from
> feeding the resistance power. I think my opinion makes a better
> definition.
>
> Dennis Ferguson

5740. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:54:54 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99i8v9ptk1@nntp9.atl.mindspring.net>
Source record: 167714

Richard:

[snip]
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:22183-3AB80B7A-9@storefull-116.iap.bryant.webtv.net...
> Dennis Ferguson wrote:
> "I think my opinion makes a better definition."
>
> I have no problem with Dennis` opinion except it doesn`t conform with
> the definitions accepted by a wide majority of those people who work
> with antennas. They`ve accepted the idea that an antenna has two
> resistive parts in series. These are the radiation resistance and the
> loss resistance. The same current flows through both. The radiation
> resistance is a fictional resistance that would take the same power as
> that which is actually being radiated were the fictional resistance to
> replace the radiation load.
[snip]

Ha... just as I suspected. Richard, please check your dictionary [Webster or Oxford is fine] for the meaning of "fiction".

So that's it. You believe that Dissipationless Resistance is a "fictional resistance". Of course! Why didn't I think of that?

Fiction is better than reality any time. In fiction one does not have to obey the Laws of either Man or Physics.

Of course "radiation resistance" is a real resistance since it is certainly not "fictional".

Richard, sometimes I feel that the proponents of "dissipationless resistance" are actually doing "Science Fiction"!

Best Regards,

-Peter K1PO

5741. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 13:56:20 UTC
From: billsohl@mindspring.com
Message-ID: <3abca5ec.1009177@news.mindspring.com>
Source record: 167715
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sat, 24 Mar 2001 00:45:01 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>news:3ABB7389.15559C47@IEEE.org...
>> W6DKN wrote:
>> > After I have experienced it first hand, I can give you a valid opinion
>> > on the subject (provided we both end up in the same place :>) .
>>
>> Do you tell your kids not to jump out in front of a moving truck?
>> Is it because you have experienced it or just used your rational
>> mind to evaluate it? I understand lots of things at which I have
>> no skill or experience.
>> --
>
>Common sense and basic survival instinct are completely different than
>trying to impose your personal opinions to the general public on a subject
>in which you have no first hand knowledge or experience.
>
>A perfect example of this is the anti-gun crowd - the vast majority of them
>have never even fired a gun, and yet they would have you believe that based
>on their feelings and opinions, you should have to give up your guns.
>
>I understand how a nuclear reactor works, but I would never be allowed to
>testify in court as to the value of such a device to the general public.
>This is because no matter how well intended, the fact remains that my
>opinion on the subject is moot due to the fact that I do not possess the
>expertise necessary to present a legally valid opinion.
>
>73 de W6DKN

Except this is not a court scenario...nor is the FCC arena
when it asks for or otherwise accepts comments on rules.
One need only examine the use and role morse code now plays
in any communications service to see it is significantly
diminished in need. The value of code to an individual
on a personal enjoyment basis is not the rational the
FCC uses in determining value or need.

Additionally, as a counter-point to your court "expert-witness"
scenario, you must admit that in the end, it is the jury
of people that do not possess that expertise that
makes the decision.

By the way, it doesn't take that much effort to be deemed an expert witness in most cases. The opposition will use its crossexamination time to discredit any expert witness...but in the end it goes to the jury for the final choice.

Cheers,
Bill K2UNK

5742. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:01:58 UTC
From: billsohl@mindspring.com
Message-ID: <3abca7ce.1491383@news.mindspring.com>
Source record: 167716
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sat, 24 Mar 2001 06:37:26 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>
>"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
>news:3ABC30EC.E44BBBF7@IEEE.org...
>> Dick Carroll wrote:
>> > Only by learning it, gaining skill in how to do it, and working
>> > radiotelegraphy can you come to know the essential facts concerning it
>> > as a working communications mode.
>>
>> So all the digital communications experts who don't possess actual
>> Morse code skill don't know the "essential facts" about Morse code?
>> If Shannon didn't possess Morse code skill, do you think he didn't
>> understand the theory? You think the FCC doesn't understand Morse
>> code? You're still beating that poor old dead horse. Hams who want
>> to use Morse code use it. Hams who don't want to use Morse code
>> don't use it.
>
>The keyword here is "Hams". As used in your sentence, the implication is
>that a person you classify as a "Ham" possesses the skills to use CW if
>they choose to do so.

No such implication can be made from that statement.
By current regulations, hams are hams with or without
morse knowledge. That has been so for 10 years.

>> Every ham has a choice of his/her >favorite mode(s).
>
>Agreed, according to your definition of a "Ham". But what about those
>persons who do not possess the skill to operate CW? They do not fit the
>definition of a "Ham" as you use it here... because they cannot operate CW
>if they wanted to because of lack of skills.

Your claim has no basis in what was stated, nor in fact.

>Which is basically what the whole discussion is about... There are some who
>may have access to the bands, but since they do not possess the skills
>necessary to operate CW, by definition they can't be included in the group
>commonly referred to as Hams...

Absolutely false...as already stated above.

Cheers,
Bill K2UNK

5743. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:04:00 UTC
From: billsohl@mindspring.com
Message-ID: <3abca8f7.1788314@news.mindspring.com>
Source record: 167717
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Fri, 23 Mar 2001 18:38:17 -0600, "David G. Nagel" <nagel@core.com>
wrote:

>Bill;
>A comment you made below seems to fit the solution to the problem. If
>the code test was made part of the scoring of the written test just like
>the various segments of the present written then those who want to do
>code can study the code and have a section of the test that they will
>pass and have other sections that they can slide on and still get their
>passing grade.
>Dave Nagel, WD9BDZ

I agree. I have never suggested that code,, as a mode, not
be included in the overall knowledge base.

>Bill Sohl wrote:
>> On Fri, 23 Mar 2001 00:04:21 -0600, "David G. Nagel" <nagel@core.com>
>> wrote:
>>
>> >Amateur radio covers a wide spectrum of methods and modes. Some people
>> >specialize in SSB, others AM, still others TV, low power, EME, and yes
>> >some CW.
>> >
>> >Qualification for an amateur radio license covers that same spectrum. We
>> >are tested on the Rules and Regulations governing the service. We are
>> >tested on our understanding of proper and appropriate operating
>> >technique. We are tested on how a radio signal is generated and
>> >detected. We are also tested on modes of operation i.e. ssb, am sstv,
>> >atv, antenna design and operation. And. We are tested on our
>> >comprehension of digital modes of communication to include morse code.
>> >To say that we should not be tested on a segment of the service just
>> >because it is old, outmoded and not used for anything ignores the fact
>> >that code is part of our general knowledge and an important part of our
>> >heritage.
>>
>> All true, but you don't consider that none of the other modes
>> are tested on a separate pass/fail basis as code is today.
>> I have no problem with adding some test questions to the
>> overall test/knowledge syllabus on code as a mode. There
>> is,however, no longer need to test anyone's individual
>> code ability as a stand-alone skill test on sending/receiving.
>> That's no different than not testing on ability to type
>> using a keyboard for packet or RTTY.
>>

>>
>> That's all you'll get from me.
>>
>> Cheers,
>> Bill K2UNK

5744. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:13:09 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABCAB75.59FF863B@IEEE.org>
Source record: 167569
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:
>
> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
> > Hams who want to use Morse code use it. Hams who don't want to use
> > Morse code don't use it.
>
> The keyword here is "Hams". As used in your sentence, the implication is
> that a person you classify as a "Ham" possesses the skills to use CW if
> they choose to do so.

That's not the implication at all. This ain't rocket science. Hams who want to use Morse code learn it and use it. Hams who don't want to use Morse code don't learn it or don't use it and forget it. Hams are hams whether they know and/or use Morse code or not. I know quite a few hams who learned Morse code and NEVER used it at all. They simply didn't like it.

There were many thousands of early Technicians who passed a General written exam and a 5wpm code test who never copied a single character of code after that. They were issued 1x3 calls starting with a 'W'. In those days, you couldn't tell a Tech from a General by knowing his call. Everyone with an amateur radio license was a ham.

According to the ARRL survey, a majority of hams use CW "rarely or never". Would you say a majority of hams are not "real hams"? I got news for you. "The Amateur's Code" doesn't mean Morse code. What is wrong with live and let live?
--
http://www.mindspring.com/~w6rca

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5745. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:15:57 UTC
From: billsohl@mindspring.com
Message-ID: <3abcabc5.2505886@news.mindspring.com>
Source record: 167718
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Fri, 23 Mar 2001 16:29:30 -0600, "JWheeler" <kd5bcu at sydcom dot
net> wrote:

>Bill Sohl <billsohl@mindspring.com> wrote in message
>> And the "price" set by the FCC is not based on any
>> competitive concerns.
>>
>
>Actually, the price the FCC sets is based on international treaty.

Agreed now. That was not the case prior to last year because
the treaty never had any speed requirement.

>Of
>course, that treaty will likely change in the next few years by dropping the
>code requirement, and the FCC will follow suit. Those that want HF
>priviledges will either pay the price and learn code or they can simply wait
>a few years until HF priviledges go on 'clearance'.

Agree again.

Cheers,
Bill K2UNK

5746. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:21:23 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABCAD63.D4FE28FD@IEEE.org>
Source record: 167570

Richard Harrison wrote:
>
> Cecil, W6RCA wrote:
> "You`re still beating that poor old dead horse."
>
> Why doesn`t Dick Carroll stuff the Morse horse and put it in a museum,
> the way Roy Rogers did old "Trigger"

It's the Mandatory Higher Speed Morse Horse that is dead and gone.
But some "real hams" will administer CPR until that horse's lips
rot and fall off.

Did you know that Roy Rogers wanted to have himself stuffed and
mounted on Trigger but it's illegal to do that to humans?
--
http://www.mindspring.com/~w6rca

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5747. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:24:04 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <2K8iJqAE4Kv6EA$c@ifwtech.plus.net>
Source record: 167571

William E. Sabin wrote:
>
>
>Ian White, G3SEK wrote:
>
>> Yes, you've identified the problem. 290K was originally chosen by Friis
>> as being conveniently around room temperature, which would be the
>> physical temperature of the resistive termination inside the noise
>> source. When typical noise temperatures were up in the thousands of K, a
>> difference of a few K didn't matter.
>
>In reviewing Friis's original article on noise figure in the Proceedings of
>IRE, I did not see a specific temperature mentioned. However, an IRE standards
>committee, headed by Prof Haus at MIT, recommended a standard lab temperature
>of 290K.
>
I don't have the original papers, but had understood that Friis did
suggest a reference temperature of 290K in his original 1944 paper, and
that the IRE's contribution in 1959 was to adopt it as a standard.

>The ARRL Handbook, 1995-2001, chapter 17, (just as one example, there are
>others) discusses a more generalized noise factor that is not pegged to a
>specific temperature. It is referred to as a "system" noise factor Fs,

There's a fundamental problem with the concept of including antenna
noise into a "system noise factor", namely that an antenna does not
really possess a noise factor (or figure) - it only has a noise
temperature.

AFAIK, the current basic definition of noise factor remains as
(signal/noise ratio at output) / (signal/noise ratio at input).
This definition is clearly limited to devices that have both an input
and an output, which excludes one-port devices such as antennas and
laboratory noise heads. The 1959 IRE standard is actually entitled
"Noise in Linear Twoports".

The formula for the noise factor F12 of two cascaded stages is:

F12 = F1 + (F2 - 1)/G1

If the first stage is an antenna and the second stage is a receiver,
the formula can only be made to work by treating the antenna or noise
head as if it were a two-port with a gain of 1. This Friis "like"
approach works in a limited way, but it does not stand up to much
questioning. (Does an antenna have an input S/N ratio? Does a noise
head?)

On the other hand, antenna and receiver noise temperatures simply add
together. It's completely rigorous (unless you're into low-noise
millimetre-wave and photonic devices, where quantum effects become
important). In practical engineering terms, that means it's a concept
that won't ever let you down.

>where
>the system includes the noise temperature of the antenna and the equipment
>temperature (indoors and outdoors). The Friis-like formula for total system
>noise temperature takes into account the temperature of every element of the
>system, including W8JI's liquid nitrogen front end for his 160M Beverage
>antenna.
>
>If we use this method, a typical receiver at 2 MHz would have a system Fs less
>than 1 dB, which means that nothing that we do the receiver itself can make a
>difference.

Could you run through this example for us, please?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5748. Re: G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:32:38 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABCB006.E2187F4D@IEEE.org>
Source record: 167573

jhilins wrote:
> I use a configuration close
> to this except I off center feed it, it will load up on all bands 160M-6M
> using only the internal antenna tuner built into my IC-756.

You have (accidentally?) stumbled upon a length of feedline that presents
a decent load to your built-in auto tuner. Many have stumbled upon lengths
of feedline that don't work with built-in autotuners. For anyone wishing
to get serious about this subject, I recommend downloading the free demo
version of EZNEC from www.eznec.com. The length of the feedline can make
all the difference in the success or failure of a ladder-line fed dipole.
More information available on my web page.
--
http://www.mindspring.com/~w6rca

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5749. Re: Antenna - restricted setup question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 14:33:12 UTC
From: Bruno Quesnel <quesnelb@ve2.ele.etsmtl.ca>
Message-ID: <3ABCB027.13A545A6@ve2.ele.etsmtl.ca>
Source record: 167572

After looking around for antennas, I've looked at rotatable dipole. Is this worth spending the money for the antenna and the rotor ????

I know that the rotor could always be reused for futur use and other antennas so it's not totally lost, but for the cost of antenna, is it really worth it ????

Thanks again

'Doc wrote:

> Bruno,
> For a temporary antenna a dipole should work just fine.
> They're pretty versitle as to how you put them up, so you
> may find that it may be just what you need. The cost of
> making a dipole just depends on what you may have in the
> junk-box. Definitely cheaper than a beam!
> 'Doc

--
Bruno Quesnel va2bmg@videotron.ca
Genie Electrique quesnelb@ve2.ele.etsmtl.ca
Electrical Engineering queb1604@ele.etsmtl.ca
Ecole de Technologie Superieure VA2 BMG

5750. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 15:01:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99icnp$e1d$1@plutonium.btinternet.com>
Source record: 167574

Garry says -
> I know that you have measured the efficiencies of all of your
antennae Reg,
==========
Your knowledge is defective. I have never measured the efficiency
of any of my antennas. What is the noise tempertaure of your source
of information?

Reg, G4FGQ

5751. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 15:38:36 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABCBF7C.C8462BC6@IEEE.org>
Source record: 167577

"Peter O. Brackett" wrote:
> I continue to say "dissipationless resistance" begone!

I'll bet you go away before it does. :-)
--
http://www.mindspring.com/~w6rca

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5752. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 15:43:46 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <Sg3v6.220$MT2.125039@dfiatx1-snr1.gtei.net>
Source record: 167575
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Bill Sohl" <billsohl@mindspring.com> wrote in message
news:3abca5ec.1009177@news.mindspring.com...
>
> SNIP
> Additionally, as a counter-point to your court "expert-witness"
> scenario, you must admit that in the end, it is the jury
> of people that do not possess that expertise that
> makes the decision.
>

Specifically, they can only make their determination by weighing the evidence presented during the trial. They are not allowed to consider any personal opinion or facts other than what has been admitted as evidence in determining guilt or innocence.

> By the way, it doesn't take that much effort to be deemed
> an expert witness in most cases.

True, you just have to show the court that you have the experience and expertise of the subject necessary to validate your opinions, and therefore allow them to be admitted as evidence.

> The opposition will use its crossexamination time to discredit any expert
> witness...

They will try... But this is how the game is played. Nevertheless, the court will recognize a person as an expert witness based on their qualifications. If they are qualified to testify as an expert witness, their opinions will be entered into the case as evidence. The jury will never be allowed to hear a layperson's opinions.

>but in the end it goes to the jury for the final choice.

Again, to be based solely upon the evidence presented during the trial, not their personal opinion or feelings on the subject.

>
> Cheers,
> Bill K2UNK
>

73 de W6DKN

5753. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 15:46:06 UTC
From: BadaBing <badabing@home.com>
Message-ID: <2j3v6.45463$H5.10229887@news1.rdc2.pa.home.com>
Source record: 167576
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Leland what is 73's ???.. I have heard of 73 after a qso but
not 73's
is that a new NoCoder Slang I need to learn

"Leland C. Scott" <no-spam@junk-mail.net> wrote in message
news:2Cat6.1895$X_5.73006@typhoon.mw.mediaone.net...
>
> "Dick Carroll" <dixie@townsqr.com> wrote in message
> news:98uguu$fi9$0@208.206.142.103...
> > No, Leland, no one is "bugged" about that. Many of us have dedicated a
> > huge amount of our personal time to help make that happen, in case you
> > didn't know what a VE does.
>
> All it takes is one counter example to nullify that argument "no one", and
> Richard has provided one.
>
> Quoted from a Richard McCollum post in rec.radio.cb
>
> "Pecking orders come in several flavors. I will make no bones here that I
> do not consider a Codeless Tech to be a full-fledged member of the
> fraternity and in fact I refused to administer them as a VE"
>
> > What many are "bugged" about is the lowering of requirements,
> > especially for the highest class of license. Nothing more.
>
> That maybe true, but for some I think it goes deeper than that.
>
> --
> 73's,
>
> Leland C. Scott
> KC8LDO
>
> ARRL member
> NCI member
>
> "You ask what Morse Code is good for? I'll tell you. Morse
> Code is used exclusively by Electronics Based life forms to
> communicate amongst themselves using advanced Organic
> Digital Signal Processors, running state of the art Artificial
> Intelligence Software, to perform the highly complex
> transmit encryption, receive decryption and error correction
> functions."

>
>

5754. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 15:47:04 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABCC178.409A70B5@IEEE.org>
Source record: 167578
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

BadaBing wrote:
> Leland what is 73's ???.. I have heard of 73 after a qso but
> not 73's is that a new NoCoder Slang I need to learn

73's is the proper way to pluralize 73. It means lots of Best Regards.
--
http://www.mindspring.com/~w6rca

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5755. more ARRL April humor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 16:07:28 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <4D3v6.45477$H5.10237593@news1.rdc2.pa.home.com>
Source record: 167579

This bill is cosponsored by Crapo and Akaka. "Crap" and "caca" are both slang for "excrement". These Senators are funny guys! :-)

73, John NU3E

> SB QST @ ARL $ARLB011
> ARLB011 Amateur Radio Spectrum Protection Act Introduced In Senate
>
> ZCZC AG11
> QST de W1AW
> ARRL Bulletin 11 ARLB011
> >From ARRL Headquarters
> Newington CT March 23, 2001
> To all radio amateurs
>
> SB QST ARL ARLB011
> ARLB011 Amateur Radio Spectrum Protection Act Introduced In Senate
>
> The Senate version of the Amateur Radio Spectrum Protection Act of
> 2001, introduced earlier this month in the US House, now is
> officially S.549. Republican Sen Michael Crapo of Idaho introduced
> the bill in the US Senate March 15.
>
> Democratic Sen Daniel Akaka of Hawaii was a cosponsor. The bill has
> been referred to the Senate Commerce, Science, and Transportation
> Committee. In introducing the Senate measure again this year, Crapo
> and Akaka referred to the importance of Amateur Radio in providing
> communication in times of disaster
>
> S.549 is identical in its wording to H.R.817, introduced in the
> House of Representatives March 1 by Rep Michael Bilirakis of
> Florida. If approved by both chambers and signed by Pres George W.
> Bush, the Spectrum Protection Act would require the FCC to provide
> equivalent replacement spectrum should it ever reallocate primary
> Amateur Radio spectrum to another service. The same requirement
> would apply if the FCC acted to diminish any secondary amateur
> allocations or to make additional allocations in ham bands that
> diminish their utility.
>
> Bilirakis and Crapo introduced the Spectrum Protection Act in a past
> session of Congress at the request of the ARRL. The League's
> Legislative and Public Affairs Manager Steve Mansfield, N1MZA, says
> he's encouraged by the fact that the Spectrum Protection bill is
> getting a head start with early introduction in both chambers this
> time around.

>
> More information on the Spectrum Protection Act, including the full
> text of the bills, is available on the ARRL Web site,
> http://www.arrl.org/govrelations/arspa.html .
> NNNN
> /EX

5756. Re: more ARRL April humor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 16:26:00 UTC
From: markem@primenet.com
Message-ID: <906E51F27markemprimenetcom@206.165.3.80>
Source record: 167580

nu3e@arrl.net (John DeGood) wrote:

>This bill is cosponsored by Crapo and Akaka. "Crap" and "caca" are both
>slang for "excrement". These Senators are funny guys! :-)
>

It may be funny, but those are really their names. Unless the Senate web
site (www.senate.gov) has been hacked...

5757. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 16:41:11 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <dehpbt02drfqslr225btv91oc82f8tu6li@4ax.com>
Source record: 167581

On Sat, 24 Mar 2001 07:06:42 -0000, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>I presume that was before small vessels carried Luneberg Lens or even the
>old simple corner reflectors?

Hi Gary,

I really don't know if they were so equipped (this was only 28 years ago) and all I can report is what appeared on the 'scope. I didn't step out to look because my station was at that radar, and anyway, it was raining.

As my ship was 600 feet long displacing 25,000 tons, we had a long braking distance. The fleet on the other hand could easily look out after themselves (but would undoubtedly bring a grumble about missing their catch). They weren't entire low tech, as several switched on their own radars when we appeared, my radar began to fill with fine filigreed lines of their own sweeps mixing with mine.

We had been running ahead of schedule, so the old man headed us out to sea (out of the lanes) to kill time. The watches for several days were nothing but boring. This episode on the dog-watch at least gave us a break (and kept the look-outs awake). On an Atlantic crossing, my buddy (AA7UJ) sat at the radar with a split set of sound powered phones to the watches as the rest of the crew dozed (about 6 people in CIC). The XO popped his head in, shook it, and closed the door carefully so as to not waken the fellows. My ship was not what would be called a warrior. We qualified only to the extent of maintaining a 40mm cannon so that we could keep our warship status (and thus escape certain dockage fees and excise tax). On the other hand, in my lab, I was never more than 20 feet away from a Polaris missile with its atomic payload - and perhaps a dozen more like it nearby.

Some might wonder about the laxity of the XO. After all, we did carry a considerable amount of classified information and would be a prize vessel if captured. No, the XO knew we had a submarine escort for just this possibility - the sub would have sunk us long before we would've been boarded. :-)

73's
Richard Clark, KB7QHC

5758. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 16:42:57 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABCCE91.239CA77A@mwci.net>
Source record: 167582

Ian White, G3SEK wrote:

> There's a fundamental problem with the concept of including antenna
> noise into a "system noise factor", namely that an antenna does not
> really possess a noise factor (or figure) - it only has a noise
> temperature.

I did not say "antenna noise factor". I said "antenna noise temperature". I just took a look, and that is what I said.

> The formula for the noise factor F12 of two cascaded stages is:
>
> F12 = F1 + (F2 - 1)/G1

I did not say this formula. I mentioned the formula for cascaded noise temperatures. Not the same thing. I said "Friis-like" not "Friis". Not exactly the same, but somewhat similar. I have just verified that also.

> On the other hand, antenna and receiver noise temperatures simply add
> together. It's completely rigorous (unless you're into low-noise
> millimetre-wave and photonic devices, where quantum effects become
> important). In practical engineering terms, that means it's a concept
> that won't ever let you down.

This is not 100% true. The ensemble of temperatures in the complete system do not just "add together". Gain (or attenuation) values are involved. The formula that I am talking about is in many handbooks, including on page 17.38 of the ARRL Handbook. That material was written by me, and it has been verified to be correct. See also ARRL UHF/Microwave Experimenter's Handbook.

When the system temperature is figured, the Fs system noise factor is the ratio of system temperature to antenna noise temperature. By the way, I did not invent this idea myself.

Page 17.38 works out an example. Suggest you refer to it. If you do not have an ARRL Handbook I can scan the pages and email them. I will be pleased to do that.

Bill W0IYH

5759. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 16:43:57 UTC
From: richardharrison@webtv.net
Message-ID: <26257-3ABCCECD-42@storefull-115.iap.bryant.webtv.net>
Source record: 167584

Peter Brackett wrote:
"Ha...just as I suspected." (check the dictionary for fiction`s meaning)

I apologize for unauthorized use of a pedantic term, "fictional resistance", as I am no pedagogue. I don`t even play one on TV. I`ve often seen radiation resistance explained as a fiction which replaces the voltage to current ratio of the radiated energy from an antenna. The radiation resistance is dissipationless because it doesn`t heat up the immediate vicinity. But, it is real.

"Fictional" was ill advised, and I was my own advisor. Shame on me!

Best regards, Richard Harrison, KB5WZI

5760. Re: J-pole: how to avoid coupling to metal mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 16:51:38 UTC
From: arrow146@aol.com
Message-ID: <20010324115138.07793.00000507@ng-mb1.aol.com>
Source record: 167583

>Subject: Re: J-pole: how to avoid coupling to metal mast?
>From: jhilins jhilins@bellsouth.net
>Date: Sat, Mar 24, 2001 4:35 AM
>Message-id: <3ABC866A.8CB7AD1B@bellsouth.net>
>
>If you constructed the J-Pole correctly, and found the correct feed
>point, you should not nave any problems with coupling.
>
>HOWEVER:
>
>VHF J-poles do have a tendency to radiate the coax ! This may be wheat
>your experiencing. Get a dozen or so tight fitting ferrite beads and
>slide them on up near the feed point and see how this works !

Hello, Jim

The OSJ (Open Stub J-Pole) is end fed.

With proper construction, the OSJ has NO problem with radiating the coax,
or the mast. This is what I am trying to get through to people.

<A HREF="http://members.aol.com/_ht_a/Arrow146/inst/ijpole.html">J-Pole
Instructions</A>

73 Al Lowe N0IMW

<A HREF="http://members.aol.com/_ht_a/Arrow146/index.html">ArrowAntenna.com</A>
604 West 17th Street
Cheyenne, WY 82001

307-638-2369 Fax 307-638-3521

5761. Re: more ARRL April humor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 17:50:28 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <E75v6.59983$Ok4.4933882@news1.rdc1.ct.home.com>
Source record: 167585

"John DeGood" <nu3e@arrl.net> wrote in message
news:4D3v6.45477$H5.10237593@news1.rdc2.pa.home.com...
> This bill is cosponsored by Crapo and Akaka. "Crap" and "caca" are both
> slang for "excrement". These Senators are funny guys! :-)
>
> 73, John NU3E
>
> > SB QST @ ARL $ARLB011
> > ARLB011 Amateur Radio Spectrum Protection Act Introduced In Senate
> >
> > ZCZC AG11
> > QST de W1AW
> > ARRL Bulletin 11 ARLB011
> > >From ARRL Headquarters
> > Newington CT March 23, 2001
> > To all radio amateurs
> >
> > SB QST ARL ARLB011
> > ARLB011 Amateur Radio Spectrum Protection Act Introduced In Senate
> >
> > The Senate version of the Amateur Radio Spectrum Protection Act of
> > 2001, introduced earlier this month in the US House, now is
> > officially S.549. Republican Sen Michael Crapo of Idaho introduced
> > the bill in the US Senate March 15.
> >
> > Democratic Sen Daniel Akaka of Hawaii was a cosponsor. The bill has
> > been referred to the Senate Commerce, Science, and Transportation
> > Committee. In introducing the Senate measure again this year, Crapo
> > and Akaka referred to the importance of Amateur Radio in providing
> > communication in times of disaster
> >
> > S.549 is identical in its wording to H.R.817, introduced in the
> > House of Representatives March 1 by Rep Michael Bilirakis of
> > Florida. If approved by both chambers and signed by Pres George W.
> > Bush, the Spectrum Protection Act would require the FCC to provide
> > equivalent replacement spectrum should it ever reallocate primary
> > Amateur Radio spectrum to another service. The same requirement
> > would apply if the FCC acted to diminish any secondary amateur
> > allocations or to make additional allocations in ham bands that
> > diminish their utility.
> >
> > Bilirakis and Crapo introduced the Spectrum Protection Act in a past
> > session of Congress at the request of the ARRL. The League's
> > Legislative and Public Affairs Manager Steve Mansfield, N1MZA, says

> > he's encouraged by the fact that the Spectrum Protection bill is
> > getting a head start with early introduction in both chambers this
> > time around.
> >
> > More information on the Spectrum Protection Act, including the full
> > text of the bills, is available on the ARRL Web site,
> > http://www.arrl.org/govrelations/arspa.html .
> > NNNN
> > /EX
>
>

5762. Re: more ARRL April humor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 17:51:57 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <195v6.59986$Ok4.4934032@news1.rdc1.ct.home.com>
Source record: 167586

I think your comments are in very bad taste. Both of these Senators are
working for the benefit of Amateur Radio and deserve better.

Pete

"John DeGood" <nu3e@arrl.net> wrote in message
news:4D3v6.45477$H5.10237593@news1.rdc2.pa.home.com...
> This bill is cosponsored by Crapo and Akaka. "Crap" and "caca" are both
> slang for "excrement". These Senators are funny guys! :-)
>
> 73, John NU3E
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> > would apply if the FCC acted to diminish any secondary amateur
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> > time around.
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> > More information on the Spectrum Protection Act, including the full
> > text of the bills, is available on the ARRL Web site,
> > http://www.arrl.org/govrelations/arspa.html .
> > NNNN
> > /EX
>
>

5763. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 18:39:13 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <peJlcrARnOv6EAc7@ifwtech.plus.net>
Source record: 167587

William E. Sabin wrote:
>
>
>Ian White, G3SEK wrote:
>
>> There's a fundamental problem with the concept of including antenna
>> noise into a "system noise factor", namely that an antenna does not
>> really possess a noise factor (or figure) - it only has a noise
>> temperature.
>

Sorry, Bill, I wasn't making my point clearly enough.

The point I had been trying to make (and not very well, I admit) was that if you combine the antenna with the receiver, and call it the "system", then the whole system becomes a one-port device, to which the concept of noise factor does not properly apply.

You are right that I got confused, although not about the reason. On looking more carefully at the examples in the ARRL Handbook, it turns out that the so-called "system noise factor" (a) is not a standard form of noise factor, and (b) does not apply to the whole system, only to the receiver!

To demonstrate (a) and (b), let us temporarily simplify the "system" to just two stages, the RX and the antenna. If there are any losses between the RX and the antenna, they can be absorbed into either Tant or Trx with appropriate corrections (which are not in dispute).

If Fs is defined as (Tsys/Tant), and Tsys has been simplified to (Trx + Tant) then:

Fs = (Trx + Tant)/Tant = Trx/Tant + 1

This does indeed have the form of a "noise factor" equation (compare with the standard equation, Frx = Trx/T0 + 1) but it is actually a non-standard representation of the *receiver* noise factor, referenced to Tant instead of T0.

If we now re-introduce losses between the receiver input socket and the antenna, it makes my point less easy to see, but I don't believe that affects its validity.

There are obvious uses for the ratio (Tsys/Tant) or (Trx/Tant) in system design - that's not in dispute. The whole problem lies in the misleading choice of name.

I appreciate that you didn't invent the term "system noise factor", and
am not blaming you for its existence, but the name is highly confusing
when it's neither a standard noise factor nor truly belongs to the
system.

Well, I for one was highly confused...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5764. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 19:32:40 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3ABCF658.16161F33@wb6hqk.ampr.org>
Source record: 167588

Richard Harrison wrote:
>
> OK. Suppose we have a couple of r-f coils sited end to end on the same
> axis and close enough for cnsiderable mutual inductance (coupling). That
> is, that current in one coil generates a voltage across the other coil.
> If we put a metal box around one of the coils and ground it, coupling
> between the coils is nearly, if not completely, killed. Why?

[deleted for brevity]

> Well, the shield ends the capacitive coupling between primary and
> secondary, but why does the metal shield kill the magnetic coupling
> between the coils?
>
> The short answer is Lenz`s law. Lenz says that induced current in a
> circuit must produce a magnetic field which opposes its creator. If the
> shield is perfectly conducting, the opposing field equals the field
> which produces it. Aluminum is an imperfect conductor, but it is good
> enough for most r-f shielding purposes, and it is economical.
>
> So, we see that a solid conducting shield can inhibit both electric and
> magnetic r-f fields. Such shields are seen almost everywhere. If they
> didn`t so work, they wouldn`t be so used.
>
> We should all be aware of the Faraday screen (shield) which is designed
> to thwart Lenz`s law from a macro viewpoint, so that the metallic shield
> becomes porous for magnetic coupling between the primary and secondary
> coils in our example.
>
> Bars or wires shorted together on one end and grounded, but insulated
> from each other at the other end, can sieve out the electric field while
> allowing the magnetic field to pass right through. Millions of Faraday
> shields are installed and doing their job.

[more stuff deleted for brevity]
>
> By breaking the circuit in the shield for a circulating current, the
> shield can`t produce an effective opposing field and the magnetic
> coupling of primary and secondary is accomplished.

> So, the declaration that separation of the magnetic and capacitive
> coupling is impossible and that the fields are inseparable is wrong. No
> matter who says it or how many times.

Notice that the capacitive coupling which has been suppressed by the
grounded shield was the result of an electric field orientated in a

direction roughly perpendicular to the shield.

The electric field associated with the time varying magnetic 'coupling' field is orientated in a direction which tends to induce circulating currents in the surface of the shield. These currents are perpendicular to the capacitive 'displacement' currents described earlier. Introducing a narrow slit in the shield will interrupt the currents circulating on the surface of the shield but can be arranged to have only a negligible effect on the shielding effectiveness to the capacitive currents. The EMF generated by the time varying magnetic field penetrating the conductive shield will establish an electric field across the the slit. The geometry of the slit is chosen so that the electric field which exists in the vicinity of the slit does not create additional undesirable coupling modes.

The Faraday shield was able to suppress coupling from electric fields generated by common mode voltages between the primary and secondary windings. The Faraday shield did _not_ suppress the circulating electric field associated with the time varying magnetic field responsible for the mutual inductance between the windings. It was possible to suppress coupling due to one electric field component from another by exploiting the different orientations of the two components.

> This has nothing to do with propagation of radio waves in a vacuum or
> even the basics of a loop antenna. It (the Faraday shield) is just a
> block to the electric field. The propagation of waves in the vacuum does
> require that each wave be in operation to beget the other half of the
> energy transport pair. E&H are both essential. But we can kill one and
> the other regenerates its partner.

No we can't. Maxwell's equations succinctly state that you cannot have a time varying electric field without an associated time varying magnetic field. T'aint no way.

> We short and open transmission lines,
> don`t we?

A good thought experiment is to visualize what happens to the electric and magnetic fields when a transmission line is opened or shorted. Both electric and magnetic fields continue to exist. The arrangement is different but they still satisfy Maxwell's equations and the imposed constraints (boundary conditions).

> An antenna can be equipped with a Faraday screen to block an electric
> field while allowing magnetic fierld excitation, just as happens with
> the Faraday shielded coil.

The Faraday shield suppresses the coupling between the antenna terminals and a particular electric field orientation. It does not block all electric field orientations, otherwise the antenna would not work.

bart
wb6hqk

5765. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 19:47:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99ithr$9vg$1@slb3.atl.mindspring.net>
Source record: 167589

Cecil:

Yup... I'm sure it will. But there is still hope of re-directing the use of that unfortunate description by steady misuse.

Dissipationless Resistance will never go away now, but maybe with sufficient misuse we can all get it "outa here".

My idea is that the denziens of this newsgroup should "trick" some special interest group into adopting "dissipationless resistance", sort of like those who adopted that grand old word "gay", and then encourage them to overuse it.

Then after a while the whole meaning of "dissipationless resistance" will change and we'll be back where we need to be with plain old radiation resistance, surge resistance, ordinary resistance, etc...

Hmmmm.... now what special interest group could we con into this....

Eureka! I know... let's get the proponents of "fractal electromagnetics" to adopt "dissipationless resistance". They will then use it all over the 'net, and in no time at all we will be free of that dammed "fiction". Fractal antennas all have dissipationless resistance!

All other suggestions are welcome.

Best Regards,

-Peter K1PO ["Fractal antennas have dissipationless resistance!"]

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABCBF7C.C8462BC6@IEEE.org...
> "Peter O. Brackett" wrote:
> > I continue to say "dissipationless resistance" begone!
>
> I'll bet you go away before it does. :-)
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5766. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 19:58:09 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99iu8h$5nj$0@208.207.71.166>
Source record: 167590
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:
>
> Dick Carroll wrote:
> > Only by learning it, gaining skill in how to do it, and working
> > radiotelegraphy can you come to know the essential facts concerning it
> > as a working communications mode.
>
> So all the digital communications experts who don't possess actual
> Morse code skill don't know the "essential facts" about Morse code?
> If Shannon didn't possess Morse code skill, do you think he didn't
> understand the theory? You think the FCC doesn't understand Morse
> code? You're still beating that poor old dead horse. Hams who want
> to use Morse code use it. Hams who don't want to use Morse code
> don't use it. Every ham has a choice of his/her favorite mode(s).

With your alleged intelligence one would think you could understand
terms like
"basic, very effective, most simple, easiest to implement under the most
austere conditions". All of which describe radiotelegraphy. But you
choose to ignore those descriptives in favor of your personal choices in
the ongoing effort to rid ham radio of CW.
We know, Cecil, all the other techies would dump you like a prince
turned into an ugly frog if you said what you actually know to be true.

5767. Re: Paper on Gamma match

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 20:01:23 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <dV7v6.27518$3i4.4003589@e3500-chi1.usenetserver.com>
Source record: 167594

Yes Piero, I have the Ham Radio issue in my hot little hand, and I'll be scanning it for you later today.

My wife deplores the space it takes for my library of QST, CQ, and Ham Radio, (QST's back to 1930), but this is one reason for keeping these valuable bits of information. I'm pleased to be able to serve you in this way.

Walt Maxwell, W2DU

Piero Tognolatti <tognolatti@ing.univaq.it> wrote in message news:3ABBCC5F.BB4506E2@ing.univaq.it...
> I am looking for the following article:
> H.T. Tolles, "How to design Gamma-matching networks," Ham Radio, pp.
> 46-55, May 1973.
> It is not easy to find Ham Radio volumes in Italy.
> Is there anyone that can find it, scan and send it to me as an e-mail?
> Thank you in advance.
> 73 de I0KPT
> --
> .....
> Piero Tognolatti
>
> e-mail: tognolatti@ing.univaq.it

5768. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 20:05:24 UTC
From: Dave <maryjane.wanna@verizon.net>
Message-ID: <867v6.1225$DB1.873972@typhoon1.ba-dsg.net>
Source record: 167591

Jim if your jeep is a CJ type you roof isn't metal so you are going to have a ground plane issue. I have a '86 Wrangler and have a TH70 in it. I installed a ball mount on the back 1/4 panel with a Perth outback.... I couldn't get a match no matter what I did. Then I found out that the out back can not be next to any vertical metal. i.e.. the roll bar and struts for the soft top. I replaced the antenna with a hustler that have the coil that you put on top of a 54 inch shaft. Now it works GREAT. The only thing is that you have to replace the coil to change bands. They do make a plate that will hold 3 coils at a time, but there was too much wind load on it. The HF works great in the jeep, other then 10m and 11 m. Some place it is getting rf into the car computer and shuts off the motor when I key up. I have even used a 1/4 wave whip on 10 and it still does the same thing..(so not the fault of the hustler.)

Hope that this helps

Dave
"jhilins" <jhilins@bellsouth.net> wrote in message
news:3ABC8165.8AEC0D51@bellsouth.net...
> Any ideas on how to center load such a antenna? Or maybe better yet
for
> strength purposes construct a loading coil?
>
> JIm
>

5769. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 20:16:26 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABD009A.FC4F59E9@mwci.net>
Source record: 167592

Ian White, G3SEK wrote:

> if you combine the antenna with the receiver, and call it the
> "system", then the whole system becomes a one-port device, to which the
> concept of noise factor does not properly apply.

The term F does not apply, but the term Fs does apply. It is the ratio of total system noise temperature to the noise temperature of the antenna alone. This is very closely related to F but it is not measured with everything at 290K. If everything is at 290 K, including the signal generator noise temperature, then F and Fs are identical numbers.

I don't agree, and quite a few others don't agree, that the term is "useless". I put a lot of thought and literature search into the Handbook writeup, and I like it. The reason I like it is that it puts the receiver into perspective vis a vis the rest of the system, parts of which may be at widely different temperatures.

Being a EME guy etc, I suggest you think about it some more. It is nifty, in my opinion.

Also, the Friis formula has to be used carefully, or it is easy to get wrong answers, especially when attenuation (eg filter loss) between active stages are involved. I have been down that road. The temperature formula has to be approached with the same caution. If we are not careful we may get an answer that is close to right, but we are not using the correct method.

I have found that it is best to adhere to both of those formulas and not make assumptions. One of the contributors, and also my co-editor, to HF Radio Systems and Circuits fell into that trap and I had to bail them out.

> You are right that I got confused, although not about the reason.
> On looking more carefully at the examples in the ARRL Handbook, it turns
> out that the so-called "system noise factor" (a) is not a standard form
> of noise factor, and (b) does not apply to the whole system, only to the
> receiver!

Part (b) is definitely not true. Fs refers to the *entire* system, from some faraway galaxy to the loudspeaker. It is one of the standard forms that a lot of people recognize. It is perfectly valid.

> To demonstrate (a) and (b), let us temporarily simplify the "system" to
> just two stages, the RX and the antenna. If there are any losses between
> the RX and the antenna, they can be absorbed into either Tant or Trx
> with appropriate corrections (which are not in dispute).

But if there is loss between amplifier stages, we may have to use the complete equation 8 on page 17.38 if we intend to use the correct procedure, and not some approximate method that may give a close answer but is not a correct answer that is good enough to put into a text book.

I think I have stated my position clearly. It's what I am satisfied with, and I don't say that casually. I have been down the road on this subject over many years.

Best regards, Ian, and thanks for your comments about the EM topics. That is one tough, tough subject to get a good handle on and I keep struggling with it. I am convinced that it is tough also for a lot of others who have "definite" ideas that do not always pan out. I am still not satisfied with the discussions about reflection. At radio frequencies a resonant plate is a much better reflector than some arbitrary dimension.

Bill W0IYH

5770. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 20:41:04 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABD0660.120D4293@mwci.net>
Source record: 167593

William E. Sabin wrote:

> Ian White, G3SEK wrote:
>
> > if you combine the antenna with the receiver, and call it the
> > "system", then the whole system becomes a one-port device, to which the
> > concept of noise factor does not properly apply.
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> The term F does not apply, but the term Fs does apply. It is the ratio of
> total system noise temperature to the noise temperature of the antenna
> alone. This is very closely related to F but it is not measured with
> everything at 290K. If everything is at 290 K, including the signal
> generator noise temperature, then F and Fs are identical numbers.
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> I don't agree, and quite a few others don't agree, that the term is
> "useless". I put a lot of thought and literature search into the Handbook
> writeup, and I like it. The reason I like it is that it puts the receiver
> into perspective vis a vis the rest of the system, parts of which may be at
> widely different temperatures.
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> Being a EME guy etc, I suggest you think about it some more. It is nifty, in
> my opinion.
>
> Also, the Friis formula has to be used carefully, or it is easy to get wrong
> answers, especially when attenuation (eg filter loss) between active stages
> are involved. I have been down that road. The temperature formula has to be
> approached with the same caution. If we are not careful we may get an
> answer that is close to right, but we are not using the correct method.
>
> I have found that it is best to adhere to both of those formulas and not
> make assumptions. One of the contributors, and also my co-editor, to HF
> Radio Systems and Circuits fell into that trap and I had to bail them out.
>
> > You are right that I got confused, although not about the reason.
> > On looking more carefully at the examples in the ARRL Handbook, it turns
> > out that the so-called "system noise factor" (a) is not a standard form
> > of noise factor, and (b) does not apply to the whole system, only to the
> > receiver!
>
> Part (b) is definitely not true. Fs refers to the *entire* system, from some
> faraway galaxy to the loudspeaker. It is one of the standard forms that a
> lot of people recognize. It is perfectly valid.
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> > with appropriate corrections (which are not in dispute).
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> complete equation 8 on page 17.38 if we intend to use the correct procedure,
> and not some approximate method that may give a close answer but is not a
> correct answer that is good enough to put into a text book.
>
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> and I don't say that casually. I have been down the road on this subject
> over many years.
>
> Best regards, Ian, and thanks for your comments about the EM topics. That is
> one tough, tough subject to get a good handle on and I keep struggling with
> it. I am convinced that it is tough also for a lot of others who have
> "definite" ideas that do not always pan out. I am still not satisfied with
> the discussions about reflection. At radio frequencies a resonant plate is
> a much better reflector than some arbitrary dimension.
>
> Bill W0IYH

At radio frequencies, especially HF, a non-resonant reflector can have a lot of radiation off the *back* side of the plate. I believe this agrees with Maxwell's equations OK because it maximizes energy available for reflection. A perfect standing wave on the plate is better than anything else.

Bill W0IYH

5771. W9inn dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 20:51:18 UTC
From: ac5ez@webtv.net
Message-ID: <25991-3ABD08C6-71@storefull-117.iap.bryant.webtv.net>
Source record: 167595

Anyone using W9inn 40/80 dipoles? Any comments about these dipoles? Do they work ok on 40 and 80 etc ??
thanks

K1zw
Larry
Qcwa

5772. Re: G5RV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 21:21:11 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99j30k$62$1@plutonium.btinternet.com>
Source record: 167596

There's no need to depend on accidents to discover suitable lengths
of feedline for any dipole at any frequency on any band.

Use program VARNEY.exe to search systematically, sweeping through
length or frequency for suitable input impedances.

Download program from website below, not zipped up, run
immediately. Enter antenna details and feedline impedances, coax or
ladder line or both together, and obtain accurate answers in
minutes.

If in practice you obtain Tx load impedances different from
predicted values then it's due to such things as your 450-ohm
ladder line being something different from 450 ohms. The program
enables you easily to check the dependence of input impedance on
the impedance of feedlines. L and C component values of an L-match
to 50 ohms are automatically included with all results.

The foregoing uses of the program are by-products. The distribution
of losses between coax, twin feeder, antenna and ground is obtained
immediately. An N-to-1 or choke balun between coax and twin feeder
is allowed for.

But in summary, this program will show that for multiband use the
G5RV offers no advantages over any other random length, center-fed,
HF dipole. With the coax it is worse than most.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

5773. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 23:09:17 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abd3722$0$15024$cc9e4d1f@news.dial.pipex.com>
Source record: 167598

"Ian White, G3SEK" wrote ...
> William E. Sabin wrote:
> >Ian White, G3SEK wrote:

> F12 = F1 + (F2 - 1)/G1
>
> If the first stage is an antenna and the second stage is a receiver,
> the formula can only be made to work by treating the antenna or noise
> head as if it were a two-port with a gain of 1. This Friis "like"
> approach works in a limited way, but it does not stand up to much
> questioning. (Does an antenna have an input S/N ratio? Does a noise
> head?)

If it is very lossy/ inefficient, I think that it does. Not that it is a very useful thing for any further calculations such as communication matgins etc..

The form (So/No)/Si/Ni) is modified because No = Ni x Loss + Tambient(1-Loss)

The fact that the inefficiency of teh antenna modiifies (So/No)/Si/Ni) to (So/No)/Si/(Ni Loss + Tamb(1-Loss)), is identical in form to what happens as we progress through and amplifier or receiver.
Still noise factor really doesn't progress things very much except as an evaluation of the receiver. The value that we really require is Ts = Ta + Tr such that we can examine the threshold value for any communications mode. It is the Ts that we have to work with in the practical case, it is this value that we are unable to modify. Attempting to measure Tr is a fairly futile exercise and as it can not be seperated in practice we run with Ts.

> On the other hand, antenna and receiver noise temperatures simply add
> together. It's completely rigorous (unless you're into low-noise
> millimetre-wave and photonic devices, where quantum effects become
> important). In practical engineering terms, that means it's a concept
> that won't ever let you down.

Providing you use well conditioned equations for the calculations.

I have found this one particularly stable when using the hot cold load technique for measuring Ts.

Ts = (To -Tn)/ Yna(Yon-1)
Where To is a load at ambient temperature
Tn is a load immersed in Liquid Nitrogen and the actual noise temperature is determined from the insertion loss of the load to the actual switching point between loads.

Yna is the ratio of detected noise power outp of the system whenthe input is terminated in a load Tn and then into the antenna that is to be used for comminication.
Yon is a similar ratio between noise power out of the system when terminated in a load at ambient temperature and a load at liquid nitrogen temperature respectively.
In practice the liquid nitrogen effective noise temperature works out at around 83°K allowwing for the losses in the connector and short length of line from the Dewar to the receiver input measureda at 0.01 dB and this bit of line is at ambient temperature.
Of course the formula is valid for any other hot /cold load temperatures.
The main difficulty is to ensure that the temperature difference between the hot and cold load is sufficient to give reasonable measuring accuracy at the systemp temperature of the system under measurement.

> >where
> >the system includes the noise temperature of the antenna and the equipment
> >temperature (indoors and outdoors). The Friis-like formula for total system
> >noise temperature takes into account the temperature of every element of the
> >system, including W8JI's liquid nitrogen front end for his 160M Beverage
> >antenna.

ALARM, ALARM TROLL DETECTED

> >If we use this method, a typical receiver at 2 MHz would have a system Fs less
> >than 1 dB, which means that nothing that we do the receiver itself can make a
> >difference.
>
> Could you run through this example for us, please?

Yes please I could do with a bit of humour, the budgie died..
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5774. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 23:18:22 UTC
From: billsohl@mindspring.com
Message-ID: <3abd2a67.8964712@news.mindspring.com>
Source record: 167597
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sat, 24 Mar 2001 15:43:46 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>
>"Bill Sohl" <billsohl@mindspring.com> wrote in message
>news:3abca5ec.1009177@news.mindspring.com...
>>
>> SNIP
>> Additionally, as a counter-point to your court "expert-witness"
>> scenario, you must admit that in the end, it is the jury
>> of people that do not possess that expertise that
>> makes the decision.
>
>Specifically, they can only make their determination by weighing the
>evidence presented during the trial. They are not allowed to consider any
>personal opinion or facts other than what has been admitted as evidence in
>determining guilt or innocence.

I haven't claimed otherwise. They can, however, apply common
sense and their own logic.

>> By the way, it doesn't take that much effort to be deemed
>> an expert witness in most cases.
>
>True, you just have to show the court that you have the experience and
>expertise of the subject necessary to validate your opinions, and therefore
>allow them to be admitted as evidence.
>
>> The opposition will use its crossexamination time to discredit any expert
>> witness...
>
>They will try... But this is how the game is played. Nevertheless, the
>court will recognize a person as an expert witness based on their
>qualifications. If they are qualified to testify as an expert witness,
>their opinions will be entered into the case as evidence. The jury will
>never be allowed to hear a layperson's opinions.
>
>>but in the end it goes to the jury for the final choice.
>
>Again, to be based solely upon the evidence presented during the trial, not
>their personal opinion or feelings on the subject.

If an expert witness testified the sky isn't blue, would they
be required to accept that as fact? The reality is that
the jury gets to make their own determination as to the

accuracy of whatever they hear is. They do not automatically accept everything as fact.

Cheers,
Bill K2UNK

5775. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 23:18:42 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abd3724$0$15024$cc9e4d1f@news.dial.pipex.com>
Source record: 167599

"Reg Edwards" wrote ...
> Garry says -
> > I know that you have measured the efficiencies of all of your
> antennae Reg,
> ==========
> Your knowledge is defective. I have never measured the efficiency
> of any of my antennas. What is the noise tempertaure of your source
> of information?

Rhetorical question Reg, the noise temperature of my source is a little higher than usual as Tom has a blow lamp directed at my arse.

BTW do you know a surgeon that will remove tongue deeply embedded into cheek for a special price?

To be serious for a moment as I know that you have done a loot of serious work on Antennas I am very interested to know why you have never considered measuring the efficiency of any of your antennae. VSWR is OK for match etc., but the determining factor for the quality of any antenna is most surely its efficiency.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5776. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-24 23:43:20 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abd3725$0$15024$cc9e4d1f@news.dial.pipex.com>
Source record: 167600

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >What do you make the sky temperature at 1.75 MHz?
>
> No, unfortunately I did it on 1.83 MHz or so.

Near enough Tom Thanks
>
> Naturally, it is quietest at mid-day.
>
> Using 3.5 kHz bandwidth, noise floor was -123 dBm (with no feedline
> loss) in my 75 ohm system on a winter night when the band was wide
> open to Europe.

OK thank you Tom
noise into Rx = -123 dBm
3,500 Hz is 35.4 dBHz

k = -198.6 dBm/Hz/°K

-123 dBm = -198.6 + 35.4 + ? dB°K

Which give 40 dB for the noise temperature delivered to the Receiver.
Which is 10,374°K

> The antenna was pointed NE with a HPBW of about 40
> degrees, and is about 1% or so efficient.

Temperature into the antenna = 10,374 x 100 = 1,037,366°K

Allowing that you are collecting noise from 40° of the sky it might be easy
to jump to the conclusion that this factor 360/40 = 9 brings the value for
sky temperature to aproximately 9,000,000°K that I originaly claimed.

However I am not sure that this is what infact happens, because we should be
considering a two dimensional angle and insufficient data is available to
complete the final step of that calculation. Never the less we can see that
we have ball park figures.

> >What is the measured efficiency of the Antenna that you use to measure
the
> >sky temperature.
>
> We've been through that. Since my vertical is close to 100% efficient

I would like to know how you calibrated the efficiency of this antenna as
you use it as a reference.

> (a 200ft tower with 100 200 ft long radials) it's easy to verify the
> signal levels of the receiving antenna.

I wonder what sky temperature you would get if you measure it through the
vertical.

With sufficient different antennae we should have enough data to solve the
simultaneaous equations and resolve the actual sky temperature; and from
that calibrate each individual antenna for efficiency.

If a daily published value for sky temperature is made available then any
Ham can calibrate his antenna efficiency with a simple measurement.
Perhaps hourly values for sky temperature could be made available.
The calculation can be performed retrospectively when the measured
temperature becomes available.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5777. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 00:04:35 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abd3726$0$15024$cc9e4d1f@news.dial.pipex.com>
Source record: 167601

"Ian White, G3SEK" wrote ...
> Gary Peach wrote:
> >> There shouldn't be any confusion; and if there is, the confusion is
> >> about T0.
> > >
> > >No doubt there will be confusion, if at all possible then Murphy's Law
> > >demands that confusion shall reign supreme. :)
> > >
> > But that's no excuse for staying with something else that is confusing
> > because it's incorrect.

So long as any measurements are only to be used by a single station to evaluate its own performance ther is no difficulty you may use and understand what is convenient to that station and there should be closure withing the closed measuring system. The diffuclties only occur when a station wishes to perform a calibration in conjunct with some other station or stations then an agreed standard is mandatory if the results are to be meaningful. Providing such a standard is probably still the perogative of the National institutions.

> >deviations from 17°C make little difference in practice to the
> >measurement of large noise figures that were encountered at around the
> >time when the whole system was proposed. Perhaps in the light of low
> >noise figure amplifiers being readily available some revision of the
> >agreed standards might be appropriate,
>
> Yes, you've identified the problem. 290K was originally chosen by Friis
> as being conveniently around room temperature, which would be the
> physical temperature of the resistive termination inside the noise
> source. When typical noise temperatures were up in the thousands of K, a
> difference of a few K didn't matter.

Quite so and for low HF they still don't because of the very high noise environment at the low frequency end of the spectrum. Assuming that efficient antennas are used.

> It began to matter when noise temperatures started to tumble to as low
> as a few K. In order to avoid significant measurement errors, the
> reference temperature T0 now has to be defined separately from the
> physical temperature of the noise source, so that the difference between
> the two can be allowed for.

Indeed it was ever so in the 1960. We had an accurate digital thermometer permanently strapped to out load at ambient temperture used for the calibration of system temperature about six times a day. a slight correction

of the To-Tn value was made from the digital thermometer reading in practice
we are speaking of a difference of To from 20&#65533;C to 27&#65533;C
Thus (300-83)/(293-83) gives about 0.14 dB difference in the reference
values.
In reality this probaly altered the measured value for Ts around 40&#65533;K by as
much as a degree or so. Cetainl on a very long bit error test the increased
errors could be counted, our specification was less than one character error
per thousand cahracters, so we were well within the required specifications
and the science team were content with the data so provided. This is errors
in the decomutated instrument data not the precision of the onboard
spacecraft instrumentation. Each instrument had its own spec but the
communication system was capable of faithfully relaying the collected data.
That indeed is exactly the same requirement that the Ham places upon his
equipment whether that has been formally identified or not.

> >but unless the Ham fraternity
> >wish to break away from the accepted standards anything which is
> >discussed here is unlikely to influence
> >the convention.
>
> I don't know where you get the idea that "the ham fraternity wishes to
> break away from accepted standards".

Please note the qualifying word "UNLESS" it makes all the difference to the
meaning of my statement.

>I am in very direct contact with
> that segment of the ham fraternity that needs to think about noise
> temperature: everybody accepts the definition that 290K is a reference
> temperature, unconnected with ambient temperature.

Valid when Noise figure is measured by sophisticated laboratory
instrumentation, but not so when more fundemental methods using hot and cold
loads are employed.

Presumably you are familiar with the Dicke Radiometer?
--
Gary7SLL
51&#65533; 23' 50" N 1&#65533; 19' 58"W
www.gary.peach.dial.pipex.com/

5778. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 00:10:59 UTC
From: fractenna@aol.com
Message-ID: <20010324191059.06349.00000874@ng-ff1.aol.com>
Source record: 167602

>>In fairness to Phil, he would not as yet have seen the session schedule.
>>
>
>Sounds interesting. Can you tell me what else will be given at that session?
>The web page doesn't give the schedule. I wonder if Dr. Cohen will be giving
>a
>paper. How do you think he will react to your papers?
>
>73
>Phil N1ZKT
>

Notice no answer for steve best. I wonder why....

73
Phil
de N1ZKT

5779. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 00:43:33 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3ABD3F35.3E339BD9@hiwaay.net>
Source record: 167603

Phil-Chip
Steve DID answer you. You must not have been paying attention. If your
NG server does not have it, check the archives.

Bill

Fractenna wrote:
>
> >>In fairness to Phil, he would not as yet have seen the session schedule.
> >>
> >
> >Sounds interesting. Can you tell me what else will be given at that session?
> >The web page doesn't give the schedule. I wonder if Dr. Cohen will be giving
> >a
> >paper. How do you think he will react to your papers?
> >
> >73
> >Phil N1ZKT
> >
>
> Notice no answer for steve best. I wonder why....
>
> 73
> Phil
> de N1ZKT

5780. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 00:45:36 UTC
From: fractenna@aol.com
Message-ID: <20010324194536.14385.00000781@ng-da1.aol.com>
Source record: 167604

>You might also want to check out the fractal antenna session on Wednesday.
>Just FYI, I am going to present two papers there:
>
>1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
>Geometries
>
>2) A Modification of the Small Loop Approximation for Fractal and Bent Wire
>Loop Antennas
>
>Take care,
>
>Steve VE9SRB
>

Something funny here...

I got on a web engine and found this url

http://www.ewh.ieee.org/soc/aps/2001/advanced/advanced_full.htm

It lists all the papers for the fractal antenna session on Wednesday. You know,
the one Stephen best refers to. There are NO TALKS listed by one Stephen Best.

Again there are NO TALKS listed by one Stephen Best.

Check it out.

Maybe he spoke too soon?? Or....maybe it's not true??

What's even more curious is there IS a talk by Dr. Cohen which sounds like it's
on the same subject as the second talk Stephen Best says he's giving.

It's all so surprising!

73
Phil
de N1ZKT

5781. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 00:48:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99jf51$b0c$1@uranium.btinternet.com>
Source record: 167605

The description "fictional" or "imaginary" resistance is correct in some antenna situations.

Radiation resistance should always be referenced to a particular point in the antenna. In the case of a short vertical it is often referenced by amateurs to the base feedpoint where it then becomes equal to the feedpoint resistance. This causes misunderstandings. It is strictly incorrect to describe the feedpoint resistance as radiation resistance. This is true only when an antenna is fed at an antinode. The handbooks and magazines written parrot-fashion by plagiarists are in need of correction.

To avoid ambiguity, unless otherwise stated, radiation resistance should always be referred to a current anti-node (a current maximum). This is the place to where Terman, Everitt, to name but two, made reference. In the case of a half-wave dipole the radiation resistance of 73 ohms is then referenced to the centre whether it is fed at the centre or not.

And in the case of a quarterwave vertical the current antinode occurs at the base of the antenna. All is well and the feedpoint resistance is equal to the radiation resistance of 36 ohms.

But when the vertical is shorter than a quarterwave there IS no current antinode. Nevertheless the radiation resistance is still referenced to that fictional or imaginary point which would exist if the antenna had been long enough to have one. And so the radiation resistance itself is fictional or imaginary. Nevertheless it is real enough to be assigned a value which can be used in efficiency calculations, etc.

The ancients did not dream up these imaginary resistances just to make things awkward for succeeding generations. They come about in a perfectly natural manner when radiation resistances are calculated from first principles by summing the contributions of each small element beginning with a standard current of one ampere at an antinode. If the antenna is shorter than 1/4-wavelength then the summation does not begin until the antenna starts. But the reference to 1 ampere at the imaginary antinode remains for all time.

The length of wire between the feedpoint and nearest antinode, imaginary or not, behaves as the necessary impedance transformer.

That this is not a trivial matter can be judged from the fact that the radiation resistance of a short antenna increases as the 4th

power of frequency but the feedpoint resistance increases only as
frequency squared.

****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Richard Harrison <richardharrison@webtv.net> wrote in message
news:26257-3ABCCECD-42@storefull-115.iap.bryant.webtv.net...
> Peter Brackett wrote:
> "Ha...just as I suspected." (check the dictionary for fiction`s
meaning)
>
> I apologize for unauthorized use of a pedantic term, "fictional
> resistance", as I am no pedagogue. I don`t even play one on TV.
I`ve
> often seen radiation resistance explained as a fiction which
replaces
> the voltage to current ratio of the radiated energy from an
antenna. The
> radiation resistance is dissipationless because it doesn`t heat
up the
> immediate vicinity. But, it is real.
>
> "Fictional" was ill advised, and I was my own advisor. Shame on
me!
>
> Best regards, Richard Harrison, KB5WZI
>

5782. FA: On Ebay 2M/6M Cubex Quad

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 01:20:49 UTC
From: Tim Randa <randas@mindspring.com>
Message-ID: <3ABD47F1.677F6D94@mindspring.com>
Source record: 167606
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.equipment

Check it out

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1224751961

5783. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 01:21:43 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3ABD4827.186AE80E@hiwaay.net>
Source record: 167607

A lesson in how to lie without really doing it- the talks are by "Steven Best", not "Stephen Best", and there is no listed talk by Cohen, at least in the Wednesday morning session, which is where the Fractal stuff is listed.

He told the truth about "Stephen", but made an implied lie about "Steven".

The Idiots are still with us.

Bill-W4BSG

Fractenna wrote:
>
> >You might also want to check out the fractal antenna session on Wednesday.
> >Just FYI, I am going to present two papers there:
> >
> >1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
> >Geometries
> >
> >2) A Modification of the Small Loop Approximation for Fractal and Bent Wire
> >Loop Antennas
> >
> >Take care,
> >
> >Steve VE9SRB
> >
>
> Something funny here...
>
> I got on a web engine and found this url
>
> http://www.ewh.ieee.org/soc/aps/2001/advanced/advanced_full.htm
>
> It lists all the papers for the fractal antenna session on Wednesday. You know,
> the one Stephen best refers to. There are NO TALKS listed by one Stephen Best.
>
> Again there are NO TALKS listed by one Stephen Best.
>
> Check it out.
>
> Maybe he spoke too soon?? Or....maybe it's not true??
>
> What's even more curious is there IS a talk by Dr. Cohen which sounds like it's
> on the same subject as the second talk Stephen Best says he's giving.

>
> It's all so surprising!
>
> 73
> Phil
> de N1ZKT

5784. HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 01:38:43 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABD4C1F.B069599E@bellsouth.net>
Source record: 167608
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

He Guy's, I'm posting this on in a few different places, not sure where the expertise may be.

I'm putting together a HF mobile (706-tuner-whip) going to put it in a Jeep Sahara.

DOES ANYONE KNOW IF THESE VEHICLES ARE KNOWN TO HAVE INTERFERENCE PROBLEMS, Noisy electrical systems, fuel pumps and the like ?

Jim

5785. Re: Antenna - restricted setup question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 01:49:08 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABD4E94.E349B962@oio.net>
Source record: 167609

Bruno,
That's a subjective question, and I don't know how to
answer it for you. There is a difference in what you
hear/don't hear with a rotating dipole. If that difference
is big enough to be worth the cost is up to you (and your
wallet). If your only looking for a temporary antenna
until you get your new one, I'd think a rotating dipole
might be a bit too costly (for me, anyway). If you already
have a rotor, tower/pole, etc, then it may ~not~ be too
expensive. What would you do with it when the new antenna
get in?
'Doc

5786. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 02:13:15 UTC
From: Jerry Bransford <jerrypb@home.com>
Message-ID: <3ABD54CC.EB871C54@home.com>
Source record: 167610
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Not specifically. Just make sure you use a good braided ground strap
from the chassis directly to ground and wire the power directly to the
battery and you should be ok.

Jerry

jhilins wrote:
>
> He Guy's, I'm posting this on in a few different places, not sure where
> the expertise may be.
>
> I'm putting together a HF mobile (706-tuner-whip) going to put it in a
> Jeep Sahara.
>
> DOES ANYONE KNOW IF THESE VEHICLES ARE KNOWN TO HAVE INTERFERENCE
> PROBLEMS, Noisy electrical systems, fuel pumps and the like ?
>
> Jim

--
Jerry Bransford
PP-ASEL KC6TAY
The Zen Hotdog... make me one with everything!
Geezer Jeep: http://www.jjournal.net/jeep/gallery/JBransfordsTJ/

5787. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 02:40:35 UTC
From: richardharrison@webtv.net
Message-ID: <13804-3ABD5AA3-209@storefull-112.iap.bryant.webtv.net>
Source record: 167614

Bart, WB6HQK wrote:
"No we can`t." (kill one constituent of a radio wave without killing the other)

I am aware that Maxwell says:
1) When an electric field changes, it creates an magnetic field.
and:
2) When a magnetic field changes, it creates an electric field.

Perhaps I should have said: You can short the electric field without killing the magnetic field.

My recollection is that a short on a transmission line forces the electric field to zero at the short, and it also forces a reversal of electric field polarity as it is changing the direction of travel. Also, the forward and reflected voltages must add to zero. In very short time and travel, strength of the electric field is restored. The current direction is unchanged as it just makes a U-turn sooner due to the shorted line, but doesn`t really change direction. Also only the voltage or the current changes polarity, not both constituents of the wave, at a reflection point.

My recollection is that energy is conserved when either the electric field is forced to zero (at a short circuit) or the magnetic field is forced to zero (at an open circuit) by a very temporary transfer of all the energy, it amounts to a double, to the surviving field. The subsequent energy redistribution to a 50-50 split is very rapid.

It`s been almost 50 years since I had to work with Maxwell`s equations. I`m lazy and loath to take them up again. Also, I think few readers would be interested in following the reformulations anyway.

Best regards, Richard Harrison, KB5WZI

5788. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 02:45:35 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABD5BCF.2B7A7AA3@IEEE.org>
Source record: 167613
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> But you
> choose to ignore those descriptives in favor of your personal choices in
> the ongoing effort to rid ham radio of CW.

I don't want to rid ham radio of CW, Dick. Each and every one of those
digital communications experts understands the usefulness and utility
of CW, whether they use the mode or not. I encourage all hams to learn
Morse code and try CW. It's fun for me and sometimes useful. What I
object to is the Morse code *requirement*, but you know that already.
You seem to think eliminating the Morse code requirement is the same
thing as ridding ham radio of CW. In that, you are simply delusional.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5789. Apt. HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 02:53:03 UTC
From: Wayne Reynolds <wreynolds@ody.ca>
Message-ID: <i4dv6.166999$Z2.2057701@nnrp1.uunet.ca>
Source record: 167612

Hi
I have been wanting to run hf from my apt. here in London Ont. Canada for sometime and I have a Kenwood TS-440Sat. I ahve used it mobile but never in my apt. but now want to.

The problem is I am in a 7`th floor apt. with a balcony. What do I use for an antenna.

Also interference any tips on what to use. I used to have a Taylor filter but that was a long time ago . I have baluns and lots of 14 gauge wire. And I have a source of Hustler coils.

Any help would be greatly appreciated. Thanks in advanced.

wayne VE3JET

5790. Top Capacitance Loading

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 02:55:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99jmj3lvj1@neptunium.btinternet.com>
Source record: 167611

NEW PROGRAM TOPHAT1.exe

TOP CAPACITANCE LOADING OF SHORT VERTICAL ANTENNAS

Loaded by any number, zero upwards, of uniformly-spaced radial rods or wires, of specified length and diameter, circled by a ring of wire. With only one radial you have an iverted-L. By entering a large number of wires the hat will have the same capacitance as a disk of close-mesh chicken wire.

Enter antenna height and diameter, frequency. Guidance provided on estimating ground loss resistance. A coil is always needed either at the antenna base or incorporated in an L-match. Coil Q is asked for.

The performance of a short top-loaded antenna is generally several dB better than a coil-loaded antenna of the same height with the coil fitted 2/3rds of the way up the antenna. With a largish top hat the antenna current is sufficiently uniform vs height for there to be little or no advantage gained by inserting a coil in the antenna. It can then be incorporated in the L-match or an automatic ATU and the antenna can be operated multi-band. With coil loading multiband working is not possible except with screwdriver-type antennas.

The superiority of capacitance loading is due to the smaller inductance needed to maintain resonance. If the coil has the same overall dimensions, and hence approximately the same Q, the coil loss resistance will be reduced for no increase in loss in the hat.

Sweep the principal input parameters over wide ranges using adjacent up/down keys on the keyboard while observing corresponding changes in radiating efficiency. The improvement in dB is calculated due to the hat compared with no hat.

Download TOPHAT1, 44 kilobytes, in a few seconds from website below.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

5791. Re: W9inn dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 03:21:10 UTC
From: jerry r <jerryrcremovethis@pobox.com>
Message-ID: <3ABD6466.E4DF755D@pobox.com>
Source record: 167615

Excellent Antenna, works great on 80 & 40, been up for 5 years

5792. Re: more ARRL April humor

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 03:34:36 UTC
From: Alfred Wallace <nospam@thank.you.com>
Message-ID: <MPG.1527857af23e80ce989682@news.easynews.com>
Source record: 167616

In article <4D345477$H5.10237593@news1.aol.com>, fractenna@aol.com says...

Another very bad joke fromthe monkeys posting at the f*{!-* keyboard.

5793. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 04:16:12 UTC
From: n8blk@aol.com
Message-ID: <20010324231612.01750.00000208@nso-fa.aol.com>
Source record: 167617

In article <3AB90C44.1AC2C05@IEEE.org>, W6RCecilA <Cecil.A.Moore@IEEE.org>
writes:

>Do they have finger stock?

No, but most of the NAPA automotive places still have the fingerstock mentioned
by Don Johnson. However I do note that most folks don't have aluminum 2 in
diameter irrigation pipe at their local hardware store either, and copper pipe
not only costs more, but probably doesn't work any better.
-art clemons-

5794. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 05:09:18 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABD7D7E.C23BBD1F@bellsouth.net>
Source record: 167618

Can you resend me the data you collected?
Message seems to have fallen off rec.radio.amateur.antenna

thanks James

5795. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 05:14:39 UTC
From: jhilins <jhilins@bellsouth.net>
Message-ID: <3ABD7EBE.C79DDEA6@bellsouth.net>
Source record: 167619

You convinced me to give it a try, I am looking into a Texas Twister its
a bit price at $500
Jim KA4UPW

5796. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 06:04:57 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <nIvG5mAJqYv6EAdM@ifwtech.plus.net>
Source record: 167620

Gary Peach wrote (in part):
>
>> >but unless the Ham fraternity
>> >wish to break away from the accepted standards anything which is
>> >discussed here is unlikely to influence
>> >the convention.
>>
>> I don't know where you get the idea that "the ham fraternity wishes to
>> break away from accepted standards".
>
>Please note the qualifying word "UNLESS" it makes all the difference to the
>meaning of my statement.
>
But since the condition you stipulate is not true, it makes the rest of
the statement inapplicable.

>>I am in very direct contact with
>> that segment of the ham fraternity that needs to think about noise
>> temperature: everybody accepts the definition that 290K is a reference
>> temperature, unconnected with ambient temperature.
>
>Valid when Noise figure is measured by sophisticated laboratory
>instrumentation, but not so when more fundemental methods using hot and cold
>loads are employed.
>
The reference temperature of 290K is still needed. When commercial noise
heads are calibrated at a national standards lab such as NPL or NIST, it
is done in a constant-temperature chamber at a temperature of their
choice, somewhat above room temperature. However, the calibration data
are then corrected so that they appear to the end user as if the
calibration had been done at 290K.

That then leaves the user to apply a further correction for the actual
temperature of the noise source, once again to reference everything back
to 290K. It's awful hard to get away from.

BTW, the latest noise heads have a built-in temperature sensor right at
the output attenuator (which defines Tcold) and the noise figure
analyser reads and applies this automagically. With older noise sources,
there is a small error because you can only measure the temperature
outside the case, yet the source itself dissipates a significant
fraction of a watt, and thus has internal temperature gradients.

>Presumably you are familiar with the Dicke Radiometer?

Yes, although NPL now uses other techniques below 26.5GHz.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5797. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 06:56:19 UTC
From: JJ&A <w7ls@blarg.net>
Message-ID: <3ABD9692.AE4DA1D0@blarg.net>
Source record: 167621
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

If you are going to use it on the higher HF bands, a simple whip is ok. On the lower bands, it will load, if you use a SGC-230 type tuner. If you try a cheaper tuner, such as a LDG, it probably won't. Too much inductance needed. Even if you do manage to match the whip, the radiation efficiency will be unacepptably low. Trust me: get a loaded whip of some sort. SGC uses one that has a self resonance point around 14 MHz. That loads from 80-10 meters. Jim

jhilins wrote:

> He Guy's, I'm posting this on in a few different places, not sure where
> the expertise may be.
>
> I'm putting together a HF mobile (706-tuner-whip) going to put it in a
> Jeep Sahara.
>
> DOES ANYONE KNOW IF THESE VEHICLES ARE KNOWN TO HAVE INTERFERENCE
> PROBLEMS, Noisy electrical systems, fuel pumps and the like ?
>
> Jim

5798. recherche cours antennes

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 09:20:33 UTC
From: "hermant.ber" <hermant.ber@infonie.fr>
Message-ID: <985512493.33341@remus.infonie.fr>
Source record: 167622

je suis a la recherche d'un cours sur le calcul des antennes en general
(calcul puissance , TOS , etc ...)
D'avance merci

5799. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 12:11:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99kn5r$52j$1@plutonium.btinternet.com>
Source record: 167623

Gary wrote -
> but the determining factor for the quality of any antenna is most surely its
> efficiency.
==========
To which variety of efficiency do you refer ? Please define the parameter(s) involved with the ratio.

Reg.

5800. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 12:34:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABDE5B8.A047FC5B@mwci.net>
Source record: 167624

William E. Sabin wrote:

> At radio frequencies, especially HF, a non-resonant reflector can have a lot of
> radiation off the *back* side of the plate. I believe this agrees with
> Maxwell's equations OK because resonance maximizes energy available for
> reflection. A
> perfect standing wave on the plate is better than anything else.

The most famous example is the radar "chaff" aluminum strips used to foil the Nazi radar. The lengths of the strips were carefully chosen to be resonant. If the strip is not resonant the wave passes right on through the strip.

Bill W0IYH

5801. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 12:47:43 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E3531E.7868%stewartx@sccoast.net>
Source record: 167625
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Richard McCollum wrote:
>
> The context here is a lot of breast
> beating self-justification for not
> taking the code test. We can talk
> coulda, shoulda, hafta from now til
> Independence Day but the cosmic
> interplay of choice and chance has
> made it a requirement to do 5wpm in
> the easiest manner possible for at
> least the next five years.

Okay, using your own words, why are we treated to this self-serving observations on the obvious? I'm fairly certain all of us know the current state of affairs when it comes to the code test, so all that "coulda, shoulda, hafta," nonsense is just that.

> What you choose to do about it if
> anything is purely up to you. You don't
> have to justify it to me or anyone else.
> If it is a self-worth issue, it is YOUR
> self-worth issue. So stop with the
> justifications already. It is not about
> the mode, it is not about VHF-UHF vs HF,
> it is about a code test that is more of
> an inconvenience than a hurdle for most
> people. Obfuscation merely irritates.

Again, and again using your own words, why are we treated to this self-serving observations on the obvious? Of course what I choose to do about it is up to me, and of course I don't have to justify it to you. Why state the obvious?

> It is particularly irritating when the
> audience is composed of people who, for
> whatever reason and by whatever method,
> passed a code test. There is a time and
> place to call golf a stupid game --
> the gallery at the Masters is more than
> likely not that time or place. Preaching
> the Gospel on the road between Mecca and
> Medina is not the best context either. So
> why in hell are you doing it?

For the exact same reason that the person who passed the code test made the statements he did. And for the same reasons you made the statements you did. And both of those collection of statements were just as irritating when the audience is composed of people who, for whatever reason, have decided against the code test.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

5802. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:03:38 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <K0mv6.129278$p66.36324622@news3.rdc1.on.home.com>
Source record: 167626

I have used 1 1/2" pvc pipe for a form in the past ... works nice ... and
weathers rather well

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"jhilins" <jhilins@bellsouth.net> wrote in message
news:3ABC8165.8AEC0D51@bellsouth.net...
> Any ideas on how to center load such a antenna? Or maybe better yet for
> strength purposes construct a loading coil?
>
> JIm
>

5803. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:05:43 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <H2mv6.129284$p66.36326834@news3.rdc1.on.home.com>
Source record: 167627

I'd say anything about 15m would be a waste ... the radiation angle would be
well too high to do any serious work. Not to mention the mismatch would
make it a terribly inefficient radiator to begin with

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"'Doc" <w5lz@oio.net> wrote in message news:3ABC8F01.2BFDBF9A@oio.net...
>
>
> James,
> I haven't read the rest of the posts so this is probably
> a 're-run'. A 108" whip with a tuner is almost worthless
> on the lower HF bands. On 20 meters an up it may work fine,
> but forget 80-30 meters.
> 'Doc

5804. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:07:55 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <L4mv6.129291$p66.36330030@news3.rdc1.on.home.com>
Source record: 167628

Why not mount them via the bumper ... You can get stainless steel whips in a length that would work nice for 20m-40m (i.e. in a 30' length) ... sure it would have to be tied down ... but it would work well if ya want to avoid coils

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"'Doc" <w5lz@oio.net> wrote in message news:3ABC9167.8D6F44B@oio.net...
> Jim,
> Considering where your going to mount it, the 108"
> whip may be your best bet. The screwdrivers, 'bug
> catchers', etc, sure wouldn't work well on the roof,
> or maybe I should say 'wouldn't last long'.
> 'Doc

5805. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:12:21 UTC
From: Richard McCollum <rmccoll@radiks.net>
Message-ID: <n7mv6.191$hD5.138419@nntp2.onemain.com>
Source record: 167629
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dwight Stewart" <stewartx@sccoast.net> wrote in message
news:B6E3531E.7868%stewartx@sccoast.net...
> Richard McCollum wrote:
> >
> > The context here is a lot of breast
> > beating self-justification for not
> > taking the code test. We can talk
> > coulda, shoulda, hafta from now til
> > Independence Day but the cosmic
> > interplay of choice and chance has
> > made it a requirement to do 5wpm in
> > the easiest manner possible for at
> > least the next five years.
>
>
> Okay, using your own words, why are we treated to this self-serving
> observations on the obvious? I'm fairly certain all of us know the
current
> state of affairs when it comes to the code test, so all that "coulda,
> shoulda, hafta," nonsense is just that.
>
>
> > What you choose to do about it if
> > anything is purely up to you. You don't
> > have to justify it to me or anyone else.
> > If it is a self-worth issue, it is YOUR
> > self-worth issue. So stop with the
> > justifications already. It is not about
> > the mode, it is not about VHF-UHF vs HF,
> > it is about a code test that is more of
> > an inconvenience than a hurdle for most
> > people. Obfuscation merely irritates.
>
>
> Again, and again using your own words, why are we treated to this
> self-serving observations on the obvious? Of course what I choose to do
> about it is up to me, and of course I don't have to justify it to you.
Why
> state the obvious?
>
>
> > It is particularly irritating when the
> > audience is composed of people who, for

> > whatever reason and by whatever method,
> > passed a code test. There is a time and
> > place to call golf a stupid game --
> > the gallery at the Masters is more than
> > likely not that time or place. Preaching
> > the Gospel on the road between Mecca and
> > Medina is not the best context either. So
> > why in hell are you doing it?
>
>
> For the exact same reason that the person who passed the code test
made
> the statements he did. And for the same reasons you made the statements
you
> did. And both of those collection of statements were just as irritating
> when the audience is composed of people who, for whatever reason, have
> decided against the code test.
>
>
> Dwight Stewart (W5NET)

Go ye and sin some more.

5806. Re: cb mobile antenna for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:27:23 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3ABDF23B.B2033C2B@bloomer.net>
Source record: 167634

My buddy (WB5UAA) is using a Shack CB Mag-mount on his 10M beacon. I hear it everyday from Southern AZ to West-Central Wisconsin and he is running 5 Watts and I'm moblie with an Outbacker antenna. His beacon is usually S3 to S6. If you happen to have one already, why not use it and save the 4 bucks of building a dipole.

Scott

Cm13141 wrote:
>
> Anyone know how well a cheap radio shack cb mobile antenna will work on 10
> meters?I am thinking of using it with my kenwood ts-930s till my Gap multi band
> vertical i orderd gets here.I plan on mounting the CB antenna on a fence post
> in my backyard and feed it with 50' of RG8,I have a tucker t-1000 antenna tuner
> to help tun it and also my rig has a tuner.Anyone have any thoughts on this or
> advice to make this work?I would like to get on the air some while waiting for
> my Gap.
> Thanks,
> James

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

5807. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:29:58 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABDF2D6.377940FA@IEEE.org>
Source record: 167631

"Rob St.Denis" wrote:
> I'd say anything about 15m would be a waste ... the radiation angle would be
> well too high to do any serious work.

Upon what evidence are you basing your high radiation angle statement?
Modeling shows that short verticals don't have a high radiation angle.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5808. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:33:52 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3ABDF3C0.95F715ED@bloomer.net>
Source record: 167630

I'm using an Outbacker and it works Great! The CB whip might work OK on 20M and up, but will be lacking on 160M-40M...It's always best to have a resonant antenna, that way more signal is radiated. Using tuners makes the transmitter happy, but doesn't change the antenna's radiation...The transmitter may be putting out 100 Watts, but if 95 Watts are being reflected back into the tuner, the other 5 are going out over the air.

Scott N0EDV
Telecommunications Tech II

"Rob St.Denis" wrote:
>
> I'm using ham sticks ... (base loaded antennas) and they work rather nice
> ...
>
> --
> Rob St.Denis
>
> Telecommunications Technician
> /---\
> | Cell Phone (613)296-0094 |
> | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> | Home Page http://robstdenis.home.dhs.org |
> \---/
> "Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
> news:99guqf$2p2$1@slb7.atl.mindspring.net...
> > You will have better results if the automatic
> > tuner is connected to a center-loaded whip antenna
> > that is tuned reasonably close to the band you want
> > to operate.. the tuner will then re-resonate the antenna
> > system as you tune from one segment of an amateur
> > band to another .. this would be especially effective
> > on the lover freqs such as 75 and 40 meters..
> >
> > An 8 or 9-foot whip, with no external loading coils,
> > will be very inefficient on these lower frequencies when
> > the automatic tuner is trying to re-tune a short whip.
> >
> > Moving most of the loading to the center of the whip allows
> > better radiation efficiency from the lower 1/3 of the antenna's
> > length which is where most of the real radiating is being accomplished..
> >
> >
> > Trish
> > --

> > Patricia E. Gibbons & Carla Satra
> > Tactical Link Systems
> > <ICQ#: 72818195>
> > <http://www.tactical-link.com>
> > see my comvan at:
> > <http://www.qrz.com/callsign.html?callsign=wa6ube>
> > .....
> > My Public Key is available at:
> > <http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> > Key ID: 0xEDECB44F
> > This key is RSA, NOT Diffie-Hellman !!
> >
> > jhilins <jhilins@bellsouth.net> wrote in message
> > news:3ABBF06B.F43A8A76@bellsouth.net...
> > > Planning on installing HF in the car.
> > >
> > > I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> > > antenna tuner. I have a friend out there using this configuration, He
> > > has instant access to 80M-6M via the tuner.
> > >
> > > My question is... Is there anyone else out there using this? How does it
> > > compare to other antennas...
> > >
> > > I'm interested in any side by side results anyone may have..
> > >
> > > Thanks
> > > James Hilins
> > >
> >
> >

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

5809. Re: Are Screwdriver plans still available.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:43:40 UTC
From: DGB <dgbcms@bayland.net>
Message-ID: <HCmv6.5612$7e6.2016997@homer.alpha.net>
Source record: 167632

Here in the Midwest I have found aluminum tubing at the scrapyards. It is aluminum conduit and has an I.D. of 2.056 which I found is nice to give a little more clearance for the 2" coil.

Fingerstock from NAPA, that's a new one! I'll have to check that out. Never seen where it's used on autos, where?

73 Dwight W9YQ

"Art Clemons" <n8blk@aol.com> wrote in message news:20010324231612.01750.00000208@nso-fa.aol.com...
> In article <3AB90C44.1AC2C05@IEEE.org>, W6RCecilA <Cecil.A.Moore@IEEE.org>
> writes:
>
> >Do they have finger stock?
>
> No, but most of the NAPA automotive places still have the fingerstock mentioned
> by Don Johnson. However I do note that most folks don't have aluminum 2 in
> diameter irrigation pipe at their local hardware store either, and copper pipe
> not only costs more, but probably doesn't work any better.
> -art clemons-

5810. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 13:45:50 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3ABDF68E.81965EDA@bloomer.net>
Source record: 167633

If cost is no object, I recommend the Outbacker. Mine (Perth Plus) is mounted on the roof of a Chevy Astro van with their coil spring. The top is about 12 feet in the air. I've hit tree branches with it and it takes it!! I've worked, Sweden, England, Germany, Italy, South Africa, Cuba and Japan with it...usually break pileups and get a reply on 1st or 2nd call.

Scott
N0EDV

jhilins wrote:
>
> Nicely done !
> Did you happen to try to sweep the radiation patterns? I believe the
> whip has a very high take off angle at lower freqs?
>
> Have any ideas on how one might center load a whip?
>
> Maybe I should have given more details...
>
> The vehicle is a Jeep and the antenna will be mounted to the roof.
> This
> antenna is going to take a lot of abuse as the top of it will be
> ~15ft
> in the air!
>
> A screw driver would never take the wind load, needless to say the
> physical beating from tree limbs
>
> Jim

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

5811. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 14:39:24 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABE031C.BE8E6E25@mwci.net>
Source record: 167635

William E. Sabin wrote:

> William E. Sabin wrote:
>
> > At radio frequencies, especially HF, a non-resonant reflector can have a lot of
> > radiation off the *back* side of the plate. I believe this agrees with
> > Maxwell's equations OK because resonance maximizes energy available for
> > reflection. A
> > perfect standing wave on the plate is better than anything else.
>
> The most famous example is the radar "chaff" aluminum strips used to foil the Nazi
> radar. The lengths of the strips were carefully chosen to be resonant. If the
> strip is not resonant the wave passes right on through the strip.

Another way of saying it is that the "cross section" for scattering (reflection) is
maximum at resonance.

Bill W0IYH

5812. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 15:03:46 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3ABE08D2.25A1E0A3@mwci.net>
Source record: 167636

William E. Sabin wrote:

> In reviewing Friis's original article on noise figure in the Proceedings of
> IRE, I did not see a specific temperature mentioned. However, an IRE standards
> committee, headed by Prof Haus at MIT, recommended a standard lab temperature
> of 290K.

I got out the 1944 article and looked more carefully. Friis does suggest 290K. I missed that previously.

Bill W0IYH

5813. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 15:26:58 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <Ldov6.100$tG3.6443@news1.atl>
Source record: 167637

Hi Jim,

Forget the tuner and 108" whip besides damaging your vehicle, unless you mount the tuner on the roof the coax run is too long a run from tuner to antenna, so it won't work well. I use a DK-3 screwdriver on a "L" mount off the tie down eye on my Toyota MR-2, its about 3' off the ground (tops out 10' on 10 meters, 11'14" on 80 meters, with 60" stinger). I run a 25' x 3" copper strip direct from the antenna ground under the whole car connecting everything I could, really lowered the noise level. I get awesome reports with my 706g and 100 watts, If I give 59 I get a +20 in return! 80-10 with the 60" stinger, 40-6 without the stinger (sharper tunign though) and I can still get in the garage. It works better and its A LOT cheaper to do!
--
73's from W4BEN,
Benjamin Blavat

"jhilins" <jhilins@bellsouth.net> wrote in message
news:3ABBF06B.F43A8A76@bellsouth.net...
> Planning on installing HF in the car.
>
> I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> antenna tuner. I have a friend out there using this configuration, He
> has instant access to 80M-6M via the tuner.
>
> My question is... Is there anyone else out there using this? How does it
> compare to other antennas...
>
> I'm interested in any side by side results anyone may have..
>
> Thanks
> James Hilins
>

5814. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 15:37:06 UTC
From: k1bqt@aol.com
Message-ID: <20010325103706.19884.00001005@ng-cd1.aol.com>
Source record: 167638

>The Idiots are still with us.<

>> It's all so surprising!<<

Only one person pays AOL and controls access to this address. Why would anyone be Phooled?

Rick K1BQT

5815. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 15:51:30 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <6uov6.129963$p66.36596957@news3.rdc1.on.home.com>
Source record: 167639

Based on personal experience and testing, given the small size of the car
and the frequency (3910kHz) it was determined ath a 102" whip gave me a 34o
take off angle.

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABDF2D6.377940FA@IEEE.org...
> "Rob St.Denis" wrote:
> > I'd say anything about 15m would be a waste ... the radiation angle
would be
> > well too high to do any serious work.
>
> Upon what evidence are you basing your high radiation angle statement?
> Modeling shows that short verticals don't have a high radiation angle.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5816. Re: W9inn dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 15:53:23 UTC
From: DL <k4zzr@adelphia.net>
Message-ID: <Tvov6.28348$St6.33893222@news2.news.adelphia.net>
Source record: 167641

sounds like an antenna I might be interested in too, where are they
available? Website?

"jerry r" <jerryrcremovethis@pobox.com> wrote in message
news:3ABD6466.E4DF755D@pobox.com...
> Excellent Antenna, works great on 80 & 40, been up for 5 years
>

5817. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 15:53:33 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <1wov6.129972$p66.36601196@news3.rdc1.on.home.com>
Source record: 167640

Bingo ... thats why i use the ham sticks ... tune em in the phone portion of the band and there ya go ...

The outbacker is far too flimsy and expensive for my blood ... That and having taps is a bad idea ... all ya need to do is get them gunked up with road salt to make them useless

hamsticks are cheap and they work ... ya break it hitting a low branch or because of ice build up you are out 20$ not 200$

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"Scott" <acepilot@bloomer.net> wrote in message
news:3ABDF3C0.95F715ED@bloomer.net...
> I'm using an Outbacker and it works Great! The CB whip might work OK on
> 20M and up, but will be lacking on 160M-40M...It's always best to have a
> resonant antenna, that way more signal is radiated. Using tuners makes
> the transmitter happy, but doesn't change the antenna's radiation...The
> transmitter may be putting out 100 Watts, but if 95 Watts are being
> reflected back into the tuner, the other 5 are going out over the air.
>
> Scott N0EDV
> Telecommunications Tech II
>
>
> "Rob St.Denis" wrote:
> >
> > I'm using ham sticks ... (base loaded antennas) and they work rather
nice
> > ...
> >
> > --
> > Rob St.Denis
> >
> > Telecommunications Technician
> > /---\
> > | Cell Phone (613)296-0094 |
> > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |

> > | Home Page http://robstdenis.home.dhs.org |
> > \---/
> > "Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
> > news:99guqf$2p2$1@slb7.atl.mindspring.net...
> > > You will have better results if the automatic
> > > tuner is connected to a center-loaded whip antenna
> > > that is tuned reasonably close to the band you want
> > > to operate.. the tuner will then re-resonate the antenna
> > > system as you tune from one segment of an amateur
> > > band to another .. this would be especially effective
> > > on the lover freqs such as 75 and 40 meters..
> > >
> > > An 8 or 9-foot whip, with no external loading coils,
> > > will be very inefficient on these lower frequencies when
> > > the automatic tuner is trying to re-tune a short whip.
> > >
> > > Moving most of the loading to the center of the whip allows
> > > better radiation efficiency from the lower 1/3 of the antenna's
> > > length which is where most of the real radiating is being
accomplished..
> > >
> > >
> > > Trish
> > > --
> > > Patricia E. Gibbons & Carla Satra
> > > Tactical Link Systems
> > > <ICQ#: 72818195>
> > > <http://www.tactical-link.com>
> > > see my comvan at:
> > > <http://www.qrz.com/callsign.html?callsign=wa6ube>
> > > ....
> > > My Public Key is available at:
> > > <http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> > > Key ID: 0xEDECB44F
> > > This key is RSA, NOT Diffie-Hellman !!
> > >
> > > jhilins <jhilins@bellsouth.net> wrote in message
> > > news:3ABBF06B.F43A8A76@bellsouth.net...
> > > > Planning on installing HF in the car.
> > > >
> > > > I am planning on using a IC-706 feeding a 108" CB whip VIA a
automatic
> > > > antenna tuner. I have a friend out there using this configuration,
He
> > > > has instant access to 80M-6M via the tuner.
> > > >
> > > > My question is... Is there anyone else out there using this? How
does it
> > > > compare to other antennas...
> > > >

> > > > I'm interested in any side by side results anyone may have..
> > > >
> > > > Thanks
> > > > James Hilins
> > > >
> > >
> > >
>
> --
> --Scott--
> 1986 Corben Junior Ace N3642
> http://corbenflyer.tripod.com/
> RV-4 under construction (tail feathers)
>
> Gotta Fly or Gonna Die!

5818. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 16:14:41 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3ABE1971.B71ECC75@toast.net>
Source record: 167646

"Peter O. Brackett" wrote:

> {elegant 80 proof snipped}
>
> Thus jR has to be something other than R.
>
> But what?
>
> I suspect, now that we all know that Imaginary Resistance jR is real but
> different from R, perhaps that is the elusive...
>
> Dissipationless Resistance that the IEEE Dictionary was so ineptly trying to
> define in it's ill advised article on resistance.
>
> Is dissipationless resistance really jR? What???
>
> Thoughts, comments,
>
> -Peter K1PO

So, who shot dissipationless resistance?

john

5819. Re: W9inn dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 16:37:35 UTC
From: DL <k4zzr@NONSPAMadelphia.net>
Message-ID: <j9pv6.28350$St6.33934552@news2.news.adelphia.net>
Source record: 167642

Where can I find one of these antennas? Do they have a website?

--
*** Remove NONSPAM from my email address ***

Reply to: k4zzr@adelphia.net

"jerry r" <jerryrcremovethis@pobox.com> wrote in message
news:3ABD6466.E4DF755D@pobox.com...
> Excellent Antenna, works great on 80 & 40, been up for 5 years
>

5820. Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 16:45:08 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99l7ag$h4v$1@nntp9.atl.mindspring.net>
Source record: 167643

Dissipationless Resistance has been debated here ad infinitum! What is it's symbol?

Shall we use R?

Still most in the NG believe that resistance, be it the old fashioned kind or the new fangled dissipationless kind, is "real".

The impedance of a resistance is calculated according to the following formula:

Z=R

Where Z is the impedance and R is the real resistance.

Now I ask, what is "Imaginary Resistance".

i.e. what do we call the device or effect which results in the impedance:

Z=j*R

Where: j is the square root of minus one (j=sqrt(-1))

This is surely not "Reactance". Perhaps this is Dissipationless Resistance.

An imaginary resistance jR is constant with respect to frequency, whereas the two widely known and accepted types of reactance both vary with respect to frequency.

Inductive reactance is a purely imaginary impedance Z which rises linearly with frequency. The impedance Z of an inductance is given by:

Z = j*2*pi*f*L

Where: j is the imaginary unit or the square root of minus one j=sqrt(-1)), pi is the ratio of the circumference to the diameter of a circle, f is frequency in Hertz, and L is inductance in Henrys.

Similarly Capacitive reactance is a purely imaginary impedance Z which varies inversely with frequency. The impedance of a capacitance is given by:

Z=j/2*pi*f*C

Where C is the capacitance in Farads and everything else is the same as above.

But the purely imaginary resistance jR does not vary with frequency! Yet it has a resistance...

Recently it has come to my attention that there might be a formal definition acceptable to the IEEE for dissipationless resistance.

Some of the NG readers may know that I often have CW skeds at 2400Z on 21.005MHz with Dr. Nehoc Nahtan, Ph.D. of the Indonesian Institute of Science in Kuala Lumpur. He operates a homebrew QRPP CW rig only and he is not always in good health, but is one of the most remarkable researchers in the world today. The good Doctor does not have much money at his disposal and so has very little laboratory apparatus to make use of. Hence, most of his results are mathematical.

He is reticent about many of his exploits and results, however he has recently completed a rare proof that Imaginary Resistance is actually Real Resistance since he has recently proved that j = sqrt (-1) is not a valid unit. He shared this proof with me on 15m CW a couple of nights ago...

He sends CW with a hand key and there was some QRM nearby, but after many long years of handling CW traffic on the NTS, my skills were up to the task.

As I was copying this proof line by line, the good Dr. sent BT's between each line, I was amazed... could it be that the imaginary unit j was not actually the square root of minus one! What?

Beginning with the fact that -1 = -1 he ultimately shows by assuming that j*j=-1 or j = sqrt(-1), in a few short lines that -1 = -1, and so by reduction to an absurdity, he proves that j cannot equal sqrt(-1) and that imaginary resistance is probably real!

Here in a few short lines is Dr. Nehoc Nahtan's remarkable proof that j is not a valid unit...

```
.........................................
Given the equality:
-1 = -1
Divide through by one on each side
-1/1 = -1/1
Invert
-1/1 = 1/-1
Take square roots
sqrt(-1/1) = sqrt(1/-1)
Assume that j=sqrt(-1) and substitute
j/1 = 1/j
Simplify
j = 1/j
j*j = 1
And
-1 = 1
Reductio ad absurdium as the Mathematicians say.
.............................................................
```

Thus jR has to be something other than R.

But what?

I suspect, now that we all know that Imaginary Resistance jR is real but different from R, perhaps that is the elusive...

Dissipationless Resistance that the IEEE Dictionary was so ineptly trying to define in it's ill advised article on resistance.

Is dissipationless resistance really jR? What???

Thoughts, comments,

-Peter K1PO

5821. Re: Tire static?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 16:47:43 UTC
From: jim reed <jreed4@kscable.com>
Message-ID: <Pipv6.39132$s6.2436022@typhoon.kc.rr.com>
Source record: 167644

Yes, steel belted radial tires can create static electricty to the extent of causing some radio interference. If this is what's causing the inteference you should not have any problem in the rain, the water will dissapate the charge. First make sure the radio chassis is grounded to a good ground (no paint) with the shortest piece of wire possible.
Here is my theory of what happens.....A magnetic field can be generated around the tires from the friction of the tires and the road not to mention the spinning "coils" of wire in the steel belted radials that may help increase the strength of this field. This field of electromagnetic induction intermittently jumps to the metal frame of the vehicle and somewhat dissapates. During this time static currents are flowing through the ground system of the car causing electrical interference to radios that require grounding. I may be way off on how or why this happens, but he is how to fix it.
Go to a truck stop or auto parts store and buy a grounding strap. It is a rubber strip with impregnated metal that will bolt to the frame and drag on the ground. It will dissapate any charge from the frame of your vehicle.You have seen these on semi trucks and vehicles of certain racial groups. You could use a small piece of metal chain, but aside from the constant clinking noise it could be a fire hazard from the sparks of the metal being rubbed away. This also may cure a "Shocker", you know, one of them vehicles that you are afraid to close the door on every time you get out because it might shock you. Good Luck, 73's

"Rudy Marcelletti" <rudym@net-link.net> wrote in message
news:3abb6a2d$0$88186$bbae4d71@news.net-link.net...
> Yesterday I noticed some increased noise on receive while cruising 70mph
on
> the freeway (no toll roads in MI). When I exited and started slowing, the
> noise started to decrease. When I got down to about 30 or 40 mph it was
> gone. I shifted to neutral and rev'd the engine, but no noise (other than
> normal) so I figure it was the tires. The ham I was talking to said to
put
> some graphite powder on the sidewalls. I never heard of this.
>
> Do tires, steel belted radials in particular, create interference?
>
> Is there any truth to the graphite idea?
>
> Can tire static if that is what it is be effectively eliminated?
>
>

5822. Re: Antenna - restricted setup question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 16:50:02 UTC
From: Bruno Quesnel <quesnelb@ve2.ele.etsmtl.ca>
Message-ID: <3ABE21BA.39506E79@ve2.ele.etsmtl.ca>
Source record: 167645

Actually my main concern is space. The house is about 20'X24' and have neighbours on both sides of the house, same dimensions..... Got also other houses in the back which are pretty much the same size and are also 2 story high (as my house).

I've looked at long wires and G5RV but I dont have the vertical descent for the G5RV ladder segment. The vertical did a fair job for contacts, but I'd like to get something maybe a little better since now it's down due to weather.

A beam standard beam (3 element - 3band) is very much probobly to heavy or has to much wind load for my standard tubular tv tower. It's 40 feet tall.... I also got the tripod on top of the house which is still standing after holding the vertical. I also don't think that the tripod wont be able to hold a standard beam at 3 feet tall....

So for now, I think that a dipole might be my best bet for the limited space for now (other then verticals). Unless you know a type of setup that might permit me to put a beam or other antenna that might serve me best.... I'm open to pretty much any suggestion.

'Doc wrote:

> Bruno,
> That's a subjective question, and I don't know how to
> answer it for you. There is a difference in what you
> hear/don't hear with a rotating dipole. If that difference
> is big enough to be worth the cost is up to you (and your
> wallet). If your only looking for a temporary antenna
> until you get your new one, I'd think a rotating dipole
> might be a bit too costly (for me, anyway). If you already
> have a rotor, tower/pole, etc, then it may ~not~ be too
> expensive. What would you do with it when the new antenna
> get in?
> 'Doc

--
Bruno Quesnel va2bmg@videotron.ca
Genie Electrique quesnelb@ve2.ele.etsmtl.ca
Electrical Engineering queb1604@ele.etsmtl.ca
Ecole de Technologie Superieure VA2 BMG

5823. Re: recherche cours antennes

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 17:24:39 UTC
From: Gilbert Mouget <gilbert.mouget@waika9.com>
Message-ID: <MPG.1528484067d2463f98968f@news.free.fr>
Source record: 167647

In article <985512493.33341@remus.infonie.fr>, hermant.ber@infonie.fr
says...
> je suis a la recherche d'un cours sur le calcul des antennes en general
> (calcul puissance , TOS , etc ...)
> D'avance merci

En anglais ou en flamand ?

5824. Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 17:27:46 UTC
From: jwg6@cornell.edu
Message-ID: <99l9qi$i43$1@news01.cit.cornell.edu>
Source record: 167648

Is it possible to construct a high-impedance shielded ladder line from coax? I've read that one can use two parallel lengths of 75 ohm coax, shorting the shields together at the ends, to produce a 150 ohm shielded line. However, I'd like the impedance to be more like 450-600 ohms. Any ideas? Could I utilize additional parallel lengths of coax somehow, in combination, to achieve this higher impedance?

I am attempting to feed an end-fed Zepp, but the feeder must run adjacent to a metal building for an appreciable distance, so a shielded line would probably be required.

Thanks!
jg

5825. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 17:50:42 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE2FF2.624A9100@IEEE.org>
Source record: 167649

Scott wrote:
>
> If cost is no object, I recommend the Outbacker. Mine (Perth Plus) is
> mounted on the roof of a Chevy Astro van with their coil spring. The top
> is about 12 feet in the air. I've hit tree branches with it and it
> takes it!! I've worked, Sweden, England, Germany, Italy, South Africa,
> Cuba and Japan with it...usually break pileups and get a reply on 1st or
> 2nd call.

I'll bet that wasn't on 75m. :-) On 75m, the Outbacker is about 8dB
down from a top hatted bugcatcher.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5826. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 17:52:32 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE3060.6A16F515@IEEE.org>
Source record: 167650

"Rob St.Denis" wrote:
> Based on personal experience and testing, given the small size of the car
> and the frequency (3910kHz) it was determined ath a 102" whip gave me a 34o
> take off angle.

But you said 15m would be the limit. Why would 20m have a high take
off angle? How did you measure the take off angle on 75m?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5827. Re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 17:56:50 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE3162.4C5478C1@IEEE.org>
Source record: 167651

JG in NY wrote:
> I am attempting to feed an end-fed Zepp, but the feeder must run adjacent to a
> metal building for an appreciable distance, so a shielded line would probably
> be required.

Use ladder-line with electric fence standoffs.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5828. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 18:30:30 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3ABE3946.BB99BF3F@wb6hqk.ampr.org>
Source record: 167652

Richard Harrison wrote:
>
> Bart, WB6HQK wrote:
> "No we can`t." (kill one constituent of a radio wave without killing the
> other)
>
> I am aware that Maxwell says:
> 1) When an electric field changes, it creates an magnetic field.
> and:
> 2) When a magnetic field changes, it creates an electric field.

Maxwell's equations are a particular formation of the experimental laws of electricity and magnetics developed by Gauss, Faraday and Ampere.

The equation:

curl B = u * e * dE / dt + u * J

Where:
B = magnetic flux density vector (Wb / m^2)
E = electric field vector (V / m)
u = permeability of media (H / m) = 4 * pi * 10-7 in free space
e = permitivity of media (F / m) = 8.85 * 10^-12 in free space
J = conduction current density (A / m^2)

Is a statement that the rotational component of the magnetic field at any point is equal to the weighted sum of the conduction current plus the time rate of change of electric field.

It does not state one causes the other, only that a particular simultaneous relationship exists.

Another other relevant equation is:

curl E = - dB / dt

Which states that a rotating electric field exists equal to minus the time rate of change of magnetic flux at any point in space.

Hypothetically, a time varying electric field could exist without a magnetic field if the electric field was rotation free, and just the right conduction current density was present. Such conditions are possible in semiconducting wires but are irrelevant to the topic of antennas and Faraday shields.

> Perhaps I should have said: You can short the electric field without
> killing the magnetic field.

While the first equation allows for the existence of circulating
magnetic flux without a corresponding electric field (current flowing
through a wire), the second equation
states that whenever a time varying magnetic flux is present, so is a
circulating electric field. You cannot have a time varying magnetic
flux without a corresponding time varying electric field.

> My recollection is that a short on a transmission line forces the
> electric field to zero at the short, and it also forces a reversal of
> electric field polarity as it is changing the direction of travel. Also,
> the forward and reflected voltages must add to zero.

The voltage between the two conductors is zero at the short but the
electric field in the dielectric still exists, primarily due to the time
varying current flowing through the short.

The usual way to solve such a problem is to postulate the existence of a
forward and reverse wave, each which is a solution to Maxwell's
equations for the continuous transmission line. The amplitude and
phasing of the individual waves are chosen to satisfy the imposed
boundary conditions. e.g. The voltage must be zero across a short
circuit and the current must be zero at an open. If a combination of
waves can be found such that when superimposed satisfy all of the
constraints, then the superimposed set is guaranteed to describe the
voltage, current and fields everywhere in the system.

> My recollection is that energy is conserved when either the electric
> field is forced to zero (at a short circuit) or the magnetic field is
> forced to zero (at an open circuit) by a very temporary transfer of all
> the energy, it amounts to a double, to the surviving field. The
> subsequent energy redistribution to a 50-50 split is very rapid.

Energy is always conserved. Some may leave the system by radiation or
conversion to heat but energy never unaccountably vanishes. The total
energy in a transmission line system at any point in time is the sum of
the energy stored in magnetic and electric fields. When standing waves
exist there is no requirement for a 50-50 split. Consider the case of a
open circuited transmission line much less than a quarter wavelength.
The input impedance is capacitive and the majority of the energy stored
is in the electric field.

> It`s been almost 50 years since I had to work with Maxwell`s equations.
> I`m lazy and loath to take them up again. Also, I think few readers
> would be interested in following the reformulations anyway.

You may well be right....

bart
wb6hqk

5829. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 18:38:51 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <SNrv6.185$W51.35024@e3500-chi1.usenetserver.com>
Source record: 167659

Peter, non-dissipative resistance is 'real', even though no energy is converted to heat during current flow. Being 'real' it is in no way 'imaginary' that would entail the use of 'j'.

I know I'm being redundant by reminding that R = E/I, which is simply a ratio, and R is a resisTANCE, not a resisTOR.

I agree that the IEEE erred in calling both dissipative and non-dissipative resistance 'resistance'.

However, because the input impedance, or 'surge' impedance' if you will, of a lossless transmission line is determined by the sqr root of L/C, and is also determined by the simple ratio E/I, there can be no conversion of electrical energy to heat at that point. Therefore there is no dissipation in the resistance appearing at the input of the line, as long as dissipation is defined as energy converted only to heat. What happens downstream, for example at the terminating load, is irrelevant to the situation at the line input.

I find it hard to understance why some people have difficulty in appreciating the difference between dissipative and non-dissipative resistance. Seems clear as a bell to me.

Walt, W2DU

5830. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 18:43:00 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <vbbsbtkpg8o678s1f6ao940b6c62c58705@4ax.com>
Source record: 167653

On 25 Mar 2001 00:45:36 GMT, fractenna@aol.com (Fractenna) wrote:

>>You might also want to check out the fractal antenna session on Wednesday.
>>Just FYI, I am going to present two papers there:
>>
>>1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
>>Geometries
>>
>>2) A Modification of the Small Loop Approximation for Fractal and Bent Wire
>>Loop Antennas
>>
>>Take care,
>>
>>Steve VE9SRB
>>
>
>Something funny here...
>
>I got on a web engine and found this url
>
>http://www.ewh.ieee.org/soc/aps/2001/advanced/advanced_full.htm
>
>
>What's even more curious is there IS a talk by Dr. Cohen which sounds like it's
>on the same subject as the second talk Steve Best says he's giving.

herr doktor,

Curious hmmm? Surprised to be found in the list? I'm sure the
speaker selection committee is unaware of your posts in this forum.
After-all, this is just a hobby activity and your gaffes, spectacular
as they may be, are not of interest to the general (or even specific)
scientific community. (I even cleaned up your spelling above so not
to embarrass you with your peers.)

BUT, as you have noticed and anticipated, yes, there is a convergence
of topic and a collision of speakers. You have remembered to take
your aspirin haven't you? Remember to take the bottle with you.
:-(

Is it possible that this event will also mark the announcement of the
winner of the FRACTAL CHALLENGE held last winter? You could present
Steve Best his $1000 award during this activity. You may notice that
his talk includes several of those designs that bested yours quite
handily.
;-)

73's
Richard Clark, KB7QHC

5831. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 18:52:29 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <N7rv6.131184$p66.36969389@news3.rdc1.on.home.com>
Source record: 167654

A little time with a communication monitor and a 81dB attenuator.

20m,40m were through personal experience. We know that if one would enjoy communicating (locally) a lower take off angle would be better, however, on those bands since my base station here would end up being lower than the lobe and hence a far lower signal

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABE3060.6A16F515@IEEE.org...
> "Rob St.Denis" wrote:
> > Based on personal experience and testing, given the small size of the
car
> > and the frequency (3910kHz) it was determined ath a 102" whip gave me a
34o
> > take off angle.
>
> But you said 15m would be the limit. Why would 20m have a high take
> off angle? How did you measure the take off angle on 75m?
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5832. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 18:58:39 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <kafsbt0fu49pfedcrksbprm92pr2t7qi0t@4ax.com>
Source record: 167655

On Sun, 25 Mar 2001 11:45:08 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Given the equality:
>-1 = -1

OK

>Divide through by one on each side
>-1/1 = -1/1

OK

>Invert
>-1/1 = 1/-1

Nocando
1. this action is not taken on both sides
2. the operator is transitive and position is meaningless

>Take square roots
>sqrt(-1/1) = sqrt(1/-1)

Occam's razor says this is NOT the simplest representation.

>Assume that j=sqrt(-1) and substitute

You have skipped the step of substitution in that you imply:
sqrt(-1/1) = sqrt(1/-1)
sqrt(-1)/sqrt(1) = sqrt(1)/sqrt(-1)
to obtain

>j/1 = 1/j

However
sqrt(-1/1) = sqrt(1/-1)
sqrt(-1)/sqrt(1) = sqrt(1)/sqrt(-1)
is not a transform

>Simplify
>j = 1/j
>j*j = 1
>And
>-1 = 1
>Reductio ad absurdium as the Mathematicians say.

Hi Peter,

What became of your Dr. Nehoc Nahtan's invention of wavelet antennas?

73's
Richard Clark, KB7QHC

5833. Re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 19:03:59 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <o5gsbt8aeivkdtb2ip20e5ngcf4bmb3u37@4ax.com>
Source record: 167660

The spacing from conductive surfaces required for the popular window
line is only about 2ï¿½". That should be a problem and you'll have lower
losses that trying the twin coax route.

Danny, K6JHE

On 25 Mar 2001 17:27:46 GMT, jwg6@cornell.edu (JG in NY) wrote:

>Is it possible to construct a high-impedance shielded ladder line from coax?
>I've read that one can use two parallel lengths of 75 ohm coax, shorting the
>shields together at the ends, to produce a 150 ohm shielded line. However,
>I'd like the impedance to be more like 450-600 ohms. Any ideas? Could I
>utilize additional parallel lengths of coax somehow, in combination, to
>achieve this higher impedance?
>
>I am attempting to feed an end-fed Zepp, but the feeder must run adjacent to a
>metal building for an appreciable distance, so a shielded line would probably
>be required.
>
>Thanks!
>jg

5834. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 19:12:54 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE4336.AFF26825@IEEE.org>
Source record: 167657

"Rob St.Denis" wrote:
> 20m,40m were through personal experience.

Well, EZNEC shows a TOA=35deg at maximum gain with a
-3dB point at TOA=12deg. Sounds reasonable to me.
--
http://www.mindspring.com/~w6rca

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5835. Re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 19:22:55 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <2cgsbtg4sis4h978fqa0mofcb9qp9vmakv@4ax.com>
Source record: 167656

On 25 Mar 2001 17:27:46 GMT, jwg6@cornell.edu (JG in NY) wrote:

>Is it possible to construct a high-impedance shielded ladder line from coax?
>I've read that one can use two parallel lengths of 75 ohm coax, shorting the
>shields together at the ends, to produce a 150 ohm shielded line. However,
>I'd like the impedance to be more like 450-600 ohms. Any ideas? Could I
>utilize additional parallel lengths of coax somehow, in combination, to
>achieve this higher impedance?
>
>I am attempting to feed an end-fed Zepp, but the feeder must run adjacent to a
>metal building for an appreciable distance, so a shielded line would probably
>be required.
>
>Thanks!
>jg

Hi jg,

Yes. You could try 9 50 Ohm cables. The cables run parallel, but
electrically they are connected in series at both ends. However, it
probably is not a good idea to have both ends wired to 450 Ohms (just
one end naturally), I imagine you would like to see a 50 Ohm input.
With 9 50 Ohm cables, the input end would be wired in 3 parallel
groups of 150 Ohm series connections. This would only work if all
lines are quarterwave (or beaded up). It is also absurd in the
extreme because the same architecture can be performed with a Balun
and more suitable transmission line materials. Run one 50/75 Ohm
cable past the building and feed the load through a Balun.

73's
Richard Clark, KB7QHC

5836. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 19:30:09 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <5Hrv6.131699$p66.37046380@news3.rdc1.on.home.com>
Source record: 167658

And how many times do models ever show 100% accuracy ... especially when the configuration on the vehicle is a consideration.

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABE4336.AFF26825@IEEE.org...
> "Rob St.Denis" wrote:
> > 20m,40m were through personal experience.
>
> Well, EZNEC shows a TOA=35deg at maximum gain with a
> -3dB point at TOA=12deg. Sounds reasonable to me.
> --
> http://www.mindspring.com/~w6rca
>
>
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> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5837. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 19:37:05 UTC
From: Keith K5WX <keithz_xspam@austin.rr.com>
Message-ID: <3ABE48DF.4C11FE2B@austin.rr.com>
Source record: 167661

Maybe the schedule was revised late Saturday night after this posting. The given web link works fine and I found 2 papers by Mr. Best...or is it Dr. Best?

8:40 AM A Modification of Small Loop Approximation for Fractal and Bent Wire Loop Antennas
Steven Best Cushcraft Corporation
9:00 AM The Fractal Loop Antenna: A Comparison of Fractal and Non-Fractal Geometries
Steven Best Cushcraft Corporation

In any case, thanks for posting the link The papers look interesting.

Keith

Fractenna wrote:

> >You might also want to check out the fractal antenna session on Wednesday.
> >Just FYI, I am going to present two papers there:
> >
> >1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
> >Geometries
> >
> >2) A Modification of the Small Loop Approximation for Fractal and Bent Wire
> >Loop Antennas
> >
> >Take care,
> >
> >Steve VE9SRB
> >
>
> Something funny here...
>
> I got on a web engine and found this url
>
> http://www.ewh.ieee.org/soc/aps/2001/advanced/advanced_full.htm
>
> It lists all the papers for the fractal antenna session on Wednesday. You know,
> the one Stephen best refers to. There are NO TALKS listed by one Stephen Best.
>
> Again there are NO TALKS listed by one Stephen Best.
>
> Check it out.
>
> Maybe he spoke too soon?? Or....maybe it's not true??
>
> What's even more curious is there IS a talk by Dr. Cohen which sounds like it's

> on the same subject as the second talk Stephen Best says he's giving.
>
> It's all so surprising!
>
> 73
> Phil
> de N1ZKT

5838. Re: Imaginary Resistance... Dissipationless Resistance... and all ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 19:40:02 UTC
From: richardharrison@webtv.net
Message-ID: <28245-3ABE4992-123@storefull-111.iap.bryant.webtv.net>
Source record: 167663

Peter, K1PO wrote:
"Here in a few short lines is Dr. Nehoc Nahtan`s remarkable proof that j is not a valid unit."

It doesn`t look like Chip`s work to me. If Chip were to invert one side of an equation, he would invert both sides..

Mathematicians would use the operator "i" and not "j". They are identical, but we use j to show the operator means the attached magnitude is phase shifted from the real (or resistance) axis by 90 degrees.

Dissipationless resistance is not associated with the j operator as like any other resistance its location is always on the real axis (usually the abscissa).

Best regards, Richard Harrison, KB5WZI

5839. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 20:07:03 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE4FE7.47847501@IEEE.org>
Source record: 167665

"Rob St.Denis" wrote:
> And how many times do models ever show 100% accuracy ... especially when the
> configuration on the vehicle is a consideration.

How do you ensure that your field strength tests are 100% accurate?
--
http://www.mindspring.com/~w6rca

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5840. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 20:14:32 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99lje3$db5$1@slb6.atl.mindspring.net>
Source record: 167662

John:

Dr. Nehoc cannot afford the expense of the IEEE Dictionary and so he was forced to work from first principles in an effort to figure out what dissipationless resistance was.

He assumed that there must be a dissipationless resistance, since the IEEE says so, and since clearly not many agree on what it is... he assumed that the only thing it could be was an imaginary resistance, and so he set out to see if he could prove that imaginary resistance jR is really a real resistance.

Now that he has proved that j cannot really be sqrt(-1), can you find the flaw in his proof? He now believes that we can now put dissipationless resistance on a sound mathematical and technical footing. But he needs some help with his laboratory experimentation. I have been working from plans he is slowly sending me each night on 15 m CW to build one of these imaginary resistors.

BTW... all of the usual circuit analysis works for this imaginary resistance, no problem... for instance....

Ohms law holds even for imaginary resistance, and so...

V = I*j*R is valid.

The power being "dissipated" in that imaginary resistor is then purely imaginary (and of course dissipationless):

P = V*I = I*I*j*R = j I*I R

However there is no energy being stored!!! As there would be in an inductor or capaitor.

No energy being stored, current is flowing, and the power is imaginary.

This must truly be dissipationless resistance, no?

What happens if you put a "real" resistor of value R in series with an "imaginary" resistor of value jR.

Then you get a total resistance of R+jR = R(1+j). The impedance of this combination is:

Z = R(1+j) and the magnitude of the impedance is sqrt(2)R. The phase angle is clearly 45 degrees.

And no energy is being stored!

What is the Q of this strange beast?

If the imaginary resistance was an inductor in series with the real resistor then the impedance clearly would be storing energy, and the Q would be:

Q = (2*pi*f*L)/R

What is the Q of an imaginary resistor in series with a real resistor?

Does it have a Q?

Is it a dissipationless resistor or is it a real resistor?

What????

When I finish building the imaginary resistor from Dr. Nehoc's plans I will share the experimental results with the group. Last night he sent me another installment of the plans... it's agonizingly slow copying those plans on 15 CW from his hand sent keying. Sort of like an extended SKN, heh, heh.

This week I have to go out and get some of the materials that he requested to go into the "mix" for the imaginary resistor. So far his plans read like the old carbon composition resistor recipe with the exception that the carbon powder is unusual. Do you know of a good supplier of diamond dust? He also wants me to get in a good supply of birefringeing optical grade glass, and some titanium dust. He says I will need a very high temperature crucible in which to "cook" the mixture for the imaginary resistor.

I can't wait to get the rest of the recipe... Any night just tune around 21.005 MHz and listen for a weak CW signal near midnight to hear him sending me the plans.

Soon we'll know if the imaginary resistor is really the dissipationless resistance that the IEEE Dictionary speaks of.

BTW.... Dr. Nehoc asked me to request any mathematicians on the NG to examine his proof that j is not sqrt(-1), and to share with us any concerns that they might have with his proof.

The good Dr. is a genious and I have no doubts, but he always tends to underestimate himself. I think that he is worried that I might spend too much of my hard earned money on diamond dust before the proof has withstood the test of time.

Food for thought...

Best Regards,

-Peter K1PO (The imaginary resistor salesman!)

"John O'Flaherty" <oflahert@toast.net> wrote in message
news:3ABE1971.B71ECC75@toast.net...
> "Peter O. Brackett" wrote:
>
> > {elegant 80 proof snipped}

> >
> > Thus jR has to be something other than R.
> >
> > But what?
> >
> > I suspect, now that we all know that Imaginary Resistance jR is real but
> > different from R, perhaps that is the elusive...
> >
> > Dissipationless Resistance that the IEEE Dictionary was so ineptly
trying to
> > define in it's ill advised article on resistance.
> >
> > Is dissipationless resistance really jR? What???
> >
> > Thoughts, comments,
> >
> > -Peter K1PO
>
> So, who shot dissipationless resistance?
>
> john
>

5841. Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 20:14:48 UTC
From: DL7JSK <tansorg@cs.tu-berlin.de>
Message-ID: <99ljlfvjl01$1@news.t-online.com>
Source record: 167664

Hi OMs
I want to construct a 5-element yagi for 2m with 3 reflectors.I need the vertical spacings of the 3 reflectors.Who can help me ?

73
Tom

5842. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 20:22:19 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <%rsv6.132396$p66.37139712@news3.rdc1.on.home.com>
Source record: 167666

they aren't ... they are within the accuracy of the equipment i used (i.e.
+/-0.05dBm) ... the point being is that my tests took into account things
that the model doesn't

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABE4FE7.47847501@IEEE.org...
> "Rob St.Denis" wrote:
> > And how many times do models ever show 100% accuracy ... especially when
the
> > configuration on the vehicle is a consideration.
>
> How do you ensure that your field strength tests are 100% accurate?
> --
> http://www.mindspring.com/~w6rca
>
>
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5843. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 20:27:44 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abe577d$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 167667

"Richard Clark" wrote ...
> Gary Peach wrote:
> >I presume that was before small vessels carried Luneberg Lens or even the
> >old simple corner reflectors?
>
> I really don't know if they were so equipped (this was only 28 years
> ago) and all I can report is what appeared on the 'scope. I didn't
> step out to look because my station was at that radar, and anyway, it
> was raining.

The Luneburg lens makes a small vessel look the size of an aircraft carrier on the PPI display. 28 years ago they had RADARs that were hardly affected by rain.

> As my ship was 600 feet long displacing 25,000 tons, we had a long
> braking distance.

And an even longer thinking distance. :)

>The fleet on the other hand could easily look out
> after themselves (but would undoubtedly bring a grumble about missing
> their catch).

I spent 6 months in the NOrth Sea on 100 Ton German built Air Sea Rescue boats whose prime purpose at times was to clear the fishing boats out of the bombing practice range. At other times the primary function was to measure depth along the sandy nudist beaches of Sylt. You can guess what was my favourite activity. We had DECCA Radar and SAHRA which consistewd of two YAGIs mounted on the mast head slightly diveregent straight ahead and an ADCOCK on the fore deck. A downed pilot that had inflated his Mea West would automaticaly deploy his beacon antenna. by steering the boat/ship so that the signal showed on the cilcular Lisajouex display at the top you would be heading for the Victim. At close range it was neccassary to switch over to the Adcock for a bearing.

>They weren't entire low tech, as several switched on
> their own radars when we appeared, my radar began to fill with fine
> filigreed lines of their own sweeps mixing with mine.

The weather was foul as 007 made his perilous drop to board us from the churning egg beater calmly coming aboard the heaving deck as though he had just come down stairs for his breakfast.

> We had been running ahead of schedule, so the old man headed us out to
> sea (out of the lanes) to kill time. The watches for several days
> were nothing but boring. This episode on the dog-watch at least gave
> us a break (and kept the look-outs awake). On an Atlantic crossing,

> my buddy (AA7UJ) sat at the radar with a split set of sound powered
> phones to the watches as the rest of the crew dozed (about 6 people in
> CIC).

He laconically pencilled an entry into the log returning to his cat nap,
taut and alert as a hunting rattler.

>The XO popped his head in, shook it, and closed the door
> carefully so as to not waken the fellows. My ship was not what would
> be called a warrior. We qualified only to the extent of maintaining a
> 40mm cannon so that we could keep our warship status (and thus escape
> certain dockage fees and excise tax). On the other hand, in my lab, I
> was never more than 20 feet away from a Polaris missile with its
> atomic payload - and perhaps a dozen more like it nearby.

When they go bang the lucky ones don't hear them. I live in the middle of a
triangle whose corners are marked by a factory that turns them out a store
that waits the day when they will be required and the Labs wher so much of
of the fundamentals are explored. Would you say that we are a prime target?

> Some might wonder about the laxity of the XO. After all, we did carry
> a considerable amount of classified information and would be a prize
> vessel if captured. No, the XO knew we had a submarine escort for
> just this possibility - the sub would have sunk us long before we
> would've been boarded. :-)

Is that double jeopardy or just plain good luck:?o

All a board The Merry Andrew
--
Gary7SLL - - - RAFARS 2757
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5844. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 20:46:36 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abee914$0$12245$cc9e4d1f@news.dial.pipex.com>
Source record: 167563

```
"Reg Edwards" wrote ...
> Gary wrote -
> > but the determining factor for the quality of any antenna is most
> > surely its efficiency.
> ====================
> To which variety of efficiency do you refer ?
> Please define the parameter(s) involved with the ratio.
```

Certainly Reg: the ratio (energy out) / (energy in)
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5845. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:00:17 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abee915$0$12245$cc9e4d1f@news.dial.pipex.com>
Source record: 167562

"William E. Sabin" wrote ...
> William E. Sabin wrote:
> > At radio frequencies, especially HF, a non-resonant reflector can have a lot of
> > radiation off the *back* side of the plate. I believe this agrees with
> > Maxwell's equations OK because resonance maximizes energy available for
> > reflection. A
> > perfect standing wave on the plate is better than anything else.
>
> The most famous example is the radar "chaff"
> aluminum strips used to foil the Nazi radar.

Both sides had Window.
I can remember playing with the stuff when I was a kid after Gerry Raids. There was even a rumour that it was poisoned to kill the kids that put it into their mouths; this was about the time that Butterfly bombs were being used, Any poison was probably the arsnic or some such that it was common to put into paper in store to prevent the rats from eating too much of it. The paper tapes used for TTY are /were often imprgneted with poisons for the same reason, so if you have any old stock be careful lest you get ill from hamdling the stuff.
The stuff that I remeber was coted with a thin black coating so that it did not reflect in the search lights and give the game away, under tyhe thin black coating was a conductive coating onto a paper base. I seem to remeber a yellow stripe, upon reflection,(sic) this may have been a colour coding, I do not know if it came in a variety of types for various purposes.

>The lengths of the strips were carefully chosen to be resonant. If the
> strip is not resonant the wave passes right on through the strip.

As the Brits were using RADAR in the shortwave region as well as the adapted NT 277 10 Cm type strips that would fool both RADAR would have been difficult if reliant solely upon resonance. The cloud of window/chaff has to have reflection characteristics similar to a squadron of Bombers, pure resonance might give the game away, the chaff is only effective as a deception for a short period so it must be deployed tactically.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5846. Re: 23 cm superturnstile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:06:19 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <3ABE609D.4B036236@earthlink.net>
Source record: 167519

Homebrewing a SuperTurnstile (or BATWING as it is commonly called
in the broadcast circles) is not that hard....the Batwing is merely
a slot antenna made out of wings...I have the docs on how to build
one at work...will post them here asap...
At 23cm you should be able to make the wings out of stamped aluminum
with 90degree tabs at the top and bottom for mounting to a mast/pole
of proper size and strength.
Also another good antenna for horiz omni work is the traveling helix
antenna...actually two vertical helix antennas...the top in opposite
sense from the bottom one...fed in the center with coax and the far
ends grounded (allows for low voltage HI current feed to act as a
deicer!)..the vertical component in each helix cancels because of
180deg phase difference...I will also post that as well..
The antennas are in the ANTENNA series of books by Lee.

Chris
WB5ITT
Chief Engineer
KDMX FM/KEGL FM
Clear Channel Broadcasting
Dallas market

"J.F. FOURCADIER" wrote:
>
> Hello !
>
> Presently, I build an ATV repeater with some friends and we are looking
> for an antenna horizontally polarized with an omnidirectional radiation
> pattern. The equipment is going to operate in the 23 cm band and a high gain
> is obviously highly wishable.
>
> I have seen descriptions of the Alford slot antenna which has a medium gain
> and would be suitable, but commercial TV stations often use superturnstile
> antenna which have more gain.
>
> Does someone hear of homebrew superturnstile antenna for the 23 cm ham band
> or other high gain antenna ?
>
> Thank you for your help.
>
> 73 de F4DAY
>
> Jean-Franï¿½ois FOURCADIER

5847. Re: 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:08:06 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <3ABE6110.478C7487@earthlink.net>
Source record: 167520

Yeah...get a 2mtr Larsen 5/8wave NMO mount type...don't cut
the whip! It should work fine on BOTH bands...use a diplexer
from Comet or Diamond (or build your own!) for dual band operation.
For horizontal use, you probably need to try a Squalo design or
Halo design...

Chris
WB5ITT

jim wrote:
>
> anybody built / or have plans for a cheap 6meter mobil
> antenna...either 50-51 mhz..or 53-54 mhz...Thanks
>
> Jim-kg4enu

5848. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:09:41 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3ABE5E95.6A11B844@dialpoint.net>
Source record: 167668

Why go to the trouble of 3 reflectors ? Unless you need some very high
F/B ratio and I doubt that you will get that with a 5 element beam even
with the 3 reflectors. They will do nothing for the gain.

DL7JSK wrote:
>
> Hi OMs
> I want to construct a 5-element yagi for 2m with 3 reflectors.I need the
> vertical spacings of the 3 reflectors.Who can help me ?
>
> 73
> Tom

5849. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:14:27 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3abee916$0$12245$cc9e4d1f@news.dial.pipex.com>
Source record: 167564

"Ian White, G3SEK" wrote ...
> Gary Peach wrote (in part):
> >> >but unless the Ham fraternity
> >> >wish to break away from the accepted standards anything which is
> >> >discussed here is unlikely to influence
> >> >the convention.
> >>
> >> I don't know where you get the idea that "the ham fraternity wishes to
> >> break away from accepted standards".
> >
> >Please note the qualifying word "UNLESS" it makes all the difference to
the
> >meaning of my statement.
> >
> But since the condition you stipulate is not true, it makes the rest of
> the statement inapplicable.

I am pleased that you feel that you can speak for the Ham fraternity, but if the rest are as unruley as the lot in this news group I doubt that anyone could claim to speak for Hams as a general class. :)

> >>I am in very direct contact with
> >> that segment of the ham fraternity that needs to think about noise
> >> temperature: everybody accepts the definition that 290K is a reference
> >> temperature, unconnected with ambient temperature.

Ian we all need to think about noise temperature if we want a good station. I doubt that those with their head screwed on properly want to waste their money and time on a substandard station. The competative spirit is obvious from the up take of Contests.

> >Valid when Noise figure is measured by sophisticated laboratory
> >instrumentation, but not so when more fundemental methods using hot and
cold
> >loads are employed.
> >
> The reference temperature of 290K is still needed. When commercial noise
> heads are calibrated at a national standards lab such as NPL or NIST, it
> is done in a constant-temperature chamber at a temperature of their
> choice, somewhat above room temperature. However, the calibration data
> are then corrected so that they appear to the end user as if the
> calibration had been done at 290K.

Understood, but not everybody uses a noise diode or noise tube to calibrate their equipement. The price of such commercial instruments precludes their use by most Hamns I would think. However the construction of Hot and cold

loads can be a kitchen table exercise which many Hams could adequately
accomplish.

> That then leaves the user to apply a further correction for the actual
> temperature of the noise source, once again to reference everything back
> to 290K. It's awful hard to get away from.

Only if you want to communicate your system performance to a third party for
that third party to use the values obtained for some further calculation.
Otherwise the system passes into one of two categories GOOD or BAD.

> BTW, the latest noise heads have a built-in temperature sensor right at
> the output attenuator (which defines Tcold) and the noise figure
> analyser reads and applies this automagically. With older noise sources,
> there is a small error because you can only measure the temperature
> outside the case, yet the source itself dissipates a significant
> fraction of a watt, and thus has internal temperature gradients.

Nice to see the care which instrument manufacturers are taking. I'm quite
sure that the instrument companies for whom I designed instruments exercised
equal care withing the available technology and state of the art at the
time. The company owners may well have been primarily interested in profits
however the guys in the Lab took a peresonal pride in the quality of the
instruments that they were charged with inventing.

> >Presumably you are familiar with the Dicke Radiometer?
>
> Yes, although NPL now uses other techniques below 26.5GHz.

With low level signals it is a bit wasteful I must admit. :)
However it is again something which the average Ham could make and calibrate
and use.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5850. Re: Station/tuner ground

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:14:46 UTC
From: Greg <greglh@gte.net>
Message-ID: <3ABE5FF0.C2BA705C@gte.net>
Source record: 167521
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Jason;
My situation required 're-learning' about grounds as I operate my shack from the second story of my house.

My ground rod does indeed serve as my protection against lightning strikes and defective equipment shorts, etc.
However, the connection was far too long (about 16 feet) to keep my shack equipment at zero RF potential. (My antenna is a vertical, thus even more importance attached to having a good RF ground at the shack)
Many reports of RF in the audio, poor results with otherwise reputable antenna tuners, etc. caused me to install a seperate RF ground system.

I used the MFJ Artificial ground unit to optimize a counterpoise antenna consisting of multiple wires (bundled) but each cut to approx. 1/4 wavelengths for 80 thru 10 meters, fed from the MFJ. The results were immediate, though not in the way I expected. My performance at 80 and 40 meters was vastly improved, with the MFJ showing a pronounced increase in RF current into my counterpoise radial(s). I expected my Ground stake to provide a reasonable ground for these bands, but not so.
What I expected was to see substantial ground current flowing into the coutnerpoise at higher bands (with the theory that my lead from the ground stake was too close to a 1/4 wavelength for these bands) Yet, 20 thru 10 meters seem less dependant on the RF ground system.

Anyway, the RF problems are gone and the system improvement with an effective RF ground is pronounced.

So much for the concept that 'one ground fits all'. You need at least 2 types. (common mode ground systems are another, even more difficult to install system, but highly regarded for RFI reduction)

Now you know what I know.

Greg K7YDL@qsl.net

Jason Hsu wrote:

> I am confused about the station/tuner ground that is attached to the ground
> terminals in the back of the transceiver and the tuner. (This is different
> from the ground plane that provides low impedance paths to a monopole antenna.)
>
> 1. What is the purpose of the station/tuner ground? Lightning safety? (Not
> an issue for me, as I live in an apartment.) Stopping RF feedback and certain
> types of RFI? (One very wise ham I know says that this ground is ONLY a
> lightning safety ground and that a sufficiently effective ground plane
> minimizes RF feedback and RFI related to grounding issues.) Due to my

> background in electrical engineering, I need not be afraid of equations or
> circuit diagrams, so point me to as many as you want. (Believe it or not, I
> have learned more now as a ham than I did back then as a student.)
> 2. What is the ideal station/tuner ground? What makes an 8-foot metal rod
> buried in the ground better than other solutions (such as the 1/4 wavelength
> counterpoise wires)? Does the effectiveness of a ground have anything to do
> with its mass or size? Would my 64"x72" ground plane made of aluminum foil
> attic insulation provide a sufficient ground? (Don't laugh. I live in an
> apartment.)
> 3. Why does the impedance of the wire connecting the ground terminals (at the
> tuner/transceiver) and the grounding object (metal rod, earth, or other object)
> vary sinusoidally with respect to wavelength? It sounds like I need to think
> of this wire as a transmission line rather than a simple conductor. Can anyone
> shed more light on this?
> 4. As you know, the connection between the transceiver/tuner ground terminal
> and the grounding object should be substantially shorter than 1/4 wavelength.
> Exactly why is this? (I realize this is related to my previous question.)
> Does a long wire act too much like an antenna? Is the resistance too high? Is
> the reactance too high?
> 5. Why can terminated 1/4 wavelength wires be used as a counterpoise when a
> short connection to ground is not available? (I understand that MFJ's
> artificial grounds tune out the reactive portion of the impedance.)
> 6. Is there any reason the 1/4 wavelength counterpoise wires should NOT be
> attached to the coax? Would mutual coupling with any part of the coax or the
> antenna adversely affect performance? If taping the counterpoise wires to the
> coax is a viable solution, this would make it MUCH easier to handle the 10
> counterpoise wires I would need for 10m, 12m, 15m, 17m, and 20m.
>
> -
> Jason Hsu, AG4DG
> jason_hsu@@@@planetmail.com
> http://www.bigfoot.com/~jason_hsu/

5851. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:24:25 UTC
From: richardharrison@webtv.net
Message-ID: <26454-3ABE6209-43@storefull-114.iap.bryant.webtv.net>
Source record: 167522

Bart, WB6HQK wrote:
"The total energy in a transmission line system at any point in time is the sum of the energy stored in magnetic and electric fields. When standing waves exist there is no requirement for a 50-50 split,"

The standing wave patterns with 90-degree offset between voltage and current confirm that. If we had a lossless line with an open or a short we could have points of disappearing voltage and other points of disappearing current, distributed periodically along the line. Minimum-current points are displaced from current maxima by 90-degrees. The transmission voltage has the same type of pattern but is displaced by 90 degrees from the current so that current maxima correspond to voltage minima and voltage maxima correspond to current minima. The line is resistive at these maxima and minima points of the SWR pattern.

One view of the relation between volts, amps, and their associated fields is that volts and amps are the producers and the fields are the products. An argument for the reverse situation can also be made.

It seems reasonable to me that in a short on a transmission line where the current doubles you get a corresponding increase in the magnetic field produced by that current and that the magnetic field change would give a corresponding change in the electric field. These E&H fields make up the reflected wave.

In a transmission line with standing waves, the energy may not be evenly divided between the E&H fields as it is in free space where the impedance is a constant 377 ohms, but the energy flowing in each direction on the line is constant. My Bird wattmeter has no problems with SWR.

Best regards, Richard Harrison, KB5WZI

5852. re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 21:46:42 UTC
From: jwg6@cornell.edu
Message-ID: <99lp02$p9l$1@news01.cit.cornell.edu>
Source record: 167523

Excellent. Thanks, gentlemen, for the responses! I'll go with the ladder line and standoffs.

I am not after a 50-ohm load; rather, I'm planning to run the zepp on 5 bands, through a balanced coupler. It is a compromise, to be sure, but in this location it's gonna to be the best I can do.

Thanks again and 73 all...
N1AEP
Joel
nr. Ithaca

5853. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 22:28:51 UTC
From: Tom N4RS <n4rs@vnet.net>
Message-ID: <Khuv6.7893$uR4.64414@ralph.vnet.net>
Source record: 167524

Hi Ben,
How about elaborating on that ground strap. Never heard that done before.
Sounds like a good idea. Have heard of bonding everything to the frame but
not a strap with everything bonded to it.....
Tom N4RS
"Benjamin Blavat" <bblavat@bellsouth.net> wrote in message
news:Ldov6.100$tG3.6443@news1.atl...
> Hi Jim,
>
> Forget the tuner and 108" whip besides damaging your vehicle, unless you
> mount the tuner on the roof the coax run is too long a run from tuner to
> antenna, so it won't work well. I use a DK-3 screwdriver on a "L" mount
off
> the tie down eye on my Toyota MR-2, its about 3' off the ground (tops out
> 10' on 10 meters, 11'14" on 80 meters, with 60" stinger). I run a 25' x 3"
> copper strip direct from the antenna ground under the whole car connecting
> everything I could, really lowered the noise level. I get awesome reports
> with my 706g and 100 watts, If I give 59 I get a +20 in return! 80-10
with
> the 60" stinger, 40-6 without the stinger (sharper tunign though) and I
can
> still get in the garage. It works better and its A LOT cheaper to do!
> --
> 73's from W4BEN,
> Benjamin Blavat
>
>
> "jhilins" <jhilins@bellsouth.net> wrote in message
> news:3ABBF06B.F43A8A76@bellsouth.net...
> > Planning on installing HF in the car.
> >
> > I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
> > antenna tuner. I have a friend out there using this configuration, He
> > has instant access to 80M-6M via the tuner.
> >
> > My question is... Is there anyone else out there using this? How does it
> > compare to other antennas...
> >
> > I'm interested in any side by side results anyone may have..
> >
> > Thanks
> > James Hilins
> >
>

>

5854. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 22:29:38 UTC
From: richardharrison@webtv.net
Message-ID: <21417-3ABE7152-247@storefull-116.iap.bryant.webtv.net>
Source record: 167528

Tom, DL7JSK wrote:
"I need the vertical spacings of the 3 reflectors (2m yagi)."

The RSGB VHF-UHF Manual has a 2-m yagi using a "trigonal" (3 stacked elements in a plane perpendicular to the plane of the other elements) reflector.

The reflector rods are 40 inches (101.6 cm) long.

Spacing rod-to-rod between the 3 reflector rods is 1/4-wavelength or 52 cm at 145 MHz. The middle rod in this reflector is spaced 40 cm from the radiator.

This information is found on pages 7.10 and 7.11 of the 3rd edition.

Best regards, Richard Harrison, KB5WZI

5855. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 22:31:23 UTC
From: 2w8ji@akorn.net
Message-ID: <3abe6df8.432330804@news.accessunited.com>
Source record: 167525

On Sun, 25 Mar 2001 15:24:25 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>The standing wave patterns with 90-degree offset between voltage and
>current confirm that. If we had a lossless line with an open or a short
>we could have points of disappearing voltage and other points of
>disappearing current, distributed periodically along the line.

We can have many things in theory we can't have in the real world.

>Minimum-current points are displaced from current maxima by 90-degrees.
>The transmission voltage has the same type of pattern but is displaced
>by 90 degrees from the current so that current maxima correspond to
>voltage minima and voltage maxima correspond to current minima. The line
>is resistive at these maxima and minima points of the SWR pattern.

No it isn't. The lossless line has either no resistance or infinite resistance every 90 degrees from the short or open. It also is impossible to feed power into the line. The line is either an infinite impedance, a perfect short, or a pure reactance.

None of this has anything to do with Farday shields.

>It seems reasonable to me that in a short on a transmission line where
>the current doubles you get a corresponding increase in the magnetic
>field produced by that current and that the magnetic field change would
>give a corresponding change in the electric field. These E&H fields make
>up the reflected wave.

What good does discussing a riddle do? Why do you say the current doubles at a short? It would depend on the rest of the system. If the line was lossless, it would be impossible to feed power into the system (unless you had infinite voltage 90 dgrees away). The input impedance of a lossless 1/4 wl long shorted line would be infinite.

Even Roy's big QRO rigs won't cause current to appear at the short.

>In a transmission line with standing waves, the energy may not be evenly
>divided between the E&H fields as it is in free space where the
>impedance is a constant 377 ohms, but the energy flowing in each
>direction on the line is constant. My Bird wattmeter has no problems
>with SWR.

What a concept.

73 Tom

5856. Re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 22:33:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3abe7141.433171887@news.accessunited.com>
Source record: 167526

On 25 Mar 2001 21:46:42 GMT, jwg6@cornell.edu (JG in NY) wrote:

>Excellent. Thanks, gentlemen, for the responses! I'll go with the ladder
>line and standoffs.
>
>I am not after a 50-ohm load; rather, I'm planning to run the zepp on 5 bands,
>through a balanced coupler. It is a compromise, to be sure, but in this
>location it's gonna to be the best I can do.

Even if you were after 50 ohms, you would not get it with the parallel
coax at one end and series coax at the other....or a transformer or
impedance transforming balun.

That's because the antenna (the load end) is not 450 ohms.

73 Tom

5857. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 22:40:02 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <99ls17stb1@slb4.atl.mindspring.net>
Source record: 167527
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
--

"W6DKN" <w6dkn@qsl.net> wrote in message
news:h6Su6.10425$q66.240615@paloalto-snr1.gtei.net...
> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3ABB7389.15559C47@IEEE.org...
> > W6DKN wrote:
> > > After I have experienced it first hand, I can give you a valid opinion
> on
> > > the subject (provided we both end up in the same place :>) .
> >
> > Do you tell your kids not to jump out in front of a moving truck?
> > Is it because you have experienced it or just used your rational
> > mind to evaluate it? I understand lots of things at which I have
> > no skill or experience.
> > --
>
> Common sense and basic survival instinct are completely different than
> trying to impose your personal opinions to the general public on a subject
> in which you have no first hand knowledge or experience.
>
> A perfect example of this is the anti-gun crowd - the vast majority of
them
> have never even fired a gun, and yet they would have you believe that
based
> on their feelings and opinions, you should have to give up your guns.
>

That is not a "perfect example" unless the end result of removing the code
requirement is that you can no longer use CW. If, after removal of the code
requirement, you or anyone else that wishes to learn and use CW is free to
do so there is NO parallel.

> I understand how a nuclear reactor works, but I would never be allowed to
> testify in court as to the value of such a device to the general public.
> This is because no matter how well intended, the fact remains that my
> opinion on the subject is moot due to the fact that I do not possess the
> expertise necessary to present a legally valid opinion.

Again, unless the end result is that it becomes illegal to use CW the
comparison is invalid.

>
> 73 de W6DKN
>
```

5858. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 22:49:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99lsinbsn1@neptunium.btinternet.com>
Source record: 167529

Gary sez -
> If it is very lossy/ inefficient, I think that it does.
==========
What it does or what it may not do is of no consequence if you only think it does.

Come back again when you have made up your mind and are certain about it.

Vague wooly waffle gets nobody nowhere.

Reg.

5859. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:00:09 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <qutsbtgjeehvu0smf5j46kui94eh0thggp@4ax.com>
Source record: 167530

On Sun, 18 Mar 2001 14:43:32 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>Richard Clark wrote:
>> C'Mon Cecil,
>> This is the same dictionary that has no definition for heat, isn't it?
>
>It's not a dictionary of the English language, Richard, it is a
>dictionary of technical terms. Presumable, "heat" is not a technical
>enough term to be included in a dictionary published by the Institute
>of Electrical and Electronic Engineers. They don't have a definition
>of "as" either.

That's funny. A whole branch of physics is devoted to heat, because
of its critical importance, and a very precise definition of it is used
implicitly in all energy systems, including emphatically electrical
engineering. Perhaps if the IEEE *had* tried to define heat precisely,
they'd have discovered the folly of their "dissipationless" resistance
definition.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5860. Tower/Mast for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:11:34 UTC
From: Paul Instone <Paulavfc@btinternet.com>
Message-ID: <99ltt1$t7f$1@uranium.btinternet.com>
Source record: 167531

Altron tower/mast 15 ft extends to 30 ft with winch and all wall mountings inc. tilt over will take large beam Buyer collects £50.00 ono 01793 - 874786 (Swindon) G4SOA paulavfc@btinternet.com

5861. Re: Antenna choice...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:21:04 UTC
From: k4ia@aol.com
Message-ID: <20010325182104.02995.00000922@ng-fs1.aol.com>
Source record: 167532

I have been using the MQ-2 for about a year and I am very happy with it. Unlike the other poster who had one of the older versions (made by a different company I believe) mine has very good SWR curves - as advertised - a little narrow on 20 but manageable. The antenna has good directional characteristics, I have never lost a spoke, and I have run a full KW into it without harm. Check out the reviews on www.eHam.net to see what others have to say. If you want a small directional antenna I don't think you can go wrong with this one.

Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

5862. Re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:24:18 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99lujh$jf1$1@plutonium.btinternet.com>
Source record: 167533

Shielded twin line is an utter waste of time and money for antenna feeders. Shielding serves no useful purpose. And it's far more lossy than necessary.

If you want a really negligible loss twin feedline for a multiband HF dipole make yourself an openwire line from 10 or 12 AWG enamelled copper wire spaced 3, 4 or 6 inches apart. Beautiful stuff !

--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

JG in NY <jwg6@cornell.edu> wrote in message
news:99l9qi$i43$1@news01.cit.cornell.edu...
> Is it possible to construct a high-impedance shielded ladder line from coax?
> I've read that one can use two parallel lengths of 75 ohm coax, shorting the
> shields together at the ends, to produce a 150 ohm shielded line. However,
> I'd like the impedance to be more like 450-600 ohms. Any ideas? Could I
> utilize additional parallel lengths of coax somehow, in combination, to
> achieve this higher impedance?
>
> I am attempting to feed an end-fed Zepp, but the feeder must run adjacent to a
> metal building for an appreciable distance, so a shielded line would probably
> be required.
>
> Thanks!
> jg
>

5863. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:30:11 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <3vusbtkdmqkhket9tkdfp1p1r5sc5kuolv@4ax.com>
Source record: 167534

On Sat, 24 Mar 2001 00:57:05 GMT, "VE9SRB" <srbest@att.net> wrote:
>Given that that IR is a heat transfer process as is thermal convection and
>conduction, the IEEE definition for dissipation being a conversion of energy
>to heat is accurate.

So is the conversion of energy to *any* frequency of EM radiation. Radiative transfer is not limited to the IR portion of the spectrum. It occurs at any frequency. (What do you think is the transfer mechanism of the "thermal noise" received at HF, or even ELF?) All radiation is heat in the formal sense that it is an irreversible radiative transfer of energy from a body.

That's what thermodynamics says, and thermo *is* the authoritive field of study of heat.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5864. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:33:51 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE805F.1C3BB705@IEEE.org>
Source record: 167536

"Rob St.Denis" wrote:
> they aren't ... they are within the accuracy of the equipment i used (i.e.
> +/-0.05dBm) ... the point being is that my tests took into account things
> that the model doesn't

Wonder how you know that since you haven't seen the model? I modeled
an entire vehicle with a whip attached to it.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5865. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:37:02 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <yivv6.3230$MT2.959890@dfiatx1-snr1.gtei.net>
Source record: 167535
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"KB9WFK" <KB9WFK@mindspring.com> wrote in message
news:99ls17stb1@slb4.atl.mindspring.net...
>
> SNIP
> > Common sense and basic survival instinct are completely different than
> > trying to impose your personal opinions to the general public on a
subject
> > in which you have no first hand knowledge or experience.
> >
> > A perfect example of this is the anti-gun crowd - the vast majority of
> > them have never even fired a gun, and yet they would have you believe
that
> > based on their feelings and opinions, you should have to give up your
guns.
> >
>
> That is not a "perfect example" unless the end result of removing the
code
> requirement is that you can no longer use CW. If, after removal of the
code
> requirement, you or anyone else that wishes to learn and use CW is free
to
> do so there is NO parallel.
>

Sure it is. The outcome of the argument is not the issue. The issue is that
you have a group of people with absolutely no expertise on the subject
forming an opinion based on personal feelings and self interest, that they
are trying to convince others is correct.

73 de W6DKN

5866. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:46:40 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE8360.A23471DB@IEEE.org>
Source record: 167538

Gary Coffman wrote:
> That's funny. A whole branch of physics is devoted to heat, because
> of its critical importance, and a very precise definition of it is used
> implicitly in all energy systems, including emphatically electrical
> engineering. Perhaps if the IEEE *had* tried to define heat precisely,
> they'd have discovered the folly of their "dissipationless" resistance
> definition.

Different disciplines have different definitions. Webster's definition
of heat is apparently sufficient for the IEEE. How do you explain why
the characteristic impedance (50 ohms) of a coax transmission line
doesn't dissipate energy, i.e. convert it to heat? Why does RG-174
dissipate so much more energy than 9913 when their Z0's are identical
at 50 ohms? (FYI, "ohms" is the unit of electrical RESISTANCE).
--
http://www.mindspring.com/~w6rca

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5867. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:47:30 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <msvv6.133609$p66.37532627@news3.rdc1.on.home.com>
Source record: 167537

Where was the antenna mounted? How long a length of cable? What type of mount? What vehicle? What ground to the vehicle? need I continue?

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABE805F.1C3BB705@IEEE.org...
> "Rob St.Denis" wrote:
> > they aren't ... they are within the accuracy of the equipment i used
(i.e.
> > +/-0.05dBm) ... the point being is that my tests took into account
things
> > that the model doesn't
>
> Wonder how you know that since you haven't seen the model? I modeled
> an entire vehicle with a whip attached to it.
> --
> http://www.mindspring.com/~w6rca
>
>
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5868. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:51:21 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE8479.290EF157@IEEE.org>
Source record: 167539

Gary Coffman wrote:
> That's what thermodynamics says, and thermo *is* the authoritive field of
> study of heat.

Too bad this isn't a thermodynamics news group, Gary.
--
http://www.mindspring.com/~w6rca

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5869. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:55:23 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE856B.90C6B2A2@IEEE.org>
Source record: 167540
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:
> The issue is that
> you have a group of people with absolutely no expertise on the subject
> forming an opinion based on personal feelings and self interest, that they
> are trying to convince others is correct.

How do you explain the host of people with expertise on the
subject who possess those same opinions?
--
http://www.mindspring.com/~w6rca

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5870. Re: Making shielded ladder-line from coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-25 23:57:50 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE85FE.1493826E@IEEE.org>
Source record: 167541

JG in NY wrote:
>
> Excellent. Thanks, gentlemen, for the responses! I'll go with the ladder
> line and standoffs.

Good choice because with high SWRs associated with the EDZ, the
side-by-side coax would have still been very lossy.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5871. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 00:07:13 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABE8831.9B88442@IEEE.org>
Source record: 167542

"Rob St.Denis" wrote:
> Where was the antenna mounted? How long a length of cable? What type of
> mount? What vehicle? What ground to the vehicle? need I continue?

In the center of the vehicle. Cable doesn't matter for radiation pattern.
Mount doesn't matter for radiation pattern. Pickup. Chassis. Nope. I
seriously doubt that you used a helicopter for your tests. That's
the only accurate way to determine take off angle. Short verticals
have approximately the same takeoff angles as 1/4WL verticals.
--
http://www.mindspring.com/~w6rca

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5872. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 00:46:40 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <Qjwv6.134241$p66.37662619@news3.rdc1.on.home.com>
Source record: 167543

Matching of a unbalanced antenna does most certainly change the toa ...
mount makes a difference as this could affect what metal is under the
antenna to balance it ...

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABE8831.9B88442@IEEE.org...
> "Rob St.Denis" wrote:
> > Where was the antenna mounted? How long a length of cable? What type of
> > mount? What vehicle? What ground to the vehicle? need I continue?
>
> In the center of the vehicle. Cable doesn't matter for radiation pattern.
> Mount doesn't matter for radiation pattern. Pickup. Chassis. Nope. I
> seriously doubt that you used a helicopter for your tests. That's
> the only accurate way to determine take off angle. Short verticals
> have approximately the same takeoff angles as 1/4WL verticals.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5873. Re: Tire static?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 00:58:29 UTC
From: "mkelly@powerup.com.au" <mkelly@powerup.com.au>
Message-ID: <3ABE9435.88777631@powerup.com.au>
Source record: 167544

I recall an OT telling me the very expensive cars in the 30's
had suppression of some sort possibly just a strap. on the brake
drums to improve radio reception. Conceivably disks could do the
same thing as they spin around as usually they 'just' touch
the pads and it might generate a staic charge.

Just a thought

Cheers

jim reed wrote:
>
> Yes, steel belted radial tires can create static electricty to the extent of
> causing some radio interference. If this is what's causing the inteference
> you should not have any problem in the rain, the water will dissapate the
> charge. First make sure the radio chassis is grounded to a good ground (no
> paint) with the shortest piece of wire possible.
> Here is my theory of what happens.....A magnetic field can be generated
> around the tires from the friction of the tires and the road not to mention
> the spinning "coils" of wire in the steel belted radials that may help
> increase the strength of this field. This field of electromagnetic induction
> intermittently jumps to the metal frame of the vehicle and somewhat
> dissapates. During this time static currents are flowing through the ground
> system of the car causing electrical interference to radios that require
> grounding. I may be way off on how or why this happens, but he is how to fix
> it.
> Go to a truck stop or auto parts store and buy a grounding strap. It
> is a rubber strip with impregnated metal that will bolt to the frame and
> drag on the ground. It will dissapate any charge from the frame of your
> vehicle.You have seen these on semi trucks and vehicles of certain racial
> groups. You could use a small piece of metal chain, but aside from the
> constant clinking noise it could be a fire hazard from the sparks of the
> metal being rubbed away. This also may cure a "Shocker", you know, one of
> them vehicles that you are afraid to close the door on every time you get
> out because it might shock you. Good Luck, 73's
>
> "Rudy Marcelletti" <rudym@net-link.net> wrote in message
> news:3abb6a2d$0$88186$bbae4d71@news.net-link.net...
> > Yesterday I noticed some increased noise on receive while cruising 70mph
> on
> > the freeway (no toll roads in MI). When I exited and started slowing, the
> > noise started to decrease. When I got down to about 30 or 40 mph it was
> > gone. I shifted to neutral and rev'd the engine, but no noise (other than
> > normal) so I figure it was the tires. The ham I was talking to said to
> put

> > some graphite powder on the sidewalls. I never heard of this.
> >
> > Do tires, steel belted radials in particular, create interference?
> >
> > Is there any truth to the graphite idea?
> >
> > Can tire static if that is what it is be effectively eliminated?
> >
> >

--
****
* Murray Kelly vk4aok mailto://mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

5874. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 01:34:49 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3ABE9CB9.5ECE1A85@bloomer.net>
Source record: 167545

Not familiar with hamsticks, but are they single band? If so, $20 X 10
bands (my Outbacker covers 10 bands) is $200, so I wouldn't consider the
Outbacker too expensive at $289. I challenge you to break an
Outbacker...fiberglas rod covered with (I believe) and Epoxy paint.
Mine will rip the spring right out of the roof before it will break the
antenna.

Scott N0EDV

"Rob St.Denis" wrote:
>
> Bingo ... thats why i use the ham sticks ... tune em in the phone portion of
> the band and there ya go ...
>
> The outbacker is far too flimsy and expensive for my blood ... That and
> having taps is a bad idea ... all ya need to do is get them gunked up with
> road salt to make them useless
>
> hamsticks are cheap and they work ... ya break it hitting a low branch or
> because of ice build up you are out 20$ not 200$
>
> --
> Rob St.Denis
>
> Telecommunications Technician
> /---\
> | Cell Phone (613)296-0094 |
> | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> | Home Page http://robstdenis.home.dhs.org |
> \---/
> "Scott" <acepilot@bloomer.net> wrote in message
> news:3ABDF3C0.95F715ED@bloomer.net...
> > I'm using an Outbacker and it works Great! The CB whip might work OK on
> > 20M and up, but will be lacking on 160M-40M...It's always best to have a
> > resonant antenna, that way more signal is radiated. Using tuners makes
> > the transmitter happy, but doesn't change the antenna's radiation...The
> > transmitter may be putting out 100 Watts, but if 95 Watts are being
> > reflected back into the tuner, the other 5 are going out over the air.
> >
> > Scott N0EDV
> > Telecommunications Tech II
> >
> >
> > "Rob St.Denis" wrote:
> > >

> > > I'm using ham sticks ... (base loaded antennas) and they work rather
> nice
> > > ...
> > >
> > > --
> > > Rob St.Denis
> > >
> > > Telecommunications Technician
> > > /---\
> > > | Cell Phone (613)296-0094 |
> > > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > > | Home Page http://robstdenis.home.dhs.org |
> > > \---/
> > > "Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
> > > news:99guqf$2p2$1@slb7.atl.mindspring.net...
> > > > You will have better results if the automatic
> > > > tuner is connected to a center-loaded whip antenna
> > > > that is tuned reasonably close to the band you want
> > > > to operate.. the tuner will then re-resonate the antenna
> > > > system as you tune from one segment of an amateur
> > > > band to another .. this would be especially effective
> > > > on the lover freqs such as 75 and 40 meters..
> > > >
> > > > An 8 or 9-foot whip, with no external loading coils,
> > > > will be very inefficient on these lower frequencies when
> > > > the automatic tuner is trying to re-tune a short whip.
> > > >
> > > > Moving most of the loading to the center of the whip allows
> > > > better radiation efficiency from the lower 1/3 of the antenna's
> > > > length which is where most of the real radiating is being
> accomplished..
> > > >
> > > >
> > > > Trish
> > > > --
> > > > Patricia E. Gibbons & Carla Satra
> > > > Tactical Link Systems
> > > > <ICQ#: 72818195>
> > > > <http://www.tactical-link.com>
> > > > see my comvan at:
> > > > <http://www.qrz.com/callsign.html?callsign=wa6ube>
> > > > ....
> > > > My Public Key is available at:
> > > > <http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> > > > Key ID: 0xEDECB44F
> > > > This key is RSA, NOT Diffie-Hellman !!
> > > >
> > > > jhilins <jhilins@bellsouth.net> wrote in message
> > > > news:3ABBF06B.F43A8A76@bellsouth.net...
> > > > > Planning on installing HF in the car.

> > > > >
> > > > > I am planning on using a IC-706 feeding a 108" CB whip VIA a
> automatic
> > > > > antenna tuner. I have a friend out there using this configuration,
> He
> > > > > has instant access to 80M-6M via the tuner.
> > > > >
> > > > > My question is... Is there anyone else out there using this? How
> does it
> > > > > compare to other antennas...
> > > > >
> > > > > I'm interested in any side by side results anyone may have..
> > > > >
> > > > > Thanks
> > > > > James Hilins
> > > > >
> > > >
> > > >
> > >
> > --
> > --Scott--
> > 1986 Corben Junior Ace N3642
> > http://corbenflyer.tripod.com/
> > RV-4 under construction (tail feathers)
> >
> > Gotta Fly or Gonna Die!

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

5875. Re: Tire static?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 01:45:14 UTC
From: Benjamin Blavat <bblavat@bellsouth.net>
Message-ID: <Maxv6.315$tG3.23372@news1.atl>
Source record: 167546

An old-timer told me how they used to get rid of tire noise. He said they introduced powdered graphite into the tires and re-inflated them seems the graphite coated the insides and create enough capacitance to dissipate the noise.
--
73's from W4BEN,
Benjamin Blavat

<mkelly@powerup.com.au> wrote in message news:3ABE9435.88777631@powerup.com.au...
> I recall an OT telling me the very expensive cars in the 30's
> had suppression of some sort possibly just a strap. on the brake
> drums to improve radio reception. Conceivably disks could do the
> same thing as they spin around as usually they 'just' touch
> the pads and it might generate a staic charge.
>
> Just a thought
>
> Cheers
>
> jim reed wrote:
> >
> > Yes, steel belted radial tires can create static electricty to the extent of
> > causing some radio interference. If this is what's causing the inteference
> > you should not have any problem in the rain, the water will dissapate the
> > charge. First make sure the radio chassis is grounded to a good ground (no
> > paint) with the shortest piece of wire possible.
> > Here is my theory of what happens.....A magnetic field can be generated
> > around the tires from the friction of the tires and the road not to mention
> > the spinning "coils" of wire in the steel belted radials that may help
> > increase the strength of this field. This field of electromagnetic induction
> > intermittently jumps to the metal frame of the vehicle and somewhat
> > dissapates. During this time static currents are flowing through the ground
> > system of the car causing electrical interference to radios that require
> > grounding. I may be way off on how or why this happens, but he is how to fix
> > it.

> > Go to a truck stop or auto parts store and buy a grounding strap.
It
> > is a rubber strip with impregnated metal that will bolt to the frame and
> > drag on the ground. It will dissapate any charge from the frame of your
> > vehicle.You have seen these on semi trucks and vehicles of certain
racial
> > groups. You could use a small piece of metal chain, but aside from the
> > constant clinking noise it could be a fire hazard from the sparks of the
> > metal being rubbed away. This also may cure a "Shocker", you know, one
of
> > them vehicles that you are afraid to close the door on every time you
get
> > out because it might shock you. Good Luck, 73's
> >
> > "Rudy Marcelletti" <rudym@net-link.net> wrote in message
> > news:3abb6a2d$0$88186$bbae4d71@news.net-link.net...
> > > Yesterday I noticed some increased noise on receive while cruising
70mph
> > on
> > > the freeway (no toll roads in MI). When I exited and started slowing,
the
> > > noise started to decrease. When I got down to about 30 or 40 mph it
was
> > > gone. I shifted to neutral and rev'd the engine, but no noise (other
than
> > > normal) so I figure it was the tires. The ham I was talking to said
to
> > put
> > > some graphite powder on the sidewalls. I never heard of this.
> > >
> > > Do tires, steel belted radials in particular, create interference?
> > >
> > > Is there any truth to the graphite idea?
> > >
> > > Can tire static if that is what it is be effectively eliminated?
> > >
> > >
>
> --
> **
> * Murray Kelly vk4aok mailto://mkelly@powerup.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 *
> **

5876. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 01:59:30 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <6oxv6.134578$p66.37803504@news3.rdc1.on.home.com>
Source record: 167547

they are 20 cdn a peiece ... what i was saying is the initial investment is the same ... but replacement cost is far cheaper. Try having a coat of 1/2" solid ice on one and smack it into a tree down a road at 80km ... itll snap like a twig. Up here ice builds up on em real well and thats a big consideration.

If i bust one i pay my 20 and get a new one ... not 290usd!

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"Scott" <acepilot@bloomer.net> wrote in message
news:3ABE9CB9.5ECE1A85@bloomer.net...
> Not familiar with hamsticks, but are they single band? If so, $20 X 10
> bands (my Outbacker covers 10 bands) is $200, so I wouldn't consider the
> Outbacker too expensive at $289. I challenge you to break an
> Outbacker...fiberglas rod covered with (I believe) and Epoxy paint.
> Mine will rip the spring right out of the roof before it will break the
> antenna.
>
> Scott N0EDV
>
>
> "Rob St.Denis" wrote:
> >
> > Bingo ... thats why i use the ham sticks ... tune em in the phone
portion of
> > the band and there ya go ...
> >
> > The outbacker is far too flimsy and expensive for my blood ... That and
> > having taps is a bad idea ... all ya need to do is get them gunked up
with
> > road salt to make them useless
> >
> > hamsticks are cheap and they work ... ya break it hitting a low branch
or
> > because of ice build up you are out 20$ not 200$
> >
> > --

> > Rob St.Denis
> >
> > Telecommunications Technician
> > /---\
> > | Cell Phone (613)296-0094 |
> > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > | Home Page http://robstdenis.home.dhs.org |
> > \---/
> > "Scott" <acepilot@bloomer.net> wrote in message
> > news:3ABDF3C0.95F715ED@bloomer.net...
> > > I'm using an Outbacker and it works Great! The CB whip might work OK
on
> > > 20M and up, but will be lacking on 160M-40M...It's always best to have
a
> > > resonant antenna, that way more signal is radiated. Using tuners
makes
> > > the transmitter happy, but doesn't change the antenna's
radiation...The
> > > transmitter may be putting out 100 Watts, but if 95 Watts are being
> > > reflected back into the tuner, the other 5 are going out over the air.
> > >
> > > Scott N0EDV
> > > Telecommunications Tech II
> > >
> > >
> > > "Rob St.Denis" wrote:
> > > >
> > > > I'm using ham sticks ... (base loaded antennas) and they work rather
> > nice
> > > > > ...
> > > > >
> > > > > --
> > > > > Rob St.Denis
> > > > >
> > > > > Telecommunications Technician
> > > > > /---\
> > > > > | Cell Phone (613)296-0094 |
> > > > > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > > > > | Home Page http://robstdenis.home.dhs.org |
> > > > > \---/
> > > > > "Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
> > > > > news:99guqf$2p2$1@slb7.atl.mindspring.net...
> > > > > > You will have better results if the automatic
> > > > > > tuner is connected to a center-loaded whip antenna
> > > > > > that is tuned reasonably close to the band you want
> > > > > > to operate.. the tuner will then re-resonate the antenna
> > > > > > system as you tune from one segment of an amateur
> > > > > > band to another .. this would be especially effective
> > > > > > on the lover freqs such as 75 and 40 meters..
> > > > > >

> > > > > An 8 or 9-foot whip, with no external loading coils,
> > > > > will be very inefficient on these lower frequencies when
> > > > > the automatic tuner is trying to re-tune a short whip.
> > > > >
> > > > > Moving most of the loading to the center of the whip allows
> > > > > better radiation efficiency from the lower 1/3 of the antenna's
> > > > > length which is where most of the real radiating is being
> > accomplished..
> > > > >
> > > > >
> > > > > Trish
> > > > > --
> > > > > Patricia E. Gibbons & Carla Satra
> > > > > Tactical Link Systems
> > > > > <ICQ#: 72818195>
> > > > > <http://www.tactical-link.com>
> > > > > see my comvan at:
> > > > > <http://www.qrz.com/callsign.html?callsign=wa6ube>
> > > > > .....
> > > > > My Public Key is available at:
> > > > >
<http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> > > > > Key ID: 0xEDECB44F
> > > > > This key is RSA, NOT Diffie-Hellman !!
> > > > >
> > > > > jhilins <jhilins@bellsouth.net> wrote in message
> > > > > news:3ABBF06B.F43A8A76@bellsouth.net...
> > > > > > Planning on installing HF in the car.
> > > > > >
> > > > > > I am planning on using a IC-706 feeding a 108" CB whip VIA a
> > automatic
> > > > > > antenna tuner. I have a friend out there using this
configuration,
> > He
> > > > > > has instant access to 80M-6M via the tuner.
> > > > > >
> > > > > > My question is... Is there anyone else out there using this? How
> > does it
> > > > > > compare to other antennas...
> > > > > >
> > > > > > I'm interested in any side by side results anyone may have..
> > > > > >
> > > > > > Thanks
> > > > > > James Hilins
> > > > > >
> > > > > >
> > > > > >
> > > >
> > > > --
> > > > --Scott--

> > > 1986 Corben Junior Ace N3642
> > > http://corbenflyer.tripod.com/
> > > RV-4 under construction (tail feathers)
> > >
> > > Gotta Fly or Gonna Die!
>
> --
> --Scott--
> 1986 Corben Junior Ace N3642
> http://corbenflyer.tripod.com/
> RV-4 under construction (tail feathers)
>
> Gotta Fly or Gonna Die!

5877. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 02:34:13 UTC
From: Larry Klose <lklose@net-link.net>
Message-ID: <3abeaabc$0$62145$bbae4d71@news.net-link.net>
Source record: 167548
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6DKN" <w6dkn@qsl.net> wrote in message news:yivv6.3230

> Sure it is. The outcome of the argument is not the issue. The issue is that you have a group of people with absolutely no expertise on the subject forming an opinion based on personal feelings and self interest, that they are trying to convince others is correct.

The people who oppose the Morse code exam statute 47 CFR 97.503(a) are not required by law to be proficient in manual Morse code reception in order to petition their government to delete the rule. The Amateur Radio community have ignore the facts and laws for too long. Your delusion that only Morse code experts can decide this matter is pure non-sense.

In its 1999 License Restructuring Decision , the FCC acknowledge the effect technological changes on the need for Morse code proficiency:
"the design of modern communications systems, including personal communication services, satellite, fiber optic, and high definition television systems, are based on digital communication technologies. We also note that no communication system has been designed in many years that depends on hand-keyed telegraphy or the ability to receive messages in Morse code by ear. In contrast, modern communication systems are designed to be automated systems."

In a October 27, 1997 briefing paper prepared for digital television broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on regulation: "The Supreme Court has observed in CBS v. DNC that the FCC must "walk a 'tightrope' to preserve the First Amendment values written into the Radio Act and its successor, the Communications Act." After referring to its Red Lion decision, the Court noted that "[t]he problems of regulation are rendered more difficult because the broadcast industry is dynamic in terms of technological change; solutions adequate a decade ago are not necessarily so now, and those acceptable today may well be outmoded 10 years hence." Columbia Broadcasting Systems, Inc. v. Democratic National Committee, 412 U.S. 94, 117 (1973)."

Because of technological and operational changes, the manual Morse code exam is unnecessary. Its use as a licensure examination element to authorize frequency bands and emission types, other than manual Morse code operation, is arbitrary and capricious. The exam is even arbitrary to authorization Morse code operation, since such operations can be conducted by computer control.

The ITU rule S25.5 forces the FCC to impose a requirement upon its citizens that is unlawful. 5 U.S.C. 706, "Scope of review" provides:

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall - (1) compel agency action unlawfully withheld or unreasonably delayed; and (2) hold unlawful and set aside agency action, findings, and conclusions found to be - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (B) contrary to constitutional right, power, privilege, or immunity; (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
(D) without observance of procedure required by law; (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court. In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

The FCC has dealt with the Morse exam matter more directly. The telegraphic examination was removed as a requirement to qualify for Technician Class operator license in 1990. In its Report and Order (FCC Record 7631), the FCC stated:

(a) "For the amateur service to achieve its purpose it must have the participation of as many qualified persons as possible who desire to pursue that purpose. Modern commercial and military electronic systems require engineers to design them, technicians to install and maintain them, and a technologically literate citizenry that can use them. The amateur service should, as it has in the past, attract technically inclined persons, particularly the youth of our country, and encourage them to learn and to prepare themselves where the United States needs expertise. We do not foresee that telegraphers will be in as great demand by future systems as will electronics and communications experts."

(b) "Telegraphy skill has been required for each person who has ever been issued an amateur operator license in the United States, including the current 493,000 licensees. Mastering the Morse Code was an arduous task for many of these licensees, and by developing their telegraphy skills they expressed their intense desire to become amateur operators. It is understandable, therefore, that there are licensees who are reluctant to share the amateur service frequencies with new licensees who have not made a similar effort to master the Morse code. We conclude, however, that telegraphy skill is not so essential to proper operation of a station that transmits exclusively above 30 MHz such as to justify turning away otherwise qualified persons who do not possess the skill. The Notice, furthermore, did not propose to delete the telegraphy skill requirement for a licensee to be the control operator of a station transmitting below 30 MHz where telegraphy communications take place extensively and worldwide communications are possible. The sharing of frequencies between codeless class licensees and other licensees can take place on frequency bands above 30 MHz where telegraphy operation is minimal and where the transmission of

the more modern emission types such as data, image, phone, pulse, RTTY, and spread spectrum, predominate."

(c) "We do not concur with the comments alleging that the passing of a telegraphy examination is an indication of the examinee's good character, high intelligence, cooperative demeanor, or willingness to comply with our rules. These traits are also found in individuals who have not passed a telegraphy examination rather than being exclusive to those who have passed such a test. For regulatory purposes, passing a telegraphy examination is no more and no less than proof of the examinee's ability to send and receive texts in Morse code at some specified rate. With respect to comments that make claims for the superiority of telegraphy over other types of communications, we do not consider these arguments as germane to this proceeding. The Notice did not propose to discontinue the authorization of telegraphy CW emission types on any amateur service frequency. The amateur service in the future, as it has in the past, can provide to those who personally desire to do so the opportunity to communicate by telegraphy."

The 13 and 20 word per minute telegraphy examination was removed as a requirement in 1999. The FCC stated in its Report and Order (FCC 99-142) for WT Docket #98-143 that:

(a) "the public interest will best be served by reducing the telegraphy examination requirement to the minimum requirement that we have found that meets the Radio Regulations" ;

(b) "an individual's ability to demonstrate increased Morse code proficiency is not necessarily indicative of that individual's ability to contribute to the advancement of the radio art" ;

(c) "such a license qualification rule [Morse code exam] is not in furtherance of the purpose of the amateur service and we do not believe that it continues to serve a regulatory purpose" ;

(d) "the amateur service is fundamentally a technical service, the emphasis on Morse code proficiency as a licensing requirement does not comport with the basis and purpose of the service" ;

(e) "reducing the emphasis on telegraphy proficiency as a licensing requirement will allow the amateur service to, as it has in the past, attract technically inclined persons, particularly the youth of our country, and encourage them to learn and to prepare themselves in the areas where the United States needs expertise" ; and

(f) "telegraphy proficiency is not a significant factor in determining an individual's ability to provide or be prepared to provide emergency communications" .

The Morse code requirement is finished. Give it up before you destroy the entire Amateur Radio Service.

Larry, KC8EPO

5878. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 03:45:54 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99me1ihrv0@208.206.142.84>
Source record: 167549
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dwight Stewart wrote:
>
> Richard McCollum wrote:
> >
> > The context here is a lot of breast
> > beating self-justification for not
> > taking the code test. We can talk
> > coulda, shoulda, hafta from now til
> > Independence Day but the cosmic
> > interplay of choice and chance has
> > made it a requirement to do 5wpm in
> > the easiest manner possible for at
> > least the next five years.
>
> Okay, using your own words, why are we treated to this self-serving
> observations on the obvious? I'm fairly certain all of us know the current
> state of affairs when it comes to the code test, so all that "coulda,
> shoulda, hafta," nonsense is just that.
>
> > What you choose to do about it if
> > anything is purely up to you. You don't
> > have to justify it to me or anyone else.
> > If it is a self-worth issue, it is YOUR
> > self-worth issue. So stop with the
> > justifications already. It is not about
> > the mode, it is not about VHF-UHF vs HF,
> > it is about a code test that is more of
> > an inconvenience than a hurdle for most
> > people. Obfuscation merely irritates.
>
> Again, and again using your own words, why are we treated to this
> self-serving observations on the obvious? Of course what I choose to do
> about it is up to me, and of course I don't have to justify it to you. Why
> state the obvious?
>
> > It is particularly irritating when the
> > audience is composed of people who, for
> > whatever reason and by whatever method,
> > passed a code test. There is a time and
> > place to call golf a stupid game --
> > the gallery at the Masters is more than
> > likely not that time or place. Preaching
> > the Gospel on the road between Mecca and

> > Medina is not the best context either. So
> > why in hell are you doing it?
>
> For the exact same reason that the person who passed the code test made
> the statements he did. And for the same reasons you made the statements you
> did. And both of those collection of statements were just as irritating
> when the audience is composed of people who, for whatever reason, have
> decided against the code test.

In other words, he's full of crap and he knows it. And is PROUD.

5879. Carolina Windom?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 04:04:57 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3abebf96_2@news.iglou.com>
Source record: 167550

What is the "special matching transformer" at the feedpoint of a Carolina Windom? I assume it's a balun but what ratio?

5880. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 04:21:55 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABEC3E3.650F97F1@IEEE.org>
Source record: 167552

"Rob St.Denis" wrote:
> Matching of a unbalanced antenna does most certainly change the toa ...

Matching, or lack thereof, will change the magnitude of the radiated
RF but it will not change the radiation pattern or take-off-angle.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5881. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 04:27:51 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99mgg7oaa0@208.206.142.84>
Source record: 167551
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:
>
> W6DKN wrote:
> > The issue is that
> > you have a group of people with absolutely no expertise on the subject
> > forming an opinion based on personal feelings and self interest, that they
> > are trying to convince others is correct.
>
> How do you explain the host of people with expertise on the
> subject who possess those same opinions?

All dozen of them?

5882. Re: Carolina Windom?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 04:28:46 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABEC57E.BC81098B@IEEE.org>
Source record: 167553

N4LQ wrote:
> What is the "special matching transformer" at the feedpoint of a Carolina
> Windom? I assume it's a balun but what ratio?

Windoms are supposed to have a feedpoint impedance close to 300 ohms
so it's probably a 6:1 or 4:1.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5883. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 04:30:54 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABEC5FE.149E1839@IEEE.org>
Source record: 167554
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Dick Carroll wrote:
>
> W6RCecilA wrote:
> >
> > W6DKN wrote:
> > > The issue is that
> > > you have a group of people with absolutely no expertise on the subject
> > > forming an opinion based on personal feelings and self interest, that they
> > > are trying to convince others is correct.
> >
> > How do you explain the host of people with expertise on the
> > subject who possess those same opinions?
>
> All dozen of them?

Project the dozen who post here into the general ham population and
you get tens of thousands.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----
```

5884. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 04:54:44 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <pnitbt0cenp9f3b9tn6bgu6ucr2qb23hh9@4ax.com>
Source record: 167557

On Sun, 25 Mar 2001 23:16:00 -0500, Jason Hsu <jhsu-no-spam@cotse.com>
wrote:

>Go to page 5 (second full paragraph) in the article "Why Radials?" at
>http://www.bencher.com/pdf_download.html
>
>It states that ground loss resistance would be no higher on 75/80m than it was
>at 40m because ground losses tend to increase with frequency.
>
>Can anyone shed some light on this? Doesn't this fly in the face of the
>conventional wisdom that dictates 1/4 wavelength radials?
>
>Are there any equations that calculate ground losses? I am surprised that the
>ARRL antenna book has none.
>
>-
>Jason Hsu, AG4DG
>jason_hsu@@@@planetmail.com
>http://www.bigfoot.com/~jason_hsu/

I suggest you re-check the ARRL antenna book. In 19th edition starting
on page 27-35 you find this discussed.

Danny, K6MHE

5885. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 05:16:50 UTC
From: "Bob M." <no@nospam.com>
Message-ID: <KdAv6.187$ix1.547148@nntp3.onemain.com>
Source record: 167555
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment

See my Icom 706 page: http://www.tibpriors.org/ham/icom.htm

"jhilins" <jhilins@bellsouth.net> wrote in message
news:3ABD4C1F.B069599E@bellsouth.net...
> He Guy's, I'm posting this on in a few different places, not sure where
> the expertise may be.
>
> I'm putting together a HF mobile (706-tuner-whip) going to put it in a
> Jeep Sahara.
>
> DOES ANYONE KNOW IF THESE VEHICLES ARE KNOWN TO HAVE INTERFERENCE
> PROBLEMS, Noisy electrical systems, fuel pumps and the like ?
>
> Jim
>

5886. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 05:41:17 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3ABED6D5.80B18482@earthlink.net>
Source record: 167556
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:

> Common sense and basic survival instinct are completely different than
> trying to impose your personal opinions to the general public on a subject
> in which you have no first hand knowledge or experience.
>
> A perfect example of this is the anti-gun crowd - the vast majority of them
> have never even fired a gun, and yet they would have you believe that based
> on their feelings and opinions, you should have to give up your guns.

Kind of a silly example, wouldn't you say? A vast majority has never fired a thermonuclear device either, and yet they would have you believe that based on their feelings and opinions, you should have to give up your personal thermonuclear device, if you had one.

Or taken even further, take the anti-drug crowd - the vast majority of them have never even shot heroin, and yet they would have you believe that based on their feelings and opinions, you should have to give up your needle.

73 .... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

5887. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 05:56:20 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3ABEDA5D.DAE623B5@earthlink.net>
Source record: 167558
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

DumbassWoger wrote:

> Just why the heck would anybody in his/her right mind pay the ARRL to be a
> member? For what?

Because it is the only national ham radio association in the US, and as such is the sole protector of every US ham's interests, rights and privileges. Because without it, ham radio would cease to exist after losing every Hz of spectrum to special interest groups who, unlike you and your CB buddy, are well organized and represented.

> Who cares?

Whoever cares about the future of ham radio, not only in the US, but in the entire world.

> The ARRL is losing members day in and day out. They have to ask themselves,
> "Why?"

Provide data to support this claim, please.

> The real reason for this loss of members is simple.
> 1. It costs too much and you get nothing back.

Bullshit. See above. What's the cost nowadays, $34? You mean to tell me that you "can't afford" lousy $34 to be a part of the organization that protects *your* interests? You probably blow more than that daily on beer.

> 2. The magazine is too full of voting and political agendas.

Bullshit. Nobody forces you to read those pages, nor the rest of the magazine for that matter.

> 3. Nobody really cares about the ARRL.

Bullshit. Nobody meaning you.

> 4. The ARRL really doesn't care about you.

What do you want? Flowers for Valentine's? Chocolate on your pillow?

> 5. The ARRL has an agenda that does not help Hams.

Ah, yes. Now we're talking... They shot Kennedy, too, didn't they? And they covered up the Roswell conspiracy.

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

5888. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 06:39:57 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <99mo2begm1@slb7.atl.mindspring.net>
Source record: 167559
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

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--

"W6DKN" <w6dkn@qsl.net> wrote in message
news:yivv6.3230$MT2.959890@dfiatx1-snr1.gtei.net...
> "KB9WFK" <KB9WFK@mindspring.com> wrote in message
> news:99ls17$stb$1@slb4.atl.mindspring.net...
> >
> > SNIP
> > > Common sense and basic survival instinct are completely different than
> > > trying to impose your personal opinions to the general public on a
> subject
> > > in which you have no first hand knowledge or experience.
> > >
> > > A perfect example of this is the anti-gun crowd - the vast majority of
> > > them have never even fired a gun, and yet they would have you believe
> that
> > > based on their feelings and opinions, you should have to give up your
> guns.
> > >
> >
> > That is not a "perfect example" unless the end result of removing the
> code
> > requirement is that you can no longer use CW. If, after removal of the
> code
> > requirement, you or anyone else that wishes to learn and use CW is free
> to
> > do so there is NO parallel.
> >
>
> Sure it is. The outcome of the argument is not the issue. The issue is
that
> you have a group of people with absolutely no expertise on the subject
> forming an opinion based on personal feelings and self interest, that they
> are trying to convince others is correct.
>
> 73 de W6DKN
>
Of course the outcome is the issue. If it weren't then there would be no
debate either way. Besides, what "expertise" is needed to see that
mandatory testing for only one mode out of dozens is wrong? Those that have
"expertise" on the subject are also basing their opinions on personal
feelings and self interests and trying to convince others they are correct.
And it isn't only those that have yet to pass the code requirement that are
```

against it. If it was about to be made a criminal offense to learn or use the mode you would have an argument. As it stands, I can only see the code test being valid if EVERY mode that might possibly be used is tested for proficiency. Then and only then would the code test have a valid leg to stand on.

5889. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 06:49:00 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <olntbtsjadqfoucmv2dt1pqto4fc77iuou@4ax.com>
Source record: 167560

On Sun, 25 Mar 2001 23:16:00 -0500, Jason Hsu <jhsu-no-spam@cotse.com>
wrote:

>Go to page 5 (second full paragraph) in the article "Why Radials?" at
>http://www.bencher.com/pdf_download.html
>
>It states that ground loss resistance would be no higher on 75/80m than it was
>at 40m because ground losses tend to increase with frequency.
>
>Can anyone shed some light on this? Doesn't this fly in the face of the
>conventional wisdom that dictates 1/4 wavelength radials?
>
>Are there any equations that calculate ground losses? I am surprised that the
>ARRL antenna book has none.
>
>-
>Jason Hsu, AG4DG

Hi Jason,

Ground loss is an empiric science. Theory cannot accommodate the vast
number of variables and the local geology is rarely known to the
degree required to reduce this to a formula. There are survey maps
that reveal these issues, but often they are restricted to commercial
frequencies and rarely outside of the AM band. However, they are
useful as indicators of soil conductivity and this information is
generally extrapolateable or useful as a basis of comparison.

As for conventional wisdom....
Your link seemed to have its share. The coverage was even handed and
mindful of the realities.

73's
Richard Clark, KB7QHC

5890. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 07:01:35 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3ABEE85F.85A65520@earthlink.net>
Source record: 167561

I did the experiment. I am now listening to a local AM radio station on a loopstick-equipped radio
inside an aluminum cylinder about 7 inches in diameter and 30 inches long.

A radio using a short whip, placed in the same tube, is unable to receive the same station, even
though reception is more than adequate when it is outside the cylinder.

This is not really analogous to the situation we've been discussing, of course, since the loop
structure is in this case differently oriented with respect to the shield. Coming as close as
possible, by orienting the loopstick so the turns, not the core, are aligned with the long axis of
the tube, signals are received.

There is no reception when the core is oriented with the long axis of the aluminum cylinder, as the
tube is then an efficient short circuit of the magnetic field. However, that configuration is not
used in the normal shielded loop, since the loop turns would have to be wound concentric with the
shield's minor circumference to duplicate it.

This experiment does demonstrate that the magnetic field component of an electromagnetic wave can
pass when a receiving loop antenna is enclosed completely inside a conducting cylinder, and strongly
suggests that the electric field cannot.

If you should wish to try it yourself, the shield I am using is a Home Depot extendible aluminum
duct, "deflecto" model A078-5. I used an AOR AR8000 with the whip removed. THis radio has a loopstick
for AMBC reception. The radio used with an electric-field probe antenna was an Alinco DJ-X10, which
has no loopstick. This is not small enough to stand up when the tube is horizontal, but I used an
antenna that could be bent 90 degrees.

If you try this, you will see some attenuation due to shorted turn effects, which can be expected
when the loopstick is enclosed in metal at the ends, as this is. However, a shielded loop has a gap
which makes that moot.

Cortland

Tom W8JI wrote:

> Try it.
>
> Try to receive a signal with a ferrite rod antenna inside the tubular
> shield (with no lengthwise slot in the shield). Tell me how well it
> receives.
>
> After all, you are saying the magnetic foeld will pass freely through
> the metal shield.
>
> Take your transitor radio, and place in the middle of a hunk of stove
> pipe a few feet long open on each end.
>
> 73 Tom

5891. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 07:08:05 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3ABEE9E4.2FACF473@earthlink.net>
Source record: 167565

Well, he's right when he says a magnetic loop will receive the same without a shield as with one. If it's well balanced, it won't even need a shield to get good nulls. And THAT has been well discussed here.

FWIW, the ARN-59 ADF (about which HOPE I have forgot most of what I knew) loop was unshielded, wound on a rotating ferrite core, and got good balance anyway.

About the rest, I took Tom up on his suggestion and did the experiment he proposed. I have posted the result here in another message.

Cortland

Richard Harrison wrote:

> Tom, W8JI wrote:
> "After all, you are saying the magnetic field will pass freely through
> the metal shield."
>
> That is what metal Faraday screens do.
>
> Tom`s implication is that the statement in quotation marks is untrue.
> Tom also implies Terman is not to be trusted, that his books had to be
> revised to correct mistakes, thus new editions were required by errata.
> Tom says magnetic and capacitive coupling are "inseparable". So, I
> requote another authority.
>
> B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission
> Fundamentals" wrote:
>
> "The process of radiation is not the only means by which energy can be
> transferred from one circuit to another; if the magnetic lines of force
> which arise from the flow of current in one circuit happen to pass
> around, or link, the conductors of another circuit, then there is a
> mutual inductance between the two circuits. If this mutual inductance is
> of Lm henries, the voltage induced in circuit 2 by the flow of I1 amp in
> circuit 1 will be
>
> E2 = j omega Lm I1 volts
>
> Similarly, if the electric lines of force arising from portions of one
> circuit which are above ground potential terminate upon portions of
> another circuit which are separated from ground by some impedance, the
> resulting capacitive coupling will allow some interchange of energy
> between the two circuits. Both the inductive and capacitive types of
> coupling can be controlled by the proper application of shielding"

>
> Griffith goes on to present a Faraday screen to eliminate capacitive
> coupling. Then, he presents a total shield for EM waves but uses a
> capacitor between two circuits to allow capacitive coupling while
> disallowing magnetic coupling between two circuits.
>
> In other words, inductive and capacitive coupling are SEPARABLE. Tom is
> wrong.
>
> Best regards, Richard Harrison, KB5WZI

5892. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 07:14:31 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3ABEEB66.CF010C0A@earthlink.net>
Source record: 167566

Let's not forget that in the near field the ratio between electric and magnetic components of the field is much different than it is at a distance.

I suspect some of our differences may be accounted for by the presence of near field conditions around a conducting object which intercepts a wave.

Cortland

Bart Rowlett wrote:

> Richard Harrison wrote:
> >
> > OK. Suppose we have a couple of r-f coils sited end to end on the same
> > axis and close enough for cnsiderable mutual inductance (coupling). That
> > is, that current in one coil generates a voltage across the other coil.
> > If we put a metal box around one of the coils and ground it, coupling
> > between the coils is nearly, if not completely, killed. Why?
> >
> [deleted for brevity]
> >
> > Well, the shield ends the capacitive coupling between primary and
> > secondary, but why does the metal shield kill the magnetic coupling
> > between the coils?
> > >
> > The short answer is Lenz`s law. Lenz says that induced current in a
> > circuit must produce a magnetic field which opposes its creator. If the
> > shield is perfectly conducting, the opposing field equals the field
> > which produces it. Aluminum is an imperfect conductor, but it is good
> > enough for most r-f shielding purposes, and it is economical.
> > >
> > So, we see that a solid conducting shield can inhibit both electric and
> > magnetic r-f fields. Such shields are seen almost everywhere. If they
> > didn`t so work, they wouldn`t be so used.
> > >
> > We should all be aware of the Faraday screen (shield) which is designed
> > to thwart Lenz`s law from a macro viewpoint, so that the metallic shield
> > becomes porous for magnetic coupling between the primary and secondary
> > coils in our example.
> > >
> > Bars or wires shorted together on one end and grounded, but insulated
> > from each other at the other end, can sieve out the electric field while
> > allowing the magnetic field to pass right through. Millions of Faraday
> > shields are installed and doing their job.
> >
> [more stuff deleted for brevity]

> >
> > By breaking the circuit in the shield for a circulating current, the
> > shield can`t produce an effective opposing field and the magnetic
> > coupling of primary and secondary is accomplished.
>
> > So, the declaration that separation of the magnetic and capacitive
> > coupling is impossible and that the fields are inseparable is wrong. No
> > matter who says it or how many times.
>
> Notice that the capacitive coupling which has been suppressed by the
> grounded shield was the result of an electric field orientated in a
> direction roughly perpendicular to the shield.
>
> The electric field associated with the time varying magnetic 'coupling'
> field is orientated in a direction which tends to induce circulating
> currents in the surface of the shield. These currents are perpendicular
> to the capacitive 'displacement' currents described earlier. Introducing
> a narrow slit in the shield will interrupt the currents circulating on
> the surface of the shield but can be arranged to have only a negligible
> effect on the shielding effectiveness to the capacitive currents. The
> EMF generated by the time varying magnetic field penetrating the
> conductive shield will establish an electric field across the the slit.
> The geometry of the slit is chosen so that the electric field which
> exists in the vicinity of the slit does not create additional
> undesirable coupling modes.
>
> The Faraday shield was able to suppress coupling from electric fields
> generated by common mode voltages between the primary and secondary
> windings. The Faraday shield did _not_ suppress the circulating
> electric field associated with the time varying magnetic field
> responsible for the mutual inductance between the windings. It was
> possible to suppress coupling due to one electric field component from
> another by exploiting the different orientations of the two components.
>
> > This has nothing to do with propagation of radio waves in a vacuum or
> > even the basics of a loop antenna. It (the Faraday shield) is just a
> > block to the electric field. The propagation of waves in the vacuum does
> > require that each wave be in operation to beget the other half of the
> > energy transport pair. E&H are both essential. But we can kill one and
> > the other regenerates its partner.
>
> No we can't. Maxwell's equations succinctly state that you cannot have
> a time varying electric field without an associated time varying
> magnetic field. T'aint no way.
>
> > We short and open transmission lines,
> > don`t we?
>
> A good thought experiment is to visualize what happens to the electric
> and magnetic fields when a transmission line is opened or shorted. Both

> electric and magnetic fields continue to exist. The arrangement is
> different but they still satisfy Maxwell's equations and the imposed
> constraints (boundary conditions).
>
> > An antenna can be equipped with a Faraday screen to block an electric
> > field while allowing magnetic fierld excitation, just as happens with
> > the Faraday shielded coil.
>
> The Faraday shield suppresses the coupling between the antenna terminals
> and a particular electric field orientation. It does not block all
> electric field orientations, otherwise the antenna would not work.
>
> bart
> wb6hqk

5893. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 07:26:35 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3ABEEE3B.E26BC8C9@earthlink.net>
Source record: 167567

This is where Tom and I disagree; I say there is no "spilling over" inside the shield. I believe I can and have demonstratedthist by failing to detect an electric field inside a tubular shield with a device sensitive to one; he says I have not.

We may confuse ourselves, however, if we say that the electric-field short (my opinion) of a shielded loop is some universal cure for noise. If the antenna is located near a noise source whose near field is predominantly electric, then it can indeed reduce that noise. But by the time you get some distance away from a radiator, the electric and magnetic components of the field have reached a ratio of 377 to 1 for both noise AND desired signals.

Cortland

"Mike P. Storke" wrote:

> ... The theory is sound and has been done for a long, LONG time. People do
> this (without the ferrite) on 160 meters (and sometimes 80 meters) all the
> time!
> This is how it works: you take your short loop antenna (short = far less
> than a wavelength, definitely less than 1/10th) and shield it on all sides
> except one. The gap is needed because if you closed it then the magnetic
> field would be locked out as well by forming a complete faraday cage. But
> by leaving a small part open, you keep the E field out but let the H field
> in.

5894. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 07:34:01 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3ABEEFFA.26839759@earthlink.net>
Source record: 167568

Roy Lewallen wrote:

> Are you saying that very little E field exists inside a coaxial cable?

I realize I did not answer your question. No, that is NOT what I am saying. What I am saying is that the external electric field is not seen inside a shield, because the shield is a sufficiently low impedance that it short circuits the E-field before it can be seen by an inner conductor.

This is the same as saying that the internal E-field of a coax is not seen OUTSIDE a coax because the shield is a good conductor, no?

Cortland

5895. Re: Cushcraft warning

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 07:41:37 UTC
From: iedmaker@aol.com
Message-ID: <20010326024137.25365.00000828@ng-cj1.aol.com>
Source record: 167469

I just purchased a a270-10s 5 element vhf/uhf yagi which had the wrong boom enclosed with it. They said they would ship a new boom out the next day. Very good tech support and waiting for it to arrive. About 5 business days now. Ty KF4DLA

5896. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 09:29:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <tKBRt$Avvwv6EA9W@ifwtech.plus.net>
Source record: 167476

Gary Peach wrote:
>
>"Ian White, G3SEK" wrote ...
>> Gary Peach wrote (in part):
>> >> >but unless the Ham fraternity
>> >> >wish to break away from the accepted standards anything which is
>> >> >discussed here is unlikely to influence
>> >> >the convention.
>> >>
>> >> I don't know where you get the idea that "the ham fraternity wishes to
>> >> break away from accepted standards".
>> >
>> >Please note the qualifying word "UNLESS" it makes all the difference to
>the
>> >meaning of my statement.
>> >
>> But since the condition you stipulate is not true, it makes the rest of
>> the statement inapplicable.
>
>I am pleased that you feel that you can speak for the Ham fraternity, but if
>the rest are as unruley as the lot in this news group I doubt that anyone
>could claim to speak for Hams as a general class. :)
>
>> >>I am in very direct contact with
>> >> that segment of the ham fraternity that needs to think about noise
>> >> temperature: everybody accepts the definition that 290K is a reference
>> >> temperature, unconnected with ambient temperature.
>
I don't speak for them, but the amateurs around the world who are
actively engaged in measuring noise temperature are a close-knit group.
We know who else is involved, we correspond by e-mail and we get
together in person whenever we can. Some of us measure noise figure
professionally while others are pure amateurs, but we all do our utmost
to work to professional standards.

>Understood, but not everybody uses a noise diode or noise tube to calibrate
>their equipement. The price of such commercial instruments precludes their
>use by most Hamns I would think.

There is a lot of published information on the web, in amateur
conference proceedings, in specialist amateur VHF/UHF/microwave
magazines, and even in a book or two, of which you don't seem to be
aware.

The reality is that for a few pounds or dollars, you can make a highly effective noise diode source that will work from HF through to the low microwave bands. And you can have it calibrated against commercial sources at a "Microwave Round Table" Sunday for free.

The only difference between an amateur and a professional diode noise source is likely to be that the professional source has a flatter calibration curve, and goes to higher frequencies.

AFAIK, tube noise sources are obsolete. Their theoretical self-calibrating feature doesn't meet modern requirements for accuracy. Perhaps even more importantly, they don't meet the more recently understood requirement for a minimal impedance change between the ON and OFF states. Solid-state noise sources (even the base-emitter junction of an ordinary RF transistor) generate very high levels of noise, which allows impedance-stabilizing attenuators to be inserted between the diode and the output. Tube-type noise diodes don't generate enough noise to allow this. I threw one away last year because it was of no practical use any more.

>However the construction of Hot and cold
>loads can be a kitchen table exercise which many Hams could adequately
>accomplish.

Not unless your kitchen has hot and cold running liquid nitrogen :) Seriously, it is by no means as easy as you suggest, not if you're going to do a really accurate job. If you choose to use conveniently accessible temperatures, the temperature baseline is short and you run into trouble with making accurate dB measurements. On the other hand, if you do have access to solid CO2 or liquid nitrogen, you run into problems with changing impedance of loads, and corrections for noise contributions from the parts of the system that are not at the same temperature as the reference load. In other words, it is not a simple job in practice.

Your theoretical speculations are accurate as far as they go - but as ever, they don't go far enough to account for the realities that are well known to people who are actively involved.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5897. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 09:48:03 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3ABF1053.7979@wt.net>
Source record: 167479

Doug Hall wrote:

> Note: The readings are likely subject to an error or a dB or two. But
> the data tells a pretty convincing story, and should probably come as
> no surprise. Base loading just can't compete with center loading when
> it comes to efficiency.

The only thing is that autotuner is not really what I'd consider a very good "base" loading coil. I don't really consider that base loading because the coil is not on the radiator itself. "Or don't think it is anyway". I may be wrong there... You can do real well with true base loading , but you need a good ground system under it. The current distribution is better on the center load, but more turns needed, and more coil loss. I think the lower the freq , the more an advantage to a center loading coil. On say ten meters with the antenna right in the middle of the roof on good metal, I don't think you would see much difference between the two. But I'm assuming a good high Q base loading coil, the same as used on the center load. On 80m, you can see quite a difference between the two types usually. MK
--
http://web.wt.net/~nm5k

5898. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:11:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99n80mckq1@uranium.btinternet.com>
Source record: 167470

Dan wrote
> I suggest you re-check the ARRL antenna book. In 19th edition starting
> on page 27-35 you find this discussed.
==========
I have the 18th Edition. On the same pages it says nothing about calculating ground losses at HF. It just describes a simple method of measuring soil conductivity at 60 Hz which is a different thing altogether.

In any case soil permittivity is as important as conductivity at HF.

Reg.

5899. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:13:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99n85s$67v$1@neptunium.btinternet.com>
Source record: 167471

Jason Hsu wrote >
> Can anyone shed some light on this? Doesn't this fly in the face
of the
> conventional wisdom that dictates 1/4 wavelength radials?
==========

What is the conventional wisdom which dictates 1/4 wavelength
radials ?

Reg.

5900. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:16:00 UTC
From: 2w8ji@akorn.net
Message-ID: <3abf2434.478990049@news.accessunited.com>
Source record: 167472

On Mon, 26 Mar 2001 07:26:35 GMT, Cortland Richmond
<ka5s@earthlink.net> wrote:

>This is where Tom and I disagree; I say there is no "spilling over" inside the
>shield. I believe I can and have demonstratedthist by failing to detect an
>electric field inside a tubular shield with a device sensitive to one; he says I
>have not.
>
>We may confuse ourselves, however, if we say that the electric-field short (my
>opinion) of a shielded loop is some universal cure for noise. If the antenna is
>located near a noise source whose near field is predominantly electric, then it
>can indeed reduce that noise. But by the time you get some distance away from a
>radiator, the electric and magnetic components of the field have reached a ratio
>of 377 to 1 for both noise AND desired signals.
>
>Cortland
Hi Courtland,

Read Roy's post about the field ratio.

It will explain a lot of things to you, if you read it carefully.

73 Tom

5901. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:17:29 UTC
From: 2w8ji@akorn.net
Message-ID: <3abf24b0.479113836@news.accessunited.com>
Source record: 167473

On Sun, 25 Mar 2001 23:49:43 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Gary sez -
>> If it is very lossy/ inefficient, I think that it does.
>=======================
>What it does or what it may not do is of no consequence if you only
>think it does.
>
>Come back again when you have made up your mind and are certain
>about it.
>
>Vague wooly waffle gets nobody nowhere.
>----
>Reg.

Especially when it is 300 lines of waffle.

5902. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:22:10 UTC
From: 2w8ji@akorn.net
Message-ID: <3abf255f.479289416@news.accessunited.com>
Source record: 167474

On Sun, 25 Mar 2001 21:46:36 +0100, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Reg Edwards" wrote ...
>> Gary wrote -
>> > but the determining factor for the quality of any antenna is most
>> > surely its efficiency.
>> ====================
>> To which variety of efficiency do you refer ?
>> Please define the parameter(s) involved with the ratio.
>
>Certainly Reg: the ratio (energy out) / (energy in)
>--
>Gary7SLL

All of my antennas and amplifiers are 100% efficient, so are my light
bulbs. What about your's Reg?

The energy out is equal to the energy in.

73 Tom

5903. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:26:25 UTC
From: 2w8ji@akorn.net
Message-ID: <3abf2696.479599916@news.accessunited.com>
Source record: 167475

On Mon, 26 Mar 2001 00:46:40 GMT, "Rob St.Denis"
<tstdenis3160@home.com> wrote:

>Matching of a unbalanced antenna does most certainly change the toa ...
>mount makes a difference as this could affect what metal is under the
>antenna to balance it ...
>
>--
>Rob St.Denis

Nonsense Rob.

It does not change the TOA, it simply changes the enery transfered
into the antenna from the feedline. And not all that much in most
cases.

73 Tom

5904. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:36:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99n9fq$8rp$1@plutonium.btinternet.com>
Source record: 167477

Cec sed -
> Modeling shows that short verticals don't have a high radiation
angle.
=======================
Quite correct Cecil. But modelling is hardly necessary. Common
sense and a little intuition show that the radiation patterns of
all vertical antennas of 3/8-wavelength or shorter are for
practical amateur purposes identical. In the vertical plane
patterns are similar to two touching semicircles.

The theoretical difference in pattern between 3/8 and 1/100
wavelengths is much less than the distortion due to mounting
antennas on different vehicles.

Reg

5905. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 11:54:18 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3ABF2DEA.86757544@bloomer.net>
Source record: 167478

OK, I got you...I wasn't thinking about the antenna whacking a tree at 80kph (50 mph). In the US, road clearances are maintained at about 14 feet unless otherwise marked by signs. I meant that when pulling into a driveway at slower speeds and whacking the antenna, it would suffer no damage. Have you ever seen the Outbacker promotional video? If so, I can't really see how you'd call them flimsy. If you like to see the video, I could send it to you.

Scott
N0EDV

"Rob St.Denis" wrote:
>
> they are 20 cdn a peiece ... what i was saying is the initial investment is
> the same ... but replacement cost is far cheaper. Try having a coat of 1/2"
> solid ice on one and smack it into a tree down a road at 80km ... itll snap
> like a twig. Up here ice builds up on em real well and thats a big
> consideration.
>
> If i bust one i pay my 20 and get a new one ... not 290usd!
>
> --
> Rob St.Denis
>
> Telecommunications Technician
> /---\
> | Cell Phone (613)296-0094 |
> | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> | Home Page http://robstdenis.home.dhs.org |
> \---/
> "Scott" <acepilot@bloomer.net> wrote in message
> news:3ABE9CB9.5ECE1A85@bloomer.net...
> > Not familiar with hamsticks, but are they single band? If so, $20 X 10
> > bands (my Outbacker covers 10 bands) is $200, so I wouldn't consider the
> > Outbacker too expensive at $289. I challenge you to break an
> > Outbacker...fiberglas rod covered with (I believe) and Epoxy paint.
> > Mine will rip the spring right out of the roof before it will break the
> > antenna.
> >
> > Scott N0EDV
> >
> >
> > "Rob St.Denis" wrote:
> > >
> > > Bingo ... thats why i use the ham sticks ... tune em in the phone

> portion of
> > > the band and there ya go ...
> > >
> > > The outbacker is far too flimsy and expensive for my blood ... That and
> > > having taps is a bad idea ... all ya need to do is get them gunked up
> with
> > > road salt to make them useless
> > >
> > > hamsticks are cheap and they work ... ya break it hitting a low branch
> or
> > > because of ice build up you are out 20$ not 200$
> > >
> > > --
> > > Rob St.Denis
> > >
> > > Telecommunications Technician
> > > /---\
> > > | Cell Phone (613)296-0094 |
> > > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > > | Home Page http://robstdenis.home.dhs.org |
> > > \---/
> > > "Scott" <acepilot@bloomer.net> wrote in message
> > > news:3ABDF3C0.95F715ED@bloomer.net...
> > > > I'm using an Outbacker and it works Great! The CB whip might work OK
> on
> > > > 20M and up, but will be lacking on 160M-40M...It's always best to have
> a
> > > > resonant antenna, that way more signal is radiated. Using tuners
> makes
> > > > the transmitter happy, but doesn't change the antenna's
> radiation...The
> > > > transmitter may be putting out 100 Watts, but if 95 Watts are being
> > > > reflected back into the tuner, the other 5 are going out over the air.
> > > >
> > > > Scott N0EDV
> > > > Telecommunications Tech II
> > > >
> > > >
> > > > "Rob St.Denis" wrote:
> > > > >
> > > > > I'm using ham sticks ... (base loaded antennas) and they work rather
> > > nice
> > > > > ...
> > > > >
> > > > > --
> > > > > Rob St.Denis
> > > > >
> > > > > Telecommunications Technician
> > > > > /---\
> > > > > | Cell Phone (613)296-0094 |

> > > > > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > > > > | Home Page http://robstdenis.home.dhs.org |
> > > > > \---/
> > > > > "Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
> > > > > news:99guqf$2p2$1@slb7.atl.mindspring.net...
> > > > > > You will have better results if the automatic
> > > > > > tuner is connected to a center-loaded whip antenna
> > > > > > that is tuned reasonably close to the band you want
> > > > > > to operate.. the tuner will then re-resonate the antenna
> > > > > > system as you tune from one segment of an amateur
> > > > > > band to another .. this would be especially effective
> > > > > > on the lover freqs such as 75 and 40 meters..
> > > > > >
> > > > > > An 8 or 9-foot whip, with no external loading coils,
> > > > > > will be very inefficient on these lower frequencies when
> > > > > > the automatic tuner is trying to re-tune a short whip.
> > > > > >
> > > > > > Moving most of the loading to the center of the whip allows
> > > > > > better radiation efficiency from the lower 1/3 of the antenna's
> > > > > > length which is where most of the real radiating is being
> > > accomplished..
> > > > > >
> > > > > >
> > > > > > Trish
> > > > > > --
> > > > > > Patricia E. Gibbons & Carla Satra
> > > > > > Tactical Link Systems
> > > > > > <ICQ#: 72818195>
> > > > > > <http://www.tactical-link.com>
> > > > > > see my comvan at:
> > > > > > <http://www.qrz.com/callsign.html?callsign=wa6ube>
> > > > > > ....
> > > > > > My Public Key is available at:
> > > > > >
> <http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> > > > > > Key ID: 0xEDECB44F
> > > > > > This key is RSA, NOT Diffie-Hellman !!
> > > > > >
> > > > > > jhilins <jhilins@bellsouth.net> wrote in message
> > > > > > news:3ABBF06B.F43A8A76@bellsouth.net...
> > > > > > > Planning on installing HF in the car.
> > > > > > >
> > > > > > > I am planning on using a IC-706 feeding a 108" CB whip VIA a
> > > automatic
> > > > > > > antenna tuner. I have a friend out there using this
> configuration,
> > > He
> > > > > > > has instant access to 80M-6M via the tuner.
> > > > > > >
> > > > > > > My question is... Is there anyone else out there using this? How

> > > does it
> > > > > > > compare to other antennas...
> > > > > > >
> > > > > > > I'm interested in any side by side results anyone may have..
> > > > > > >
> > > > > > > Thanks
> > > > > > > James Hilins
> > > > > > >
> > > > > >
> > > > > >
> > > > >
> > > > --
> > > > --Scott--
> > > > 1986 Corben Junior Ace N3642
> > > > http://corbenflyer.tripod.com/
> > > > RV-4 under construction (tail feathers)
> > > >
> > > > Gotta Fly or Gonna Die!
> >
> > --
> > --Scott--
> > 1986 Corben Junior Ace N3642
> > http://corbenflyer.tripod.com/
> > RV-4 under construction (tail feathers)
> >
> > Gotta Fly or Gonna Die!

--
--Scott--
1986 Corben Junior Ace N3642
http://corbenflyer.tripod.com/
RV-4 under construction (tail feathers)

Gotta Fly or Gonna Die!

5906. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 12:17:32 UTC
From: Dave Heil <k8mn@ovis.net>
Message-ID: <3ABF254E.4A99693B@ovis.net>
Source record: 167480
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Larry "the homemade lawyer" Klose wrote:

> In a October 27, 1997 briefing paper prepared for digital television
> broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> regulation: "The Supreme Court has observed in CBS v. DNC that the FCC must
> "walk a 'tightrope' to preserve the First Amendment values written into the
> Radio Act and its successor, the Communications Act." After referring to
> its Red Lion decision, the Court noted that "[t]he problems of regulation
> are rendered more difficult because the broadcast industry is dynamic in
> terms of technological change; solutions adequate a decade ago are not
> necessarily so now, and those acceptable today may well be outmoded 10 years
> hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> Committee, 412 U.S. 94, 117 (1973)."

Are you a member of NAAB (National Association of Amateur Broadcasters)?
We aren't a broadcasting service and we aren't commercial, Larry.

> Because of technological and operational changes, the manual Morse code exam
> is unnecessary. Its use as a licensure examination element to authorize
> frequency bands and emission types, other than manual Morse code operation,
> is arbitrary and capricious. The exam is even arbitrary to authorization
> Morse code operation, since such operations can be conducted by computer
> control.

YOU believe them to be arbitrary and capricious, Larry. You also
believe that running a computer controlled morse contact is a snap.
That'd make you one of the folks basing an opinion on something you know
little about. Your posting would indicate that you would try to sway us
toward believing that you are correct yet you've based your views on
your tiny bit of knowledge and your "I don't wanna" feelings about morse
testing.

> The Morse code requirement is finished. Give it up before you destroy > the entire
Amateur Radio Service.

Oh puhleeze, Larry. Cut the melodrama.

Dave K8MN

5907. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 13:10:15 UTC
From: k4ia@aol.com
Message-ID: <20010326081015.02960.00001029@ng-fs1.aol.com>
Source record: 167481

Strongly suggest you look at a ClearSpeech DSP speaker from www.amcominc.com or page 124 of April QST. It will get rid of your noise and all the other noise you encounter running mobile. My car is diesel so I don;t make any noise but everyone else sure does. Add noisy power lines and mobile operation can be a real challenge. The Clearspeech is a "must have" as far as I am concerned.
Radio K4IA
Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP Intrastate, International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

5908. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 13:51:00 UTC
From: Larry Klose <lklose@net-link.net>
Message-ID: <3abf4956$0$88188$bbae4d71@news.net-link.net>
Source record: 167482
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dave Heil" <k8mn@ovis.net> wrote in message
news:3ABF254E.4A99693B@ovis.net...
> Larry "the homemade lawyer" Klose wrote:
>
> > In a October 27, 1997 briefing paper prepared for digital television
> > broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> > regulation: "The Supreme Court has observed in CBS v. DNC that the FCC
must
> > "walk a 'tightrope' to preserve the First Amendment values written into
the
> > Radio Act and its successor, the Communications Act." After referring
to
> > its Red Lion decision, the Court noted that "[t]he problems of
regulation
> > are rendered more difficult because the broadcast industry is dynamic in
> > terms of technological change; solutions adequate a decade ago are not
> > necessarily so now, and those acceptable today may well be outmoded 10
years
> > hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> > Committee, 412 U.S. 94, 117 (1973)."
>
> Are you a member of NAAB (National Association of Amateur Broadcasters)?
> We aren't a broadcasting service and we aren't commercial, Larry.

Dave, what the court was saying is that technological change will change the
validity of FCC rules. The Morse code exam requirement was valid at one
time, but today it is not.

> > Because of technological and operational changes, the manual Morse code
exam
> > is unnecessary. Its use as a licensure examination element to authorize
> > frequency bands and emission types, other than manual Morse code
operation,
> > is arbitrary and capricious. The exam is even arbitrary to
authorization
> > Morse code operation, since such operations can be conducted by computer
> > control.
>
> YOU believe them to be arbitrary and capricious, Larry. You also
> believe that running a computer controlled morse contact is a snap.
> That'd make you one of the folks basing an opinion on something you know
> little about. Your posting would indicate that you would try to sway us
> toward believing that you are correct yet you've based your views on
> your tiny bit of knowledge and your "I don't wanna" feelings about morse

> testing.

PSK 31 seems to work petty good.

> > The Morse code requirement is finished. Give it up before you destroy
> > the entire Amateur Radio Service.
>
> Oh puhleeze, Larry. Cut the melodrama.

You don't think that the Amateur Radio community can not lose frequency
allocations. The FCC must allocate frequency in the public interest.
How is the public interest satisfied by maintaining a non-conforming
requirement?

> Dave K8MN

Larry KC8EPO

5909. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 14:10:24 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <k5Iv6.5399$IA1.456405@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167483

"Fractenna" <fractenna@aol.com> wrote in message
news:20010324194536.14385.00000781@ng-da1.aol.com...
> >You might also want to check out the fractal antenna session on
Wednesday.
> >Just FYI, I am going to present two papers there:
> >
> >1) The Fractal Loop Antenna: A comparison of Fractal and Non-Fractal
> >Geometries
> >
> >2) A Modification of the Small Loop Approximation for Fractal and Bent
Wire
> >Loop Antennas
> >
> >Take care,
> >
> >Steve VE9SRB
> >
>
> Something funny here...
>
> I got on a web engine and found this url
>
> http://www.ewh.ieee.org/soc/aps/2001/advanced/advanced_full.htm
>
> It lists all the papers for the fractal antenna session on Wednesday. You
know,
> the one Stephen best refers to. There are NO TALKS listed by one Stephen
Best.
>
> Again there are NO TALKS listed by one Stephen Best.
>
> Check it out.
>
> Maybe he spoke too soon?? Or....maybe it's not true??
>
> What's even more curious is there IS a talk by Dr. Cohen which sounds like
it's
> on the same subject as the second talk Stephen Best says he's giving.
>
> It's all so surprising!
>
> 73
> Phil
> de N1ZKT

>
>

Is this some kind of sick game?

Here is the listing from session 75 - Fractal Antennas. Check out paper numbers 3 and 4. See you at 8:40!!

Oh, BTW, I don't see Dr. Cohen's paper in the list. It must be in another session. I would be interested in knowing which one as I would not want to miss it.

Steven (not Stephen)

75 Fractal Antennas

1 8:00 AM Modified Sierpinski Gasket
Patch Antenna for Multiband Applications

Raj Mittra
The Pennsylvania State University

Junho Yeo
The Pennsylvania State University

2 8:20 AM Shorted Fractal
Sierpinski Monopole Antenna

P.S. Hall
University of Birmingham

Peter Song
University of Birmingham

3 8:40 AM A Modification of Small Loop
Approximation for Fractal and Bent Wire Loop

Antennas

Steven Best
Cushcraft Corporation

4 9:00 AM The Fractal Loop Antenna: A
Comparison of Fractal and Non-Fractal Geometries

Steven Best
Cushcraft Corporation

5 9:20 AM Scaling Property of the
Koch Fractal Dipole

Philip Tang
National Aeronautics and Space Administration

Parveen Wahid
University of Central Florida

6 9:40 AM A Modified Quasi-Yagi Planar
Antenna with Wideband Characteristics in C-Band

Cheunsoo Ha
Kumoh National University of Technology

Y. Qian
University of California, Los Angeles

T. Itoh
University of California, Los Angeles

7 10:00 AM Analysis of Fractal-Shaped
Antennas Using the Multiperiodic Traveling Wave

Vee Model

Carles Puente
FRACTUS, S.A.

Jordi Soler
FRACTUS, S.A.

8 10:20 AM Bowtie Microstrip Patch
Antenna Based on The Sierpinski Fractal

Carmen Borja
FRACTUS, S.A.

Raquel Montero
FRACTUS, S.A.

Carles Puente
FRACTUS, S.A.

Jaume Anguera
FRACTUS, S.A.

9 10:40 AM A Rectangular Cavity Backed Slot
Antenna with Parasitic Slots

Kazuhiro Hirasawa
University of Tsukuba

Song Shi
University of Tsukuba

Yu Change
Union College

Toshihiro Kotani
University of Tsukuba

5910. Re: cb mobile antenna for 10 meters?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 14:19:30 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3ABF4FF2.41C67EA6@rupert.tds-az.lmco.com>
Source record: 167484

Cm13141 wrote:
>
> Anyone know how well a cheap radio shack cb mobile antenna will work on 10
> meters?I am thinking of using it with my kenwood ts-930s till my Gap multi band
> vertical i orderd gets here.I plan on mounting the CB antenna on a fence post
> in my backyard and feed it with 50' of RG8,I have a tucker t-1000 antenna tuner
> to help tun it and also my rig has a tuner.Anyone have any thoughts on this or
> advice to make this work?I would like to get on the air some while waiting for
> my Gap.
> Thanks,
> James

It has been my experience that most Radio Shack antennas come with
instructions
for adjusting the tuning for 10 Meters. I have a small, 3 foot, mag
mount
for my car and a base station vertical at home. I don't use a tuner for
either one of them. Like most mobile vertical antennas, the mag mount
depends on the car body to act as a ground plane. If you were to use it
some other way than on a car, you would need to provide the ground
plane.
The base station vertical is actually a vertical dipole and doesn't
require a ground plane. It does a fine job at just about any height.
The bandwidth was wide enough to cover the CB frequencies and the
lower 400 to 500 KHz of 10 Meters without any tuner.

But, for about the same price as a cheap mobile whip, you could probably
build a nice simple dipole. I use to have one stretched between two
trees. Just two lengths of wire and some coax. I didn't even bother
with a balun at the feed point and still never need a tuner. 15 to 20
feet of height is about all you need for a good signal..

Martin, K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

5911. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 14:32:11 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <tlkubtghvh6iasi108kaem77ma8sev8bef@4ax.com>
Source record: 167489

They do every now and then make additions to the Antenna Book and that
was added in the 19th edition.

Danny

On Mon, 26 Mar 2001 12:11:02 +0100, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Dan wrote
>> I suggest you re-check the ARRL antenna book. In 19th edition
>starting
>> on page 27-35 you find this discussed.
>========================
>I have the 18th Edition. On the same pages it says nothing about
>calculating ground losses at HF. It just describes a simple method
>of measuring soil conductivity at 60 Hz which is a different thing
>altogether.
>
>In any case soil permittivity is as important as conductivity at
>HF.
>----
>Reg.
>
>

5912. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 14:38:21 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <xvIv6.5437$IA1.459127@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167485

"VE9SRB" <srbest@att.net> wrote in message
news:k5Iv6.5399$IA1.456405@bgtnsc06-news.ops.worldnet.att.net...
>
> Oh, BTW, I don't see Dr. Cohen's paper in the list. It must be in another
> session. I would be interested in knowing which one as I would not want
to
> miss it.
>

Dr. Cohen's paper is in Wednesday afternoon's session. I look forward to
it.

Steve VE9SRB

4 2:00 PM The Electrically Small Limit of Fractal
Element Antennas

Nathan Cohen
Fractal Antenna Systems Inc.

Robert Hohlfeld
Boston University

5913. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 15:04:28 UTC
From: 2w8ji@akorn.net
Message-ID: <3abf596d.492617547@news.accessunited.com>
Source record: 167486

On Mon, 26 Mar 2001 10:29:19 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>Your theoretical speculations are accurate as far as they go - but as
>ever, they don't go far enough to account for the realities that are
>well known to people who are actively involved.
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'

It doesn't hurt to have a good understanding of the how the real world
works.

73 Tom

5914. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 15:11:02 UTC
From: DL7JSK <truckdrivingman@hotmail.com>
Message-ID: <99nm6ofmc01$1@news.t-online.com>
Source record: 167487

"Ralph Mowery" <rmowery@dialpoint.net> schrieb im Newsbeitrag
news:3ABE5E95.6A11B844@dialpoint.net...
> Why go to the trouble of 3 reflectors ? Unless you need some very high
> F/B ratio and I doubt that you will get that with a 5 element beam even
> with the 3 reflectors. They will do nothing for the gain.

Quite simple.I've heard that a multiple reflector compensates the missing of
directors.And since I have not the space for 10 or 15-element antennas,I
thought,this is a good solution

>
>
> DL7JSK wrote:
> >
> > Hi OMs
> > I want to construct a 5-element yagi for 2m with 3 reflectors.I need the
> > vertical spacings of the 3 reflectors.Who can help me ?
> >
> > 73
> > Tom

5915. Re: W9inn dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 15:21:33 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3abf5e7c_2@news.cybertours.com>
Source record: 167488

They have no Website to my knowledge but he advertises in QST evey month.
look for a small ad.
73 dave

"DL" <k4zzr@NONSPAMadelphia.net> wrote in message
news:j9pv6.28350$St6.33934552@news2.news.adelphia.net...
> Where can I find one of these antennas? Do they have a website?
>
> --
> *** Remove NONSPAM from my email address ***
>
> Reply to: k4zzr@adelphia.net
>
>
> "jerry r" <jerryrcremovethis@pobox.com> wrote in message
> news:3ABD6466.E4DF755D@pobox.com...
> > Excellent Antenna, works great on 80 & 40, been up for 5 years
> >
>
>

5916. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 15:40:13 UTC
From: richardharrison@webtv.net
Message-ID: <288-3ABF62DD-119@storefull-112.iap.bryant.webtv.net>
Source record: 167491

Jason Hsu, AG4DG wrote:
"Are there any equations that calculate ground losses?"

The 19th edition of the ARRL Antenna Book does a good job starting on page 27-35 of showing how ground conditions affect surface propagation at frequencies between 2 and 30 MHz.

The question was why do ground losses increase with frequency. There are per cycle losses in nature. We have "skin effect" that increases resistivity as the square root of the frequency. For example, surface resistivity for a conductor is 3.16 x the 1 MHz value at 10 MHz.

The Austin-Cohen formula has been much used to estimte ground wave daylight signal strengths of low frequency radio waves over water since the early days of the 20th century. Austin-Cohen was concoted from experiments. Math was later applied to explain and modify it. The original formula works better than the modifications. It`s been determined that an attenuation factor of the form "-alpha d / lambda to the nth power" has theoretical justification. So, as the wavelength shortens, the signal strength declines because the quotient, which is the attenuation factor, increases. Austin-Cohen has been extrapolated.

If you want in-depth information on propagation of radio waves, Terman knows all and tells all.

Best regards, Richard Harrison, KB5WZI

5917. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 15:42:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99nnuo$si7$1@plutonium.btinternet.com>
Source record: 167490

Gary wrote -
>
> Certainly Reg: the ratio (energy out) / (energy in)
==========
The energy out to where ? Having answered that question, would
you then precisely describe where you would connect your energy
meters to obtain the efficiency of your common or garden inverted-L
wire.

Reg.

5918. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 16:26:21 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <99nquq$68$1@newpoisson.nosc.mil>
Source record: 167494

Buck: you mention that you have a diesel so you "don't make any noise"?
Good for you 'cause you've got a keeper there!

Some earlier posts would lead one to believe that a dictionary's descriptor
of a "noise generator" would include two pictures - a spark gap ionized and
a Ford Diesel truck.

Couldn't resist, Buds. Diesels can be some nosiy puppies. What car/truck
are you talking about, just curiouis. Regards, Jim R.

"K4IA" <k4ia@aol.com> wrote in message
news:20010326081015.02960.00001029@ng-fs1.aol.com...
> Strongly suggest you look at a ClearSpeech DSP speaker from
www.amcominc.com or
> page 124 of April QST. It will get rid of your noise and all the other
noise
> you encounter running mobile. My car is diesel so I don;t make any noise
but
> everyone else sure does. Add noisy power lines and mobile operation can
be a
> real challenge. The Clearspeech is a "must have" as far as I am
concerned.
> Radio K4IA
> Buck
> Fredericksburg, Virginia USA
> ----------------------
> REAL CHEAP Long Distance 4.9 cents/min Interstate and REAL CHEAP
Intrastate,
> International, Toll Free, Callback, Calling Cards, Pagers and more Tune to
> http://www.ld.net/?bucksavers

5919. best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 16:40:50 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abf7132$0$88187$bbae4d71@news.net-link.net>
Source record: 167492

I have seen adds for all band dipole kits fed with ladder line and the lengths all vary! What is the best general length for an "all band" dipole? By all band, I am referring to something that can cover at least 80 to 10 meters with a good tuner, 450 ohm window line, and no loading coils/traps/ resonactors/gizmos, etc. Several antennas are sold as "all band" and are about 100 to 102 feet of wire, 3 insulators and 100 feet of 450 ohm window line. Why this length? Why not the resonant length of the lowest frequency you intend to operate? Would not this work better?

5920. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 16:49:10 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <tbusn5eou1a1d5@corp.supernews.com>
Source record: 167493
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6DKN" <w6dkn@qsl.net> wrote in message
news:GgXu6.5164$KA6.461531@dfiatx1-snr1.gtei.net...
> Agreed, according to your definition of a "Ham". But what about those
> persons who do not possess the skill to operate CW? They do not fit the
> definition of a "Ham" as you use it here... because they cannot operate CW
> if they wanted to because of lack of skills.

And what about those code tested "Hams" who don't have knowledge of the various digital modes, ATV, satellite operation, and the list can go on and on? By your logic those code tested Hams are not "REAL Hams" either. They don't "possess the skill to operate" as you put it. What goes around comes around. If you want to conjure up some logic, like yours above, just be prepared to have it applied universally, then we shall see if the shoe fits or not.

> Which is basically what the whole discussion is about...

Amateur Radio elitism organized along the Code / No Code dividing line. You can dress up the CW elitism up anyway you like, but it's bigotry anyway you look at it.

--
--
73 de,

Leland C. Scott
KC8LDO

ARRL member
NCI member

"You ask what Morse Code is good for? I'll tell you. Morse
Code is used exclusively by Electronics Based life forms to
communicate amongst themselves using advanced Organic
Digital Signal Processors, running state of the art Artificial
Intelligence Software, to perform the highly complex
transmit encryption, receive decryption and error correction
functions."

5921. Re: How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 16:52:34 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abf73f1$0$88187$bbae4d71@news.net-link.net>
Source record: 167495

There are no traps that are "driven" or "reflector" traps on the Cushcraft X7 triband beam--only traps on one director element at end of boom. Would arcing still occur? I don't think we have the little wasps referred to in Michigan. Maybe spiders, but most bugs spiders are after are lower than 100 feet, aren't they? Would a bad match box cause high swr on 20 and 15 but not on 10?

I will try to use a spotting scope to look at the traps. Maybe it is different problem?
Rudy Marcelletti wrote in message
<3abb68f9$0$88180$bbae4d71@news.net-link.net>...
>If a trap, such as the 15 and 20 meter traps on my Cushcraft X7 beam, are
>mechanically sound, and are properly installed, with the drain holes down,
>just how does a trap go bad? Power levels have always been well within
>specs (no more than 600 watts PEP and traps are rated for 2KW). I am
>baffled. There are no moving parts!
>
>

5922. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 17:26:59 UTC
From: richardharrison@webtv.net
Message-ID: <18840-3ABF7BE3-14@storefull-116.iap.bryant.webtv.net>
Source record: 167497

Reg wrote:
"What is the conventional wisdom which dictates 1/4-wavelength radials?"

The same current flows in the surrounding ground as in the antenna. In the ground, the current from near and far converges at the tower. (vertical antenna) Loss due to high current density can be mitigated by making the surface near the tower into highly conductive ground by adding copper radials.

Experiments showed the area within 1/3-wavelength contributed the most ground loss. Being stingy with copper, this was cut to 1/4-wavelength.

A ground system with 1 ohm of loss resistance under a 10-ohm tower is about 90% efficient. That ground resistance would require on the average about 120 radials about 0.3 wavelengths long at 3 MHz.

A ground system with 10 ohms of loss resistance, as might be typical of a ground rod under the same tower, would drop the radiation efficiiency to about 17%.

So, the 1/4-wave radial system is a compromise.

Best regards, Richard Harrison, KB5WZI

5923. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 17:28:46 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3abf7c6c$0$88178$bbae4d71@news.net-link.net>
Source record: 167496

James: You indicated the vehicle is a Jeep and I assume you are likely to go off road. If so, then the stainless whip antenna is your best shot. At present, I am using an Icom IC-706MKII, AH-4 coupler and whip. I have the coupler mounted on a piece of aluminum plate bolted to the luggage rack on a Suburban. There are 2 large ground straps attached to the body. I have a big ground plane with the Suburban body--something you don't have with a Jeep. You will need to tie as much metal together as you can on your vehicle. I have a ball mount on this plate also, with a 6" spring. I have been using a 102" stainless whip, and added another foot to the bottom, for a total of 10 feet, plus what ever length the feed wire is from the coupler output, about 8 inches or so. I was having problems tuning on 6 meters and thought I was having a half wave multiple problem, so added the extra foot. Turns out the antenna and coupler was reacting with a Comet SBB5 and/or Z780 dual band vhf/uhf antennas I had also mounted on the aluminum plate. I put a Comet SB10 cell look-a-like there and it works fine now on 6.

I WHACK A LOT OF TREES, BRIDGES, LIGHTS, AND DRIVE THROUGHS WITH THIS WHIP ANTENNA! It has held up for 6 months very well!

The whip antenna works very good on 20 up to 6. The coupler will "tune" down to 80 meters but the signal is very bad. I use a short Huslter mast and 75 meter resonator on this band. The coupler does not like this set up on higher bands.

40 meters is OK with the whip--but you will not be a big signal with 100 watts on this band anyway, but it will be an acceptable match for local rag chewing in the morning and mid day on this band.

20 to 6 meters are a blast. I really like 17 meters!

Take 30 feet of 18ga wire with a heavy duty alligator clip with you. Clip it to the end of the whip and toss the other end into a tree. Works real good on all bands. Lots better than just the whip! You can trail a 10 foot piece of say 28 gauge wire with you down the road too! Looks hokey though and you can lose it.

You sound like you are looking for durability and will sacrifice performance for it. You will get a bigger signal from a loaded whip (on the band it is designed for) or from a screwdriver or bugcatcher antenna, however, for your Jeep and off-roading I would recommend the whip over anything else. Take 30 feet of wire with you to throw in a tree! It will take a beating--no doubt about it. It will outlast anything else you can put on your vehicle. You can put a flag on it where it is required at dune parks and such. I would mount a ball on the left rear fender and the coupler inside on the left seat area (assuming CJ type Jeep). If you have a fiberglass top, drill a hole for the high voltage wire to go through. If rag top, sew a grommet type

hole. SGC has a drawing of a similar installation in the SGC-230 coupler manaual you can find at www.sgcworld.com

If you want to just play on 80 meters while driving down the freeway, get a big screw driver and put on a big cap hat, or build some thing like Cecil did from his junk box and win a shootout--but don't go off road with it! If you go back in the bush--take the whip and wire. You don't see anything else on a Hummer! If you should happen to do something stupid and somehow break the stainless whip, and if you are still able to, you can still hook up the wire to the ball mount and call for help!

If you want a big signal on 80--put up a full size vertical with 8 elevated radials at home and use an AL-1500 amp!
<3ABBF06B.F43A8A76@bellsouth.net>...
>Planning on installing HF in the car.
>
>I am planning on using a IC-706 feeding a 108" CB whip VIA a automatic
>antenna tuner. I have a friend out there using this configuration, He
>has instant access to 80M-6M via the tuner.
>
>My question is... Is there anyone else out there using this? How does it
>compare to other antennas...
>
>I'm interested in any side by side results anyone may have..
>
>Thanks
>James Hilins
>

5924. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 17:51:37 UTC
From: kb7qhc@home.com
Message-ID: <3abf7fac.2074378979@news.seanet.com>
Source record: 167498

On Sun, 18 Mar 2001 14:43:32 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> C'Mon Cecil,
>> This is the same dictionary that has no definition for heat, isn't it?
>
>It's not a dictionary of the English language, Richard, it is a
>dictionary of technical terms. Presumable, "heat" is not a technical
>enough term to be included in a dictionary published by the Institute
>of Electrical and Electronic Engineers. They don't have a definition
>of "as" either.

Hi Cecil,

"Heat" is not technical enough for the IEEE? I am not surprised they
don't have a definition for "as" either; for that we can all be truly
grateful. (What grand and eloquent purpose could they shove aside to
demean and prostitute yet another word?).

You are quite right that this is NOT a dictionary of the English
language. It is a dictionary of cant and argot cloaked in the august
robes of a real dictionary. ;->

Thanx for yet another grin from the dictionarykraftvolk at the IEEE!

73's
Richard Clark, KB7QHC

5925. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:08:51 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <TALv6.137446$p66.39105903@news3.rdc1.on.home.com>
Source record: 167499

Well any fiberglass antenna with a particularily strong bulk modulus (high rigidity) will dislike being hit by debris and trees ... just one of those things.

Honestly, the ham sticks aren't too good ... but they work well enough ... and are dirt cheap

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"Scott" <acepilot@bloomer.net> wrote in message
news:3ABF2DEA.86757544@bloomer.net...
> OK, I got you...I wasn't thinking about the antenna whacking a tree at
> 80kph (50 mph). In the US, road clearances are maintained at about 14
> feet unless otherwise marked by signs. I meant that when pulling into a
> driveway at slower speeds and whacking the antenna, it would suffer no
> damage. Have you ever seen the Outbacker promotional video? If so, I
> can't really see how you'd call them flimsy. If you like to see the
> video, I could send it to you.
>
> Scott
> N0EDV
>
>
> "Rob St.Denis" wrote:
> >
> > they are 20 cdn a peiece ... what i was saying is the initial investment
is
> > the same ... but replacement cost is far cheaper. Try having a coat of
1/2"
> > solid ice on one and smack it into a tree down a road at 80km ... itll
snap
> > like a twig. Up here ice builds up on em real well and thats a big
> > consideration.
> >
> > If i bust one i pay my 20 and get a new one ... not 290usd!
> >
> > --
> > Rob St.Denis

> >
> > Telecommunications Technician
> > /---\
> > | Cell Phone (613)296-0094 |
> > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > | Home Page http://robstdenis.home.dhs.org |
> > \---/
> > "Scott" <acepilot@bloomer.net> wrote in message
> > news:3ABE9CB9.5ECE1A85@bloomer.net...
> > > Not familiar with hamsticks, but are they single band? If so, $20 X
10
> > > bands (my Outbacker covers 10 bands) is $200, so I wouldn't consider
the
> > > Outbacker too expensive at $289. I challenge you to break an
> > > Outbacker...fiberglas rod covered with (I believe) and Epoxy paint.
> > > Mine will rip the spring right out of the roof before it will break
the
> > > antenna.
> > >
> > > Scott N0EDV
> > >
> > >
> > > "Rob St.Denis" wrote:
> > > >
> > > > Bingo ... thats why i use the ham sticks ... tune em in the phone
> > portion of
> > > > the band and there ya go ...
> > > >
> > > > The outbacker is far too flimsy and expensive for my blood ... That
and
> > > > having taps is a bad idea ... all ya need to do is get them gunked
up
> > with
> > > > road salt to make them useless
> > > >
> > > > hamsticks are cheap and they work ... ya break it hitting a low
branch
> > or
> > > > because of ice build up you are out 20$ not 200$
> > > >
> > > > --
> > > > Rob St.Denis
> > > >
> > > > Telecommunications Technician
> > > > /---\
> > > > | Cell Phone (613)296-0094 |
> > > > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > > > | Home Page http://robstdenis.home.dhs.org |
> > > > \---/
> > > > "Scott" <acepilot@bloomer.net> wrote in message

> > > > news:3ABDF3C0.95F715ED@bloomer.net...
> > > > > I'm using an Outbacker and it works Great! The CB whip might work
OK
> > on
> > > > > 20M and up, but will be lacking on 160M-40M...It's always best to
have
> > a
> > > > > resonant antenna, that way more signal is radiated. Using tuners
> > makes
> > > > > the transmitter happy, but doesn't change the antenna's
> > radiation...The
> > > > > transmitter may be putting out 100 Watts, but if 95 Watts are
being
> > > > > reflected back into the tuner, the other 5 are going out over the
air.
> > > > >
> > > > > Scott N0EDV
> > > > > Telecommunications Tech II
> > > > >
> > > > >
> > > > > "Rob St.Denis" wrote:
> > > > > >
> > > > > > I'm using ham sticks ... (base loaded antennas) and they work
rather
> > > nice
> > > > > > ...
> > > > > >
> > > > > > --
> > > > > > Rob St.Denis
> > > > > >
> > > > > > Telecommunications Technician
> > > > > > /---\
> > > > > > | Cell Phone (613)296-0094
|
> > > > > > | e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
> > > > > > | Home Page http://robstdenis.home.dhs.org |
> > > > > > \---/
> > > > > > "Patricia Gibbons" <wa6ube@tactical-link.com> wrote in message
> > > > > > news:99guqf$2p2$1@slb7.atl.mindspring.net...
> > > > > > > You will have better results if the automatic
> > > > > > > tuner is connected to a center-loaded whip antenna
> > > > > > > that is tuned reasonably close to the band you want
> > > > > > > to operate.. the tuner will then re-resonate the antenna
> > > > > > > system as you tune from one segment of an amateur
> > > > > > > band to another .. this would be especially effective
> > > > > > > on the lover freqs such as 75 and 40 meters..
> > > > > > >
> > > > > > > An 8 or 9-foot whip, with no external loading coils,
> > > > > > > will be very inefficient on these lower frequencies when
> > > > > > > the automatic tuner is trying to re-tune a short whip.

> > > > > > >
> > > > > > > > Moving most of the loading to the center of the whip allows
> > > > > > > > better radiation efficiency from the lower 1/3 of the
antenna's
> > > > > > > > length which is where most of the real radiating is being
> > > > accomplished..
> > > > > > > >
> > > > > > > >
> > > > > > > > Trish
> > > > > > > > --
> > > > > > > > Patricia E. Gibbons & Carla Satra
> > > > > > > > Tactical Link Systems
> > > > > > > > <ICQ#: 72818195>
> > > > > > > > <http://www.tactical-link.com>
> > > > > > > > see my comvan at:
> > > > > > > > <http://www.qrz.com/callsign.html?callsign=wa6ube>
> > > > > > > > .....
> > > > > > > > My Public Key is available at:
> > > > > > > >
> > <http://pgp5.ai.mit.edu:11371/pks/lookup?op=vindex&search=0xEDECB44F>
> > > > > > > > Key ID: 0xEDECB44F
> > > > > > > > This key is RSA, NOT Diffie-Hellman !!
> > > > > > > >
> > > > > > > > jhilins <jhilins@bellsouth.net> wrote in message
> > > > > > > > news:3ABBF06B.F43A8A76@bellsouth.net...
> > > > > > > > > Planning on installing HF in the car.
> > > > > > > > >
> > > > > > > > > I am planning on using a IC-706 feeding a 108" CB whip VIA a
> > > > automatic
> > > > > > > > > antenna tuner. I have a friend out there using this
> > configuration,
> > > > He
> > > > > > > > > has instant access to 80M-6M via the tuner.
> > > > > > > > >
> > > > > > > > > My question is... Is there anyone else out there using this?
How
> > > > does it
> > > > > > > > > compare to other antennas...
> > > > > > > > >
> > > > > > > > > I'm interested in any side by side results anyone may have..
> > > > > > > > >
> > > > > > > > > Thanks
> > > > > > > > > James Hilins
> > > > > > > > >
> > > > > > > > >
> > > > > > > > >
> > > > > > > >
> > > > > > > > --
> > > > > > > > --Scott--
> > > > > > > > 1986 Corben Junior Ace N3642

> > > > > http://corbenflyer.tripod.com/
> > > > > RV-4 under construction (tail feathers)
> > > > >
> > > > > Gotta Fly or Gonna Die!
> > >
> > > --
> > > --Scott--
> > > 1986 Corben Junior Ace N3642
> > > http://corbenflyer.tripod.com/
> > > RV-4 under construction (tail feathers)
> > >
> > > Gotta Fly or Gonna Die!
>
> --
> --Scott--
> 1986 Corben Junior Ace N3642
> http://corbenflyer.tripod.com/
> RV-4 under construction (tail feathers)
>
> Gotta Fly or Gonna Die!

5926. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:18:23 UTC
From: Michael Edelman <mje@spamcop.net>
Message-ID: <3ABF87EF.E7F71785@spamcop.net>
Source record: 167500

> What is the conventional wisdom which dictates 1/4 wavelength
> radials ?

Same reason you have a 1/4 wave vertical element. You're aiming for a 50 ohm feedpoint impedance at resonance.

-- ke8yy

Michael Edelman mje@spamcop.net
http://www.foldingkayaks.org (nomadics)
http://www.findascope.com (choosing a telescope)

5927. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:18:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABF87FF.C94D5D18@IEEE.org>
Source record: 167501

Rudy Marcelletti wrote:
> I have seen adds for all band dipole kits fed with ladder line and the
> lengths all vary! What is the best general length for an "all band" dipole?
> By all band, I am referring to something that can cover at least 80 to 10
> meters with a good tuner, 450 ohm window line, and no loading coils/traps/
> resonactors/gizmos, etc. Several antennas are sold as "all band" and are
> about 100 to 102 feet of wire, 3 insulators and 100 feet of 450 ohm window
> line. Why this length? Why not the resonant length of the lowest frequency
> you intend to operate? Would not this work better?

If we keep the SWR on 450 ohm ladder-line between 4.5:1 and 18:1, the
impedance at a current maximum point will be between 25 ohms and 100
ohms which equates to a 50 ohm SWR less than 2:1. Some lengths of
all-band dipoles are better at achieving that desired SWR range than
others. 102ft will NOT achieve that range on 75m. Modeling indicates
that a 130ft dipole at 40ft high will achieve that desired range of
450ohm SWRs on *all* HF ham bands so that's what I use. I tune my
antenna system to resonance by varying the length of the ladder-line
and don't need an antenna tuner. More information on my web page.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5928. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:23:14 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3ABF8912.D7ABE7B0@IEEE.org>
Source record: 167502

Richard Clark wrote:
> "Heat" is not technical enough for the IEEE?

I'm going to suggest to the IEEE that they define heat as follows:
"heat - what an electronic engineer detects when he touches a hot
heat sink."
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5929. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:41:57 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABF8D75.4C5C0DBD@oio.net>
Source record: 167503

Rudy,
Yes, a 'resonant' length at the lowest frequency of use
would work out better than a random length would (going to
get an arguement there!). In general, the longer the
antenna, the 'better' it will work.
'Doc

5930. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:49:18 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3ABF8F2E.69974665@iquest.net>
Source record: 167504

Rudy,

Take a look at Larry Cebik's website: www.cebik.com and read his informational notes (titled
'If I could only have one wire antenna' or something close).

L.B. did extensive modeling and shows the results: 88' plays well if you're wanting to keep its pattern close to a dipole. You may improve your understanding of how/why varying lengths get quoted by reading some of the other works on that site.

Should you decide 40-10 meters is your goal, L.B. shows the benefits to using 44' in length. Others have laid claim to this one as well. Its a great compromise for portable uses. Some additional details are there for making this a rotable dipole and a stack.

The 102' you refer to seeing relates to G5RV/Varney's well known 20 meter extended dipole that will also allow a reasonable compromise on the other bands. His original design has suffered at the hands of many 'antenna designers'. Thus, reports vary with which 'version' is used and rarely are the surroundings considered. L.B. also addresses the G5RV in easy to understand fashion.

Bests,

Patrick
W9GTA

5931. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:52:42 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3ABF8FFA.14829D9@oio.net>
Source record: 167505
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

jhilins,
I have no idea if the Jeep is more susceptible to RF than
other vehicles, but I'll offer this. Route all cables as far
from the 'computer' as possible. Do NOT use braid as a ground
strap, it will deteriorate in weather. Instead, use a copper
strap such as the flashing used around roofs. And make the
best mechanincal connection you can. Most problems with mobile
antennas usually come back to grounding.
The standard steel whip, or SGC's whip are useless on the
lower HF bands. They ~will~ load, but no one will hear you.
If your going to use 80 and 40 meters, invest in some kind of
loaded antenna, otherwise you will be a very frustrated camper.
'Doc
PS - Also, invest in a 5 gallon bucket of torroids...

5932. Egg insulator for dipole center?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 18:59:20 UTC
From: "Dave Cook", com
Message-ID: <ckMv6.627409$U46.19171573@news1.sttls1.wa.home.com>
Source record: 167506

I'm putting together a lightweight dipole and was thinking about using a lightweight plastic egg inslulator for the center instead of the traditional glass/porclain center insulators with the eyes on the ends. The ARRL antenna book says that strain insulators "may" be used for center insulators, but doesn't elaborate. I was wondering if there are any issues with a) having the dipole wires actually cross over slightly in the center, and b) using a plastic insulator at the feedpoint.

-- Dave, WA0TTN

5933. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 19:26:03 UTC
From: Jerry Bransford <jerrypb@home.com>
Message-ID: <3ABF97B5.9F19EF0C@home.com>
Source record: 167507
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Doc, I've been using braid for grounding straps for 35 years... no problems.

Jerry

'Doc wrote:
>
> jhilins,
> I have no idea if the Jeep is more susceptible to RF than
> other vehicles, but I'll offer this. Route all cables as far
> from the 'computer' as possible. Do NOT use braid as a ground
> strap, it will deteriorate in weather. Instead, use a copper
> strap such as the flashing used around roofs. And make the
> best mechanincal connection you can. Most problems with mobile
> antennas usually come back to grounding.
> The standard steel whip, or SGC's whip are useless on the
> lower HF bands. They ~will~ load, but no one will hear you.
> If your going to use 80 and 40 meters, invest in some kind of
> loaded antenna, otherwise you will be a very frustrated camper.
> 'Doc
> PS - Also, invest in a 5 gallon bucket of torroids...

--
Jerry Bransford
PP-ASEL KC6TAY
The Zen Hotdog... make me one with everything!
Geezer Jeep: http://www.jjournal.net/jeep/gallery/JBransfordsTJ/

5934. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 19:32:38 UTC
From: richardharrison@webtv.net
Message-ID: <18838-3ABF9956-123@storefull-116.iap.bryant.webtv.net>
Source record: 167509

Michael Edelman, KE8YY wrote:
"Same reason you have a 1/4 wave vertical element. You`re aiming for a 50-ohm feedpoint impedance at resonance,"

I think Reg has a program called "Earthies" to help with the analysis needed for entanglements with the earth. I should have used it before my last posting. A 10-ohm antenna with a 10-ohm ground would probably have lost about 1/2 its energy in the ground and thus had an efficiency of 50% or thereabouts. I wrote 17%.

Reg can make the point that as radials come near the ground from above, the wave`s velocity on the radial is slowed by ground loss just as ground loss puts a drag on a traveling wave far from an antenna. The slowed wave at the earth`s surface traveling away from an antenna tilts the wave forward as if it were literally dragging its feed on the earth.

So, in a radial near the earth`s surface whether buried or not , the wave is slowed from its free space velocity. This results in a shorter radial travel distance in the copper to reach 90-degrees of phase rotation (1/4-wavelength). So, A radial that is 1/4-wavelength in free space is actually longer than a 1/4 wave near the surface of the earth and is no longer resonant if that were the intention, or not.

Also, the 1/4-wave vertical is half of a 1/2-wave dipole (its image is in the ground) so its drivepoint resistance is 1/2 that of the dipole or about 36 ohms. 50-ohm coax is not an automatic match.

Best regards, Richard Harrison, KB5WZI

5935. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 19:39:21 UTC
From: richardharrison@webtv.net
Message-ID: <18838-3ABF9AE9-124@storefull-116.iap.bryant.webtv.net>
Source record: 167508

Gary, KE4ZV wrote:
"Gary Peach is right that all propagation is dissipative."

Webster might agree with Gary. The IEEE and I don`t.

Best regards, Richard Harrison, KB5WZI

5936. "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:04:11 UTC
From: trwagner1@yahoo.com
Message-ID: <3abfa017.28239094@netnews.worldnet.att.net>
Source record: 167510

This will sound a bit bizarre, but please bear with me.

I recall going to a hamfest in Indianapolis (Marion County Fairgrounds) about 2 years ago. I saw something quite weird. It was a large ROUND antenna. The maker claimed you could lay it flat on the ground or hang it in an attic. When they demonstrated it (with a radio attached) they had it lying on the ground. Worked quite well.

I do recall they had a website. But, I've lost the address and I have no idea what the antenna was called. Has anyone heard of this? Seen their website?

It looked like a giant hula-hoop and was quite thick.

Thanks

Ted, kb9rpd

5937. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:10:04 UTC
From: jimmy john <jj@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC807D3E6DB@www.premiersi.com>
Source record: 167511

Sounds like the bilal isotron antenna. http://www.eham.net/reviews/search
and search for "isotron"

"Ted Wagner" <trwagner1@yahoo.com> wrote in message
news:3abfa017.28239094@netnews.worldnet.att.net...
> This will sound a bit bizarre, but please bear with me.
>
> I recall going to a hamfest in Indianapolis (Marion County
> Fairgrounds) about 2 years ago. I saw something quite weird. It was
> a large ROUND antenna. The maker claimed you could lay it flat on the
> ground or hang it in an attic. When they demonstrated it (with a
> radio attached) they had it lying on the ground. Worked quite well.
>
> I do recall they had a website. But, I've lost the address and I have
> no idea what the antenna was called. Has anyone heard of this? Seen
> their website?
>
> It looked like a giant hula-hoop and was quite thick.
>
> Thanks
>
> Ted, kb9rpd

5938. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:19:32 UTC
From: richardharrison@webtv.net
Message-ID: <26454-3ABFA454-126@storefull-114.iap.bryant.webtv.net>
Source record: 167515

Dick Carroll wrote:
"So don`t try to convince us that you will ever be a "real Ham" until
you, too, are at least minimally gualified as a CW operator."

A "Real Ham" is an Amateur Radio Licensee by definition of the people
who make the rules, the FCC.

The FCC no longer requires even minimal gualifications as a CW operator,
so Dick Carroll is spreading misinformation.

Best regards, Richard Harrison, KB5WZI

5939. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:22:23 UTC
From: Paul Anderson <peanderson@avaya.com>
Message-ID: <3ABFA4FE.7C50E6E4@avaya.com>
Source record: 167512
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

I occasionally set my TS850 in the seat next to me and use
a Hustler antenna on 20 meters...no special wiring...just ran
the power from the 850 directly to the battery...use RG58
to the antenna mounted on the rear bumber...has worked
fine, little or no ignition noise from a 97 TJ.
Paul Anderson WBï¿½ZRD

jhilins wrote:

> He Guy's, I'm posting this on in a few different places, not sure where
> the expertise may be.
>
> I'm putting together a HF mobile (706-tuner-whip) going to put it in a
> Jeep Sahara.
>
> DOES ANYONE KNOW IF THESE VEHICLES ARE KNOWN TO HAVE INTERFERENCE
> PROBLEMS, Noisy electrical systems, fuel pumps and the like ?
>
> Jim

5940. Re: Egg insulator for dipole center?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:34:50 UTC
From: glc1173@aol.com
Message-ID: <20010326153450.08229.00001027@ng-co1.aol.com>
Source record: 167513
Body handling: HTML body converted to readable text

Dave wrote:
>I'm putting together a lightweight dipole >and was thinking about using a
>lightweight plastic egg inslulator for the >center instead of the traditional
>glass/porclain center insulators with the >eyes on the ends. The ARRL antenna
>book says that strain insulators "may" be >used for center insulators, but
>doesn't elaborate. I was wondering if there >are any issues with a) having
>the dipole wires actually cross over >slightly in the center, and b) using a
>plastic insulator at the feedpoint.

Plastic works just fine; in fact, some other ham here in Burlington, North Carolina even makes center insulators out of 1/4 sheet plastic. But his don't have the wires cross.
N4GSV,
Matt
~~~~~~~~~~~~~~~~~~~~
Dissident news - plus immigration, gun rights, nationwide weather
ALAMANCE INDEPENDENT:
official newspaper of the Vast Right Wing Conspiracy
~~~~~~~~~~~~~~~~~~~~

5941. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:36:21 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3ABFA844.545@pacbell.net>
Source record: 167421

Nice try, Peter. j/1 is j. 1/j is -j. They're not equal. Either of
them squared is equal to -1. In fact, they're the two roots of -1,
but again, they're not equal, any more than the two roots of
four are equal. Perhaps you misunderstood Dr. Nahtan. Maybe
you should work on your code.

Tom Donaly KA6RUH

Peter J. Brackett wrote:
>
> Here in a few short lines is Dr. Nehoc Nahtan's remarkable proof that j is
> not a valid unit...
> ....
> Given the equality:
> -1 = -1
> Divide through by one on each side
> -1/1 = -1/1
> Invert
> -1/1 = 1/-1
> Take square roots
> sqrt(-1/1) = sqrt(1/-1)

This is true only if you do the arithmetic inside the brackets first.
Otherwise you are calculating two different square roots and
calling them equal.

> Assume that j=sqrt(-1) and substitute
> j/1 = 1/j

This is a false statement since j does not equal -j. All the rest,
based on this transparent falsity is wrong, too.

> Simplify
> j = 1/j
> j*j = 1
> And
> -1 = 1
> Reductio ad absurdium as the Mathematicians say.
> ....
>
> Thus jR has to be something other than R.
>
> But what?
>
> I suspect, now that we all know that Imaginary Resistance jR is real but
> different from R, perhaps that is the elusive...

>
> Dissipationless Resistance that the IEEE Dictionary was so ineptly trying to
> define in it's ill advised article on resistance.
>
> Is dissipationless resistance really jR? What???
>
> Thoughts, comments,
>
> -Peter K1PO

5942. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:38:25 UTC
From: richardharrison@webtv.net
Message-ID: <26455-3ABFA8C1-57@storefull-114.iap.bryant.webtv.net>
Source record: 167514

I wrote:
"---the wave is slowed from its free space velocity."

I mentioned loss as a slowing factor but omitted mention of the earth`s dielectric constant which slows the wave`s travel, too, just as the dielectric of coax slows a wave`s progress.

Best regards, Richard Harrison, KB5WZI

5943. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:43:11 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3abfb96a$0$62140$bbae4d71@news.net-link.net>
Source record: 167424

I agree! Let them argue! That's what the tuner is for. I don't have the time to fiddle with different lengths of ladder line or make up a relay box like Cecil has, and besides, I am mainly interested in portable wire antennas. Sounds like a good old fashioned tried and true 135 foot dipole fed with 450 line and a decent tuner like an MFJ-986 should be just fine on 80 to 10 meters, double that for 160 meters, or short and work over ground as Marconi. I guess I must have been thinking G5RV and that's where I came up with the 102 feet.
'Doc wrote in message <3ABF8D75.4C5C0DBD@oio.net>...
>
>
>Rudy,
> Yes, a 'resonant' length at the lowest frequency of use
>would work out better than a random length would (going to
>get an arguement there!). In general, the longer the
>antenna, the 'better' it will work.
> 'Doc

5944. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 20:48:03 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3abfba8e$0$62143$bbae4d71@news.net-link.net>
Source record: 167425

Reg wrote:
>
>It is in any case of no great consequence. Just get the biggest
>and fattest coil as possible into the antenna.
>
And hope you don't smash it when you wack a tree while 2 trackin' with your
Jeep!

5945. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:08:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99ob30$is1$1@uranium.btinternet.com>
Source record: 167516

All your problems associated with location of loading coil in a short vertical antenna, mobile or in your back yard, can be solved by downloading program LOADCOIL from website below.

Optimum loading coil location, whether it be somewhere in the antenna or antenna tuner, depends on ground loss resistance and on loading coil Q.

It is in any case of no great consequence. Just get the biggest and fattest coil as possible into the antenna.

Or download new program TOPHAT1 from website below. This will show that a top hat on a short vertical can be several dB better than any antenna of the same overall height with a loading coil 1/2-way or 2/3rds way up the antenna.

Of course, if you have an antenna approaching 1/8th or 1/4-wave in height, there's little or nothing to be gained by either capacitance or coil loading at any height. Just tune it up and away you go !

Download LOADCOIL now. Another way of looking at the same thing is available by downloading program VERTLOAD. Yet another way of analysing performance is available with HELICAL3 which deals with loading coils at the bottom only or with coils extending all the way from bottom to top.
--
****
Regards, Reg, G4FGQ
Free radio design & modelling software
http://www.btinternet.com/~g4fgq.regp

****

Mark Keith <nm5k@wt.net> wrote in message
news:3ABF1053.7979@wt.net...
> Doug Hall wrote:
>
> > Note: The readings are likely subject to an error or a dB or
two. But
> > the data tells a pretty convincing story, and should probably
come as
> > no surprise. Base loading just can't compete with center
loading when
> > it comes to efficiency.
>

> The only thing is that autotuner is not really what I'd consider
a very
> good "base" loading coil. I don't really consider that base
loading
> because the coil is not on the radiator itself. "Or don't think
it is
> anyway". I may be wrong there... You can do real well with true
base
> loading , but you need a good ground system under it. The current
> distribution is better on the center load, but more turns needed,
and
> more coil loss. I think the lower the freq , the more an
advantage to a
> center loading coil. On say ten meters with the antenna right in
the
> middle of the roof on good metal, I don't think you would see
much
> difference between the two. But I'm assuming a good high Q base
loading
> coil, the same as used on the center load. On 80m, you can see
quite a
> difference between the two types usually. MK
> --
> http://web.wt.net/~nm5k

5946. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:19:28 UTC
From: Cliff Gieseke <cliffgie@swbell.net>
Message-ID: <3ABFB260.1F10C3E8@swbell.net>
Source record: 167517

The 1978 ARRL Antenna Anthology, pp. 94-98, shows such an antenna -- A 40-Meter DDRR Antenna, consisting of a 1/4 wavelength element grounded at one end and wound into a single-turn coil, a few conductors diameters above the ground.

-- Cliff Gieseke, W4ZFL

Ted Wagner wrote:

> This will sound a bit bizarre, but please bear with me.
>
> I recall going to a hamfest in Indianapolis (Marion County
> Fairgrounds) about 2 years ago. I saw something quite weird. It was
> a large ROUND antenna. The maker claimed you could lay it flat on the
> ground or hang it in an attic. When they demonstrated it (with a
> radio attached) they had it lying on the ground. Worked quite well.
>
> I do recall they had a website. But, I've lost the address and I have
> no idea what the antenna was called. Has anyone heard of this? Seen
> their website?
>
> It looked like a giant hula-hoop and was quite thick.
>
> Thanks
>
> Ted, kb9rpd

5947. Re: Egg insulator for dipole center?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:22:01 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3abfb388_2@news3.prserv.net>
Source record: 167518

I used one that way for years. The only issue is UV protection of the exposed coax dielectric over a long period, which doesn't apply in your case. Presently, I am using a portion of a guy wire as a dipole by attaching the coax across one of the egg insulators.
--
Crazy George
Dave Cook <nospam.davepc2@netdave.,com> wrote in message news:ckMv6.627409$U46.19171573@news1.sttls1.wa.home.com...
> I'm putting together a lightweight dipole and was thinking about using a
> lightweight plastic egg inslulator for the center instead of the traditional
> glass/porclain center insulators with the eyes on the ends. The ARRL antenna
> book says that strain insulators "may" be used for center insulators, but
> doesn't elaborate. I was wondering if there are any issues with a) having
> the dipole wires actually cross over slightly in the center, and b) using a
> plastic insulator at the feedpoint.
>
> -- Dave, WA0TTN
>
>

5948. Re: Egg insulator for dipole center?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:31:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3ABFB525.41778AF0@eznec.com>
Source record: 167420

Neither of the issues you raise is a problem, provided that the dipole is roughly an odd number of half wavelengths long. At these lengths, the impedance at the feedpoint is low, so it's very tolerant of any shunt capacitance or resistance. You can use just about any halfway reasonable material and configuration for an insulator. Unplated PC board material, PVC, even a plastic curtain ring, wood dowel, or piece of Nylon twine are ok. (I've used a curtain ring for a very lightweight dipole. Epoxy-glass PC board material is good if the antenna will be used for long in the sun, since it's not made as brittle by UV as most plastics.) If, on the other hand, the antenna is about an even number of half wavelengths long or is considerably shorter than a half wavelength, the center impedance is very high, and the center insulator can have an effect. In these cases, you should use a low loss material with decent spacing between conductors. Low loss capacitance won't hurt anything, but you need to avoid any leakage path or lossy C when the feedpoint impedance is high.

Roy Lewallen, W7EL

Dave Cook wrote:
>
> I'm putting together a lightweight dipole and was thinking about using a
> lightweight plastic egg inslulator for the center instead of the traditional
> glass/porclain center insulators with the eyes on the ends. The ARRL antenna
> book says that strain insulators "may" be used for center insulators, but
> doesn't elaborate. I was wondering if there are any issues with a) having
> the dipole wires actually cross over slightly in the center, and b) using a
> plastic insulator at the feedpoint.
>
> -- Dave, WA0TTN

5949. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:40:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3ABFB753.2E231D98@eznec.com>
Source record: 167422

Sounds like the CTHA (contra-wound toroidal helical antenna). You can see some pictures at http://www.antennex.com/shack/Jan00/hawks.htm, and a web search for CTHA will yield other URLs. I have no doubt that it will radiate. But just what fraction of the applied power is radiated isn't something the manufacturer has been willing or able to tell.

Roy Lewallen, W7EL

Ted Wagner wrote:
>
> This will sound a bit bizarre, but please bear with me.
>
> I recall going to a hamfest in Indianapolis (Marion County
> Fairgrounds) about 2 years ago. I saw something quite weird. It was
> a large ROUND antenna. The maker claimed you could lay it flat on the
> ground or hang it in an attic. When they demonstrated it (with a
> radio attached) they had it lying on the ground. Worked quite well.
>
> I do recall they had a website. But, I've lost the address and I have
> no idea what the antenna was called. Has anyone heard of this? Seen
> their website?
>
> It looked like a giant hula-hoop and was quite thick.
>
> Thanks
>
> Ted, kb9rpd

5950. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:44:30 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3ABFB83E.5DAB19B4@dialpoint.net>
Source record: 167419

I can understand you going with what you have been told, but you have
been told wrong. It is doubtful if you will get enough gain with the 3
reflectors over just one to notice. Almost no comercial antennas are
using the 3 reflectors any more.

DL7JSK wrote:
>
> "Ralph Mowery" <rmowery@dialpoint.net> schrieb im Newsbeitrag
> news:3ABE5E95.6A11B844@dialpoint.net...
> > Why go to the trouble of 3 reflectors ? Unless you need some very high
> > F/B ratio and I doubt that you will get that with a 5 element beam even
> > with the 3 reflectors. They will do nothing for the gain.
>
> Quite simple.I've heard that a multiple reflector compensates the missing of
> directors.And since I have not the space for 10 or 15-element antennas,I
> thought,this is a good solution
>
> >

5951. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:53:48 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3ABFBA6C.20EA2EB5@dialpoint.net>
Source record: 167423

Best can be deifned in many ways. The 100 to 105 feet for the g5rv is
'best' if you want an antenna that will have low swr over the most ham
bands. The 120 to 135 feet of a dipole will be 'best' as far as the
signal strength.
There are some other antennas that will be 'best' depending on who is
doing the talking. Best bet is around 130 feet or cut to the frequency
you most use on 80 meters and feed it with about that much open wire.

One 'best' was to take about 265 feet of wire and cut it in the middle.
Suport the ends as high as possiable and put the other ends at the
tuner. Then make a feedline out of part of it spaced at 3 to 6 inches
and support the 'center' as far away and as high as possiable.

Rudy Marcelletti wrote:
>
> I have seen adds for all band dipole kits fed with ladder line and the
> lengths all vary! What is the best general length for an "all band" dipole?
> By all band, I am referring to something that can cover at least 80 to 10
> meters with a good tuner, 450 ohm window line, and no loading coils/traps/
> resonactors/gizmos, etc. Several antennas are sold as "all band" and are
> about 100 to 102 feet of wire, 3 insulators and 100 feet of 450 ohm window
> line. Why this length? Why not the resonant length of the lowest frequency
> you intend to operate? Would not this work better?

5952. Re: Push up Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 21:58:52 UTC
From: Mark <kf9tl@home.com>
Message-ID: <3ABFBBAD.F646438B@home.com>
Source record: 167426

MFJ has one that is fiberglass and pushes to 33' I think for about $80

5953. WTB R-7 Cushcraft

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 22:10:17 UTC
From: Mark <kf9tl@home.com>
Message-ID: <3ABFBE5A.DFC247E7@home.com>
Source record: 167427

My brother is looking for one but he has no email.

73
Mark
KF9TL

5954. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 23:01:58 UTC
From: 2w8ji@akorn.net
Message-ID: <3abfc93d.521245562@news.accessunited.com>
Source record: 167428

On Mon, 26 Mar 2001 17:11:02 +0200, "DL7JSK"
<truckdrivingman@hotmail.com> wrote:

>Quite simple.I've heard that a multiple reflector compensates the missing of
>directors.And since I have not the space for 10 or 15-element antennas,I
>thought,this is a good solution

That isn't true.

The difference betweeen a single reflector and multiple relectors
(trigonal) is nearly immeasurable.

The gain of a yagi is a function of boom length, and once you have one
reflector you pretty well have it all handled at that end of the
antenna.

73 Tom

5955. Re: recherche cours antennes

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 23:02:25 UTC
From: poissondanlo@aol.com
Message-ID: <20010326180225.08258.00000830@ng-co1.aol.com>
Source record: 167429

Bonjour
si tu ne l'as pas , tu peux consulter le livre de F5AD de Nimes (30)
adresse sur
http://www.free.fr/f5ad
ou qque chose comme ï¿½a
ou en vente a la librairie de Megahertz ou du ref-union
ce livre est une reference en la matiere
F5JTM
Serge

5956. Re: Apt. HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 23:05:58 UTC
From: poissondanlo@aol.com
Message-ID: <20010326180558.08258.00000831@ng-co1.aol.com>
Source record: 167430

Hi,
look for an internet site of SM0VPO
he has a lot of antennas balcony , he leave to in an apt.
Sorry i don't remember his adress but with altavista or other webb searcher it
is usefull
73's
Serge /F5JTM

5957. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-26 23:08:39 UTC
From: 2w8ji@akorn.net
Message-ID: <3abfca68.521544917@news.accessunited.com>
Source record: 167431

On Mon, 26 Mar 2001 20:04:11 GMT, trwagner1@yahoo.com (Ted Wagner) wrote:

>I recall going to a hamfest in Indianapolis (Marion County >Fairgrounds) about 2 years ago. I saw something quite weird. It was >a large ROUND antenna. The maker claimed you could lay it flat on the >ground or hang it in an attic. When they demonstrated it (with a >radio attached) they had it lying on the ground. Worked quite well.

Hi Ted,

What were they comparing it against? Antennas very close to the ground are very inefficient, there is no way around that.

There are a lot of false claims and misinformation to the contrary, but the fact is always that nearly all applied power is eaten-up in losses. That true for the DDRR, the CTA, the CFA, and all these magical antennas.

Save your money, and stay away from gimmicks.

73 Tom

5958. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 00:05:48 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <3ABFD95C.316@bellsouth.net>
Source record: 167432
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Doc,

It amazes me that the tuner/whip combinations garner any sales at all. Of course, it is just MHO, BUT that opinion is based on many years of HF mobile study, installation, and mistakes. In some cases, a hamstick will outperform those things--and a hamstick is just about the worst thing on the lower bands. I wouldn't waste my time, nor my hard earned cash, on those things.

It is an unfortunate thing that some people *really* believe that a "tuner" actually "tunes" an antenna. I had such a conversation with a supposedly knowledgable Extra class last week! When I pointed out that tuners don't "tune" the antenna, he confidently assured me that a certain brand of "tuner" both (quote) "physically and electrically" tune the whip! PHOOEY! I hear sub-standard mobiles on the air all the time. They are often down in the mud, unreadable, or just not even *there*. Yet their owners swear by the "great" performance their tuner/whip combo is giving, how "good" their hamstick (dummy load on a stick) is, and my question is always: Compared to WHAT? Put 'em in field trials, run field strength tests against bugcatchers and screwdrivers. See the superior field strength of competitive, high Q, RESONANT antennas--it'll make ya sick! I guarantee your tuner/whip or hamstick will get MASHED in a field trial.

Now, having thrown off on the tuners, etc, let me say this: Certainly, there are times when it is not feasible to use higher efficiency antennas. The spouse threatens bodily harm if you drill holes in the new car, or there is no way to attach a big antenna. You do what you have to with what you can. And that is understandable. But if you are out for the best signal you can obtain, it takes a BIG, UGLY antenna to do the job.

73

Jerry

'Doc wrote:
>
> jhilins,
> I have no idea if the Jeep is more susceptible to RF than
> other vehicles, but I'll offer this. Route all cables as far
> from the 'computer' as possible. Do NOT use braid as a ground
> strap, it will deteriorate in weather. Instead, use a copper
> strap such as the flashing used around roofs. And make the

> best mechanincal connection you can. Most problems with mobile
> antennas usually come back to grounding.
> The standard steel whip, or SGC's whip are useless on the
> lower HF bands. They ~will~ load, but no one will hear you.
> If your going to use 80 and 40 meters, invest in some kind of
> loaded antenna, otherwise you will be a very frustrated camper.
> 'Doc
> PS - Also, invest in a 5 gallon bucket of torroids...

5959. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 00:50:56 UTC
From: dcollin@connix.com
Message-ID: <3abfe572.14555229@news.mybizz.net>
Source record: 167434

Read this interesting article:

http://www.cebik.com/aledz.html

5960. Re: Apt. HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 00:51:54 UTC
From: dcollin@connix.com
Message-ID: <3abfe5b8.14624957@news.mybizz.net>
Source record: 167433

On 26 Mar 2001 23:05:58 GMT, poissondanlo@aol.com (POISSONDANLO)
wrote:

>Hi,
>look for an internet site of SM0VPO
>he has a lot of antennas balcony , he leave to in an apt.
>Sorry i don't remember his adress but with altavista or other webb searcher it
>is usefull
>73's
>Serge /F5JTM

http://hem.passagen.se/sm0vpo/

5961. Re: QST---QST--Fractal Antenna Reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 00:53:20 UTC
From: info@telcomcity.com
Message-ID: <99ooa0$3go$1@news.netmar.com>
Source record: 167435

In article <20010317211850.13654.00000015@ng-fm1.aol.com>, Fractenna
<fractenna@aol.com> writes:
>I'd like to pass along this invitation for all interested hams to join us on
>the fractal antenna reflector. This is the primo forum on the web for the
>discussion of fractal antennas. Moderated, lively, and filtered for spam and
>off topic comments this is the home of fun feedback on a ham-grown
technology.
>
>Dr. Cohen participates in this forum and it is the only one he responds to
on
>the web.
>
>To join:
>
>fractalantenna-subscribe@yahoogroups.com
>
>73
>Phil N1ZKT

Has Cohen threatened to sue anyone at Telecom City yet?

----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

5962. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:06:38 UTC
From: kb7qhc@home.com
Message-ID: <3abfe70c.2100842251@news.seanet.com>
Source record: 167436

On Mon, 26 Mar 2001 12:23:14 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> "Heat" is not technical enough for the IEEE?
>
>I'm going to suggest to the IEEE that they define heat as follows:
>"heat - what an electronic engineer detects when he touches a hot
>heat sink."

Hi Cecil,

I've one that is better. When I was a striker in the Navy, I asked an
old grizzled Chief how hot a transistor could get. He replied:
"Hold on to it and count to 10. If you are still holding it at
the end of that count (and you haven't lost any skin), then it isn't
too hot."

73's
Richard Clark, KB7QHC

5963. Radiation Resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:09:56 UTC
From: mover123@webtv.net
Message-ID: <3241-3ABFE864-9@storefull-245.iap.bryant.webtv.net>
Source record: 167443

All,

I am new to this group - first post. Please accept my apology if this has already been covered ad nauseum.

In the amateur radio literature, I have read that (paraphrasing) "Radiation resistance varies from point to point along the antenna. For example, if at some point the voltage and current are in phase, and the current is 1A and the voltage is 75V, the radiation resistance at that point is 75 Ohms".

My problem with this statement is that I am used to thinking of impedance as a property associated with a PAIR of terminals. What is meant by 75V a some point in the antenna? The radiation resistance defined at the center of a dipole makes perfect sense to me. Is this just sloppy wordsmanship in the literature, or what?

Thanks, Paul

5964. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:19:25 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99oplmfip1@slb6.atl.mindspring.net>
Source record: 167437

Donaly:

Heh, heh... Nope it's not my code that's the problem.

Actually the "proof" presented by the good Dr. on 15m CW was, quite good at least I thought so at first.

But after the "fever" of trying to copy Dr. Nahatan's rough hand sent CW through bad QRM died down, I did finally figure out what the flaw in his proof was...

Can you spot it?

I'll share it with y'all later.

And so... I cancelled my "order" for diamond dust! Heh, heh.

That all being said, I still want to know... what then is "imaginary resistance"?

Imaginary resistance jR is a perfectly valid concept as far as I can see. Why not?

It is certainly not "dissipationless" resistance since the current and voltage through and across jR are exactly 90 degrees out of phase and so the power dissipated in it is itself "imaginary".

But is jR an energy storage mechanism like inductive reactance j*2*pi*f*L, and that other reactance?

If not then... What?

We may have difficulty buying jR's from the local electronic parts jobber, but that does not mean that imaginary resistances don't exist. Or that they can't be constructed. In fact I have discovered a "neat" construction for an imaginary resistor.

Now then... what if an antenna had a radiation resistance that was imaginary?

What if a transmission line had a surge resistance that was imaginary?

Surely imaginary resistance is a more viable concept than that dang foolery called a "dissipationless resistance". No?

Think about it...

I'll share the flaw in Dr. Nehoc's proof in a subsequent posting.

Best Regards,

-Peter

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:3ABFA844.545@pacbell.net...
> Nice try, Peter. j/1 is j. 1/j is -j. They're not equal. Either of
> them squared is equal to -1. In fact, they're the two roots of -1,
> but again, they're not equal, any more than the two roots of
> four are equal. Perhaps you misunderstood Dr. Nahtan. Maybe
> you should work on your code.
>
> Tom Donaly KA6RUH
>
> Peter J. Brackett wrote:
> >
> > Here in a few short lines is Dr. Nehoc Nahtan's remarkable proof that j
is
> > not a valid unit...
> > ....
> > Given the equality:
> > -1 = -1
> > Divide through by one on each side
> > -1/1 = -1/1
> > Invert
> > -1/1 = 1/-1
> > Take square roots
> > sqrt(-1/1) = sqrt(1/-1)
>
> This is true only if you do the arithmetic inside the brackets first.
> Otherwise you are calculating two different square roots and
> calling them equal.
>
> > Assume that j=sqrt(-1) and substitute
> > j/1 = 1/j
>
> This is a false statement since j does not equal -j. All the rest,
> based on this transparent falsity is wrong, too.
>
> > Simplify
> > j = 1/j
> > j*j = 1
> > And
> > -1 = 1
> > Reductio ad absurdium as the Mathematicians say.
> > ....
> >
> > Thus jR has to be something other than R.
> >
> > But what?
> >
> > I suspect, now that we all know that Imaginary Resistance jR is real but
> > different from R, perhaps that is the elusive...

> >
> > Dissipationless Resistance that the IEEE Dictionary was so ineptly
trying to
> > define in it's ill advised article on resistance.
> >
> > Is dissipationless resistance really jR? What???
> >
> > Thoughts, comments,
> >
> > -Peter K1PO
>

5965. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:20:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99opti$2fm$2@208.207.71.131>
Source record: 167438
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
>
> W6DKN wrote:
>
> > Common sense and basic survival instinct are completely different than
> > trying to impose your personal opinions to the general public on a subject
> > in which you have no first hand knowledge or experience.
> >
> > A perfect example of this is the anti-gun crowd - the vast majority of them
> > have never even fired a gun, and yet they would have you believe that based
> > on their feelings and opinions, you should have to give up your guns.
>
> Kind of a silly example, wouldn't you say? A vast majority has never fired a
> thermonuclear device either, and yet they would have you believe that based on
> their feelings and opinions, you should have to give up your personal
> thermonuclear device, if you had one.

Now THAT is a silly example.

5966. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:23:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99oq3e$2fm$3@208.207.71.131>
Source record: 167439
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
>
> DumbassWoger wrote:
>
> > Just why the heck would anybody in his/her right mind pay the ARRL to be a
> > member? For what?
>
> Because it is the only national ham radio association in the US, and as such is
> the sole protector of every US ham's interests, rights and privileges.

Well actually, they're the sole protector of ARRL's singulara
interests, first, then if there's anything left, US hams as a group
might get a little attention.
Back in the days of HPM it was as you say. But HPM is long gone.

5967. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:32:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99oqhc$t89$1@slb7.atl.mindspring.net>
Source record: 167440

Donaly:

OK, OK... you got it correct.

I didn't read your analysis thoroughly the first time I replied, I didn't notice the leading carrets... >>.

Yes, at the point of taking square roots, the good Dr. should have put plus and minus signs on each side. Since the sqrt operation does not produce a unique result. The square root operation produces two unique results, and on each side of the equation. Then the development of the proof would need to take four different tracks from that point and the "valid" path chosen. Heh, heh. Good work!

i.e.

As you pointed out...

The proof should have read...

+- sqrt(-1/1) = +- sqrt(1/-1)

and then... the four different cases resulting from this "equality" would need to be sorted out properly...

That being said...

I again ask...

What about "imaginary resistance" jR, is that not a valid concept?

Best,

-Peter K1PO

"Donaly" <dtdonaly@pacbell.net> wrote in message
news:3ABFA844.545@pacbell.net...
> Nice try, Peter. j/1 is j. 1/j is -j. They're not equal. Either of
> them squared is equal to -1. In fact, they're the two roots of -1,
> but again, they're not equal, any more than the two roots of
> four are equal. Perhaps you misunderstood Dr. Nahtan. Maybe
> you should work on your code.
>
> Tom Donaly KA6RUH
>
> Peter J. Brackett wrote:
> >
> > Here in a few short lines is Dr. Nehoc Nahtan's remarkable proof that j
is

> > not a valid unit...
> > .....
> > Given the equality:
> > -1 = -1
> > Divide through by one on each side
> > -1/1 = -1/1
> > Invert
> > -1/1 = 1/-1
> > Take square roots
> > sqrt(-1/1) = sqrt(1/-1)
>
> This is true only if you do the arithmetic inside the brackets first.
> Otherwise you are calculating two different square roots and
> calling them equal.
>
> > Assume that j=sqrt(-1) and substitute
> > j/1 = 1/j
>
> This is a false statement since j does not equal -j. All the rest,
> based on this transparent falsity is wrong, too.
>
> > Simplify
> > j = 1/j
> > j*j = 1
> > And
> > -1 = 1
> > Reductio ad absurdium as the Mathematicians say.
> > .....
> >
> > Thus jR has to be something other than R.
> >
> > But what?
> >
> > I suspect, now that we all know that Imaginary Resistance jR is real but
> > different from R, perhaps that is the elusive...
> >
> > Dissipationless Resistance that the IEEE Dictionary was so ineptly
trying to
> > define in it's ill advised article on resistance.
> >
> > Is dissipationless resistance really jR? What???
> >
> > Thoughts, comments,
> >
> > -Peter K1PO
>

5968. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:35:03 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99oqmjeid1@slb7.atl.mindspring.net>
Source record: 167441

Gary:

Right on!

I firmly believe that the IEEE Dictionary is dead wrong on this issue.

Let's end the use of "dissipationless resistance" here and now.

Thanks man!

-Peter K1PO

"Gary Coffman" <ke4zv@bellsouth.net> wrote in message
news:qutsbtgjeehvu0smf5j46kui94eh0thggp@4ax.com...
> On Sun, 18 Mar 2001 14:43:32 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:
> >Richard Clark wrote:
> >> C'Mon Cecil,
> >> This is the same dictionary that has no definition for heat, isn't it?
> >
> >It's not a dictionary of the English language, Richard, it is a
> >dictionary of technical terms. Presumable, "heat" is not a technical
> >enough term to be included in a dictionary published by the Institute
> >of Electrical and Electronic Engineers. They don't have a definition
> >of "as" either.
>
> That's funny. A whole branch of physics is devoted to heat, because
> of its critical importance, and a very precise definition of it is used
> implicitly in all energy systems, including emphatically electrical
> engineering. Perhaps if the IEEE *had* tried to define heat precisely,
> they'd have discovered the folly of their "dissipationless" resistance
> definition.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

5969. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:38:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99oqrg$q0o$1@slb3.atl.mindspring.net>
Source record: 167442

Cecil:

What??? You mean this is not rec.radio.amateur.thermo???

I've been hangin in the wrong group all along!

Best,

-Peter K1PO

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3ABE8479.290EF157@IEEE.org...
> Gary Coffman wrote:
> > That's what thermodynamics says, and thermo *is* the authoritive field
of
> > study of heat.
>
> Too bad this isn't a thermodynamics news group, Gary.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5970. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:49:26 UTC
From: Irv Finkleman <finkirvNOSPAM@home.com>
Message-ID: <3ABFF180.93A7812F@home.com>
Source record: 167444

Sounds to me like a Magnetic Loop such as the MFJ 1786 (with the
protective plastic
cover removed). Search for AA5TB. He homebrews 'em and has links to other
sites.

Ted Wagner wrote:

> This will sound a bit bizarre, but please bear with me.
>
> I recall going to a hamfest in Indianapolis (Marion County
> Fairgrounds) about 2 years ago. I saw something quite weird. It was
> a large ROUND antenna. The maker claimed you could lay it flat on the
> ground or hang it in an attic. When they demonstrated it (with a
> radio attached) they had it lying on the ground. Worked quite well.
>
> I do recall they had a website. But, I've lost the address and I have
> no idea what the antenna was called. Has anyone heard of this? Seen
> their website?
>
> It looked like a giant hula-hoop and was quite thick.
>
> Thanks
>
> Ted, kb9rpd

--

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5971. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:51:20 UTC
From: pfk@home.com
Message-ID: <3abff169.31751764@carnews0.ca.nortel.com>
Source record: 167446
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Jeez Jerry, you're confusing the heck out of me.

Didn't you say a couple of weeks ago when someone asked about wiring a CB to: wire the hot side to the battery and the neg side to a nearby bare metal groud?

I had thought of wiring my CB direct to the battery (pos & neg, both fused) and then had second thoughts after reading that post of yours.

Now I've interpretted your post below to say pos and neg to battery.

Paul

On Sun, 25 Mar 2001 02:13:15 GMT, Jerry Bransford <jerrypb@home.com> wrote:

>Not specifically. Just make sure you use a good braided ground strap
>from the chassis directly to ground and wire the power directly to the
>battery and you should be ok.
>
>Jerry

'01 TJ Sport
5-Speed D44/TracLoc

The opinions exressed here are mine
and not those of my employer

5972. Re: Egg insulator for dipole center?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:51:40 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3ABFF22C.15CE@wt.net>
Source record: 167445

Roy Lewallen wrote:
You can use just about any halfway reasonable
> material and configuration for an insulator. Unplated PC board material,
> PVC, even a plastic curtain ring, wood dowel, or piece of Nylon twine
> are ok. (I've used a curtain ring for a very lightweight dipole.

I've made light ones from plastic coathanger material. I cut off little
2-3 inch strips, and then drill or melt holes in the ends. Worked fine.
You can carry them in your pocket like pencil stubs. Good for camping.
MK

--
http://web.wt.net/~nm5k

5973. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 01:58:39 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3ABFF3CF.1A8D@wt.net>
Source record: 167448

Reg Edwards wrote:
>
> All your problems associated with location of loading coil in a
> short vertical antenna, mobile or in your back yard, can be solved
> by downloading program LOADCOIL from website below.
>
> Optimum loading coil location, whether it be somewhere in the
> antenna or antenna tuner, depends on ground loss resistance and on
> loading coil Q.
>
> It is in any case of no great consequence. Just get the biggest
> and fattest coil as possible into the antenna.
>
> Or download new program TOPHAT1 from website below. This will show
> that a top hat on a short vertical can be several dB better than
> any antenna of the same overall height with a loading coil 1/2-way
> or 2/3rds way up the antenna.
>
> Of course, if you have an antenna approaching 1/8th or 1/4-wave in
> height, there's little or nothing to be gained by either
> capacitance or coil loading at any height. Just tune it up and
> away you go !
>
> Download LOADCOIL now. Another way of looking at the same thing is
> available by downloading program VERTLOAD. Yet another way of
> analysing performance is available with HELICAL3 which deals with
> loading coils at the bottom only or with coils extending all the
> way from bottom to top.
> --
> **********
> Regards, Reg, G4FGQ
> Free radio design & modelling software
> http://www.btinternet.com/~g4fgq.regp
>
> **********
>
I'll check them out. I have most of them except maybe the newest ones
out. So far vertload is my favorite for that type of thing. Good for
mobile stuff. MK
--
http://web.wt.net/~nm5k

5974. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:00:34 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3ABFF442.59D5@wt.net>
Source record: 167447

Rudolph M. Marcelletti wrote:
>
> Reg wrote:
> >
> >It is in any case of no great consequence. Just get the biggest
> >and fattest coil as possible into the antenna.
> >
> And hope you don't smash it when you wack a tree while 2 trackin' with your
> Jeep!

Won't faze the coils I make on my plastic bug catchers. Sure can whack
out an expensive "airdux" or whatever bug coil though. MK
--
http://web.wt.net/~nm5k

5975. Re: Push up Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:13:44 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3ABFF758.2420@wt.net>
Source record: 167449

Mark wrote:
>
> MFJ has one that is fiberglass and pushes to 33' I think for about $80

I think I'd rather have a metal radio shack one though myself. Mainly for the lightning aspect. If you take a hit on it, the mast will be the lightning rod to ground. A plastic rod will be a disaster looking to happen unless you have real thick wires running down it. Only if there were an rf reason to use a non conductive mast would I consider that, or maybe camping etc. At home , you will be better of with the metal mast if you are in a lightning area. I took a hit on mine once. Being as I had no damage to any antenna or feedline at all, that tells me the mast itself did 95% of the dirty work directing the strike to ground. "I have it grounded well at the base". if the coax had directed the strike it would have been punctured down near the base somewhere. it wasn't. The mast itself did it all nearly as it's about a foot higher than the feedpoint of the dipole antennas. MK
--
http://web.wt.net/~nm5k

5976. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:33:08 UTC
From: Dave Heil <k8mn@ovis.net>
Message-ID: <3ABFEDBE.8D6CFC3D@ovis.net>
Source record: 167450
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Larry Klose wrote:
>
> "Dave Heil" <k8mn@ovis.net> wrote in message
> news:3ABF254E.4A99693B@ovis.net...
> > Larry "the homemade lawyer" Klose wrote:
> >
> > > In a October 27, 1997 briefing paper prepared for digital television
> > > broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> > > regulation: "The Supreme Court has observed in CBS v. DNC that the FCC
> must
> > > "walk a 'tightrope' to preserve the First Amendment values written into
> the
> > > Radio Act and its successor, the Communications Act." After referring
> to
> > > its Red Lion decision, the Court noted that "[t]he problems of
> regulation
> > > are rendered more difficult because the broadcast industry is dynamic in
> > > terms of technological change; solutions adequate a decade ago are not
> > > necessarily so now, and those acceptable today may well be outmoded 10
> years
> > > hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> > > Committee, 412 U.S. 94, 117 (1973)."
> >
> > Are you a member of NAAB (National Association of Amateur Broadcasters)?
> > We aren't a broadcasting service and we aren't commercial, Larry.
>
> Dave, what the court was saying is that technological change will change the
> validity of FCC rules. The Morse code exam requirement was valid at one
> time, but today it is not.

Larry, you are citing a court case pitting a commercial broadcasting
network against a national political party. That the case and its
issues have little to do with amateur radio seems to have escaped you.

> > > Because of technological and operational changes, the manual Morse code
> exam
> > > is unnecessary. Its use as a licensure examination element to authorize
> > > frequency bands and emission types, other than manual Morse code
> operation,
> > > is arbitrary and capricious. The exam is even arbitrary to
> authorization
> > > Morse code operation, since such operations can be conducted by computer
> > > control.
> >
```

> > YOU believe them to be arbitrary and capricious, Larry. You also
> > believe that running a computer controlled morse contact is a snap.
> > That'd make you one of the folks basing an opinion on something you know
> > little about. Your posting would indicate that you would try to sway us
> > toward believing that you are correct yet you've based your views on
> > your tiny bit of knowledge and your "I don't wanna" feelings about morse
> > testing.
>
> PSK 31 seems to work petty good.

How does it work in a pileup?

> > > The Morse code requirement is finished. Give it up before you destroy
> > > the entire Amateur Radio Service.
> >
> > Oh puhleeze, Larry. Cut the melodrama.
>
> You don't think that the Amateur Radio community can not lose frequency
> allocations. The FCC must allocate frequency in the public interest.
> How is the public interest satisfied by maintaining a non-conforming
> requirement?

Can lose? I don't think that amateur radio will lose any of its HF
allocations though we might see 40m realigned in future.

We don't have a "non-conforming requirement". There is still a 5wpm
requirement for HF access. I don't think you should waste time blowing
smoke up the asses of those congregated in this newsgroup. Mount your
soapbox and spout your homemade semi-legalistic rantings where they
might make some difference. Here your stuff is just cheerleading.

Dave K8MN

5977. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:47:29 UTC
From: billsohl@mindspring.com
Message-ID: <3abf4e2c.1011097@news.mindspring.com>
Source record: 167452
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Sun, 25 Mar 2001 23:37:02 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>"KB9WFK" <KB9WFK@mindspring.com> wrote in message
>news:99ls17stb1@slb4.atl.mindspring.net...
>>
>> SNIP
>> > Common sense and basic survival instinct are completely different than
>> > trying to impose your personal opinions to the general public on a
>> > subject in which you have no first hand knowledge or experience.
>> >
>> > A perfect example of this is the anti-gun crowd - the vast majority of
>> > them have never even fired a gun, and yet they would have you believe
>> > that based on their feelings and opinions, you should have to give
>> > up your guns.
>>
>> That is not a "perfect example" unless the end result of removing the
>> code requirement is that you can no longer use CW. If, after removal
>> of the code requirement, you or anyone else that wishes to learn and
>> use CW is free to do so there is NO parallel.
>
>Sure it is. The outcome of the argument is not the issue. The issue is that
>you have a group of people with absolutely no expertise on the subject
>forming an opinion based on personal feelings and self interest, that they
>are trying to convince others is correct.

You are clearly uninformed as to who is forming opinions
as to the rational and need for code testing. Many, including
myself, have "been there, done that" as to passing the
code test at speeds greater than 5 wpm. Not all those
opposed to continued code testing are so "uniformed"
as you think.

Cheers,
Bill K2UNK

5978. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:47:31 UTC
From: billsohl@mindspring.com
Message-ID: <3abf4f33.1273859@news.mindspring.com>
Source record: 167451
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On 26 Mar 2001 04:27:51 GMT, Dick Carroll <dixie@townsqr.com> wrote:

>W6RCecilA wrote:
>>
>> W6DKN wrote:
>> > The issue is that
>> > you have a group of people with absolutely no expertise on the subject
>> > forming an opinion based on personal feelings and self interest, that they
>> > are trying to convince others is correct.
>>
>> How do you explain the host of people with expertise on the
>> subject who possess those same opinions?
>
> All dozen of them?

Where do you get that mis-information from or is
that just a knee jerk guess?

Cheers,
Bill K2UNK

5979. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:54:20 UTC
From: billsohl@mindspring.com
Message-ID: <3ac0004c.2126060@news.mindspring.com>
Source record: 167453
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Mon, 26 Mar 2001 12:17:32 GMT, Dave Heil <k8mn@ovis.net> wrote:

>Larry "the homemade lawyer" Klose wrote:
>
>> In a October 27, 1997 briefing paper prepared for digital television
>> broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
>> regulation: "The Supreme Court has observed in CBS v. DNC that the FCC must
>> "walk a 'tightrope' to preserve the First Amendment values written into the
>> Radio Act and its successor, the Communications Act." After referring to
>> its Red Lion decision, the Court noted that "[t]he problems of regulation
>> are rendered more difficult because the broadcast industry is dynamic in
>> terms of technological change; solutions adequate a decade ago are not
>> necessarily so now, and those acceptable today may well be outmoded 10 years
>> hence." Columbia Broadcasting Systems, Inc. v. Democratic National
>> Committee, 412 U.S. 94, 117 (1973)."
>
>Are you a member of NAAB (National Association of Amateur Broadcasters)?
>We aren't a broadcasting service and we aren't commercial, Larry.
>
>> Because of technological and operational changes, the manual Morse code exam
>> is unnecessary. Its use as a licensure examination element to authorize
>> frequency bands and emission types, other than manual Morse code operation,
>> is arbitrary and capricious. The exam is even arbitrary to authorization
>> Morse code operation, since such operations can be conducted by computer
>> control.
>
>YOU believe them to be arbitrary and capricious, Larry.

In the absense of any contradicting comments,
the FCC sure seems to think so too. I haven't read
one FCC comment that put any rational into
why code should be kept as a test...with the singular
exception being that for now, it still is a treaty
requirement.

Cheers,
Bill K2UNK

5980. Re: Radiation Resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:55:48 UTC
From: richardharrison@webtv.net
Message-ID: <6562-3AC00134-226@storefull-118.iap.bryant.webtv.net>
Source record: 167457

Paul wrote:
"My problem with this statement is that I am used to thinking of
imedance as a property associated with a pair of terminals."

Paul has it right. Impedance is associated with a pair of terminals.

Most antennas are of the standing wave type. These have open circuits at their tip ends. When the traveling wave arrives at the tip end of the antenna there is no where for current to go except to return to the sending terminal of the antenna. Interference between the forward and reflected waves on the antenna produces an impedance variation from maximum at the open-circuit tip end to minimum back !/4-wave from the tip end. The feedline can be attached at the point on the antenna which matches the feedline. I don`t know what your author wrote but he may have made the mistake I made in writing the above.

If an unbalanced antenna was the topic discussed, it may be assumed that the author expected the reader to know the voltage or impedance was referenced to ground. If a balanced antenna was the topic, then the author was implying equal distances in opposite directions from a center feedpoint.

How this impedance selection process is made with a balanced antenna may be seen on page 18-5 of the 19th edition of the ARRL Antenna Book where the "Delta Match" is covered.

The same process can be used with an unbalanced antenna where it is called shunt feeding the antenna worked against a ground system. I was most disappointed to find no index listing for "shunt feed" in the ARRL Antenna Book index.

Best regards, Richard Harrison, KB5WZI

5981. Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:56:23 UTC
From: ke4qkn@aol.com
Message-ID: <20010326215623.13235.00001743@ng-fi1.aol.com>
Source record: 167455

Tried to build a nice 1/2 wave dipole today for 10m and could not get the SWR below 2:1. Never had this problem before, thought I might have forgotten to do something......

The center is a Van Gordon 1:1 HI-Q balun. Measured 8 ft 3" of wire for each leg, plus an additional foot: 6" to work with in the center, 6" to work with on the end. Used 14 ga stranded THHN wire. Soldered the ends to the middle, made 5 loops through the lug, used end insulators with 5 loops on each end. Hung it up about 10ft off the ground in the driveway to test it before hanging it, and like I said, could NOT get the swr below 2:1. I use an MFJ antenna analyzer and the lowest SWR I could get on this thing was at about 24.5 mhz, it dipped down to 1.7:1.

Got frustrated, took it apart started over. Same problem. Second time I used 18 ga stranded wire.

All my soldering connections were solid, and I used about 5 different pieces of coax, so I know it was not a coax problem. I also moved it to 3 or 4 different locations for testing, with the same results. I even tried hanging it as an inverted V!!!! Nothing seemed to work.

I tested the balun with a VOM and there was no short. Is there any way I could have gotten a "bad" balun? Like I said this is the same construction technique I have used for making dozens of dipoles and I have never had this problem before.

Flame away.

Frustrated, KE4QKN/AE

5982. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 02:57:43 UTC
From: billsohl@mindspring.com
Message-ID: <3ac000ff.2304958@news.mindspring.com>
Source record: 167454
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Tue, 27 Mar 2001 02:33:08 GMT, Dave Heil <k8mn@ovis.net> wrote:

>Larry Klose wrote:
>>
>> "Dave Heil" <k8mn@ovis.net> wrote in message
>> news:3ABF254E.4A99693B@ovis.net...
>> > Larry "the homemade lawyer" Klose wrote:
>> >
>> > > In a October 27, 1997 briefing paper prepared for digital television
>> > > broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
>> > > regulation: "The Supreme Court has observed in CBS v. DNC that the FCC
>> must
>> > > "walk a 'tightrope' to preserve the First Amendment values written into
>> the
>> > > Radio Act and its successor, the Communications Act." After referring
>> to
>> > > its Red Lion decision, the Court noted that "[t]he problems of
>> regulation
>> > > are rendered more difficult because the broadcast industry is dynamic in
>> > > terms of technological change; solutions adequate a decade ago are not
>> > > necessarily so now, and those acceptable today may well be outmoded 10
>> years
>> > > hence." Columbia Broadcasting Systems, Inc. v. Democratic National
>> > > Committee, 412 U.S. 94, 117 (1973)."
>> >
>> > Are you a member of NAAB (National Association of Amateur Broadcasters)?
>> > We aren't a broadcasting service and we aren't commercial, Larry.
>>
>> Dave, what the court was saying is that technological change will change the
>> validity of FCC rules. The Morse code exam requirement was valid at one
>> time, but today it is not.
>
>Larry, you are citing a court case pitting a commercial broadcasting
>network against a national political party. That the case and its
>issues have little to do with amateur radio seems to have escaped you.

That the fundamental concept has as much to do with
amateur service (as well as any other service) seems
to have escaped ole Dave. Case law is not so narrowly
viewed as you might wish.

Cheers,
Bill K2UNK

5983. Re: Radiation Resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 03:16:48 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <tevvbtkg8hf5b7t2gn0clul6ecnkvk8c65@4ax.com>
Source record: 167456

On Mon, 26 Mar 2001 20:09:56 -0500 (EST), mover123@webtv.net (Paul Ward) wrote:
>In the amateur radio literature, I have read that (paraphrasing)
>"Radiation resistance varies from point to point along the antenna. For
>example, if at some point the voltage and current are in phase, and the
>current is 1A and the voltage is 75V, the radiation resistance at that
>point is 75 Ohms".
>
>My problem with this statement is that I am used to thinking of
>impedance as a property associated with a PAIR of terminals. What is
>meant by 75V a some point in the antenna? The radiation resistance
>defined at the center of a dipole makes perfect sense to me. Is this
>just sloppy wordsmanship in the literature, or what?

An antenna is implicitly a two wire circuit, with one half of it immaterial,
IE the displacement current through space which completes the circuit
is the second "wire". So the potential discussed is between this point on
the wire and the rest of the universe.

It's a bit hard to put a test probe on the rest of the universe, because it
is large, and there are phase effects across such a large distributed
structure (just using a ground won't do, particularly if the antenna is
being operated well away from a ground point, IE in free space). So this
concept is mainly of use for analytical purposes rather than for real world
measurements.

But if you broke the antenna at this point, and somehow maintained the
same current flow (say by inserting an ideal current source), then you'd
measure 75 volts between the two parts when 1 amp was being driven
across the break by the source. This is what you have at a dipole feedpoint.
The two parts of the antenna become your test probes, connecting to the
rest of the universe and completing the circuit.

Note that you can't just break the wire without adding the current source.
Then there'd be zero current flow, no generated fields to complete the circuit,
and any voltage you measured would be irrelevant to the actual behavior of
the intact antenna.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5984. Re: Want to Buy: Tubes

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 03:21:53 UTC
From: Rosco <rvaagen@nospam.hotmail.com>
Message-ID: <IHTv6.340$_P6.69519@news7.onvoy.net>
Source record: 167458

try www.rfparts.com

REDBONE <redbone1@swbell.net> wrote in message
news:3A9A5A58.43AA@swbell.net...
> I want to buy some tubes NEW or PULLS (must not be "SOFT"!!!!). I need
> to buy some of the following:
>
> QUANITY Type
>
> 4 4CX250B tubes
>
> 2 3-500Z Graphite Tubes
> (Must be Varian Industries
> or Amprex)
> No Russian or Chinese
> made.
>
> Please reply to with price including shipping to: Roy Thomas Sr..
> Email Address:
> kid1121@netzero.net
>
>

5985. Anyone Have an Electraslide Screwdriver?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 03:35:13 UTC
From: "Dave Alden (KB8VJD)" <dalden@home.com>
Message-ID: <9C519DA0DA1BB18D.ED06B6379D966712.C219084F56D92CF4@lp.airnews.net>
Source record: 167459

I'm strongly considering the purchase of an Electraslide screwdriver
made by Clay Emert of the El Paso Amateur Radio club:

http://www.dzn.com/w5es/ELECTRO.HTM

Has anyone used one and if so could I get an opinion?

I will be using mine in a Chrysler Mini-van with an Icom 706MKII-G.

Also, it is apparently available with either a copper or an aluminum
bottom tube. The aluminium of course is much lighter. Any comments
on whether one or the other is preferable?

Thanks,

Dave Alden KB8VJD

5986. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 03:51:12 UTC
From: Jerry Bransford <jerrypb@home.com>
Message-ID: <3AC00D4F.D2BDB308@home.com>
Source record: 167460
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

No, the braided (or whatever) ground strap I was referring to goes between the radio's chassis and the Jeep body or chassis. It's just that a braided ground strap provides not only a good DC ground, but a good RF ground too. The positive side still goes to directly to the battery through an inline fuse. The rule-of-thumb is that the ground wire should go to the closest possible electrical ground. The ground wire can either be the black wire, or simply a ground-wire (or braided ground wire) connected between the radio's chassis (like a cabinet screw) and the Jeep's body or chassis. HTH!

Jerry

Paul Keating wrote:
>
> Jeez Jerry, you're confusing the heck out of me.
>
> Didn't you say a couple of weeks ago when someone asked about wiring a
> CB to: wire the hot side to the battery and the neg side to a nearby
> bare metal groud?
>
> I had thought of wiring my CB direct to the battery (pos & neg, both
> fused) and then had second thoughts after reading that post of yours.
>
> Now I've interpretted your post below to say pos and neg to battery.
>
> Paul
>
> On Sun, 25 Mar 2001 02:13:15 GMT, Jerry Bransford <jerrypb@home.com>
> wrote:
>
> >Not specifically. Just make sure you use a good braided ground strap
> >from the chassis directly to ground and wire the power directly to the
> >battery and you should be ok.
> >
> >Jerry
>
> '01 TJ Sport
> 5-Speed D44/TracLoc
>
> The opinions exressed here are mine
> and not those of my employer

--
Jerry Bransford
PP-ASEL KC6TAY
The Zen Hotdog... make me one with everything!
Geezer Jeep: http://www.jjournal.net/jeep/gallery/JBransfordsTJ/

5987. Re: Apt. HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:00:29 UTC
From: ik7565@erols.com
Message-ID: <3AC0105D.5F1E4690@erols.com>
Source record: 167461

I use a 10m hamstick off the balcony rail with my HTX-10 rig from a 5th floor condo. Work all kinds of DX. Counterpoise helps a lot.

73 de N8IK

Wayne Reynolds wrote:
>
> Hi
> I have been wanting to run hf from my apt. here in London Ont. Canada for
> sometime and I have a Kenwood TS-440Sat. I ahve used it mobile but never in
> my apt. but now want to.
>
> The problem is I am in a 7`th floor apt. with a balcony. What do I use for
> an antenna.
>
> Also interference any tips on what to use. I used to have a Taylor filter
> but that was a long time ago . I have baluns and lots of 14 gauge wire. And
> I have a source of Hustler coils.
>
> Any help would be greatly appreciated. Thanks in advanced.
>
> wayne VE3JET

5988. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:00:47 UTC
From: richardharrison@webtv.net
Message-ID: <26456-3AC0106F-38@storefull-114.iap.bryant.webtv.net>
Source record: 167462

Cortland, KA5S wrote:'"If the antenna is located near a noise source whose field is predominantly electric, then it can indeed reduce that noise. But by the time you get some distance away from a radiator, the electric and magnetic components of the field have reached a ratio of 377 to 1 for both noise and the desired signals."

Nice summary! That`s what I think, too. Once the loop is in the far field of noise sources it still has the same advantage of an unshielded loop as it can be oriented to null out noise perpendicular to the loop just as an unshielded loop can.

Thanks for performing the loop experiment. You found that a signal could still be received by a loop with a properly situated shield. I`m sure MFJ has tried their product before offering it for sale. I`ve bought a couple of items from MFJ and they both worked well. There may be better similar products, I just don`t know. I make no endorsement and don`t disparage their products either. I don`t know of any MFJ product which defies scientific justification.

Best regards, Richard Harrison, KB5WZI

5989. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:15:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC013C4.704D4EB7@IEEE.org>
Source record: 167464

"Peter O. Brackett" wrote:
> I firmly believe that the IEEE Dictionary is dead wrong on this issue.

I firmly believe that the Bible is dead wrong on some issues.
Unfortunately, nobody cares.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5990. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:18:18 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC0148A.43D88760@IEEE.org>
Source record: 167463
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Bill Sohl wrote:
>
> On 26 Mar 2001 04:27:51 GMT, Dick Carroll <dixie@townsqr.com> wrote:
> > All dozen of them?
>
> Where do you get that mis-information from or is
> that just a knee jerk guess?

Dick believes that all of the no code test folk in the world post
to this newsgroup and that all hams who don't post to this newsgroup
believe like he does.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5991. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:30:03 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC0174B.521D3A52@IEEE.org>
Source record: 167466

Texas Rangers Fan Since 1972 wrote:
> I use an MFJ antenna analyzer and
> the lowest SWR I could get on this thing was at about 24.5 mhz, it dipped down
> to 1.7:1.

Assuming the SWR was higher on each side of 24.5 MHz, that means the
antenna impedance at resonance is either 29 ohms or 85 ohms. Antennas
don't have to be 50 ohms at resonance. A perfectly resonant 1/2WL dipole
in free space would have a 50 ohm SWR of 1.5:1
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5992. Re: Want to Buy: Tubes

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:32:14 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC017CE.67837919@IEEE.org>
Source record: 167465

Rosco wrote:
> try www.rfparts.com

Anybody need a JAN 53A? :-)
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5993. Re: Another theory question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:47:52 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3AC01C6C.411D3C4F@bellatlantic.net>
Source record: 167467

Eafter = C1 * (V^2) / 4 PLUS C2 * (V^2) / 4

You left out the second cap. Solving:
since C2 = C1,
Eafter = C1*(V^2)/4 + C1*(V^2)/4
Therefore Eafter = C1*(V^2)/2

Simple algebra does work on this, despite what was
indicated in an earlier post. Nevertheless the theory
discussed was valuable.

Bill Manley wrote:

> Noting the interest in the "Warner was right .." and "question on theory"
> threads the group might enjoy entertaining the following question which was
> offered to me in a job interview many years ago.
>
> Given two equal capacitors (C1 and C2) arranged in parallel but separated by
> a normally open switch. With the switch open C1 is charged to voltage (V).
> C2 has no charge. Also given is that all circuitry is lossless. Then the
> switch is closed.
>
> Before the closure note that the energy in the circuit is
>
> Ebefore = C1 * (V^2) / 2 + 0
>
> After the switch is closed, the charge Q is equally shared by both
> capacitors. The voltage on each capacitor is now V/2.
>
> Now the total energy is
>
> Eafter = C1 * (V^2) / 4
>
> Where did the energy go?
>
> (BTW, I did get the job)
>
> regards,
>
> Bill Manley KB4XE

5994. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:57:05 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.152814ea97bd42d2989692@news-server.socal.rr.com>
Source record: 167468

In article <97t8p5$d7g$14@mycroft.westnet.com>, lou1@westnet.com says...
> anyone have a 12v dc to ac converter for sale>?
> know a source?

It's called an inverter. I picked one up not too long ago at Pep Boys (auto parts & accessories) for a good price. Audiovox brand, model ADC150, rated for 150 watts continuous power. Works great! I use it to run my notebook computer when we travel and don't have AC power available. Very handy item.

--

-- // Steve //

Steve Silverwood, KB6OJS AOL Instant Msgr: "steve kb6ojs"
Fountain Valley, CA USA Yahoo! Messenger: "steve_kb6ojs"
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Fax: 425/699-7473

5995. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 04:57:11 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1528157dc5fd8d8d989693@news-server.socal.rr.com>
Source record: 167369

In article <mvxp6.12697$a7.131492@typhoon.neo.rr.com>, awatts@neo.rr.com says...
> Anybody have experience with one? How does a G5RV compare to, say, a
> 40M dipole on 40M -- at the same height? -- a 10M dipole on 10M?
>
> Also, I'll have to run it through the near tops of some trees --
> should I replace the bare copper horizontal wire part with insulated
> wire to keep from maybe starting a fire.
>
> It's 102 feet long, and I can't run it completely free of tree limbs
> and foliage.

I have a "shorty" G5RV (40-10 meters, 1/2 the size of the full length model) which I picked up at the TRW ham swap meet a few months back. It's up not quite two stories up and it does a fine job. Used it on 10m in November for the Sweepstakes and managed to log a couple of sheets worth of contacts (more than I planned on, as a "casual" participant). I was duly impressed!

--

-- // Steve //

Steve Silverwood, KB6OJS AOL Instant Msgr: "steve kb6ojs"
Fountain Valley, CA USA Yahoo! Messenger: "steve_kb6ojs"
http://home.socal.rr.com/silverwood Email: kb6ojs@arrl.net
Fax: 425/699-7473

5996. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 05:04:44 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC01F6C.C53C8385@IEEE.org>
Source record: 167370

Steve Silverwood wrote:
> Used (the half sized G5RV) on 10m
> in November for the Sweepstakes and managed to log a couple of sheets
> worth of contacts (more than I planned on, as a "casual" participant).
> I was duly impressed!

Not surprising since the full sized G5RV was designed for 20m.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5997. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 06:08:06 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac047c0$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 167372

"Tom W8JI" wrote ...
> Ted Wagner wrote:
> >I recall going to a hamfest in Indianapolis (Marion County
> >Fairgrounds) about 2 years ago. I saw something quite weird. It was
> >a large ROUND antenna. The maker claimed you could lay it flat on the
> >ground or hang it in an attic. When they demonstrated it (with a
> >radio attached) they had it lying on the ground. Worked quite well.
>
> What were they comparing it against? Antennas very close to the ground
> are very inefficient, there is no way around that.

I am wondering if ther is a way around it. The ground forms a boundary a (poor one), but it could be made to look like a good one where the Voltage will be normal to or zero at the boundary, (the vertical Antenna) and the magnetic field will be parrallel to or zero at. (the loop antenna)

The 'zero at' the boundary condition often occurs where there are other boundaries that produce a sitution where a mode can be set up, such as the inside of a waveguide or a cavity. In free space in the abscence of large buildings to form boundaries it is likely that the 'zero at' condition will not occur generally, thus one might anticipate that large currents due to a wave would pass at the boundary.
If a suitable transducer is placed at the boundary then the currents may be detected. i.e. the slot cut into the narrow wall of a waveguide, the current lines are cut and the slot radiates. By reciprocity a wave across the slot excites the waveguide. An Antenna at ground level might be capable, if designed carefully, of duplicating this mode of detection.

Just because it ain't been done it doesn't mean that it can't be done.

> There are a lot of false claims and misinformation to the contrary,
> but the fact is always that nearly all applied power is eaten-up in
> losses. That true for the DDRR, the CTA, the CFA, and all these
> magical antennas.
>
> Save your money, and stay away from gimmicks.

In general I would agree with that Tom.
However, when a wave terminates at the ground where does the current that forms the boundary flow?

Who a few years ago would have anticipated Cave Radio?
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

5998. Heat shrink

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 06:55:10 UTC
From: stan.holmes@eskom.co.za
Message-ID: <3AC0394E.E472E5ED@eskom.co.za>
Source record: 167371

Hi
Can I use heat shrink as a dust / water cover on a Hy-gain DB-1015A antenna over the trap ends. The heat shrink is marked non conductive and is blue in colour. Will it be OK with RF.
Stan
ZS6HAL

5999. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 07:07:20 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac047c1$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 167375

"Ian White, G3SEK" wrote ...
> Gary Peach wrote:
> >"Ian White, G3SEK" wrote ...
> >> Gary Peach wrote (in part):
> >I am pleased that you feel that you can speak for the Ham fraternity, but
if
> >the rest are as unruley as the lot in this news group I doubt that anyone
> >could claim to speak for Hams as a general class. :)
> >
> >> >>I am in very direct contact with
> >> >> that segment of the ham fraternity that needs to think about noise
> >> >> temperature: everybody accepts the definition that 290K is a
reference
> >> >> temperature, unconnected with ambient temperature.
> >
> I don't speak for them, but the amateurs around the world who are
> actively engaged in measuring noise temperature are a close-knit group.
> We know who else is involved, we correspond by e-mail and we get
> together in person whenever we can. Some of us measure noise figure
> professionally while others are pure amateurs, but we all do our utmost
> to work to professional standards.

How does one get to know this group?

> >Understood, but not everybody uses a noise diode or noise tube to
calibrate
> >their equipement. The price of such commercial instruments precludes
their
> >use by most Hams I would think.
>
> There is a lot of published information on the web, in amateur
> conference proceedings, in specialist amateur VHF/UHF/microwave
> magazines, and even in a book or two, of which you don't seem to be
> aware.

That is true Ian, I have been in Hospital for a triple bye pass that didn't work out as well as it might, so I have spent a good number of years closeted at home. On Sunday I managed to go to Blackwell's in Oxford where I did find a couple of tomes that lightly touched on the subject; one a translation from the French price £55 and one other book price £74. I'm afraid that at those prices I will not be reading them, much as I would like to have them in my collection. I would not expect a request to our local library to be fruitful, besides they are the sorts of books that one retains for future reference. Neither book touched directly upon this low end of the spectrum.

> The reality is that for a few pounds or dollars, you can make a highly
> effective noise diode source that will work from HF through to the low
> microwave bands. And you can have it calibrated against commercial
> sources at a "Microwave Round Table" Sunday for free.

Just how stable is the calibration?
Of what magnitude of noise temperature are you speaking?
Will any of the sources make 10^8 K?
I want to be sure to bracket the temperatures of interest, an extrapolated
result is probaly worthless beyond being an indicator.

> The only difference between an amateur and a professional diode noise
> source is likely to be that the professional source has a flatter
> calibration curve, and goes to higher frequencies.

At the moment I am interested in going down. This site is in a dip. It would
be OK for Moon-Bounce, but I feel physically incapable of constructing a
suitable antenna for that and besides the number of operating hours a month
are too few to keep me out of mischief. Therfore I have turned my eyes
towards the low end of the band wher hopefully being in a hollow will have
less effect. the remaining challenge down here seems to be 136 kHz so I am
reconoitering the territory. It seems that I will be a bit short of
co-experimenters.

> AFAIK, tube noise sources are obsolete. Their theoretical self-
> calibrating feature doesn't meet modern requirements for accuracy.
> Perhaps even more importantly, they don't meet the more recently
> understood requirement for a minimal impedance change between the ON and
> OFF states. Solid-state noise sources (even the base-emitter junction of
> an ordinary RF transistor) generate very high levels of noise, which
> allows impedance-stabilizing attenuators to be inserted between the
> diode and the output. Tube-type noise diodes don't generate enough noise
> to allow this. I threw one away last year because it was of no practical
> use any more.

(My first experience of this type of noise source was in 1957, noise power
was calulated from the reading on an ameter in line with the directly heated
filament. It was of German origin, not surprising as I was then in Germany.
;) At about this time I encountered the Schomandl phase locked frequency
standard, each section had to be manually tuned; the state of tune indicated
by a magic eye tuning indicator. All valves/tubes.)

That is a bit of information that I have missed during my confinement.
Due to my circumstances most of my re-awakened interest will neccassarily
need to be confined to theoretical work. A I can't afford equipment, B if
any Aerial construction is require I need to be absolutely certain before
commencing work that it will have some measure of success the physical
effort involved will take me a week where a fit person might spend an hour.
There are no willing local Hams that would errect an antenna for me. C I
can't get about to chase components.

> >However the construction of Hot and cold
> >loads can be a kitchen table exercise which many Hams could adequately

> >accomplish.

Once I get started I would be OK. I have a Palomar R-X Noise Bridge which will provide some noise, but I have doubts about the calibration and stability of that noise source and I think that the attainable noise temperature is too low for the bottom end at 136 kHz.

> Not unless your kitchen has hot and cold running liquid nitrogen :)

That is not such a pipe dream. (sic) LiN is available in small quaties if you have a suitable Dewar. BOC have a plant near us for the M&S depot presumably I could get some there, however LiN temperatures are not required for use at the low end of the SW bands, on the contary what I need is a stable high temperature noise source and a load at ambient temperature can be the cold load.

> Seriously, it is by no means as easy as you suggest, not if you're going
> to do a really accurate job. If you choose to use conveniently
> accessible temperatures, the temperature baseline is short and you run
> into trouble with making accurate dB measurements.

Unfortunately Ian I am only too well aware of that problem, I have been turning the problem over in my mind for a few years. I have devloped a method of calibrating signal level in an Rx to very fine limits, I checked it out extensively at 2,295 MHz and it is a winner. I want to adapt the method so that a small additional circuitary added to a communications receiver which is under the control of the processor that is built into most of them these days so that an accurately calibrated digital display of received signal level may be built in. Imagine the change that this could make to contests. (No more gratuitous 599 to all and sundry). With the development of reliable methods of measuring ERP accurate models of the propogation characteristics could be made from the results of contests. The dynamics of propogation could be better studied, some of the short term changes that occur in propogation at HF might be studied. This would at least give a magnitude study whilst better methods to recover the phase data are developed.

> On the other hand, if
> you do have access to solid CO2 or liquid nitrogen, you run into
> problems with changing impedance of loads, and corrections for noise
> contributions from the parts of the system that are not at the same
> temperature as the reference load. In other words, it is not a simple
> job in practice.

Believe me I have done it professionally I know exactly what you mean and I am quite happy that at 2,295 MHz I became very competent with these proceedures and handling LiN.
We had a Dewar of LiN that was 25 feet tall and several feet in diameter. In order to measure the level we placed one foot on a pad of material that changed its resistance with the applied pressure. We also used the LiN for cooling the MASER down below the inverison temperature so that we could quickly (8 hour) get the Helium Refrigerator going) They have better methods

now I understand.
CO2 in conjunction with To would not give a sufficiently long baseline for work at the lower frequencies. The longer the base line the better the results, though a baseline adjacent to the temperatures at which the system is to work will give satisfactory results.

> Your theoretical speculations are accurate as far as they go - but as
> ever, they don't go far enough to account for the realities that are
> well known to people who are actively involved.

Please, don't leave me dangling.

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6000. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 07:21:33 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac047c4$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 167373

"Tom W8JI" wrote ...
> Ian White, G3SEKwrote:
> >Your theoretical speculations are accurate as far as they go - but as
> >ever, they don't go far enough to account for the realities that are
> >well known to people who are actively involved.
>
> It doesn't hurt to have a good understanding of the how the real world
> works.

The first step to understanding is curiosity, the second investigation, If I prod it, does it bite. The third stage is formal description, and the final stage is prediction.

If you were generous of spirit instead of ridicule you might offer some sound advice and facts, then all of the subscribers to this news group might learn something instead of having to read through your baiting posts.
I have tried to go easy on you so far Tom, but it seems to me that if your claims of an extensive AE Farm are true you have far too much money and not enough real curiosity.
You have missed what the intellectual giants understood so well.
I think that Isaac Newton summed it up when he said, "I do not know what I may appear to the world, but to myself I seem to have been only a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6001. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 07:23:28 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac047c5$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 167374

```
"Reg Edwards" wrote ...
> Gary wrote -
> > Certainly Reg: the ratio (energy out) / (energy in)
> ========================
> The energy out to where ? Having answered that question, would
> you then precisely describe where you would connect your energy
> meters to obtain the efficiency of your common or garden inverted-L
> wire.
```

Reg we could play this silly game forever, why don't you admit just
occassionally that you don't know.
73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6002. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 08:39:48 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <99pjge$i2s$1@news.service.uci.edu>
Source record: 167376
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill Sohl <billsohl@mindspring.com> wrote in message
news:3ac0004c.2126060@news.mindspring.com...
> I haven't read
> one FCC comment that put any rational into
> why code should be kept as a test...with the singular
> exception being that for now, it still is a treaty
> requirement.

Best place to look for it might be the same place where they gave rationale
for keeping any of the other requirements - wherever that is.

73, Jim AC6XG

6003. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 11:09:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99psal$4ep$1@plutonium.btinternet.com>
Source record: 167377

Michael Edelman wrote >
> > What is the conventional wisdom which dictates 1/4 wavelength
> > radials ?
>
> Same reason you have a 1/4 wave vertical element. You're aiming
for a 50
> ohm feedpoint impedance at resonance.
==========

But the input resistance of a 1/4-wave resonant vertical is not 50
ohms - it is only 36.

6004. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 11:36:26 UTC
From: stanbarb@warwick.nOt
Message-ID: <Xns9071433ADD8EAstancomms@204.255.24.253>
Source record: 167378

"Rudy Marcelletti" <rudym@net-link.net> wrote in
<3abb6b59$0$88186$bbae4d71@news.net-link.net>:

>Thanks to all for the constructive help. (Even though I still won't
>use a bike flag ;-))
>Walt Smith
>
>Walt--you should fly a little "pirate flag" flag on the top of your
>antenna! The fiberglass rod sounds like a good solution, however, why
>not just mount the antenna to the aluminum tubing thereby incorporating
>the aluminum, which I assume is mechanically attached to the frame, into
>the ground plane scheme of things. The more metal you have under this
>antenna the better it will work!
>
>

Rudy;
Beware the idea of using the tube as a ground plane. What you have in mind here is a coaxial antenna; a center fed vertical dipole. Both ends of that dipole must be connceted to nothing, but insulators... not to the bike's frame.
If the tubing were long enough, you could attach a quarter wave sleeve (sometimes called a decoupling sleeve), to that support at its top, where the antenna would be mounted. With the bottom end of that sleeve touching nothing conductive! The closest thing that I can think of to use as an example is an Isopole, with the bottom cone removed and with the upper cone untapered.
This type of antenna was used on the old Ma Bell (yea, does go back quite'a ways) VHF Hi-Band Mobile Phones. There are also some cell phone antennas using an "elvated feed", but with all the streamled covering, it's hard to see.
Stan

6005. Power cap of #18 ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 11:55:30 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <Ic%v6.4612$l5.4225640@newsfeed1.thebiz.net>
Source record: 167379

Would appreciate info on power handling capability of #18AWG 450 ohm window line - approx 250ft run at 3.5/7Mhz at low SWR.

Tnx & 73,
Barry N1EU

6006. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:19:05 UTC
From: trwagner1@yahoo.com
Message-ID: <3ac084c7.86791471@netnews.worldnet.att.net>
Source record: 167380

Bingo! Thanks Roy. This is it. I recall seeing this and being a bit interested. I'm not enough interested to spend any money. I'm intrigued to say the least. I wanted to look into it a bit more.

I am more interested in making a magnetic loop or QRP work.

Thanks!

Ted

On Mon, 26 Mar 2001 13:40:35 -0800, Roy Lewallen <w7el@eznec.com> wrote:

>Sounds like the CTHA (contra-wound toroidal helical antenna). You can
>see some pictures at http://www.antennex.com/shack/Jan00/hawks.htm, and
>a web search for CTHA will yield other URLs. I have no doubt that it
>will radiate. But just what fraction of the applied power is radiated
>isn't something the manufacturer has been willing or able to tell.
>
>Roy Lewallen, W7EL
>
>Ted Wagner wrote:
>>
>> This will sound a bit bizarre, but please bear with me.
>>
>> I recall going to a hamfest in Indianapolis (Marion County
>> Fairgrounds) about 2 years ago. I saw something quite weird. It was
>> a large ROUND antenna. The maker claimed you could lay it flat on the
>> ground or hang it in an attic. When they demonstrated it (with a
>> radio attached) they had it lying on the ground. Worked quite well.
>>
>> I do recall they had a website. But, I've lost the address and I have
>> no idea what the antenna was called. Has anyone heard of this? Seen
>> their website?
>>
>> It looked like a giant hula-hoop and was quite thick.
>>
>> Thanks
>>
>> Ted, kb9rpd

6007. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:20:23 UTC
From: al <ke4nu@hotmail.com>
Message-ID: <SF%v6.39$ge7.839@newsfeed.slurp.net>
Source record: 167381
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Hello, go with a screwdriver antenna, it does not need a tuner...its big, its ugly, but it beats everything else, that I've tried. Hamsticks work soso above 40m, but for 75 go with the screwdriver. Ground the rig to nearest chassis ground, just grounding thru the coax shield is not good enough. It will work some without it but will work better with chassis ground. I've used a 706 for a couple of years and have learned the importance of good grounds and good antennas. On the bugcatcher, they work fine, but everytime you want to change frequency you have to stop and move the jumper. Hope this helps...AL

6008. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:36:57 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <JP%v6.6679$9i1.592068@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167382

Hello,

Some thoughts...

First, I believe that the extra wire in the dipole, about a
foot, is adding to the antennas length, thus making it resonate
at the 24.5 MHz point. Check your math and you will see that
468/24.5= aprox 19ft. That is what you have with the extra
foot of wire that you had included in the original design.

A foot or so of wire at 28 MHz is a lot.

A couple of other points. You mention that you used
"five loops through the lug" what does that mean? If you
looped the antenna wire around something, that makes
the looped wire into a coil that is probably affecting the
resonate frequency also. Take out the loops. The solder
connections should be strong enough to take the stress
without looping the antenna wire.

Stranded wire will also make the antenna look longer
electrically as will insulated wire.

So... if you remove the loops, and the extra wire, the antenna
should resonate at ten meters instead of at twelve meters. If
you
can achieve the 1.7:1 ratio at say, 28.4 MHz, then it should be
good to use. Now then, we probably could debate the actual
SWR reading, but 1.7:1 is OK and very usable. There may be
environmental factors that keep the antenna from exhibiting a
1:1 ratio. I remember the first time that I tried to get a ten
meter
antenna to the magic 1:1. Took hours, and no appreciable
difference in performance. May be that the ratio will lower
when the antenna is raised to it's operating height. If not
don't stress. Just use it!

73

Gary WG7X

Texas Rangers Fan Since 1972 <ke4qkn@aol.com> wrote in message
news:20010326215623.13235.00001743@ng-fi1.aol.com...
> Tried to build a nice 1/2 wave dipole today for 10m and could
not get the SWR
> below 2:1......
>

> The center is a Van Gordon 1:1 HI-Q balun. Measured 8 ft 3" of
wire for each
> leg, plus an additional foot: 6" to work with in the center, 6"
to work with on
> the end. Used 14 ga stranded THHN wire. Soldered the ends to
the middle, made 5
> loops through the lug, used end insulators with 5 loops on each
end. Hung it up
> about 10ft off the ground in the driveway to test it before
hanging it, and
> like I said, could NOT get the swr below 2:1. I use an MFJ
antenna analyzer and
> the lowest SWR I could get on this thing was at about 24.5 mhz,
it dipped down
> to 1.7:1.
>

6009. W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:45:08 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <99q20klmu1@planet.kis.keele.ac.uk>
Source record: 167387

Hi Folks,

I see in an advertisement from Waters and Stanton in the UK that one of the company owners, Jeff Stanton, has designed an 3.5Mhz dipole that also works on 40 and 20m. It seems to be about 50ft total size too.

Anyone with similar designs on the web anywhere?

Cheers.

Leigh....M5GWH, currently looking at sm0vpo's designs.

--

Leigh M. Preece Media and Communications Centre
Keele University. Staffs. UK. ST5 5BG
==========
Ex-PMR Radio Page: http://www.qsl.net/m5gwh/pmrpage.htm

6010. Re: Tire static?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:53:25 UTC
From: stanbarb@warwick.nOt
Message-ID: <Xns907150480F756stancomms@204.255.24.253>
Source record: 167386

"jim reed" <jreed4@kscable.com> wrote in
<Pipv6.39132$s6.2436022@typhoon.kc.rr.com>:

>Yes, steel belted radial tires can create static electricty to the
>extent of causing some radio interference. If this is what's causing the
>inteference you should not have any problem in the rain, the water will
>dissapate the charge. First make sure the radio chassis is grounded to a
>good ground (no paint) with the shortest piece of wire possible.
>Here is my theory of what happens.....A magnetic field can be generated
>around the tires from the friction of the tires and the road not to
>mention the spinning "coils" of wire in the steel belted radials that
>may help increase the strength of this field. This field of
>electromagnetic induction intermittently jumps to the metal frame of the
>vehicle and somewhat dissapates. During this time static currents are
>flowing through the ground system of the car causing electrical
>interference to radios that require grounding. I may be way off on how
>or why this happens, but he is how to fix it.
>Go to a truck stop or auto parts store and buy a grounding strap.
>It is a rubber strip with impregnated metal that will bolt to the frame
and
>drag on the ground. It will dissapate any charge from the frame of your
>vehicle.You have seen these on semi trucks and vehicles of certain
>racial groups. You could use a small piece of metal chain, but aside
>from the constant clinking noise it could be a fire hazard from the
>sparks of the metal being rubbed away. This also may cure a "Shocker",
>you know, one of them vehicles that you are afraid to close the door on
>every time you get out because it might shock you. Good Luck, 73's
>

Question: Do not moving, sliding, contacts create noise themselves? And
at 70 plus, it's probably just floating in the slip stream of air flowing
under the chassis. Probably fine though to dissipate static when you
enter/exit the vehicle, or hand the toll taker his (or her) due.
We do still have toll roads out east. :(

>
>
>"Rudy Marcelletti" <rudym@net-link.net> wrote in message
>news:3abb6a2d$0$88186$bbae4d71@news.net-link.net...
>> Yesterday I noticed some increased noise on receive while cruising
>> 70mph
>on
>> the freeway (no toll roads in MI). When I exited and started slowing,
>> the noise started to decrease. When I got down to about 30 or 40 mph
>> it was gone. I shifted to neutral and rev'd the engine, but no noise

>> (other than normal) so I figure it was the tires. The ham I was
>> talking to said to
>put
>> some graphite powder on the sidewalls. I never heard of this.
>>
>> Do tires, steel belted radials in particular, create interference?
>>
>> Is there any truth to the graphite idea?
>>
>> Can tire static if that is what it is be effectively eliminated?
>>
>>

Another source of static at high speed is caused by the antenna passing
through the air. The ball at the top is intended to reduce the discharge
by getting rid of the sharp point at the antenna's tip. Sharp points
concentrate the charge and raise the noise level.

>
>

Stan

6011. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:54:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99q2g9$nh8$1@slb3.atl.mindspring.net>
Source record: 167383

Cecil:

The bible is wrong on some issues? In Texas? What?

Now see what you have done!

By this unfortunate comparison, even though nobody cares, you may just have inadvertently elevated that poor misguided IEEE Dictionary to the level of the bible.

Jeesh! What next? The "Church of Dissipationless Resistance"?

Imaginary Resistance has much more reality than dissipationless resistance!

-Peter K1PO

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3AC013C4.704D4EB7@IEEE.org...
> "Peter O. Brackett" wrote:
> > I firmly believe that the IEEE Dictionary is dead wrong on this issue.
>
> I firmly believe that the Bible is dead wrong on some issues.
> Unfortunately, nobody cares.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6012. Looking for Comments on Open Sleeve Dipole Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:56:14 UTC
From: kelly@dvol
Message-ID: <3ac08c8e.221362@news2.dvol.com>
Source record: 167384

I ran across an interesting multiband HF dipole antenna in Bill Orr's "W6ASI HF Antenna Handbook", the open sleeve dipole on pp 4-29. Apparently it's an old design going back around 30 years and there have been a few scattered articles on it in QST, older ARRL Antenna Handbooks and CQ over the years which I missed. I understsnd that HyGain and Force12 have used the open sleeve feed concept in a couple of their products. A web search turned up scant information on the subject.
>
The design strikes me as a better idea than the usual G5RV and trap dipoles for 2-3 band applications but for some reason the antenna has gotten very little attention in ham circles. I'm thrashing for a decent coax-fed 40/20 dipole for Field Day and would like to have comments on the design and construction of open sleeve wire dipoles from any users and/or the antenna gurus who hang out hereabouts - I'm particularly interested in understanding the limitations of the design.
>
Tnx
>
w3rv

6013. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 12:57:25 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac08c7e.571238467@news.accessunited.com>
Source record: 167385

On Mon, 26 Mar 2001 22:00:47 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Cortland, KA5S wrote:'"If the antenna is located near a noise source
>whose field is predominantly electric, then it can indeed reduce that
>noise. But by the time you get some distance away from a radiator, the
>electric and magnetic components of the field have reached a ratio of
>377 to 1 for both noise and the desired signals."
>
>Nice summary! That`s what I think, too. Once the loop is in the far
>field of noise sources it still has the same advantage of an unshielded
>loop as it can be oriented to null out noise perpendicular to the loop
>just as an unshielded loop can.

Nice but not true.

At a distance of about 1/10th of a wavelength from a small antenna, the field impedance reverses.

The loop becomes electric field dominant, and a small dipole magnetic field dominant.

All the shield does is help balance the antenna if the antenna has a balance problem....nothing more.

If the shield is improperly installed, then it will help UN-balance the antenna.

73 Tom

6014. Re: Egg insulator for dipole center?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:08:00 UTC
From: kelly@dvol
Message-ID: <3ac08fec.1083436@news2.dvol.com>
Source record: 167388

On Mon, 26 Mar 2001 18:59:20 GMT, "Dave Cook"
<nospam.davepc2@netdave.,com> wrote:

>I'm putting together a lightweight dipole and was thinking about using a
>lightweight plastic egg inslulator for the center instead of the traditional
>glass/porclain center insulators with the eyes on the ends.
>
I've used those dollar eggs for center insulators in quickie
lightweight half wave dipoles several times, never had a problem.
>
>-- Dave, WA0TTN
>
w3rv

6015. PRACTICE CW ON THE WEB.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:24:56 UTC
From: Brad <bdstrau@attglobal.net>
Message-ID: <3ac09869_3@news1.prserv.net>
Source record: 167391

PRACTICE CW ON THE WEB.

http://www.morse101.com

6016. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:28:57 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac08dc0.571559741@news.accessunited.com>
Source record: 167389

On Tue, 27 Mar 2001 08:21:33 +0100, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Tom W8JI" wrote ...
>> Ian White, G3SEKwrote:
>> >Your theoretical speculations are accurate as far as they go - but as
>> >ever, they don't go far enough to account for the realities that are
>> >well known to people who are actively involved.
>>
>> It doesn't hurt to have a good understanding of the how the real world
>> works.
>
>The first step to understanding is curiosity, the second investigation, If I
>prod it, does it bite. The third stage is formal description, and the final
>stage is prediction.

I see what the problem is. You've missed the second stage totally.

If I can help, let me know.

73 Tom

6017. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:31:21 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac0955b.573507571@news.accessunited.com>
Source record: 167390

On Tue, 27 Mar 2001 08:23:28 +0100, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Reg Edwards" wrote ...
>> Gary wrote -
>> > Certainly Reg: the ratio (energy out) / (energy in)
>> ======================
>> The energy out to where ? Having answered that question, would
>> you then precisely describe where you would connect your energy
>> meters to obtain the efficiency of your common or garden inverted-L
>> wire.
>
>Reg we could play this silly game forever, why don't you admit just
>occassionally that you don't know.

Maybe for the same reason you can't admit it Gary?

73 Tom

6018. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:39:20 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac09627.573711746@news.accessunited.com>
Source record: 167392

On Tue, 27 Mar 2001 07:08:06 +0100, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>I am wondering if ther is a way around it. The ground forms a boundary a
>(poor one), but it could be made to look like a good one where the Voltage
>will be normal to or zero at the boundary, (the vertical Antenna) and the
>magnetic field will be parrallel to or zero at. (the loop antenna)

My statement wasn't quite true.

Vertical antennas near earth can be quite efficient, nearly 100%. It
does require a good overall design.

Very low height (in terms of wavelength) or electrically very small
antennas are almost always very inefficient. Especially when placed
near earth without a large ground system.

73 Tom

6019. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:41:12 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac09781.574057656@news.accessunited.com>
Source record: 167393

On Tue, 27 Mar 2001 01:49:26 GMT, Irv Finkleman
<finkirvNOSPAM@home.com> wrote:

>Sounds to me like a Magnetic Loop such as the MFJ 1786 (with the
>protective plastic
>cover removed). Search for AA5TB. He homebrews 'em and has links to other
>sites.

A loop antenna isn't all that efficient unless it is at least .1 wl
diameter.

They are especially poor, like all antennas, when horizontally
polarized and placed very near earth.

73 Tom

6020. Re: Power cap of #18 ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:42:17 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC098B9.B4818E98@oio.net>
Source record: 167394

BarryG wrote:
>
> Would appreciate info on power handling capability of #18AWG 450 ohm window
> line - approx 250ft run at 3.5/7Mhz at low SWR.
>
> Tnx & 73,
> Barry N1EU

Barry,
It will handle anything you can legally feed it, or
more if the SWR stays low.
'Doc

6021. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:43:32 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC09904.E45AB8B6@IEEE.org>
Source record: 167397

Reg Edwards wrote:
>
> Michael Edelman wrote >
> > > What is the conventional wisdom which dictates 1/4 wavelength
> > > radials ?
> >
> > Same reason you have a 1/4 wave vertical element. You're aiming
> > for a 50 ohm feedpoint impedance at resonance.

> But the input resistance of a 1/4-wave resonant vertical is not 50
> ohms - it is only 36.

Slanted radials will take care of that but I have another question.
Taking a lesson from an off-center fed dipole, if we make the
horizontal radials shorter than 1/4WL and the vertical radiator
longer than 1/4WL, can we find a 50+jX ohm point? (where the
reactance can be neutralized with a series cap) I've been meaning
to model that configuration but day-trading has soaked up my time.
--
http://www.mindspring.com/~w6rca

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6022. Re: Heat shrink

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:44:47 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC0994F.B9597AC7@oio.net>
Source record: 167395

stan.holmes@eskom.co.za wrote:
>
> Hi
> Can I use heat shrink as a dust / water cover on a Hy-gain DB-1015A
> antenna over the trap ends. The heat shrink is marked non conductive and
> is blue in colour. Will it be OK with RF.
> Stan
> ZS6HAL

Stan,
It should work fine. The only question I would have
is will the 'heat-shrink' shrink enough for the differences
in diameters?
'Doc

6023. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:45:37 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC09981.7E57A2B@IEEE.org>
Source record: 167398

Roy Lewallen wrote:
> Sounds like the CTHA (contra-wound toroidal helical antenna). You can
> see some pictures at http://www.antennex.com/shack/Jan00/hawks.htm, and
> a web search for CTHA will yield other URLs.

Is that the same thing as the old Hula-Hoop antenna?
--
http://www.mindspring.com/~w6rca

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6024. Re: Power cap of #18 ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:51:54 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC09AFA.CFE4E41F@IEEE.org>
Source record: 167401

BarryG wrote:
> Would appreciate info on power handling capability of #18AWG 450 ohm window
> line - approx 250ft run at 3.5/7Mhz at low SWR.

"Wirebook III" says "for less than full power". Why not use their
stocking number #554 - #14 wire "for maximum power". That's what
I use.
--
http://www.mindspring.com/~w6rca

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6025. Re: best length of "all band" dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:53:23 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ac09b76$0$88187$bbae4d71@news.net-link.net>
Source record: 167399

Great article Dennis. Gave me some good ideas. I never did think the 100
or 102 foot length was a good idea. I must have been confused with G5RV
type antennas. 73
Dennis Collin wrote in message <3abfe572.14555229@news.mybizz.net>...
>Read this interesting article:
>
>http://www.cebik.com/aledz.html

6026. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:54:43 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC09BA3.8904A65A@IEEE.org>
Source record: 167402

"Peter O. Brackett" wrote:
> By this unfortunate comparison, even though nobody cares, you may just have
> inadvertently elevated that poor misguided IEEE Dictionary to the level of
> the bible.

Well Peter, I've heard that a Webster's dictionary is the "Bible"
of the English language. So wouldn't an IEEE dictionary be the
US "Bible" of electrical and electronic terms? :-)
--
http://www.mindspring.com/~w6rca

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6027. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:56:09 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC09BF9.B8087A3A@oio.net>
Source record: 167400

Frustrated,
As already said, the antenna sounds like it's too long. The formula gives you a 'ball park' length, not an exact one, and it's usually just a 'tad' too long ('tad' = techspeak for just a little bit). If the final mounting height is higher than where your testing the antenna, the SWR will change when your finished. But, it shouldn't be completely out of reason. Have fun...
'Doc

6028. Re: Radiation Resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:56:17 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac09820.574216277@news.accessunited.com>
Source record: 167396

On Mon, 26 Mar 2001 20:09:56 -0500 (EST), mover123@webtv.net (Paul Ward) wrote:

>All,
>
>I am new to this group - first post. Please accept my apology if this
>has already been covered ad nauseum.
>
>In the amateur radio literature, I have read that (paraphrasing)
>"Radiation resistance varies from point to point along the antenna. For
>example, if at some point the voltage and current are in phase, and the
>current is 1A and the voltage is 75V, the radiation resistance at that
>point is 75 Ohms".
>
>My problem with this statement is that I am used to thinking of
>impedance as a property associated with a PAIR of terminals. What is
>meant by 75V a some point in the antenna? The radiation resistance
>defined at the center of a dipole makes perfect sense to me. Is this
>just sloppy wordsmanship in the literature, or what?
>
>Thanks, Paul

Hi Paul,

Radiation resistance is mostly useless, by itself it won't tell you a thing. That's mostly because it has several common uses or definitions, all of which mean something different.

The exception is if someone carefully defines how it was measured.

My point is you have to be VERY careful how you use radiation resistance. It is probably the single most misused term when discussing antenna. Radiation resistance is the source of some very popular misconceptions.

Radiation resistance can be the terminal impedance of an antenna or antenna system, it can be the resistance at a current loop, it can be the resistance at a specified point, or it can be defined many other ways. Unless you fully understand what it all means, it is best to simply avoid using it!

In the case you describe, it seems clear they are speaking of the resistance that would appears when the antenna is "broken" and fed at any random point they choose. This is ONE definition, properly called the "feedpoint" or "terminal" radiation resistance.

The loop radiation resistance (the resistance that would be measured at the middle of the current maxima) might be quite different. The IRE definition that compares the effective current causing the radiation to the total power radiated is another definition.

73 Tom

6029. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 13:57:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC09C2D.765E2929@IEEE.org>
Source record: 167405

Leigh Preece= wrote:
>
> Hi Folks,
>
> I see in an advertisement from Waters and Stanton in the UK that one of the
> company owners, Jeff Stanton, has designed an 3.5Mhz dipole that also works
> on 40 and 20m. It seems to be about 50ft total size too.
>
> Anyone with similar designs on the web anywhere?

I have a 130ft dipole that works on *ALL* HF bands without a tuner.
It's on my web page.
--
http://www.mindspring.com/~w6rca

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6030. Re: Bicycle antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:00:27 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ac09d1f$0$88179$bbae4d71@news.net-link.net>
Source record: 167403

Stan Labinsky Jr. wrote in message ...

>Beware the idea of using the tube as a ground plane. What you have in mind
>here is a coaxial antenna; a center fed vertical dipole. Both ends of that
>dipole must be connceted to nothing, but insulators... not to the bike's
>frame.
>
That is not what I had in mind. Simply mount the Diamond dual band antenna he already has to the appropriate mount connected to the frame of the bike. The more metal under the antenna the better--just like on a car. That is why bigger vehicles generally have a bigger signal, all other things being equal. That is why simply placing your HT on a vehicle improves performance. If the antenna is not going to use the metal of the bike for the return path, as in a J-pole, then by all means it must be isolated from it and put up as high as possible. However, if a railing mount is used on a bike tube, then the most metal that can be electrically bonded to the mount should be. My rubber duck mounted on an approximately 5" x 14" aluminum luggage rack works a lot better than when it s mounted on the HT!

6031. Re: Walter was right !

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:05:03 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AC09E0E.5F83@pacbell.net>
Source record: 167411

W6RCecilA wrote:
>
> "Peter O. Brackett" wrote:
> > I firmly believe that the IEEE Dictionary is dead wrong on this issue.
>
> I firmly believe that the Bible is dead wrong on some issues.
> Unfortunately, nobody cares.
> --
> http://www.mindspring.com/~w6rca
>
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I've always felt that what is important about religious texts is
not what they say about the physical, but what they say about the
metaphysical. Unfortunately, some physicists like to talk about
the metaphysical, too, with about the same validity as a shaman
discussing antenna theory. The IEEE dictionary, at its best,
is neither a religious text nor a physics text. It merely
defines words as the editors think most engineers use them. If
you think the definitions are wrong, complain to the engineers.

Tom Donaly KA6RUH

6032. Re: Antenna - restricted setup question

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:10:46 UTC
From: G&R <"stop the spam"@limbo.hell>
Message-ID: <Gb1w6.469240$f36.14736140@news20.bellglobal.com>
Source record: 167404

Our antena has a 7 foot turning radius and is a multi-band mini quad (new design) for 10-15-20m.

It is expensive, however, it is easy to erect (8 bolts, 4 clamps and mount) and requires little if any tuning.

www.degendesigns.com

Comments to me through the NG or my address are welcome.

73

Guenther
info@degendesigns.com

"Bruno Quesnel" <quesnelb@ve2.ele.etsmtl.ca> wrote in message news:3ABE21BA.39506E79@ve2.ele.etsmtl.ca...
> Actually my main concern is space. The house is about 20'X24' and have
> neighbours on both sides of the house, same dimensions..... Got also
> other houses in the back which are pretty much the same size and are
> also 2 story high (as my house).
>
> I've looked at long wires and G5RV but I dont have the vertical descent
> for the G5RV ladder segment. The vertical did a fair job for contacts,
> but I'd like to get something maybe a little better since now it's down
> due to weather.
>
> A beam standard beam (3 element - 3band) is very much probobly to heavy
> or has to much wind load for my standard tubular tv tower. It's 40 feet
> tall.... I also got the tripod on top of the house which is still
> standing after holding the vertical. I also don't think that the tripod
> wont be able to hold a standard beam at 3 feet tall....
>
> So for now, I think that a dipole might be my best bet for the limited
> space for now (other then verticals). Unless you know a type of setup
> that might permit me to put a beam or other antenna that might serve me
> best.... I'm open to pretty much any suggestion.
>
> 'Doc wrote:
>
> > Bruno,
> > That's a subjective question, and I don't know how to
> > answer it for you. There is a difference in what you
> > hear/don't hear with a rotating dipole. If that difference
> > is big enough to be worth the cost is up to you (and your
> > wallet). If your only looking for a temporary antenna

> > until you get your new one, I'd think a rotating dipole
> > might be a bit too costly (for me, anyway). If you already
> > have a rotor, tower/pole, etc, then it may ~not~ be too
> > expensive. What would you do with it when the new antenna
> > get in?
> > 'Doc
>
> --
> Bruno Quesnel va2bmg@videotron.ca
> Genie Electrique quesnelb@ve2.ele.etsmtl.ca
> Electrical Engineering queb1604@ele.etsmtl.ca
> Ecole de Technologie Superieure VA2 BMG
>
>

6033. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:14:50 UTC
From: Dave Heil <k8mn@ovis.net>
Message-ID: <3AC09247.4B249DF2@ovis.net>
Source record: 167406
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill Sohl wrote:
>
> On Mon, 26 Mar 2001 12:17:32 GMT, Dave Heil <k8mn@ovis.net> wrote:
>
> >Larry "the homemade lawyer" Klose wrote:
> >
> >> In a October 27, 1997 briefing paper prepared for digital television
> >> broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> >> regulation: "The Supreme Court has observed in CBS v. DNC that the FCC must
> >> "walk a 'tightrope' to preserve the First Amendment values written into the
> >> Radio Act and its successor, the Communications Act." After referring to
> >> its Red Lion decision, the Court noted that "[t]he problems of regulation
> >> are rendered more difficult because the broadcast industry is dynamic in
> >> terms of technological change; solutions adequate a decade ago are not
> >> necessarily so now, and those acceptable today may well be outmoded 10 years
> >> hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> >> Committee, 412 U.S. 94, 117 (1973)."
> >
> >Are you a member of NAAB (National Association of Amateur Broadcasters)?
> >We aren't a broadcasting service and we aren't commercial, Larry.
> >
> >> Because of technological and operational changes, the manual Morse code exam
> >> is unnecessary. Its use as a licensure examination element to authorize
> >> frequency bands and emission types, other than manual Morse code operation,
> >> is arbitrary and capricious. The exam is even arbitrary to authorization
> >> Morse code operation, since such operations can be conducted by computer
> >> control.
> >
> >YOU believe them to be arbitrary and capricious, Larry.
>
> In the absense of any contradicting comments,
> the FCC sure seems to think so too. I haven't read
> one FCC comment that put any rational into
> why code should be kept as a test...with the singular
> exception being that for now, it still is a treaty
> requirement.

That singular exception makes HF morse testing the law of the land, Bill
so it must have some bearing. That is certainly more than comes from a
homemade lawyer quoting from a court case between a commercial
television network and a national political party. Larry's chants of
his new age mantra are a bit premature.

Dave K8MN

6034. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:16:19 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <FKDAOg2MXXI8S7Hln63Ub0oEK1Q6@4ax.com>
Source record: 167407

ke4qkn@aol.com (Texas Rangers Fan Since 1972) wrote:

>Tried to build a nice 1/2 wave dipole today for 10m and could not get the SWR
>below 2:1. Never had this problem before, thought I might have forgotten to do
>something......
>
>The center is a Van Gordon 1:1 HI-Q balun. Measured 8 ft 3" of wire for each
>leg, plus an additional foot: 6" to work with in the center, 6" to work with on
>the end. Used 14 ga stranded THHN wire. Soldered the ends to the middle, made 5
>loops through the lug, used end insulators with 5 loops on each end.

Well, if you're making five loops at each end, you're making it an awful lot of trouble to shorten the antenna. Why don't you just make a single loop, and then shorten the antenna an inch or so at a time for each leg. Eventually, the resonance should move into the ten meter band.

Bob
k5wq

6035. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:17:49 UTC
From: Dave Heil <k8mn@ovis.net>
Message-ID: <3AC092FB.51DA34D1@ovis.net>
Source record: 167408
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Bill Sohl wrote:
>
> On Tue, 27 Mar 2001 02:33:08 GMT, Dave Heil <k8mn@ovis.net> wrote:
>
> >Larry Klose wrote:
> >>
> >> "Dave Heil" <k8mn@ovis.net> wrote in message
> >> news:3ABF254E.4A99693B@ovis.net...
> >> > Larry "the homemade lawyer" Klose wrote:
> >> >
> >> > > In a October 27, 1997 briefing paper prepared for digital television
> >> > > broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> >> > > regulation: "The Supreme Court has observed in CBS v. DNC that the FCC
> >> must
> >> > > "walk a 'tightrope' to preserve the First Amendment values written into
> >> the
> >> > > Radio Act and its successor, the Communications Act." After referring
> >> to
> >> > > its Red Lion decision, the Court noted that "[t]he problems of
> >> regulation
> >> > > are rendered more difficult because the broadcast industry is dynamic in
> >> > > terms of technological change; solutions adequate a decade ago are not
> >> > > necessarily so now, and those acceptable today may well be outmoded 10
> >> years
> >> > > hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> >> > > Committee, 412 U.S. 94, 117 (1973)."
> >> >
> >> > Are you a member of NAAB (National Association of Amateur Broadcasters)?
> >> > We aren't a broadcasting service and we aren't commercial, Larry.
> >>
> >> Dave, what the court was saying is that technological change will change the
> >> validity of FCC rules. The Morse code exam requirement was valid at one
> >> time, but today it is not.
> >
> >Larry, you are citing a court case pitting a commercial broadcasting
> >network against a national political party. That the case and its
> >issues have little to do with amateur radio seems to have escaped you.
>
> That the fundamental concept has as much to do with
> amateur service (as well as any other service) seems
> to have escaped ole Dave. Case law is not so narrowly
> viewed as you might wish.
```

The two matters have very little to do with each other, Bill, no matter how much you might wish they did. Why can't our "I-found-a-law-book-under-a-tree" expert cite a case involving amateur radio? Could it be because there aren't any such cases?

Dave K8MN

6036. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:30:46 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3AC0A416.41C67EA6@rupert.tds-az.lmco.com>
Source record: 167409

Texas Rangers Fan Since 1972 wrote:
>
> Tried to build a nice 1/2 wave dipole today for 10m and could not get the SWR
> below 2:1. Never had this problem before, thought I might have forgotten to do
> something......
>
> The center is a Van Gordon 1:1 HI-Q balun. Measured 8 ft 3" of wire for each
> leg, plus an additional foot: 6" to work with in the center, 6" to work with on
> the end. Used 14 ga stranded THHN wire. Soldered the ends to the middle, made 5
> loops through the lug, used end insulators with 5 loops on each end. Hung it up
> about 10ft off the ground in the driveway to test it before hanging it, and
> like I said, could NOT get the swr below 2:1. I use an MFJ antenna analyzer and
> the lowest SWR I could get on this thing was at about 24.5 mhz, it dipped down
> to 1.7:1.
>
> Got frustrated, took it apart started over. Same problem. Second time I used 18
> ga stranded wire.
>
> All my soldering connections were solid, and I used about 5 different pieces of
> coax, so I know it was not a coax problem. I also moved it to 3 or 4 different
> locations for testing, with the same results. I even tried hanging it as an
> inverted V!!!! Nothing seemed to work.
>
> I tested the balun with a VOM and there was no short. Is there any way I could
> have gotten a "bad" balun? Like I said this is the same construction technique
> I have used for making dozens of dipoles and I have never had this problem
> before.
>
> Flame away.
>
> Frustrated, KE4QKN/AE

It doesn't sound like you are doing anything wrong and it sounds like
the
results are correct.

A dipole, cut to the correct length and spaced 1/2 wavelength above
ground,
should have a feed impedance of around 72 ohms. Using a 50 ohm feed,
this
would give you a SWR of about 1.5:1. You shouldn't expect any better
than
this. The fact that it shows 1.7:1 at 24.5 mhz tells me that the antenna
is a little to long and needs some pruning. When cut to the proper
length

you should have a 2:1 SWR bandwidth of about 1 to 1.5 MHz. The bigger the
wire, or the "fatter" you make the elements look, the wider the
bandwidth.

If you place the center of the dipole at 1/2 wavelangth above ground
and then bring the ends towards ground, like a Inverted-V, the feed
impedance will drop. It is possible to get it to near 50 ohms for a
1.2:1 SWR, or better. I use a home made trap dipole in a Inverted-V
fashion for 40/20/15/10 meters and get around a 1.1:1 - 1.2:1 SWR on
the all of the design center frequencies. The 2:1 SWR bandwidth is
sufficient on all the bands such that I have no need for a tuner.

Martin K7MEM

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

6037. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:34:23 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AC0A4EF.CCAB0606@toast.net>
Source record: 167415

"Peter O. Brackett" wrote:

> Now then... what if an antenna had a radiation resistance that was
> imaginary?

Hmmm.... imaginary qso's?

john

6038. Re: Heat shrink

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:39:08 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AC0A60C.C1E709BF@toast.net>
Source record: 167416

stan.holmes@eskom.co.za wrote:

> Hi
> Can I use heat shrink as a dust / water cover on a Hy-gain DB-1015A
> antenna over the trap ends. The heat shrink is marked non conductive and
> is blue in colour. Will it be OK with RF.
> Stan
> ZS6HAL

There's a kind of heat-shrink tubing especially for encapsulation. It has a liner of a plastic that melts and fills the cavities and squeezes out the ends of the shrunk tubing. I'ts probably a little more expensive, but it would give better waterproofing.

john

6039. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 14:44:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99q8tj$3bo$1@neptunium.btinternet.com>
Source record: 167410

Tut, tut Gary. Try not to be so despondent. We can't win 'em all.
;o)

You asked why I had never measured the efficiency of any of my
antennas and got yourself caught on your own catch-question.

Sorry I am unable to admit I don't know what the radiating
efficiencies of my antennas are, because I DO know. But I havn't
the foggiest idea of what the sky temperature might be at 1.9 MHz.

Regards, Reg, G4FGQ
==========

Gary Peach <xcg34@dial.pipex.com> wrote in message
news:3ac047c5$0$15028$cc9e4d1f@news.dial.pipex.com...
>
> "Reg Edwards" wrote ...
> > Gary wrote -
> > > Certainly Reg: the ratio (energy out) / (energy in)
> > ==========
> > The energy out to where ? Having answered that question,
would
> > you then precisely describe where you would connect your energy
> > meters to obtain the efficiency of your common or garden
inverted-L
> > wire.
>
> Reg we could play this silly game forever, why don't you admit
just
> occassionally that you don't know.
> 73
> --
> Gary7SLL
> 51° 23' 50" N 1° 19' 58"W
> www.gary.peach.dial.pipex.com/
>
>

6040. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 15:24:13 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99qbatnjh0@208.207.71.175>
Source record: 167412
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

```
Bill Sohl wrote:
>
> On Sun, 25 Mar 2001 23:37:02 GMT, "W6DKN" <w6dkn@qsl.net> wrote:
>
> >"KB9WFK" <KB9WFK@mindspring.com> wrote in message
> >news:99ls17$stb$1@slb4.atl.mindspring.net...
> >>
> >> SNIP
> >> > Common sense and basic survival instinct are completely different than
> >> > trying to impose your personal opinions to the general public on a
> >> > subject in which you have no first hand knowledge or experience.
> >> >
> >> > A perfect example of this is the anti-gun crowd - the vast majority of
> >> > them have never even fired a gun, and yet they would have you believe
> >> > that based on their feelings and opinions, you should have to give
> >> > up your guns.
> >>
> >> That is not a "perfect example" unless the end result of removing the
> >> code requirement is that you can no longer use CW. If, after removal
> >> of the code requirement, you or anyone else that wishes to learn and
> >> use CW is free to do so there is NO parallel.
> >
> >Sure it is. The outcome of the argument is not the issue. The issue is that
> >you have a group of people with absolutely no expertise on the subject
> >forming an opinion based on personal feelings and self interest, that they
> >are trying to convince others is correct.
>
> You are clearly uninformed as to who is forming opinions
> as to the rational and need for code testing. Many, including
> myself, have "been there, done that" as to passing the
> code test at speeds greater than 5 wpm. Not all those
> opposed to continued code testing are so "uniformed"
> as you think.
>

So, *YOU*'re one of the Dirty Dozen!
```

6041. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 15:25:52 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99qbe0njh1@208.207.71.175>
Source record: 167414
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill Sohl wrote:
>
> On Mon, 26 Mar 2001 12:17:32 GMT, Dave Heil <k8mn@ovis.net> wrote:
>
> >Larry "the homemade lawyer" Klose wrote:
> >
> >> In a October 27, 1997 briefing paper prepared for digital television
> >> broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> >> regulation: "The Supreme Court has observed in CBS v. DNC that the FCC must
> >> "walk a 'tightrope' to preserve the First Amendment values written into the
> >> Radio Act and its successor, the Communications Act." After referring to
> >> its Red Lion decision, the Court noted that "[t]he problems of regulation
> >> are rendered more difficult because the broadcast industry is dynamic in
> >> terms of technological change; solutions adequate a decade ago are not
> >> necessarily so now, and those acceptable today may well be outmoded 10 years
> >> hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> >> Committee, 412 U.S. 94, 117 (1973)."
> >
> >Are you a member of NAAB (National Association of Amateur Broadcasters)?
> >We aren't a broadcasting service and we aren't commercial, Larry.
> >
> >> Because of technological and operational changes, the manual Morse code exam
> >> is unnecessary. Its use as a licensure examination element to authorize
> >> frequency bands and emission types, other than manual Morse code operation,
> >> is arbitrary and capricious. The exam is even arbitrary to authorization
> >> Morse code operation, since such operations can be conducted by computer
> >> control.
> >
> >YOU believe them to be arbitrary and capricious, Larry.
>
> In the absense of any contradicting comments,
> the FCC sure seems to think so too. I haven't read
> one FCC comment that put any rational into
> why code should be kept as a test...with the singular
> exception being that for now, it still is a treaty
> requirement.

Which after all was all they needed to say, wasn't it?

6042. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 15:27:45 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99qbhhnjh2@208.207.71.175>
Source record: 167413
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Bill Sohl wrote:
>
> On Tue, 27 Mar 2001 02:33:08 GMT, Dave Heil <k8mn@ovis.net> wrote:
>
> >Larry Klose wrote:
> >>
> >> "Dave Heil" <k8mn@ovis.net> wrote in message
> >> news:3ABF254E.4A99693B@ovis.net...
> >> > Larry "the homemade lawyer" Klose wrote:
> >> >
> >> > > In a October 27, 1997 briefing paper prepared for digital television
> >> > > broadcasters, Mr. Erwin G. Krasnow noted the effects of technology on
> >> > > regulation: "The Supreme Court has observed in CBS v. DNC that the FCC
> >> must
> >> > > "walk a 'tightrope' to preserve the First Amendment values written into
> >> the
> >> > > Radio Act and its successor, the Communications Act." After referring
> >> to
> >> > > its Red Lion decision, the Court noted that "[t]he problems of
> >> regulation
> >> > > are rendered more difficult because the broadcast industry is dynamic in
> >> > > terms of technological change; solutions adequate a decade ago are not
> >> > > necessarily so now, and those acceptable today may well be outmoded 10
> >> years
> >> > > hence." Columbia Broadcasting Systems, Inc. v. Democratic National
> >> > > Committee, 412 U.S. 94, 117 (1973)."
> >> >
> >> > Are you a member of NAAB (National Association of Amateur Broadcasters)?
> >> > We aren't a broadcasting service and we aren't commercial, Larry.
> >>
> >> Dave, what the court was saying is that technological change will change the
> >> validity of FCC rules. The Morse code exam requirement was valid at one
> >> time, but today it is not.
> >
> >Larry, you are citing a court case pitting a commercial broadcasting
> >network against a national political party. That the case and its
> >issues have little to do with amateur radio seems to have escaped you.
>
> That the fundamental concept has as much to do with
> amateur service (as well as any other service) seems
> to have escaped ole Dave. Case law is not so narrowly
> viewed as you might wish.

Balderdash. Commercial rules have zero applicabilty to amateur radio.

6043. Re: TUNER FOR THE AM BCB

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 15:29:15 UTC
From: richardharrison@webtv.net
Message-ID: <2444-3AC0B1CB-227@storefull-111.iap.bryant.webtv.net>
Source record: 167417

Marvin Rosen wrote:

"Would it be practical / possible to make an artificial ground (tuner) for am bcb for receiver experimentation?"

The purpose of a groundwire tuner is to neutralize the reactance of the wire. At high frequencies the reactance can be large.

At 600 KHz, the wavelength is 1640 feet. A 20-ft ground wire is of no practical significance as impedance goes. Inductance depends on twists, turns, size, and proximity to objects, but may run about 0.3 microhenry / foot. 20 feet would total about 6 microhenries. this has a reactance of about 22 ohms at 600 KHz. To tune-out such a low impedance out requires about .01 microfarads, in series.

The short answer is that in most cases a groundwire tuner is not worthwhile in the mediumwave band.

Best regards, Richard Harrison, KB5WZI

6044. WTB: Cushcraft A3S

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 15:35:38 UTC
From: Roberto Corgiolu <r.corgiolu@tiscalinet.it>
Message-ID: <99qj3kkpj1@lacerta.tiscalinet.it>
Source record: 167319

Cushcraft A3S + A743 (40MT Kit) wanted to buy.
Only if all in good conditions.
73 de IK0PRG ik0prg@arrl.net

6045. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 15:58:57 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <3ac0c84f$0$62148$bbae4d71@news.net-link.net>
Source record: 167418

How do you construct your bugcatcher type coils to be "tree proof"?????Use a solid core? Wrap them with padding?
Mark Keith wrote in message <3ABFF442.59D5@wt.net>...
>Rudolph M. Marcelletti wrote:
>>
>> Reg wrote:
>> >
>> >It is in any case of no great consequence. Just get the biggest
>> >and fattest coil as possible into the antenna.
>> >
>> And hope you don't smash it when you wack a tree while 2 trackin' with your
>> Jeep!
>
>Won't faze the coils I make on my plastic bug catchers. Sure can whack
>out an expensive "airdux" or whatever bug coil though. MK
>--
>http://web.wt.net/~nm5k

6046. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 18:01:05 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <fdqYs7AhVNw6EATh@ifwtech.plus.net>
Source record: 167320

Gary Peach wrote:
>
>"Ian White, G3SEK" wrote ...

>> I don't speak for them, but the amateurs around the world who are
>> actively engaged in measuring noise temperature are a close-knit group.
>> We know who else is involved, we correspond by e-mail and we get
>> together in person whenever we can. Some of us measure noise figure
>> professionally while others are pure amateurs, but we all do our utmost
>> to work to professional standards.
>
>How does one get to know this group?
>
Essentially by *doing* measurements and *using* the theory in support of
that.

There is lots of information on the web, for example in the 432MHz and
Above Moonbounce Newsletter archives at www.nitehawk.com/rasmit/ and the
DUBUS magazine archives (www.dubus.org). There are also many years of
recorded noise figure measurements in VHF conference proceedings.

However, all this is in support of developing low-noise VHF/UHF/
microwave amplifiers, and I see from further down your post that you're
actually interested in something quite different...

>> >Understood, but not everybody uses a noise diode or noise tube to
>calibrate
>> >their equipement. The price of such commercial instruments precludes
>their
>> >use by most Hams I would think.
>>
>> There is a lot of published information on the web, in amateur
>> conference proceedings, in specialist amateur VHF/UHF/microwave
>> magazines, and even in a book or two, of which you don't seem to be
>> aware.
>
>That is true Ian, I have been in Hospital for a triple bye pass that didn't
>work out as well as it might, so I have spent a good number of years
>closeted at home. On Sunday I managed to go to Blackwell's in Oxford where I
>did find a couple of tomes that lightly touched on the subject; one a
>translation from the French price ï¿½55 and one other book price ï¿½74. I'm
>afraid that at those prices I will not be reading them, much as I would like
>to have them in my collection. I would not expect a request to our local
>library to be fruitful, besides they are the sorts of books that one retains
>for future reference. Neither book touched directly upon this low end of the

>spectrum.
>
I'm sorry to hear that you are mainly confined to home, and essentially
to armchair theorizing (and that does explain something...)

The kinds will textbooks you find in Blackwell's (the huge Oxford
University bookstore, for the benefit of non-locals) are not really what
you need. What I'd suggest is a visit to www.agilent.com/find/nf where
you can download their Application Notes 57-1, 'Fundamentals of RF and
Microwave Noise Figure Measurement' and 57-2, 'Noise Figure Measurement
Accuracy'. These Application Notes are much closer to the interface
where theory meets practice, and they're free for the taking.

>
>> The reality is that for a few pounds or dollars, you can make a highly
>> effective noise diode source that will work from HF through to the low
>> microwave bands. And you can have it calibrated against commercial
>> sources at a "Microwave Round Table" Sunday for free.
>

>Just how stable is the calibration?

That's hard to assess, but after allowing for temperature changes it is
probably within +/- 0.1dB ENR long-term.

>Of what magnitude of noise temperature are you speaking?

Usually only about 600K or 6000K, which is all that's needed to measure
typical RF devices.

>Will any of the sources make 10^8ï¿½K?

No, and neither will normal measuring equipment.

>I want to be sure to bracket the temperatures of interest, an extrapolated
>result is probaly worthless beyond being an indicator.
>
Ah, I see what you want to do... For noise levels as high as that, the
best comparison source is a calibrated signal generator, using an RMS
detector at the output of a receiver.

Really the only reason for using noise as the test signal to measure
noise figure is that it's relatively easy to generate it at accurate low
levels. Signal generators are not used because of the problems of
attenuator and cable leakage which limit the minimum level of signal
that can be accurately generated.

On the other hand, if you want to measure a high noise level, all the
advantages and disadvantages reverse. It is not too difficult to
generate accurate high noise levels, but with a signal generator it is
very easy indeed so that is the best source. The RMS detector bridges
the gap between noise and a sine-wave signal, and away you go.

Another feature of high antenna noise levels is that they tend to be very variable, which means you don't have to worry too much about instrument accuracy.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

6047. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 18:15:07 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC0D8AB.519414E@IEEE.org>
Source record: 167322

"Rudolph M. Marcelletti" wrote:
> How do you construct your bugcatcher type coils to be "tree proof"?????Use a
> solid core? Wrap them with padding?

I have wrapped them on fiberglas pipe - virtually indestructable.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6048. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 18:17:07 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AC0D923.40AD0DF2@usa.alcatel.com>
Source record: 167321

If I understand you properly, you are saying that at a distance from a loop its field will be identifiable because the electric field will predominate, and at a distance from an dipole its field will be identifiable because the magnetic field will predominate.

Only problem is, it is NOT possible to tell by the ratio of electric to magnetic field in the far-field, whether the radiator was a magnetic loop or an electric dipole.

Cortland

Tom W8JI wrote:

> At a distance of about 1/10th of a wavelength from a small antenna,
> the field impedance reverses.
>
> The loop becomes electric field dominant, and a small dipole magnetic
> field dominant.
>

6049. Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 18:20:00 UTC
From: "Steve D. Perkins" <steve@NOSPAM.hotmail.com>
Message-ID: <99qlmf06o6@news2.newsguy.com>
Source record: 167324

I realize that this newsgroup probably caters more so to shortwave and CB equipment, but I have a simple question about plain ol' FM radio that I'm hoping people here will have the knowledge to answer.

At work I've been listening to streaming radio broadcasts over the internet on my PC. However, our network isn't the more reliable on earth, and I've discovered some excellant jazz
stations in the area that don't broadcast streaming internet audio... so I've brought in a small radio from home to listen the old fashioned way.

This is just a small AM/FM/CD-Player with headphones device, that uses the headphones themselves as the antenna. Reception is pretty crummy unless you sit just right (you know with
your right leg bent and your left arm held over your head!). I've gotten into the habit of plugging my headphones into the audio-out port instead, so that there is no external antenna
(and at least the signal will be CONSISTANTLY crummy).

This has given me the idea of plugging some real form of antenna into the headphones port to get better reception. Since most FM antenna seem to use an F-connector, I grabbed an F-connector-to-miniphone adapter from Radio Shack (and even that by itself gives a slight improvement). I don't mind grabbing a full-blown "rabbit ears" antenna to place on my desk, but it would be infinately more convienent to have a small telescoping rod antenna that I can
compact and store in my CD case with the player.

I've searched a few web sites, but haven't really found any that cater to radio equipment in great depth. Can anyone point me in the direction of some sites or catalogs where I can find a small telescoping rod antenna compatible with an f-connector or miniplug (or at least
confirm for me that no such creature exists)?

6050. Re: "Round" antenna????

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 19:01:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC0E392.B5778C5C@eznec.com>
Source record: 167323

Sorry, even though I'm now a qualified member of the OFC, I don't recall what the Hula-Hoop antenna was. But the answer is probably no. The CTHA has a couple of toroidal windings, going in opposite directions from each other. The HF version does look like it's wound on a Hula Hoop, though, and the whole thing is covered with black electrical tape.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > Sounds like the CTHA (contra-wound toroidal helical antenna). You can
> > see some pictures at http://www.antennex.com/shack/Jan00/hawks.htm, and
> > a web search for CTHA will yield other URLs.
>
> Is that the same thing as the old Hula-Hoop antenna?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6051. Force 12 C3SS Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 19:06:07 UTC
From: Denis O' Flynn <denisf@eircom.net>
Message-ID: <4p6w6.3837$_W2.4374@news.indigo.ie>
Source record: 167326

Hi, Putting up my new C3SS beam at the weekend. I have an A627013S 6m, 2m,70cms Tribander as well to go up on the tower. Anyone can advice me as to the distance I should leave between them - i'm new to beams - alwaysa worked with wires up to now.

any advice really appreciated.

de Denis EI6HB
denisf@eircom.net

6052. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 19:11:09 UTC
From: "Steve D. Perkins" <steve@NOSPAM.hotmail.com>
Message-ID: <99qonc0a7b@news2.newsguy.com>
Source record: 167325

To go a little further out on a limb... is there any combination of readily available adapters that would let me use an antenna and headphones at the same time (a drawback of plugging my headphones into the line-out plug is that I can't control the volume level)? I would need end up with some kind of splitter contraption that goes from miniplug-male to f-connector-male and miniplug-female.

6053. Re: Force 12 C3SS Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 20:23:26 UTC
From: vk4sx <vk4sx@dingoblue.net.au>
Message-ID: <3ac0f744$0$25464$7f31c96c@news01.syd.optusnet.com.au>
Source record: 167327

Hi what is the makers name of the A627013S 6m,
2m,70cms Tribander,?? can it be mounted Vert or Horiz ?/
rgds Dennis

"Denis O' Flynn" <denisf@eircom.net> wrote in message
news:4p6w6.3837$_W2.4374@news.indigo.ie...
> Hi, Putting up my new C3SS beam at the weekend. I have an A627013S 6m,
> 2m,70cms Tribander as well to go up on the tower. Anyone can advice me as
to
> the distance I should leave between them - i'm new to beams - alwaysa
worked
> with wires up to now.
>
> any advice really appreciated.
>
> de Denis EI6HB
> denisf@eircom.net
>
>
>

6054. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 20:28:09 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac10df8$0$12248$cc9e4d1f@news.dial.pipex.com>
Source record: 167332

"Tom W8JI" wrote ...
> Gary Peach wrote:
> >"Tom W8JI" wrote ...
> >> Ian White, G3SEKwrote:
> >The first step to understanding is curiosity, the second investigation,
If I
> >prod it, does it bite. The third stage is formal description, and the
final
> >stage is prediction.
>
> I see what the problem is. You've missed the second stage totally.

At this end of the spectrum totally, well almost I have done some
preliminary measurements, but I am not completely happy with them. I was
hoping because of my predicament to get a leg up to make my experiments a
bit more interesting earlier rather than later.

> If I can help, let me know.

That is a very kind offer, thank you Tom,
If I need your help I will E-Mail.
73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6055. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 20:48:47 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac10df9$0$12248$cc9e4d1f@news.dial.pipex.com>
Source record: 167331

"Reg Edwards" wrote
> Tut, tut Gary. Try not to be so despondent. We can't win 'em all.
> ;o)

Hopefully I thought that it didn't show, :)
As for winning Reg I know that in the long run we all win some and looses some so I have no problem with owning up when I am convinced that I am wrong. I always feel that being wrong is an opportunity to learn, being right only confirms that I knew something all along and I have add little to my knowledge store. I would also guess that being right all of the time would indicate that I am well within the boundaries of human knowledge and that I am not trying to push the envelope. If I was not being wrong at least 50% of the time then I would feel that I was not where I wanted to be.

> You asked why I had never measured the efficiency of any of my
> antennas and got yourself caught on your own catch-question.

It wasn't a catch question Reg, I don't do those; I leave them for the clever Dicks that never did anything.
I am genuinely interested in the results of measuring the efficiency of your antennae and comparing those results with the other measurements that you have made concerning VSWR etc.

> Sorry I am unable to admit I don't know what the radiating
> efficiencies of my antennas are, because I DO know.

As they are subject to reciprocity they might be expected to have a similar efficiency on receive. as the measurement of sky temperature is in the first instance a fairly simple experimant, (disregarding very high precision initially). So you might have some idea of what the temperatures might be when viewed through yout AEs.

> But I havn't
> the foggiest idea of what the sky temperature might be at 1.9 MHz.

Fairy Snuff Reg.
On the basis that if you can't hear them you can't work them and the fact that at around these frequencies the limiting factor to signal to noise with low signal levels is the sky temperature and not the Receiver Noise figure a knowledge of sky temperatures is of great interest. For about a year when I could do little else because of my then invalidity Each listening session on HF I logged the sky temperature for the session. At that time I was monitoring RTTY and AMTOR as well as SSB (quite a lot on 20 but some on other bands.) By having some idea of sky temperature, but at that stage no idea of my AE efficiency I could calculate the Signal to noise of the incoming signals by counting the errors on the screen. Form this and a

knowledge of the S/N it is possible to infer a received signal level at the AE I/P. Although my experiments were crude and I have progressed them no further for the moment, other than being satisfied that the idea works and is capable of refinement. For the future the value for quickly assessing a new antenna and for some searching propagation measurements there is a lot of potential in the idea, especially if enough Hams take an interest and have a go for themselves.
73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6056. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 21:24:10 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC104FA.5AB0D860@oio.net>
Source record: 167329

Steve,
The first thing that comes to mind is a head-set with
a very long cord. Then sit close to a window. Not the
most 'eligant' solution, but....
'Doc

6057. Re: Force 12 C3SS Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 21:24:13 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3ac10513$0$62139$2c3e98f8@news.voyager.net>
Source record: 167328

one mfgr recommends the boom length of the lowest hf freq for separation
but i have found very good results using 3 to 5 feet. my tower had a
cushcraft a3 on the bottom, a cushcraft a50-5 at 5 ft from the a3, a 11
el 440 yagi at 2 feet above the a50-5 and finally a 8 el 2m yagi 3 feet
above the 440 yagi
ken w8ob

Denis O' Flynn wrote:
>
> Hi, Putting up my new C3SS beam at the weekend. I have an A627013S 6m,
> 2m,70cms Tribander as well to go up on the tower. Anyone can advice me as to
> the distance I should leave between them - i'm new to beams - alwaysa worked
> with wires up to now.
>
> any advice really appreciated.
>
> de Denis EI6HB
> denisf@eircom.net

6058. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 21:48:13 UTC
From: "Steve D. Perkins" <steve@NOSPAM.hotmail.com>
Message-ID: <99r1su0nfv@news2.newsguy.com>
Source record: 167334

No good... the main complaint leading me to explore these options in the first place is how annoying it is that the reception changes radically every time I move my head. No fun sitting
perfectly still all day long! <smile>

"'Doc" <w5lz@oio.net> wrote in message news:3AC104FA.5AB0D860@oio.net...
> Steve,
> The first thing that comes to mind is a head-set with
> a very long cord. Then sit close to a window. Not the
> most 'eligant' solution, but....
> 'Doc

6059. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 21:56:29 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac10dfa$0$12248$cc9e4d1f@news.dial.pipex.com>
Source record: 167333

"Ian White, G3SEK" wrote ...
> Gary Peach wrote:
> >"Ian White, G3SEK" wrote
...
> >How does one get to know this group?
> >
> Essentially by *doing* measurements and *using* the theory in support of
> that.

Yes, I note from your comments below that most of the measurements are at VHF and above. As this conversation has the topic subject that it does I have been atempting to address the subject and trying to remain more or less on topic concerning 160 m

> There is lots of information on the web, for example in the 432MHz and
> Above Moonbounce Newsletter archives at www.nitehawk.com/rasmit/ and the
> DUBUS magazine archives (www.dubus.org). There are also many years of
> recorded noise figure measurements in VHF conference proceedings.

Yes thank you Ian, Hogg and Mumford et al. probably fit fairly well at these higher frequencies. It is the bottom of the curve that is of interest to me at the moment, does it flatten or plough on into infinity at f=0. :)

> However, all this is in support of developing low-noise VHF/UHF/
> microwave amplifiers, and I see from further down your post that you're
> actually interested in something quite different...

I was atempting, for once, to remain on topic.

> I'm sorry to hear that you are mainly confined to home, and essentially
> to armchair theorizing (and that does explain something...)

Yes thank you Ian. I was reluctant to mention my personal circumstance, but I felt that It was time to dispel any misunderstanding, so hopefully I will not bring up the subject again. Funny thing about mind experiments when you are not too well without the access to every now and then do some practical work, you can start chasing dragons fairly easily. However I think that so far in this thread I have tried to stick with what I know and have experience of and wher I have been over reaching that experience I have attempted to qualify my statements.

> The kinds will textbooks you find in Blackwell's (the huge Oxford
> University bookstore, for the benefit of non-locals) are not really what
> you need.

Pity They are just the stuff with which I am familiar. And I still feel more at home with a book than a screen for deep technical texts. Putting complex

equations on screen with only plain text can be frustrating. E. Brit for instance uses images of formula to overcome the limitation.

>What I'd suggest is a visit to www.agilent.com/find/nf where
> you can download their Application Notes 57-1, 'Fundamentals of RF and
> Microwave Noise Figure Measurement' and 57-2, 'Noise Figure Measurement
> Accuracy'. These Application Notes are much closer to the interface
> where theory meets practice, and they're free for the taking.

I will visit and download your recomendation thank you Ian. I can print the notes out and curl up in bed with them at my leisure.

> >> The reality is that for a few pounds or dollars, you can make a highly
> >> effective noise diode source that will work from HF through to the low
> >> microwave bands. And you can have it calibrated against commercial
> >> sources at a "Microwave Round Table" Sunday for free.
>
> >Just how stable is the calibration?
>
> That's hard to assess, but after allowing for temperature changes it is
> probably within +/- 0.1dB ENR long-term.

That is pretty good for amateur work in the first instance.
If I could make all of my measurements with that sort of precision I'd be a happy chappie.

> >Of what magnitude of noise temperature are you speaking?
>
> Usually only about 600K or 6000K, which is all that's needed to measure
> typical RF devices.
>
> >Will any of the sources make 10^8 K?
>
> No, and neither will normal measuring equipment.

That is -80 dBm in 2.4 kHz bandwidth, (typical SSB pass band)

A good Rx should be able to cope with that level.
Especially if there is NO RF amplifier.

> >I want to be sure to bracket the temperatures of interest, an
extrapolated
> >result is probaly worthless beyond being an indicator.
> >
> Ah, I see what you want to do... For noise levels as high as that, the
> best comparison source is a calibrated signal generator, using an RMS
> detector at the output of a receiver.

Yes that is waht I want to avoid, the errors using a bolometer and an attenuator can accumulate. I have been that route before. What I am looking for is a primary standard that of it's nature requires no calibration. A LiN load and a Load at ambient with a thermometer on iot is fine for very low noise temperatures. I would like to duplicate the method but at very

high system temperatures, thus I look for some physical standard. What noise temperature for instance is a plasma?

> Really the only reason for using noise as the test signal to measure
> noise figure is that it's relatively easy to generate it at accurate low
> levels.

Agreed, what I would like is a very high temperature load that fits these same criteria. This would make it available easily to any Ham sufficiently interested to want one and learn how to use it. Once again with a good physical standard high noise source an attenuator soon makes such a load quite useful as a calibration standard.

>Signal generators are not used because of the problems of
> attenuator and cable leakage which limit the minimum level of signal
> that can be accurately generated.

Yes I am familiar with the problem when attempting to plot threshold on an AGC curve. I think the answer is a small device powered by its own internal batteries and completly sealed and no power leads to it. The device would plug directly into the I/P AE terminal/connector of the receiver under test.

> On the other hand, if you want to measure a high noise level, all the
> advantages and disadvantages reverse. It is not too difficult to
> generate accurate high noise levels, but with a signal generator it is
> very easy indeed so that is the best source.

For some testing a noise souce is better, a coherent source requires accurate tuning to the right point on the pass band curve tyo ensure that you are using G(Fs) that the receiver will use in practice. A noise source completely avoids this problem and also it operates upon the Equivalent Noise Bandwidth of the filter ae noise does in pratice. Also no correction factors for the type of detector need not be applied when making noise measurement.

>The RMS detector bridges
> the gap between noise and a sine-wave signal, and away you go.

Yes that is a whole new topic, I spent some months comparing the various possible detectors and their form factors. If any work that I do is to be of use to the Ham fraternity in general such calibrations should be avoided wherever possible by using noise.

> Another feature of high antenna noise levels is that they tend to be
> very variable, which means you don't have to worry too much about
> instrument accuracy.

Whe you say variable there are periods when the rate of change is small and the measurements can be made to reasonable precision by measuring in the gaps between the dots and dashes of a fairly slow morse transmission some fairly good comparisons can be made on an integrating meter of noise from a resistor at ambient temperature and the noise from the antenna that originates in the sky.

A step attenuator with about 80 dB or more total attenuation and a least step of 1 dB can act both as the Ambient load and the attenuator for measuring the noise delivered from the Antenna.
The home made step attenuator described in the ARRL Hannd book is quite suitable if fabricated from double sided PCB and all is soldered with compartments for each section of attenuator. The one which I constructed is a binary series as this produces every step of attenuation in 1 dB steps at the lowest cost and the most convenient resistor values. Mine actually does 71 dB and I add an external pad or use the Attenuator built into the Rx having first calibrated it.
The steps that I have are 20, 20, 16, 8, 4, 2, 1 dB
These have proved Ok to use to measure sky temperatures to within 1 dB

The integrating meter is of my own design and it doubles up to crudely indicate S/N when receiving SSB It plugs into the record O/P of the Rx. It is an active device. The time constant is switchable.
I *will* calibrate my antenna efficiency over the spectrum of interest one day.
At the moment I think it is something like this:

1.75 MHz -|- ?
3.5 MHz -|- 17%
7 MHz -|- 53%
10 MHz -|- 17%
14 MHz -|- 84%
18 MHz -|- 44%
21 MHz -|- 15%
24 MHz -|- 2.5%
28 MHz -|- 27%
29 MHz -|- 23%

73
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6060. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 21:59:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99r2er$7dl$1@neptunium.btinternet.com>
Source record: 167330

Cecil, no problem ! Use program ENDFEED (or several others) to find antenna height to produce the following input resistances.

Height of Vertical Radiator in Wavelengths	Input Resistance Ohms	Input Reactance Ohms	Tune Capacitance Picofards
0.250	37	0	-
0.269	50	- 38	140
0.292	75	- 84	63
0.322	100	- 151	35

With a group of elevated horizontal radials, each 1/4-wavelength.

Shallow-buried radials in good ground can be any length.

Above reactances and capacitances apply at 30MHz. Antenna rod = 0.4" diameter.

If elevated radials are less than 1/4-wave then the input reactance can be made zero. But current will flow on outside of coax.

Regards, Reg, G4FGQ

****

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote in message news:3AC09904.E45AB8B6@IEEE.org...
> Reg Edwards wrote:
> >
> > Michael Edelman wrote >
> > > > What is the conventional wisdom which dictates 1/4 wavelength
> > > > radials ?
> > >
> > > Same reason you have a 1/4 wave vertical element. You're aiming
> > > for a 50 ohm feedpoint impedance at resonance.
>
> > But the input resistance of a 1/4-wave resonant vertical is not 50
> > ohms - it is only 36.
>
> Slanted radials will take care of that but I have another question.
> Taking a lesson from an off-center fed dipole, if we make the

> horizontal radials shorter than 1/4WL and the vertical radiator
> longer than 1/4WL, can we find a 50+jX ohm point? (where the
> reactance can be neutralized with a series cap) I've been meaning
> to model that configuration but day-trading has soaked up my
time.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6061. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 23:22:26 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <gB7BOs4ObnfXb8sGxSX5kv65CZvz@4ax.com>
Source record: 167335

"Steve D. Perkins" <steve@NOSPAM.hotmail.com> wrote:

>
> I've searched a few web sites, but haven't really found any that cater to radio equipment
>in great depth. Can anyone point me in the direction of some sites or catalogs where I can
>find a small telescoping rod antenna compatible with an f-connector or miniplug (or at
least
>confirm for me that no such creature exists)?
>
>

You might head back to Radio Shack and ask to see their 2001 product catalog. On page 166 is a selection of FM antennas -- from a $2.99 wire dipole to a number of snazzy-looking amplified antennas. On page 167 are some TV set-top, rabbit ear style antennas, some of which include FM reception, too.

I'd start with the little wire dipole. It'll probably work as well as any of the other, more expensive stuff.

Bob
k5qwg

6062. Re: FRACTAL ANTENNAS At IEEE APS in July

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 23:38:25 UTC
From: burt@innocent.com
Message-ID: <99r89hmol1@news.netmar.com>
Source record: 167358

In article <20010315184407.01728.00002095@ng-da1.aol.com>, Fractenna
<fractenna@aol.com> writes:
>Yep:
>
>Fun surprises in store! And wouldn't you like to know what they are:-)
>
>;-)
>
>73
>Phil
>N1ZKT

Yes! Will Fractal Antenna Systems have an exhibit at IEEE? We'd really
like
to see some of your work. Can we take pictures?

See you there!

----- Posted via NewsOne.Net: Free (anonymous) Usenet News via the Web -----
http://newsone.net/ -- Free reading and anonymous posting to 60,000+ groups
NewsOne.Net prohibits users from posting spam. If this or other posts
made through NewsOne.Net violate posting guidelines, email abuse@newsone.net

6063. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 23:42:52 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac122ce.609723556@news.accessunited.com>
Source record: 167336

On Tue, 27 Mar 2001 10:17:07 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>If I understand you properly, you are saying that at a distance from a loop
>its field will be identifiable because the electric field will predominate,
>and at a distance from an dipole its field will be identifiable because the
>magnetic field will predominate.
>
>Only problem is, it is NOT possible to tell by the ratio of electric to
>magnetic field in the far-field, whether the radiator was a magnetic loop
>or an electric dipole.
>
>Cortland

Even in the near field, you are unlikely to know. The exception would
be within maybe 1/10th of a wavelength or less.

Roy explained the field behavior pretty well, but I guess it fell on
deaf ears. That may be a requirement to keep thinking the shield has
some meaning purpose other than balance.

Bart agreed, Bill agreed, Roy agreed, Reg agreed, Reference Data for
Radio Engineers in the later copies agrees. Faraday and Maxwell agree.
The only people who disagree are those who use the examples of
transformers out of context for evidence.

I think everyone else has given up, and so will I. Some things are
hopeless, and not worth the time.

73 Tom

6064. Re: 160m preamp for RX antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 23:44:47 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac1250c.610298251@news.accessunited.com>
Source record: 167338

On Tue, 27 Mar 2001 21:28:09 +0100, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>
>"Tom W8JI" wrote ...
>> Gary Peach wrote:
>> >"Tom W8JI" wrote ...
>> >> Ian White, G3SEKwrote:
>> >The first step to understanding is curiosity, the second investigation,
>If I
>> >prod it, does it bite. The third stage is formal description, and the
>final
>> >stage is prediction.
>>
>> I see what the problem is. You've missed the second stage totally.
>
>At this end of the spectrum totally, well almost I have done some
>preliminary measurements, but I am not completely happy with them. I was
>hoping because of my predicament to get a leg up to make my experiments a
>bit more interesting earlier rather than later.

Since you never finished the second stage, you should not be offering
solutions. You should be working on the second stage.

Now get to work.

73 Tom

6065. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-27 23:45:22 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AC12612.B4E25E1@hiwaay.net>
Source record: 167337

Steve- I know some of the answers have been slightly facetious, but- the obvious cure is to get a better radio, one that has a connection for an antenna. Try this, then , if the reception is still bad, try an added antenna.
You have not told us much about the physical set-up at work. The type of building structure, how far you are from "outside" walls, whether you can get access to outside for an antenna, etc, are all things that will help people help. So far, the question is almost "how high is up", and no one can answer.

Give us the real info, and you may get better answers.

Good luck-Bill-W4BSG

"Steve D. Perkins" wrote:
>
> I realize that this newsgroup probably caters more so to shortwave and CB equipment, but I
> have a simple question about plain ol' FM radio that I'm hoping people here will have the
> knowledge to answer.
>
> At work I've been listening to streaming radio broadcasts over the internet on my PC.
> However, our network isn't the more reliable on earth, and I've discovered some excellant jazz
> stations in the area that don't broadcast streaming internet audio... so I've brought in a
> small radio from home to listen the old fashioned way.
>
> This is just a small AM/FM/CD-Player with headphones device, that uses the headphones
> themselves as the antenna. Reception is pretty crummy unless you sit just right (you know with
> your right leg bent and your left arm held over your head!). I've gotten into the habit of
> plugging my headphones into the audio-out port instead, so that there is no external antenna
> (and at least the signal will be CONSISTANTLY crummy).
>
> This has given me the idea of plugging some real form of antenna into the headphones port
> to get better reception. Since most FM antenna seem to use an F-connector, I grabbed an
> F-connector-to-miniphone adapter from Radio Shack (and even that by itself gives a slight
> improvement). I don't mind grabbing a full-blown "rabbit ears" antenna to place on my desk,
> but it would be infinately more convienent to have a small telescoping rod antenna that I can
> compact and store in my CD case with the player.

>
> I've searched a few web sites, but haven't really found any that cater to radio equipment
> in great depth. Can anyone point me in the direction of some sites or catalogs where I
can
> find a small telescoping rod antenna compatible with an f-connector or miniplug (or at
least
> confirm for me that no such creature exists)?

6066. Anttron 8010B antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 00:13:16 UTC
From: nz8c@aol.com
Message-ID: <20010327191316.18380.00001245@ng-fl1.aol.com>
Source record: 167339

Hello all
Has anyone tried the Anttron 8010B antenna? If so, how do you have it mounted
and how is it's preformance across the bands?
Please email me direct, with any and all info, at: NZ8C@aol.com
73,
Renee NZ8C

6067. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 00:30:58 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AC130C2.2D2E@wt.net>
Source record: 167340

Rudolph M. Marcelletti wrote:
>
> How do you construct your bugcatcher type coils to be "tree proof"?????Use a
> solid core? Wrap them with padding?

They are wound on lightweight plastic cores about 2-.5-3 inches dia. I put plugs in the ends and drill holes to mount on the sticks I use. The wire is #12 house wire with the insulation on, and then I wrap vinyl over the coil when I'm done to waterproof. And yep, I'm sure your thinking all this stuff will ruin the coil, but in practice it doesn't seem to. I've compared with equal size bug coil antennas, and could see little if any difference with the plastic core and vinyl. You can hit a tree and doesn't faze one of these. There is nothing to break. MK
--
http://web.wt.net/~nm5k

6068. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 00:38:22 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AC1327E.567A@wt.net>
Source record: 167341

Steve D. Perkins wrote:
>
> To go a little further out on a limb... is there any combination of readily available
> adapters that would let me use an antenna and headphones at the same time (a drawback of
> plugging my headphones into the line-out plug is that I can't control the volume level)?
I
> would need end up with some kind of splitter contraption that goes from miniplug-male to
> f-connector-male and miniplug-female.

I guess you could make one with all the right connectors. You might try
just taking a piece of wire and wrapping a whole lot of turns around the
headphone wire near the player, and then running the wire off to a place
that seems to get the station. You might get it to work just from the
capacitive couplng of the extra wire to the phone lines. But , if the
phones line is shielded, this might not work. You might want to consider
a better radio with a real antenna connection. IE: stereo receiver etc.
MK
--
http://web.wt.net/~nm5k

6069. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 00:50:30 UTC
From: dcollin@connix.com
Message-ID: <3ac136ed.4882082@news.mybizz.net>
Source record: 167343

On Tue, 27 Mar 2001 13:20:00 -0500, "Steve D. Perkins"
<steve@NOSPAM.hotmail.com> wrote:

> I've searched a few web sites, but haven't really found any that cater to radio equipment
>in great depth. Can anyone point me in the direction of some sites or catalogs where I can
>find a small telescoping rod antenna compatible with an f-connector or miniplug (or at
least
>confirm for me that no such creature exists)?

Yep ... back to the Shack!

6070. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 00:51:46 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AC135A2.1BAB@wt.net>
Source record: 167342

W6RCecilA wrote:

> Slanted radials will take care of that but I have another question.
> Taking a lesson from an off-center fed dipole, if we make the
> horizontal radials shorter than 1/4WL and the vertical radiator
> longer than 1/4WL, can we find a 50+jX ohm point? (where the
> reactance can be neutralized with a series cap) I've been meaning
> to model that configuration but day-trading has soaked up my time.

You can usually do it without a cap is the radiator is long enough.
Within limits anyway. "1/4 wl design". MK

--
http://web.wt.net/~nm5k

6071. Corrections for previous data.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 00:59:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <99rd07$a79$1@neptunium.btinternet.com>
Source record: 167344

Cec, please disregard the previous figures which were produced in haste and very inaccurate. I had pushed the program beyond its validity limits. On reflection, the figures didn't look right. The following data has been produced using program VARNEY to compute input impedance of a dipole and dividing by two.

Input Impedance versus Height -

Height of Vertical Radiator in Wavelengths	Input Resistance Ohms	Input Reactance Ohms	Tune Capacitance Picofards
0.250	37	0	-
0.288	50	100	53
0.328	75	222	24
0.352	100	303	18

With a set of elevated horizontal radials, each 1/4-wavelength.

Shallow-buried radials in good ground can be of any resonable length.

Above reactances and capacitances apply at 30MHz. Antenna rod = 0.4" diameter.

If elevated radials are less than 1/4-wave, (height + radial = 1/2-wave) then the input reactance
will be zero, but the coax will radiate and some people don't like that.

Regards, Reg, G4FGQ

6072. Coil Form Material

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 01:03:21 UTC
From: "David L. Dyke" <dld@NOSPAMrglobal.net>
Message-ID: <99rd8k017g1@enews4.newsguy.com>
Source record: 167346

I am wondering about the 'have to' vs the 'ideal' coil form material. I realize that an air or glass coil form is about ideal (constructing a high-Q coil), but what if all I can obtain is plain-old white PVC? How much of a loss of efficiency can I expect at RF frequencies?

Simple question, I know, but I am looking for opinions. (B & W coil stock is outrageously priced, plexi-glas is noot cheap either, and I do not have a source for fiberglass tubing.)

Thanks in advance.

73 de N6XOS (Dave) dld@rglobal.net

6073. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 01:18:42 UTC
From: Larry Klose <lklose@net-link.net>
Message-ID: <3ac13c04$0$88182$bbae4d71@news.net-link.net>
Source record: 167345
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:99qbhhnjh2@208.207.71.175...
>
> Bill Sohl wrote:
> >
> > On Tue, 27 Mar 2001 02:33:08 GMT, Dave Heil <k8mn@ovis.net> wrote:
> >
> > >Larry Klose wrote:
> > >>
> > >> "Dave Heil" <k8mn@ovis.net> wrote in message
> > >> news:3ABF254E.4A99693B@ovis.net...
> > >> > Larry "the homemade lawyer" Klose wrote:
> > >> >
> > >> > > In a October 27, 1997 briefing paper prepared for digital
television broadcasters, Mr. Erwin G. Krasnow noted the effects of
technology on regulation: "The Supreme Court has observed in CBS v. DNC that
the FCC must "walk a 'tightrope' to preserve the First Amendment values
written into the Radio Act and its successor, the Communications Act."
After referring to its Red Lion decision, the Court noted that "[t]he
problems of regulation are rendered more difficult because the broadcast
industry is dynamic in terms of technological change; solutions adequate a
decade ago are not necessarily so now, and those acceptable today may well
be outmoded 10 years hence." Columbia Broadcasting Systems, Inc. v.
Democratic National Committee, 412 U.S. 94, 117 (1973)."
> > >> >
> > >> > Are you a member of NAAB (National Association of Amateur
Broadcasters)?
> > >> > We aren't a broadcasting service and we aren't commercial, Larry.
> > >>
> > >> Dave, what the court was saying is that technological change will
change the
> > >> validity of FCC rules. The Morse code exam requirement was valid at
one
> > >> time, but today it is not.
> > >
> > >Larry, you are citing a court case pitting a commercial broadcasting
> > >network against a national political party. That the case and its
> > >issues have little to do with amateur radio seems to have escaped you.
> >
> > That the fundamental concept has as much to do with
> > amateur service (as well as any other service) seems
> > to have escaped ole Dave. Case law is not so narrowly
> > viewed as you might wish.

>
> Balderdash. Commercial rules have zero applicabilty to amateur radio.

It was a US Supreme Court decision not an FCC commercial radio rule.

Larry KC8EPO

6074. Re: Radiation Resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 02:08:38 UTC
From: richardharrison@webtv.net
Message-ID: <18841-3AC147A6-19@storefull-116.iap.bryant.webtv.net>
Source record: 167347

Tom, W8JI wrote:
"My point is you have to be VERY careful how you use radiation resistance."

Terman defines radiation resistance as:
"This is the resistance that, when inserted in series with the antenna, will consume the same amount of power as is actually radiated. The magnitude of the radiation resistance depends upon the antenna configuration and upon the point in the antenna system at which the resistance is considered as being inserted (clearly, radiation resistance is an analytical tool). Unless specifically stated to the contrary, it is customary to refer the radiation resistance to a current maximum in the case of an ungrounded antenna (like a balanced dipole), and to the current at the base of the antenna when the antenna is grounded (or operated against ground like a vertical resting on a base insulator)."

It is well to define what you mean by radiation resistance. If you don`t say what you mean, most informed recipients of your message are likely to think you are using the Terman definitions.

Best regards, Richard Harrison, KB5WZI

6075. Re: Corrections for previous data.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 02:23:01 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC14B05.B3B5DE5F@IEEE.org>
Source record: 167348

Reg Edwards wrote:
> 0.288 50 100 53

Thanks Reg, this was the one in which I was interested.

> If elevated radials are less than 1/4-wave, (height + radial =
> 1/2-wave) then the input reactance
> will be zero, but the coax will radiate and some people don't like
> that.

Is that because the current into the vertical radiator and the
current into the radials are not equal?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6076. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 02:25:46 UTC
From: richardharrison@webtv.net
Message-ID: <18838-3AC14BAA-302@storefull-116.iap.bryant.webtv.net>
Source record: 167349

Tom W8JI wrote:
"Nice but not true."

Tom, W8JI wrote:
'"All the shield does is help balance the antenna if the antenna has a balance problem....nothing more."

Tom is still wrong but is unlikely to admit his mistake.

Best regards, Richard Harrison, KB5WZI

6077. Re: G5RV Dipole -- Works?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 02:47:39 UTC
From: yardleyite@aol.com
Message-ID: <20010327214739.25681.00001333@ng-cs1.aol.com>
Source record: 167350

Steve,
I've had my G5RV up for a year now and think it works great. I have it mounted 75' high. If you can use insulated wire it will protect the elements from oxidation. It gets a little gain on 20 and 15 meters, and on 40 and 80 meters it approximates the gain of a dipole.

I have the full sixed version (102') and use it with an antenna tuner. Good luck and 73.
Joe Cro N3IBX

6078. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 02:49:35 UTC
From: yardleyite@aol.com
Message-ID: <20010327214935.25681.00001334@ng-cs1.aol.com>
Source record: 167351

Loose the balun and watch your VSWR go down. I know the theory behind them but have never had any luck using a balun.
73 de Joe N3IBX

6079. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 03:12:49 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AC156B1.F0574B93@usa.alcatel.com>
Source record: 167352

You have been saying for some time now that one can't separate magnetic and
electric fields anyway. If true, one could never tel what their ratio was to
each other.

Cortland

Tom W8JI wrote:

> On Tue, 27 Mar 2001 10:17:07 -0800, Cortland Richmond
> <Cortland.Richmond@usa.alcatel.com> wrote:
>
> >If I understand you properly, you are saying that at a distance from a loop
> >its field will be identifiable because the electric field will predominate,
> >and at a distance from an dipole its field will be identifiable because the
> >magnetic field will predominate.
> >
> >Only problem is, it is NOT possible to tell by the ratio of electric to
> >magnetic field in the far-field, whether the radiator was a magnetic loop
> >or an electric dipole.
> >
> >Cortland
>
> Even in the near field, you are unlikely to know. The exception would
> be within maybe 1/10th of a wavelength or less.
>
> Roy explained the field behavior pretty well, but I guess it fell on
> deaf ears. That may be a requirement to keep thinking the shield has
> some meaning purpose other than balance.
>
> Bart agreed, Bill agreed, Roy agreed, Reg agreed, Reference Data for
> Radio Engineers in the later copies agrees. Faraday and Maxwell agree.
> The only people who disagree are those who use the examples of
> transformers out of context for evidence.
>
> I think everyone else has given up, and so will I. Some things are
> hopeless, and not worth the time.
>
> 73 Tom

6080. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 03:18:09 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E6C21F.7BFB%stewartx@sccoast.net>
Source record: 167353
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:

> Kind of a silly example, wouldn't you say?
> A vast majority has never fired a
> thermonuclear device either, and yet they
> would have you believe that based on
> their feelings and opinions, you should
> have to give up your personal
> thermonuclear device, if you had one.

I'm sorry, but you're not getting my thermonuclear device until you pry it from my cold deap fingers (not to mention a few hundred thousand other cold dead fingers).

Anyway, lets not be silly - the two examples just don't fit together. Private ownership of firearms is a tradition that goes all the way back to the very start of this country (every person who signed that Constitution, and the Bill of Rights, owned a gun), but I'm not aware of anybody who is honestly suggesting a right to privately own a thermonuclear device, nor is there any tradition of such ownership. In other words, these two are not even in the same ballbark - in either capabilities or political debate.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

6081. Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 03:25:30 UTC
From: mover123@webtv.net
Message-ID: <3238-3AC159AA-224@storefull-245.iap.bryant.webtv.net>
Source record: 167354

I own the 15th edition of the Antenna Book (1988). Chapter 2, "Antenna Fundamentals" includes the following statement in the third paragraph: "Other factors being equal, field strength is directly proportional to current. It is therefore desirable to make the current as large as possible for a given amount of transmitter power..."

This statement seems to imply the supplied power is not what determines the strength of the radiated field. There is clearly something misleading about this statement as it stands. Perhaps if they used "available power" instead of just "power", it would make more sense. I think I know what was meant, but it is unfortunate that such statements exist in the basic literature that newcomers are exposed to. Comments welcome.

Thanks, Paul

6082. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 04:10:07 UTC
From: richardharrison@webtv.net
Message-ID: <18840-3AC1641F-48@storefull-116.iap.bryant.webtv.net>
Source record: 167355

Tom, W8JI wrote:
"The difference between a single reflector and multiple reflectors (trigonal) is nearly immeasurable."

Tom may be right. Support for his opinion would be interesting.

A reflector element is usually placed about 1/4-wavelength from the radiator. This is for the desired phasing, and the reflector length can be altered and the spacing can be changed with the same phasing result. I am using 1/4 wavelegth to simplify the following explanation.

The reflector is about 1/2-wavelength long and has low resistance. It is parallel with the radiator element. Because it is near resonance, the reflector readily accepts energy from the radiator. Because it has no load or significant loss resistance, it must re-radiate the energy it accepts.

By Lenz`s law we know the induced field must oppose its creator. We also know that if the conductor is nearly lossless, the re-radiated energy and energy direct from the radiator will balance to nearly zero in the direction of the reflector.

But the reflected energy returning towards the radiator has gone through 90 degrees to get to the reflector. At the reflector it underwent another 180 degrees. On the return to the radiator it undergoes another 90 degrees of phase change. The total phase change during the roundtrip from radiator to reflector and back to the radiator is 360 degrees. This phase rotation puts the reflected energy in phase with the energy newly emerging from the radiator. We have a power gain in the forward direction.

In the trigonal reflector, only the middle reflecting element shares a plane with both the radiator and the directors in the parasitic array. Energy directed towards the upper and lower reflecting is in a different plane from that directed at the middle reflecting element and can evoke its own responses.

I have no experience with the trigonal reflector. In my experience, all of the arrays I`ve used that had multiple reflectors had multiple radiating elements, one for each reflector. But I can`t say the trigonal reflector won`t work, either. I can only observe that people have built them and probably thought they were worth the effort, or they probably would have not got them published in several respected places. I did not recommend the trigonal reflector. I only had a source of design details which I gladly supplied.

Best regards, Richard Harrison, KB5WZI

6083. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 04:37:28 UTC
From: richardharrison@webtv.net
Message-ID: <12867-3AC16A88-3@storefull-118.iap.bryant.webtv.net>
Source record: 167356

Paul Ward wrote:
"It is therefore desirable to make the current as large as possible for a given amount of transmitter power..."

This ARRL Antenna Book comment makes more sense when you continue on to get to the point of the paragraph:
"In any circuit that contains both resistance (hopefully the "radiation resistance") and reactance, the largest current will flow when the reactance is "tuned out"_."

Best regards, Richard Harrison, KB5WZI

6084. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 05:33:24 UTC
From: n2ey@aol.com
Message-ID: <20010328003324.09227.00000355@nso-mp.aol.com>
Source record: 167357

In article <20010326215623.13235.00001743@ng-fi1.aol.com>, ke4qkn@aol.com
(Texas Rangers Fan Since 1972) writes:

>Tried to build a nice 1/2 wave dipole today for 10m and could not get the SWR
>below 2:1. Never had this problem before, thought I might have forgotten to
>do
>something......
>
>The center is a Van Gordon 1:1 HI-Q balun. Measured 8 ft 3" of wire for each
>leg, plus an additional foot: 6" to work with in the center, 6" to work with
>on
>the end. Used 14 ga stranded THHN wire. Soldered the ends to the middle, made
>5
>loops through the lug, used end insulators with 5 loops on each end. Hung it
>up
>about 10ft off the ground in the driveway to test it before hanging it, and
>like I said, could NOT get the swr below 2:1. I use an MFJ antenna analyzer
>and
>the lowest SWR I could get on this thing was at about 24.5 mhz, it dipped
>down
>to 1.7:1.
>
>Got frustrated, took it apart started over. Same problem. Second time I used
>18
>ga stranded wire.
>
>All my soldering connections were solid, and I used about 5 different pieces
>of
>coax, so I know it was not a coax problem. I also moved it to 3 or 4
>different
>locations for testing, with the same results. I even tried hanging it as an
>inverted V!!!! Nothing seemed to work.
>
>I tested the balun with a VOM and there was no short. Is there any way I
>could
>have gotten a "bad" balun? Like I said this is the same construction
>technique
>I have used for making dozens of dipoles and I have never had this problem
>before.

First thought: The balun may be bad. Or it may be introducing unwanted
reactance at the feedpoint. It can measure OK with a VOM and still be no good
at 28 MHz. (All it takes is one shorted turn). You have checked so many other
things that it's the next thing I would check.

Try making up the dipole without the balun. Try 8 feet 3 inches on each side, measured from the coax connection point to the eye of the end insulator.

How high up are you mounting this dipole? Height above ground makes a big difference in the feedpoint impedance.

73 de Jim, N2EY

6085. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 06:05:07 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC17F6D.EDEB8082@earthlink.net>
Source record: 167359
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:

> Zoran Brlecic wrote:
> >
> > DumbassWoger wrote:
> >
> > > Just why the heck would anybody in his/her right mind pay the ARRL to be a
> > > member? For what?
> >
> > Because it is the only national ham radio association in the US, and as such is
> > the sole protector of every US ham's interests, rights and privileges.
>
> Well actually, they're the sole protector of ARRL's singulara
> interests, first, then if there's anything left, US hams as a group
> might get a little attention.
> Back in the days of HPM it was as you say. But HPM is long gone.

I'm not sure I follow you... What might those "ARRL's singular interests" be and what do you propose as an alternative to the *only* national amateur radio organization? Cutting off one's own nose to spite the face is usually not a smart choice.

Look, clearly it is in every US ham's interest to retain as much spectrum as possible for as long as possible. Fiber optics in every house will alleviate the pressure, but it will not eliminate it. Everything else is petty stuff which is not critical for the survival of amateur radio. Once we absolve this fact, the choice is simple: we either support our one and only ham radio representation in the world or not - we keep our hobby alive or not.

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6086. antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 06:10:36 UTC
From: cm13141@aol.com
Message-ID: <20010328011036.20499.00001078@ng-fz1.aol.com>
Source record: 167360

I am looking to buy a antenna tuner to use with dipoles and other type of wire antennas.What is the best bang for the buck tuner that I should check out?I have a
Kenwood TS-930S that i run barefoot.
Thanks,
James

6087. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 06:25:56 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC1844F.24D81C70@earthlink.net>
Source record: 167361
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dwight Stewart wrote:

> Zoran Brlecic wrote:
>
> > Kind of a silly example, wouldn't you say?
> > A vast majority has never fired a
> > thermonuclear device either, and yet they
> > would have you believe that based on
> > their feelings and opinions, you should
> > have to give up your personal
> > thermonuclear device, if you had one.
>
> I'm sorry, but you're not getting my thermonuclear device until you pry it
> from my cold deap fingers (not to mention a few hundred thousand other cold
> dead fingers).
>
> Anyway, lets not be silly - the two examples just don't fit together.
> Private ownership of firearms is a tradition that goes all the way back to
> the very start of this country (every person who signed that Constitution,
> and the Bill of Rights, owned a gun)

Well, geez, every person who signed that Constitution was also a slave owner,
but you could hardly condone that nowadays, especially with all these nutcases
running around demanding their $1 million retribution in gold bars.

> , but I'm not aware of anybody who is
> honestly suggesting a right to privately own a thermonuclear device, nor is
> there any tradition of such ownership. In other words, these two are not
> even in the same ballbark - in either capabilities or political debate.

Why not? I am simply asking for consistency: a thermonuclear device falls into
the same category of "firearms" as a six-gun. They are both devices used for one
purpose only: to kill people. Everything else is a smokescreen. Now, it would
seem to me that the very same amendment you guys are pulling in the case of
handguns, rifles and automatic weaponry must cover *all* firearms. One person's
definition of danger is another person's definition of safety. What this boils
down to is this: that amendment is somewhat anachronistic.
Btw, neither you nor Dick commented on the second part of my example - the
narcotics use. But I admit, here we are dealing with one of those things that
make people feel good and politicians re-elected. War on drugs. Any day now.

73 ..... Zoran WA7AA

And in case anyone's wondering: I own neither a handgun nor a TND, but I do
support a right to bear a handgun or two; I also support legalization of all

drugs except to minors, followed by revamping of the legal system with the emphasis on expanding a death penalty. Too radical? Hell yeah, but with 1% of the US population in prison, something better be done before it gets worse.

--
Support freedom of speech, or I'll kill you!

6088. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 06:27:25 UTC
From: "D. Stussy" <kd6lvw@bde-arc.ampr.org>
Message-ID: <Pine.LNX.4.10.10103280623330.2855-100000@exp.bde-arc.ampr.org>
Source record: 167362
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

On Wed, 28 Mar 2001, Zoran Brlecic wrote:
> Dick Carroll wrote:
> > Zoran Brlecic wrote:
> > > DumbassWoger wrote:
> > > > Just why the heck would anybody in his/her right mind pay the ARRL to be a
> > > > member? For what?
> > >
> > > Because it is the only national ham radio association in the US, and as such is
> > > the sole protector of every US ham's interests, rights and privileges.
> >
> > Well actually, they're the sole protector of ARRL's singulara
> > interests, first, then if there's anything left, US hams as a group
> > might get a little attention.
> > Back in the days of HPM it was as you say. But HPM is long gone.
>
> I'm not sure I follow you... What might those "ARRL's singular interests"
> be and what do you propose as an alternative to the *only* national amateur
> radio organization? Cutting off one's own nose to spite the face is usually
> not a smart choice.
>
> Look, clearly it is in every US ham's interest to retain as much spectrum
> as possible for as long as possible. Fiber optics in every house will
> alleviate the pressure, but it will not eliminate it. Everything else is
> petty stuff which is not critical for the survival of amateur radio. Once
> we absolve this fact, the choice is simple: we either support our one and
> only ham radio representation in the world or not - we keep our hobby alive
> or not.

I wouldn't call the ARRL the "sole" protector of amateur radio in the U.S.
Many amateurs, whether as individuals or as groups (clubs, repeater
coordinators, or others) comment on pending FCC rulemakings and write
Congress-critters (as they are called in another newsgroup). Only if the ARRL
were the only entity talking to the government would the title of "sole
protector" be appropriate. Nothing says that each individual licensee can't
comment directly and must go through the ARRL.....

6089. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 07:29:00 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC19317.42C249A0@earthlink.net>
Source record: 167363
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"D. Stussy" wrote:

> > Look, clearly it is in every US ham's interest to retain as much spectrum
> > as possible for as long as possible. Fiber optics in every house will
> > alleviate the pressure, but it will not eliminate it. Everything else is
> > petty stuff which is not critical for the survival of amateur radio. Once
> > we absolve this fact, the choice is simple: we either support our one and
> > only ham radio representation in the world or not - we keep our hobby alive
> > or not.
>
> I wouldn't call the ARRL the "sole" protector of amateur radio in the U.S.
> Many amateurs, whether as individuals or as groups (clubs, repeater
> coordinators, or others) comment on pending FCC rulemakings and write
> Congress-critters (as they are called in another newsgroup). Only if the ARRL
> were the only entity talking to the government would the title of "sole
> protector" be appropriate. Nothing says that each individual licensee can't
> comment directly and must go through the ARRL.....

Nothing says that - you're right. However, how much clout do you think US hams would have with FCC and congressmen if they kept showing up in groups of 5 to 10, without unified representation, on a strictly individual basis? We could all comment ourselves right out of all the spectrum.

Nothing says each individual US citizen can't fight an invading army on his own and in groups, but doing that would be the biggest mass suicide since Jim Jones. That's why we have the US Army. And that is also why we have the ARRL - to have a strong, unified and committed representation so we don't look like a bunch of jokers. Frankly, I don't understand what's all this dislike of the ARRL - what's the big grudge? Would someone care to explain?

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6090. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 07:56:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99s5ek$hg6$1@slb7.atl.mindspring.net>
Source record: 167364

Walter:

[snip]
> I agree that the IEEE erred in calling both dissipative and
non-dissipative
> resistance 'resistance'.
>
> However, because the input impedance, or 'surge' impedance' if you will,
of
> a lossless transmission line is determined by the sqr root of L/C, and is
> also determined by the simple ratio E/I, there can be no conversion of
> electrical energy to heat at that point. Therefore there is no dissipation
> in the resistance appearing at the input of the line, as long as
dissipation
> is defined as energy converted only to heat. What happens downstream, for
> example at the terminating load, is irrelevant to the situation at the
line
> input.
>
> I find it hard to understance why some people have difficulty in
> appreciating the difference between dissipative and non-dissipative
> resistance. Seems clear as a bell to me.
>
> Walt, W2DU
[snip]

Walter... we agree. I am with you on this issue. But the IEEE's Chief Lexicographer has already done his damage. Oh well.

BTW... do what do you think of the concept of imaginary resistance? jR is not only a concept but it is "real". Imaginary resistance is quite useful for explaining the operation of "narrow band" antenna tuners and certain other impedance transformation effects in both broadband and narrowband contexts. It is sometimes useful at intermediate steps in the synthesis of broadband matching networks.

Imaginary resistance is quite useful as an analysis tool, and...

In fact, with some expense, imaginary resistance can be "approximated" in the lab to as much precision as is desired (Over a prescribed finite frequency band).

Here is a question for the NG... given that imaginary resistance can be "approximated" as closely as desired, is there any practical use for it?

Best regards,

-Peter K1PO

6091. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 09:54:12 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <8xiw6.64$0H2.6969@dfiatx1-snr1.gtei.net>
Source record: 167365
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Zoran Brlecic" <zbrlecic@earthlink.net> wrote in message
news:3AC1844F.24D81C70@earthlink.net...
>SNIP
>
> Why not? I am simply asking for consistency: a thermonuclear device falls
into
> the same category of "firearms" as a six-gun.
>
> SNIP

Come on now, even Clinton couldn't make that one fly.... A gun can only
kill a single person within the shooters' direct line of sight per
discharge. This weapon targets a specific person, and has the option to
only wound, as well as kill. It does not destroy the surrounding buildings,
all life forms in the surrounding area, and pollute the land with radiation
for the next several centuries.

If what you say were true, then the ATF would be enforcing the laws
regarding Nukes... :>)

73 de W6DKN

6092. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 10:37:38 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <99setidet1@planet.kis.keele.ac.uk>
Source record: 167366

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> Leigh Preece= wrote:
> >
> > Hi Folks,
> >
> > I see in an advertisement from Waters and Stanton in the UK that one of the
> > company owners, Jeff Stanton, has designed an 3.5Mhz dipole that also works
> > on 40 and 20m. It seems to be about 50ft total size too.
> >
> > Anyone with similar designs on the web anywhere?

> I have a 130ft dipole that works on *ALL* HF bands without a tuner.
> It's on my web page.

All well and good but I don't have 130ft+ to put the thing in do I?

Leigh....
--

Leigh M. Preece Media and Communications Centre
Keele University. Staffs. UK. ST5 5BG
==========
Ex-PMR Radio Page: http://www.qsl.net/m5gwh/pmrpage.htm

6093. Re: seeking dc/ac converter

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 12:09:59 UTC
From: deyoreo@re.ray.com
Message-ID: <3ac1d470.1261233@proxy.res.ray.com>
Source record: 167367

Radio shack, RV supply stores. They come in 140 Watts up to 1500Watts.
On Tue, 27 Mar 2001 04:57:05 GMT, Steve Silverwood <kb6ojs@arrl.net>
wrote:

>In article <97t8p5$d7g$14@mycroft.westnet.com>, lou1@westnet.com says...
>> anyone have a 12v dc to ac converter for sale>?
>> know a source?
>
>It's called an inverter. I picked one up not too long ago at Pep Boys
>(auto parts & accessories) for a good price. Audiovox brand, model
>ADC150, rated for 150 watts continuous power. Works great! I use it to
>run my notebook computer when we travel and don't have AC power
>available. Very handy item.
>
>--
>
>-- // Steve //
>
>Steve Silverwood, KB6OJS AOL Instant Msgr: "steve kb6ojs"
>Fountain Valley, CA USA Yahoo! Messenger: "steve_kb6ojs"
>http://home.socal.rr.com/silverwood Email: kb6ojs@arrl.net
> Fax: 425/699-7473

6094. Re: Coil Form Material

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 12:27:28 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <99slnb$8db$1@newpoisson.nosc.mil>
Source record: 167269

"David L. Dyke" <dld@NOSPAMrglobal.net> wrote in message
news:99rd8k017g1@enews4.newsguy.com...
I am wondering about the 'have to' vs the 'ideal' coil form material. I realize that an air or glass coil form is about ideal (constructing a high-Q coil), but what if all I can obtain is plain-old white PVC? How much of a loss of efficiency can I expect at RF frequencies?

Simple question, I know, but I am looking for opinions. (B & W coil stock is outrageously priced, plexi-glas is noot cheap either, and I do not have a source for fiberglass tubing.)

Thanks in advance.

73 de N6XOS (Dave) dld@rglobal.net

Dave: I've turned to toilet paper tubes (sans paper), Brawny paper towel tubes (sans paper), and, most recently, the Quaker Oats cylinders (sans oats).

For any of them (chosen for their diameter and length, depending on my "L" and "Q" needs) I cut up a couple of 1/8" wooden dowels to the same length as the tube and epoxy the dowel pieces laterally along the form - that way I get the wire elevated off the form enough to employ alligator clips or, in one case, solder wire tap points to connect to a multi-ganged switch.

Works for me - expect the cardboard form to have little effect on the Q of those coils.

Regards, Jim R. K9JWV

6095. Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 12:28:20 UTC
From: "John (KB3CDF)" <murphman@erols.com>
Message-ID: <99sldi$5gp$1@bob.news.rcn.net>
Source record: 167368

Dear Elmer:

I am considering a permanent antenna mount for 2m/70cm. I am seriously considering a NMO in the center of the roof of my vehicle vs. any other type mount.

It is suspect that there would be a HUGE increase in performance with this type of installation.

I am kind of "on the fence" with this decision.

My concerns:
1.) parking garage issues
2.) resale or trade-in of the vehicle
3.) leaks ...rain or water issues???

I am guessing there are many HAMs out there that have considered this and decided one way or the other for various reasons. I would love to hear your arguments in either direction.

Thanks in advance,
--
~~~
John
73's de KB3CDF
~~~

6096. Re: Why do ground losses increase with frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 12:40:55 UTC
From: Jim Rodenkirch <rodenkir@spawar.navy.mil>
Message-ID: <99smgj$8lt$1@newpoisson.nosc.mil>
Source record: 167270

"Mark Keith" <nm5k@wt.net> wrote in message news:3AC135A2.1BAB@wt.net...
W6RCecilA wrote:

<snip> Taking a lesson from an off-center fed dipole, if we make the horizontal radials shorter than 1/4WL and the vertical radiator longer than 1/4WL, can we find a 50+jX ohm point? (where the reactance can be neutralized with a series cap) I've been meaning to model that configuration but day-trading has soaked up my time.

Mark replied:

You can usually do it without a cap is the radiator is long enough. Within limits anyway. "1/4 wl design". MK

Mark and Cecil: I'll be trying this approach out (shortened radials and a tunable vertical radiator) over the coming week. I'm planning on activating a new U.S. Island that's out in the boonies so I'll need to use a boat to get to the bloody place - consequently, need to keep the antenna system lean and mean. Plan on working out a vertical antenna arrangement that leverages off Cecil's modified ham stick creation for 20 - 10. Will be stabilizing the vertical off the boat's edge and deploying a shortened radial system; e.g., 30 to 40 radials of a length around 8 to 10 feet. Hope to leverage off the fact I'll have the base of the vertical at the water's edge and can deploy most of the radials in the salt water. I can construct and install the system at my home as I live at waters edge so I'll use an Autek Research Model VA1 analyzer as I'm atunin' and adjustin' - so, I'll get the impedance, R and X components, L and C readouts. Outta be interesting. If you're interested I'll be glad to report back on what happens. Regards, Jim R.

6097. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 13:46:23 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ac1eb53$0$88187$bbae4d71@news.net-link.net>
Source record: 167271

What do you have to do to change bands on these setups? How many bands do
you get out of a coil? What kind of "plugs" are you putting in the ends and
what kind of "sticks" do you mount them on?
Mark Keith wrote in message <3AC130C2.2D2E@wt.net>...
>Rudolph M. Marcelletti wrote:
>>
>> How do you construct your bugcatcher type coils to be "tree
proof"?????Use a
>> solid core? Wrap them with padding?
>
>They are wound on lightweight plastic cores about 2-.5-3 inches dia. I
>put plugs in the ends and drill holes to mount on the sticks I use. The
>wire is #12 house wire with the insulation on, and then I wrap vinyl
>over the coil when I'm done to waterproof. And yep, I'm sure your
>thinking all this stuff will ruin the coil, but in practice it doesn't
>seem to. I've compared with equal size bug coil antennas, and could see
>little if any difference with the plastic core and vinyl. You can hit a
>tree and doesn't faze one of these. There is nothing to break. MK
>--
>http://web.wt.net/~nm5k

6098. best commercial 4:1 balun for beam antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 13:53:19 UTC
From: Rudy Marcelletti <rudym@net-link.net>
Message-ID: <3ac1ecf3$0$88189$bbae4d71@news.net-link.net>
Source record: 167272

CC wants something like $80.00 for their "match box" for my X7 beam that I don't even know is bad yet but I need to have one on hand for the tower guys when they come to help. I think it is unlikely that traps went bad. CC wants about $35.00 to $40.00 each for those as well. I could always use the balun on something else if the XM79 box is still good.

Who makes a good 2kw 4:1 balun?

What is the best way to test a balun (on the tower)?

6099. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 13:59:02 UTC
From: K7MEM <jda@rupert.tds-az.lmco.com>
Message-ID: <3AC1EE26.446B9B3D@rupert.tds-az.lmco.com>
Source record: 167274

N2EY wrote:
>
> In article <20010326215623.13235.00001743@ng-fi1.aol.com>, ke4qkn@aol.com
> (Texas Rangers Fan Since 1972) writes:
>
> > Tried to build a nice 1/2 wave dipole today for 10m and could not get the SWR
> > below 2:1. Never had this problem before, thought I might have forgotten to
> > do something......
> >
> > The center is a Van Gordon 1:1 HI-Q balun. Measured 8 ft 3" of wire for each
> > leg, plus an additional foot: 6" to work with in the center, 6" to work with
> > on the end. Used 14 ga stranded THHN wire. Soldered the ends to the middle,
> > made 5 loops through the lug, used end insulators with 5 loops on each end.
> > Hung it up about 10ft off the ground in the driveway to test it before
> > hanging it, and like I said, could NOT get the swr below 2:1. I use an
> > MFJ antenna analyzer and the lowest SWR I could get on this thing was
> > at about 24.5 mhz, it dipped down to 1.7:1.
> >
> > Got frustrated, took it apart started over. Same problem. Second time I used
> > 18 ga stranded wire.
> >
> > All my soldering connections were solid, and I used about 5 different pieces
> > of coax, so I know it was not a coax problem. I also moved it to 3 or 4
> > different locations for testing, with the same results. I even tried
> > hanging it as an inverted V!!!! Nothing seemed to work.
> >
> > I tested the balun with a VOM and there was no short. Is there any way I
> > could have gotten a "bad" balun? Like I said this is the same construction
> > technique I have used for making dozens of dipoles and I have never had
> > this problem before.
>
> First thought: The balun may be bad. Or it may be introducing unwanted
> reactance at the feedpoint. It can measure OK with a VOM and still be no good
> at 28 MHz. (All it takes is one shorted turn). You have checked so many other
> things that it's the next thing I would check.

Just another thought. As Jim says, a VOM is not a good way to check a
balun.
You can't really tell how it is going to work at various RF frequencies.
However, you did say that you had a MFJ antenna analyzer. If I remember
correctly, in the instruction manual there are instructions on properly
testing a balun using the analyzer and a couple of resistors. I have
done
it before, but I don't remember the procedure off hand.

> Try making up the dipole without the balun. Try 8 feet 3 inches on each side,
> measured from the coax connection point to the eye of the end insulator.
>
> How high up are you mounting this dipole? Height above ground makes a big
> difference in the feedpoint impedance.
>
> 73 de Jim, N2EY

--
Martin E. Meserve K7MEM
martin.e.meserve AT lmco.com

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

6100. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:08:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99sr9qae0@208.206.142.72>
Source record: 167273
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
>
I am simply asking for consistency: a thermonuclear device falls into
> the same category of "firearms" as a six-gun. They are both devices used for one
> purpose only: to kill people. Everything else is a smokescreen.

You are just as wrong as you can possibly be, as most anti gun people consistantly are. I have absolutely no intention of killing anyone with a gun, but I also have no intention of allowing you to confiscate them. I DO have an intent to use them - the mere existance and presence - to deflect those who would cause bodily harm to me and my family. Almost always, the mere sight a weapomn of defense is more than enough to put the coward to flight. Should the assailant be in an unusual state of mind, such as drugged or insane, and insist on forcing me to use a firearm to stop him, of course that would be the natural progression of things.
Soit was when columnist Mr. Carl Rowan, a rabid anti-gunner, shot an intruder. He sure changed his tune in a hurry. Curious thing, that he even OWNED a gun, what with all his anti-gun rhetoric, isn't it? Do YOU own gun, by the way?

Now, it would
> seem to me that the very same amendment you guys are pulling in the case of
> handguns, rifles and automatic weaponry must cover *all* firearms. One person's
> definition of danger is another person's definition of safety. What this boils
> down to is this: that amendment is somewhat anachronistic.
> Btw, neither you nor Dick commented on the second part of my example - the
> narcotics use. But I admit, here we are dealing with one of those things that
> make people feel good and politicians re-elected. War on drugs. Any day now.
>

I'm not real eager to take seriously the opinion of anyone who can't differentiate between a personal firearm and a nuclear weapon. Looks like a screw may be loose somewhere.

6101. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:15:14 UTC
From: kazering <kazeringue@aol.com>
Message-ID: <3AC1F3DF.2040303@aol.com>
Source record: 167278

As to issue #2(resale value), here's an idea.

I have a friend that recently sold his vehicle that had been drilled for NMO mount(on the roof). When he was ready to sell, he simply swapped out the 2-meter antenna with a cell phone NMO antenna. He explained it as a "feature" instead of a "problem". The guy who bought it "didn't know you could do that" and "didn't realize his cell phone could work so well". A simple 5 minute demonstration, and the buyer was okay with the "problem".

When you have lemons, find a way to make lemonade.

73,
W4KAZ

6102. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:19:09 UTC
From: oldtimeradio@??.net
Message-ID: <3ac1f182.9004387@news.vnet.net>
Source record: 167275

On Wed, 28 Mar 2001 07:28:20 -0500, "John (KB3CDF)"
<murphman@erols.com> wrote:

>Dear Elmer:
>
>I am considering a permanent antenna mount for 2m/70cm. I am
>seriously considering a NMO in the center of the roof of my vehicle
>vs. any other type mount.

>My concerns:
>1.) parking garage issues
The one or two times a year I deal with this, I just unscrew
the antenna when entering.
>2.) resale or trade-in of the vehicle
I drive them 'till they drop so this is no problem to me
>3.) leaks ...rain or water issues???
Never had a problem with my NMO and Larsen antenna

If you have an SUV, where no one will see the plug when you trade
vehicles, drill the hole. If you have a regular height car and plan
to trade, I'd use some kind of trunk lid mount.

OTR

PS
You do know that there is a special drill bit made to do this? I'd
hate to see your drill bit grab and poke through your head liner.

6103. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:27:31 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <nxmw6.166$7b2.48911@paloalto-snr1.gtei.net>
Source record: 167277

I would (and did) go with a SO-238 UHF style mount. It's compatible with more antennas, and the hole in the roof is smaller. It's easy to fit a small hole plug if you remove the antenna, and a dab of touchup paint and it is barely noticeable...

Another neat feature - if your into camping or field day, you can remove the antenna and connect a run of coax to the mount to allow the use of a small yagi in a tree or on a push up mast...

(And your correct concerning the performance improvement over a typical window or gutter mount.)

73 de W6DKN

"John (KB3CDF)" <murphman@erols.com> wrote in message news:99sldi$5gp$1@bob.news.rcn.net...
> Dear Elmer:
>
> I am considering a permanent antenna mount for 2m/70cm. I am
> seriously considering a NMO in the center of the roof of my vehicle
> vs. any other type mount.
>
> It is suspect that there would be a HUGE increase in performance with
> this type of installation.
>
> I am kind of "on the fence" with this decision.
>
> My concerns:
> 1.) parking garage issues
> 2.) resale or trade-in of the vehicle
> 3.) leaks ...rain or water issues???
>
> I am guessing there are many HAMs out there that have considered this
> and decided one way or the other for various reasons. I would love to
> hear your arguments in either direction.
>
> Thanks in advance,
> --
> ~~~
> John
> 73's de KB3CDF
>
>
>

6104. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:28:06 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <99ssdl$h5e@r02n01.cac.psu.edu>
Source record: 167276

Hi John:

I don't know if you will see a huge increase in performance with a permanent mount but you will see some. You will see the most if your replacing a through glass antenna. If you are replacing a magnet mount, the biggest change will be in stoping the slow deterioration you will see when the coax is smashed in the door over and over.
As for resale value on the car, before I did it to my pickup, I asked a few people I knew in the used car business. They told me that it had no real effect on the value after the car was a year old. So unless your trading cars every year no problem.
As for leaks, I've never had any problems, but I went to a local 2 way radio shop and had them put it in. It didn't cost much and they did it right. I use a 2m/70cm antenna that is a loaded 1/4 on 2m and a gain antenna on 70cm. It's slightly shorter than a standard 1/4 wave. Here in Pennsylvania the advantages of higher gain antennas is not so clear as the lower angle of radiation is not so useful in the mountains. It works just fine and I have no problems with my garage or parking ramps with my S10 pickup.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"John (KB3CDF)" <murphman@erols.com> wrote in message
news:99sldi$5gp$1@bob.news.rcn.net...
> Dear Elmer:
>
> I am considering a permanent antenna mount for 2m/70cm. I am
> seriously considering a NMO in the center of the roof of my vehicle
> vs. any other type mount.
>
> It is suspect that there would be a HUGE increase in performance with
> this type of installation.
>
> I am kind of "on the fence" with this decision.
>
> My concerns:
> 1.) parking garage issues
> 2.) resale or trade-in of the vehicle
> 3.) leaks ...rain or water issues???
>
> I am guessing there are many HAMs out there that have considered this

> and decided one way or the other for various reasons. I would love to
> hear your arguments in either direction.
>
> Thanks in advance,
> --
> ~~~
> John
> 73's de KB3CDF
>
>
>

6105. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:38:22 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99st0u$6l4$0@208.206.142.72>
Source record: 167279
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
>
> Dick Carroll wrote:
>
> > Zoran Brlecic wrote:
> > >
> > > DumbassWoger wrote:
> > >
> > > > Just why the heck would anybody in his/her right mind pay the ARRL to be a
> > > > member? For what?
> > >
> > > Because it is the only national ham radio association in the US, and as such is
> > > the sole protector of every US ham's interests, rights and privileges.
> >
> > Well actually, they're the sole protector of ARRL's singulara
> > interests, first, then if there's anything left, US hams as a group
> > might get a little attention.
> > Back in the days of HPM it was as you say. But HPM is long gone.
>
> I'm not sure I follow you... What might those "ARRL's singular interests" be

First and formost, selfpreserveation, on a the BOD level. Consider the
January vote on whether or not to support code testing at the next ITU
meeting.
The vote to drop code testing was by a voice vote, with no identity of
who voted how. There was a lone effort by a BOD Member to poll the BOD
for each member's vote, which was quickly voted down. None of those
voting against keeping code testing wanted his vote made public, and
without a individual poll of the vote it will not be, officially at
least. Since the BOD members are elected as individuals, the entire BOD
can't be held accountable for such a vote since they can't be elected
nor unseated en masse.
Just a bit of defense against the will of a large bloc of ARRL
members' wishes. Selfpreservation at it's finest.

and what
> do you propose as an alternative to the *only* national amateur radio organization?
> Cutting off one's own nose to spite the face is usually not a smart choice.

Oh, no, alternatives haven't proved viable to date. Just understand that
the enemy is not always outside looking in.

>
> Look, clearly it is in every US ham's interest to retain as much spectrum as possible

> for as long as possible.

Not at all. We use little of our UHF/SHF allocations, and it might very
well be in our best interests to "trade" some of that unused real estate
for some we could make better use of, maybe on HF or VHF. I think that
most of the Part 15 intentional radiator devices would be much better
off above UHF instead of on HF where they do far more damage, but that
battle was lost long ago.

Fiber optics in every house will alleviate the pressure, but
> it will not eliminate it. Everything else is petty stuff which is not critical for
> the survival of amateur radio. Once we absolve this fact, the choice is simple: we
> either support our one and only ham radio representation in the world or not - we
> keep our hobby alive or not.

And while we're at it, keep the heat and pressure on them...

6106. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:43:44 UTC
From: richardharrison@webtv.net
Message-ID: <13897-3AC1F8A0-19@storefull-115.iap.bryant.webtv.net>
Source record: 167282

Tom, W8JI wrote:
"I think everyone else has given up, and so will I."

Tom should give up because he is dead wrong.

The shield on a loop antenna is a Faraday shield. Faraday shields are sieves which pass the magnetic field but don`t pass the electric field.

Origin of the fields affects the % of each field arriving at the sieve, but doesn`t affect the electric field blocking of the sieve. When there is a disproportionate electric field as the result of noise nearby, the Faraday shield has an opportunity to sieve out some of the noise.

The issue that Tom has been adamant on was:
"The electric and magnetic fields are INSEPARABLE."

I am just as adamant that he is dead wrong on inseparability.

The Faraday shield does this job in many locations including loop antennas. Tom has not given any explanation to support his claim of inseparability. I have explained how the Faraday shield works.

The Faraday shield is used in millions of 50/60 Hz transformers to sieve out higher frequencies which might be detrimental. The Faraday shield is also used at r-f in every mediumwave broadcast transmitter I ever worked with, and that is a bunch, for exactly the same purpose. It is used to eliminate capacitive coupling. Capacitive coupling favors higher frequencies. So, the faraday shield intervenes between transmitter and antenna to kill the capacitive coupling so that harmonics won`t get a leg up.

Come on Tom, throw in the towel. Don`t try to declare victory and fade away.

Best regards, Richard Harrison, KB5WZI

6107. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:49:27 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC1F9F7.DD4D30AC@IEEE.org>
Source record: 167280
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
> Well, geez, every person who signed that Constitution was also a slave owner,
> but you could hardly condone that nowadays, ...

Because slave ownership is illegal nowadays while gun ownership is still
protected by the 2nd Amendment.

> ... a thermonuclear device falls into
> the same category of "firearms" as a six-gun. They are both devices used for one
> purpose only: to kill people.

Actually, pistols are most often used as a deterrent to avoid killing
people. All I had to do one night was to display my 9mm and the mugger
with the knife broke an Olympic record running away.

Did you hear about the eight year old who got suspended for pointing a
chicken strip at a teacher and saying "pow"? One wonders what would have
happened if he had pointed the chicken strip at a teacher and said, "yum".
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6108. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 14:52:24 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC1FAA8.FC48C520@IEEE.org>
Source record: 167281
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> I have absolutely no intention of killing anyone with
> a gun, but I also have no intention of allowing you to confiscate them.

Would you kill the person trying to confiscate your guns?
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6109. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 15:08:56 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC1FE88.D45AAE38@IEEE.org>
Source record: 167283
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:
> None of those
> voting against keeping code testing wanted his vote made public, and
> without a individual poll of the vote it will not be, officially at
> least.

I had diphtheria when I was three years old. I would have died without
antitoxin shots. The doctor didn't want me to hate him in later life
so he had my mother hide my eyes so I wouldn't see who was hurting me
for my own good. That's what the ARRL BOD did for you, Dick.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

6110. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 15:17:02 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2006E.A5CFE1DB@IEEE.org>
Source record: 167284

Leigh Preece= wrote:
> All well and good but I don't have 130ft+ to put the thing in do I?

I don't know, cuz you didn't say that in your posting.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6111. Re: Coil Form Material

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 15:18:33 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC200C9.E04D2961@IEEE.org>
Source record: 167285

Jim Rodenkirch wrote:
> Simple question, I know, but I am looking for opinions. (B & W coil stock
> is outrageously priced, plexi-glas is noot cheap either, and I do not have a
> source for fiberglass tubing.)

There might be a Ryan-Herco store in your area. That's where I get
my fiberglas stuff.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6112. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 15:22:42 UTC
From: "Steve D. Perkins" <steve@NOSPAM.hotmail.com>
Message-ID: <99svm40275a@news1.newsguy.com>
Source record: 167293

> You have not told us much about the physical set-up at work. The type of
> building structure, how far you are from "outside" walls, whether you
> can get access to outside for an antenna, etc, are all things that will
> help people help. So far, the question is almost "how high is up", and
> no one can answer.
>
> Give us the real info, and you may get better answers.

There's really not a whole lot to say... I'm not needed a truly nice high-quality setup, just a little portable solution capable of fitting in the pouch on my CD carrying case that will give me decent reception for FM stations within the city limits (10-15 mile radius max).

My office is in the middle of uptown Atlanta, I'm on the 17th floor, nearest window is about 15-20 ft. away (ability to mount an outdoor antenna is out of the question, and would be
overkill for my needs in any case). The radio is nothing special, a little Chinese radio/CD-player gadget that fits convienently in a pouch inside my CD carrying case. It has a
headphones jack (that doubles as the antenna), a miniplug line-out jack, and an AC adapter plug
that makes it nice to use at home, work, or the car (using a cassette adapter).

I believe that I found a possible solution. After tinkering around some more on the internet I found some more suppliers of RF components... so I ordered a small telescoping antenna with a BNC connector, and an adapter to go from BNC to F (for the F-connector to miniplug adapter I already have). I'll either plug my small antenna contraption into the headphones jack and keep my headphones in the line-out plug, or maybe use a splitter to plug
both into the headphones jack (as I said, I can't control the volume when plugged into the line-out jack).

Another small question someone may know. Like I said, this little radio uses the headphones plugged into it as its external antenna. Plugging an F-connector-to-miniplug adapter into the headphones jack doesn't seem to hurt anything, but is there any chance that
plugging a real antenna (or anything that acts as a terminator) into that jack could damage the
equipment or give the antenna a dangerous electrical charge?

6113. Re: Coil Form Material

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 15:31:59 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ac20415_2@news3.prserv.net>
Source record: 167286

Interestingly enough, the 'loss' due to PVC is not from loss tangent, but rather from increased capacitance between turns of the winding. The design of coils for higher dielectric constant core material differs from air core. To approximate air core design, space the wire away from the tube with radial spines, made as narrow and tall as practical. Having the wire tight against the PVC is what does the 'damage'. Or use flat stock in an X configuration. The old coil designs, before machine windings, and development of specialized materials was based on experimental determination of what works best. Another alternative is Styrofoam cylinders from craft and hobby shops. It has practically no loss at all, being mostly air. It does take a little care in winding, as it crushes, but when slightly mashed, holds the turns in place.
--
Crazy George
David L. Dyke <dld@NOSPAMrglobal.net> wrote in message
news:99rd8k017g1@enews4.newsguy.com...
> I am wondering about the 'have to' vs the 'ideal' coil form material. I
> realize that an air or glass coil form is about ideal (constructing a
high-Q
> coil), but what if all I can obtain is plain-old white PVC? How much of a
> loss of efficiency can I expect at RF frequencies?
>
> Simple question, I know, but I am looking for opinions. (B & W coil stock
is
> outrageously priced, plexi-glas is noot cheap either, and I do not have a
> source for fiberglass tubing.)
>
> Thanks in advance.
>
> 73 de N6XOS (Dave) dld@rglobal.net
>
>
>
>

6114. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 15:48:09 UTC
From: jder8745@aol.com
Message-ID: <20010328104809.06661.00000139@ng-fm1.aol.com>
Source record: 167287

Howdy,
I used to always drill and mount in the top. Lately tho I've been using mag mounts. They are mechanically sufficient for 2m/.7m ants. And also do a good job electrically

A true story: Many years ago I had a rather husky 6-m whip on a spring base on the side of a VW microbus.

Whilst driving thru a multi-level parking garage in Indianapolis, I began to hear a crashing noise. They had a 4-ft fluorescent tube mounted on each of the concrete "joists" which were separated by about twenty feet. I figured I took out about 15 or so of those lights. Needless to say I changed my mind about parking there and headed for the closest exit.

I returned to that same garage a month or so later to find that they had installed wire guards around all the lights.

However you mount the antenna, the top oh the vehicle is clearly the best location.

Jack, K9CUN

6115. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:03:39 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3AC20B5B.26408125@mwci.net>
Source record: 167288

Richard Harrison wrote:

> The shield on a loop antenna is a Faraday shield. Faraday shields are
> sieves which pass the magnetic field but don`t pass the electric field.

For harmonically varying E and H fields in a non-conductor, an E field begets an H field and an H field in turn begets an E field. The curl properties of E and H fields assure this.

If a material of some kind allows only an H field to pass, when the H field reaches the other side of the material and leaves it and re-enters a non-conductiong region, it will then resume the creation of the E field, just as it did before reaching the material.

The electromagnetic wave then continues on from there. Guaranteed.

What the value of Z0 (E / H), is on each side of the conducting material depends on what factors may be influencing the wave on each side of the material.

There is no such thing as a transformer of any kind, conventional or transmission line, that does not involve both E fields and H fields.

Bill W0IYH

6116. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:09:33 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC20CBD.8A42F829@oio.net>
Source record: 167292

James,
That's sort of a loaded question (pun intended). It depends
on a number of things, how bad is the mis-match, do you ever plan
to use more than 100-200 watts, how much is too much($$). It never
really hurts to have 'too much' tuner. Especially with MFJ, always
select a tuner that handles at least twice your power output (3x is
better). If your open to used tuners, there are a bunch that would
work well for you. I have a Dentron MT-3000 that's never given me
any problems (not for sale). So, shop around, compare prices, go for
a tuner larger than what you need. Good luck...
'Doc

PS - You might consider building one, not really that hard to do.

6117. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:12:36 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac20cb0.669607067@news.accessunited.com>
Source record: 167289

On Tue, 27 Mar 2001 20:25:46 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Tom W8JI wrote:
>"Nice but not true."
>
>Tom, W8JI wrote:
>'"All the shield does is help balance the antenna if the antenna has a
>balance problem....nothing more."
>
>Tom is still wrong but is unlikely to admit his mistake.
>
>Best regards, Richard Harrison, KB5WZI

Try your nonsense on Bill a while Richard.

6118. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:16:08 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC20E48.26C0ED26@oio.net>
Source record: 167296
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Jerry,
Your lucky. In this part of the country, if braid
is exposed to the weather, it lasts maybe 6 months.
Then you start getting some really weird changes.
'Doc

6119. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:16:09 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <28ow6.16676$Gv.101627@news.inreach.com>
Source record: 167290

Paul:

Because I don't see anything misleading about the quote from the ARRL Antenna Book, I have had some difficulty understanding what you think is wrong with it.

Of course, you are correct in stating that the power supplied to antenna affects the current flow and therefore the field strength. But that would be a scenario where the antenna is the constant and the available/supplied power is the dependent variable. That is not the scenario the Antenna Book is talking about.

The writer of the part you quoted was talking about transmitter power being constant and the antenna (or changes made to it) being the variable. My reading of "Other factors being equal" and "a given amount of transmitter power" means that there are no changes in power to affect the antenna current when you make your field strength comparisons.

What am I missing?

Roger K6XQ

6120. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:16:43 UTC
From: Bill Manley <b_manley@bellsouth.net>
Message-ID: <v9ow6.1663$__1.186562@news2.mia>
Source record: 167291

Could it be that the solution will be revealed on April 1?

Bill Manley
-
"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:99lje3$db5$1@slb6.atl.mindspring.net...
> John:
>
> Dr. Nehoc cannot afford the expense of the IEEE Dictionary and so he was
> forced to work from first principles in an effort to figure out what
> dissipationless resistance was.
>
> He assumed that there must be a dissipationless resistance, since the IEEE
> says so, and since clearly not many agree on what it is... he assumed that
> the only thing it could be was an imaginary resistance, and so he set out
to
> see if he could prove that imaginary resistance jR is really a real
> resistance.
>
> Now that he has proved that j cannot really be sqrt(-1), can you find the
> flaw in his proof? He now believes that we can now put dissipationless
> resistance on a sound mathematical and technical footing. But he needs
some
> help with his laboratory experimentation. I have been working from plans
he
> is slowly sending me each night on 15 m CW to build one of these imaginary
> resistors.
>
> BTW... all of the usual circuit analysis works for this imaginary
> resistance, no problem... for instance....
>
> Ohms law holds even for imaginary resistance, and so...
>
> V = I*j*R is valid.
>
> The power being "dissipated" in that imaginary resistor is then purely
> imaginary (and of course dissipationless):
>
> P = V*I = I*I*j*R = j I*I R
>
> However there is no energy being stored!!! As there would be in an
inductor
> or capaitor.
>

> No energy being stored, current is flowing, and the power is imaginary.
>
> This must truly be dissipationless resistance, no?
>
> What happens if you put a "real" resistor of value R in series with an
> "imaginary" resistor of value jR.
>
> Then you get a total resistance of R+jR = R(1+j). The impedance of this
> combination is:
>
> Z = R(1+j) and the magnitude of the impedance is sqrt(2)R. The phase
angle
> is clearly 45 degrees.
>
> And no energy is being stored!
>
> What is the Q of this strange beast?
>
> If the imaginary resistance was an inductor in series with the real
resistor
> then the impedance clearly would be storing energy, and the Q would be:
>
> Q = (2*pi*f*L)/R
>
> What is the Q of an imaginary resistor in series with a real resistor?
>
> Does it have a Q?
>
> Is it a dissipationless resistor or is it a real resistor?
>
> What????
>
> When I finish building the imaginary resistor from Dr. Nehoc's plans I
will
> share the experimental results with the group. Last night he sent me
> another installment of the plans... it's agonizingly slow copying those
> plans on 15 CW from his hand sent keying. Sort of like an extended SKN,
> heh, heh.
>
> This week I have to go out and get some of the materials that he requested
> to go into the "mix" for the imaginary resistor. So far his plans read
like
> the old carbon composition resistor recipe with the exception that the
> carbon powder is unusual. Do you know of a good supplier of diamond dust?
> He also wants me to get in a good supply of birefringeing optical grade
> glass, and some titanium dust. He says I will need a very high
temperature
> crucible in which to "cook" the mixture for the imaginary resistor.
>
> I can't wait to get the rest of the recipe... Any night just tune around

> 21.005 MHz and listen for a weak CW signal near midnight to hear him
> sending me the plans.
>
> Soon we'll know if the imaginary resistor is really the dissipationless
> resistance that the IEEE Dictionary speaks of.
>
> BTW.... Dr. Nehoc asked me to request any mathematicians on the NG to
> examine his proof that j is not sqrt(-1), and to share with us any
concerns
> that they might have with his proof.
>
> The good Dr. is a genious and I have no doubts, but he always tends to
> underestimate himself. I think that he is worried that I might spend too
> much of my hard earned money on diamond dust before the proof has
withstood
> the test of time.
>
> Food for thought...
>
> Best Regards,
>
> -Peter K1PO (The imaginary resistor salesman!)
>
>
>
>
> "John O'Flaherty" <oflahert@toast.net> wrote in message
> news:3ABE1971.B71ECC75@toast.net...
> > "Peter O. Brackett" wrote:
> >
> > > {elegant 80 proof snipped}
> > >
> > > Thus jR has to be something other than R.
> > >
> > > But what?
> > >
> > > I suspect, now that we all know that Imaginary Resistance jR is real
but
> > > different from R, perhaps that is the elusive...
> > >
> > > Dissipationless Resistance that the IEEE Dictionary was so ineptly
> trying to
> > > define in it's ill advised article on resistance.
> > >
> > > Is dissipationless resistance really jR? What???
> > >
> > > Thoughts, comments,
> > >
> > > -Peter K1PO
> >

> > So, who shot dissipationless resistance?
> >
> > john
> >
>
>

6121. Re: HF MOBLE NOISE

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:19:01 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC20EF5.F7C89B41@oio.net>
Source record: 167297
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.autos.makers.jeep+willys,rec.ham-radio.swap

Jerry,
Always remember the first rule of HF mobiling. "The worth
of an antenna is directly proportional to it's ugliness."
'Doc

6122. Re: Triple reflector of a yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:19:49 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac20d07.669693546@news.accessunited.com>
Source record: 167294

On Tue, 27 Mar 2001 22:10:07 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>A reflector element is usually placed about 1/4-wavelength from the >radiator. This is for the desired phasing, and the reflector length can >be altered and the spacing can be changed with the same phasing result. >I am using 1/4 wavelegth to simplify the following explanation.

The nice thing about a reflector is phasing is correct for ANY spacing much less than 1/2 wl.

>The reflector is about 1/2-wavelength long and has low resistance. It is >parallel with the radiator element. Because it is near resonance, the >reflector readily accepts energy from the radiator.

The optimum reflector is at resonance when at modest spacings.

>from radiator to reflector and back to the radiator is 360 degrees. This >phase rotation puts the reflected energy in phase with the energy newly >emerging from the radiator. We have a power gain in the forward >direction.

The signal in the forward direction does not need to be in phase to provide gain. It simply has to be less out-of-phase than in the other directions.

Many antennas work on this principle.

>reflector won`t work, either. I can only observe that people have built >them and probably thought they were worth the effort, or they probably >would have not got them published in several respected places. I did not >recommend the trigonal reflector.

Trigoinal reflector have a fallen by the wayside as measurements and models have proven them only margially effective. They never lived up to the supposed advantages.

As was pointed out by others, you never see them now for good reason.

73 Tom

6123. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:22:25 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac20ef2.670184616@news.accessunited.com>
Source record: 167295

On Tue, 27 Mar 2001 07:57:01 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Leigh Preece= wrote:
>>
>> Hi Folks,
>>
>> I see in an advertisement from Waters and Stanton in the UK that one of the
>> company owners, Jeff Stanton, has designed an 3.5Mhz dipole that also works
>> on 40 and 20m. It seems to be about 50ft total size too.
>>
>> Anyone with similar designs on the web anywhere?
>
>I have a 130ft dipole that works on *ALL* HF bands without a tuner.
>It's on my web page.
>--
>http://www.mindspring.com/~w6rca

But doesn't your dipole have a system of stubs that must be switched?

73 Tom

6124. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:25:29 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC21079.15CEB28F@IEEE.org>
Source record: 167298

Tom W8JI wrote:
> But doesn't your dipole have a system of stubs that must be switched?

Not stubs, series section transformers in a 1,2,4,8,16 ft arrangement.
Throwing the knife switches is lots easier than twisting three analog
knobs.
--
http://www.mindspring.com/~w6rca

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

6125. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:41:24 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <fq44ct4gqh1drqm1dgceueopfl11tk4lvo@4ax.com>
Source record: 167299

Ah yes. A flashback to my youth. When I got out of high school, I
bought a 1937 Chevrolet coupe and installed my 10-meter rig in it.
Used a full-size 1/4 wave antenna. I pulled into a 76 station for gas
and took out every fluorescent lamp in that bay. Sounded like a war.
Unfortunately, this was also the station I worked at on weekends.
Needless to say my boss was not a happy camper. :-)

Dick - W6CCD

On 28 Mar 2001 15:48:09 GMT, jder8745@aol.com (JDer8745) wrote:

>Howdy,
>I used to always drill and mount in the top. Lately tho I've been using mag
>mounts. They are mechanically sufficient for 2m/.7m ants. And also do a good
>job electrically
>
>A true story: Many years ago I had a rather husky 6-m whip on a spring base on
>the side of a VW microbus.
>
>Whilst driving thru a multi-level parking garage in Indianapolis, I began to
>hear a crashing noise. They had a 4-ft fluorescent tube mounted on each of the
>concrete "joists" which were separated by about twenty feet. I figured I took
>out about 15 or so of those lights. Needless to say I changed my mind about
>parking there and headed for the closest exit.
>
>I returned to that same garage a month or so later to find that they had
>installed wire guards around all the lights.
>
>However you mount the antenna, the top oh the vehicle is clearly the best
>location.
>
>Jack, K9CUN

6126. FS: Fun SWL/Ham gadgets for disabled/elderly....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 16:55:03 UTC
From: ARS--KC8BCR@webtv.net
Message-ID: <23140-3AC21767-7@storefull-134.iap.bryant.webtv.net>
Source record: 167300
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

...or anyone else who just likes the joy of playing around with little
electronic projects. NOT KITS! Fully assembled. BUT.... at kit prices!
For photos and further details, please visit: http://qth.com/dwm

73, Bill - WA8MEA @ Jackson Co. QRP Club Station: KC8BCR

6127. FS: KLM Satellite Antennas, Price Reduced!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 17:36:02 UTC
From: Headhamster <headhamster@earthlink.net>
Message-ID: <6ipw6.4873$aP5.399892@newsread2.prod.itd.earthlink.net>
Source record: 167301
Cross-posted to: nj.forsale,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap,sci.electronics.equipment

I have a pair of KLM amateur radio satellite antennas for sale. Both antennas are in good condition and each has the optional polarity switcher. Because these antennas are already assembled I can not ship them. I am willing to meet someone halfway up to about 100 miles or so. I am located in Union County, NJ.

I will sell both antennas for $150.00 or any reasonable offer. I want to sell the pair together.

You can view the antennas at the following URLs:
http://headhamster.homestead.com/files/ForSale/KLM_VHF.jpg
http://headhamster.homestead.com/files/ForSale/KLM_UHF.jpg
Please take a look!!!

Tnx, 73 de Rich - W2YQ

6128. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 17:56:43 UTC
From: Leigh Preece= <mda03@keele.ac.uk>
Message-ID: <99t8krkch2@planet.kis.keele.ac.uk>
Source record: 167304

W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> Leigh Preece= wrote:
> > All well and good but I don't have 130ft+ to put the thing in do I?

> I don't know, cuz you didn't say that in your posting.

Nerr nerr nee nerr nerr! Sorry about that but thought you may have had an inkling due to me asking about such a small dipole. Does you 130ft design work if doubled back on itself?

Leigh....M5GWH
--

Leigh M. Preece Media and Communications Centre
Keele University. Staffs. UK. ST5 5BG
==========
Ex-PMR Radio Page: http://www.qsl.net/m5gwh/pmrpage.htm

6129. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 17:57:13 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3ac225be.50463825@news.aepnet.com>
Source record: 167303

On Fri, 23 Mar 2001 01:08:15 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

[snip]

>OK. In the near field, which depends on the size of the aerial (noise >radiator of opportunity), the electric component from a noise source is >larger than the magnetic component.

Why? What if your "radiator of opportunity" is another loop? Must not reciprocity apply and the noise source be a "magnetic radiator" (near field of course)?

[snip]

Wes Stewart N7WS

6130. Must sell tubes for needed cash!!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 17:58:01 UTC
From: rich <radioman@ptdprolog.net>
Message-ID: <JCpw6.12489$uQ6.172512@nnrp1.ptd.net>
Source record: 167302

Must sell some of my 18year tube collection as some unfortunate financial
problems have come up.
Have both nos and good tested used in all types. I do not have a list so
please send wants and I will
reply as fast as I can. Please reply to gatesyard@yahoo.com
Thanks for the look
Rich

6131. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 18:15:00 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <99t9loqmj1@news.tribune.com>
Source record: 167305

There are about 10 Johnson Matchbox tuners for sale on Ebay, all most all
for less than $100.

John
KA9CAR

Cm13141 <cm13141@aol.com> wrote in message
news:20010328011036.20499.00001078@ng-fz1.aol.com...
> I am looking to buy a antenna tuner to use with dipoles and other type of
wire
> antennas.What is the best bang for the buck tuner that I should check
out?I
> have a
> Kenwood TS-930S that i run barefoot.
> Thanks,
> James

6132. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 18:26:56 UTC
From: richardharrison@webtv.net
Message-ID: <2351-3AC22CF0-45@storefull-114.iap.bryant.webtv.net>
Source record: 167309

Bill Sabin wrote:
"There is no such thing as a transformer of any kind, conventional or transmission line, that does not involve both E and H fields."

I certainly agree. I have never posted to the contrary. The E field on one side of the Faraday shield is blocked. The E field on the other side of the shield is re-created from the H field that the Faraday shield let pass through. I already said this in previous posts.

Best regards, Richard Harrison, KB5WZI

6133. Does any one still make the 18HTS Hy-tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 18:28:57 UTC
From: w4fms@aol.com
Message-ID: <20010328132857.09235.00000944@ng-mm1.aol.com>
Source record: 167306

Does anyone know if any companies are again making the 18HTS Hy-tower vertical or facsmile thereof. I don't recall seeing any verticals currently available that use any type of lattice tower structure.

Frank, W4FMS
w4fms@aol.com

6134. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 18:31:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC22E0D.EBEF3CF2@eznec.com>
Source record: 167308

I'm still trying to figure out which pigeon hole to put transresistance
in, "dissipative" or "non-dissipative". Which is it?

Roy Lewallen, W7EL

6135. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 18:32:21 UTC
From: atkes@imap1.asu.edu
Message-ID: <99tanl$5lb$1@news.asu.edu>
Source record: 167307

Cortland Richmond (Cortland.Richmond@usa.alcatel.com) wrote:
: You have been saying for some time now that one can't separate magnetic and
: electric fields anyway. If true, one could never tel what their ratio was to
: each other.

: Cortland

: Tom W8JI wrote:

snip

Cortland,

I wanted to make a few comments and I couldn't quite figure out which message to follow up. I chose yours, but I think that you and Tom both agree that you can, in principle, separately measure the electric and magnetic fields.

Generally what is a magnetic induction B and what is an electric field E is determined (and defined for that matter) by the force on an electric charge q, F = q (E + v x B), where E and B are evaluated at the position of the charge. You then in principle measure the fields separately by measuring the part of the force that is independent of velocity, and the part that is dependent on the velocity.

Since the charges in copper have a relatively tiny magnetic moment compared to their charge, the force on them is well described by this equation. The average velocity of the charges in a small region of the copper is zero with no field applied. Therefore, if you somehow only applied a magnetic field, no current would flow, since the net force on the charges is zero. As many have been saying here, Maxwell's equations tell you that a changing magnetic field in a finite region gives some electric field in that region too. There just isn't any way around this if you accept Faraday's law, since it says that the average electric field along any closed loop is proportional to the changing magnetic induction averaged over the area through the loop. The only way to have the electric field zero everywhere is to have zero oscillating magnetic induction everywhere.

Notice that Faraday's law does not contain any material properties, so this is equally true in copper and in vacuum.

In a small loop antenna (or a transformer winding for that matter) the charges are being pushed primarily by that electric field. The fact that it is easier to calculate the electric field component that contributes by using the magnetic field is why this is called magnetic coupling. However the fact remains that it is the electric field that is doing the work.

When you think about how the magnetic field is used in calculations, it is obvious that a loop antenna is not really responding to the magnetic field. When the loop response is calculated from the magnetic field, it is the magnetic field through the area surrounded by the loop that is used. There is no copper there and therefore no copper electrons. Instead, this changing magnetic field must be accompanied by an average electric field around the perimeter of the loop. It is this electric field that pushes the electrons around the loop. That is, charges are pushed by the fields at their position. They are not pushed by fields somewhere else. That we can calculate the field that is doing the work by calculating the fields somewhere else does not change this fact.

73 Kevin w9cf

6136. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:02:15 UTC
From: richardharrison@webtv.net
Message-ID: <26522-3AC23537-45@storefull-113.iap.bryant.webtv.net>
Source record: 167313

Roger Leon, K6XQ wrote:
"I have some difficulty understanding what you think is wrong with it."
(An ARRL Antenna Book quotation)

Actually there is nothing "wrong" if the whole paragraph is quoted.

I thought Paul was complaining that the text said "---make the current
as large as possible for a given amount of transmitter power."

That might have seemed ARRL was recommending low impedance antennas. It
turns out that later in the paragraph:
"---the largest current will flow when the reactance is "tuned out"---."
appears and explains the earlier sentence.

Seems to me the author wanted not to say you need a "conjugate match" to
maximize power to the antenna. Help! Walter! We need that new edition of
"Reflections" PDQ.

Best regards, Richard Harrison, KB5WZI

6137. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:06:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC23643.C01F75D1@eznec.com>
Source record: 167310

Sorry for the additional posting, but I'm still struggling to figure out how to calculate and apply this new-found (to me) quantity of "dissipationless resistance". I know how to calculate resistance, but need some more help with the "dissipationless" kind. Any characteristic that can't be expressed numerically is of limited engineering use, so I'm sure "dissipationless" resistance can be easily calculated. But I need some help -- perhaps some of you more experienced folks could help me out. I've calculated the impedances of the following items, and the resistance is of course just the real part. But how much of each is "dissipative" and how much "dissipationless"?

Impedance of free space, 377 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of average soil at 10 MHz, 30 + j26 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of lossless cable, 50 + j0 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of RG-58 at 150 MHz (6 dB/100 ft loss), 50 - j0.24 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of RG-58 at 1 MHz (0.32 dB/100 ft loss), 50 - j1.9 ohms
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Transimpedance of National LM359 amplifier 314,000 ohms
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

I assume the models can have "dissipative" and "dissipationless" resistances in series for mathematical convenience. But if the two have to be connected in parallel, please so note. I also assume that when in series they directly add, or does "dissipationless" resistance have a phase angle associated with it? (And if it does, is the imaginary part "dissipative reactance"?)

Your answers will help me, and I'm sure others, learn how to apply this useful concept. Thanks!

Roy Lewallen

6138. Re: Really ignorant question about antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:09:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC236FD.EE2F2EBF@eznec.com>
Source record: 167311

I apologize. I made an error and posted this in the wrong thread. Please don't respond here. I've reposted it in the intended thread "Imaginary Resistance... Dissipationless..."

Roy Lewallen, W7EL

Roy Lewallen wrote:
>
> Sorry for the additional posting, but I'm still struggling to figure out
> how to calculate and apply this new-found (to me) quantity of
> "dissipationless resistance". . .

6139. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:10:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC23718.63182A08@eznec.com>
Source record: 167312

Sorry for the additional posting, but I'm still struggling to figure out how to calculate and apply this new-found (to me) quantity of "dissipationless resistance". I know how to calculate resistance, but need some more help with the "dissipationless" kind. Any characteristic that can't be expressed numerically is of limited engineering use, so I'm sure "dissipationless" resistance can be easily calculated. But I need some help -- perhaps some of you more experienced folks could help me out. I've calculated the impedances of the following items, and the resistance is of course just the real part. But how much of each is "dissipative" and how much "dissipationless"?

Impedance of free space, 377 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of average soil at 10 MHz, 30 + j26 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of lossless cable, 50 + j0 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of RG-58 at 150 MHz (6 dB/100 ft loss), 50 - j0.24 ohms.
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Impedance of RG-58 at 1 MHz (0.32 dB/100 ft loss), 50 - j1.9 ohms
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

Transimpedance of National LM359 amplifier 314,000 ohms
Disspative resistance, ohms ______
Dissipationless resistance, ohms ______

I assume the models can have "dissipative" and "dissipationless" resistances in series for mathematical convenience. But if the two have to be connected in parallel, please so note. I also assume that when in series they directly add, or does "dissipationless" resistance have a phase angle associated with it? (And if it does, is the imaginary part "dissipative reactance"?)

Your answers will help me, and I'm sure others, learn how to apply this useful concept. Thanks!

Roy Lewallen

6140. M2 HO Loops: Comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:15:45 UTC
From: Adam Adkins <km5nNoSpam@earthlink.net>
Message-ID: <MPG.152bf4b2d353fa5b989687@news.earthlink.net>
Source record: 167314

I have been giving some serious thought to upgrading my VHF / UHF antenna array. There are a couple of conditions I want to satisfy:

Resonable cost - Obvious enough. I am not interested in spending great wads of cash, and don't particularly care to build one at the moment. My building efforts are going toward other projects, besides antennas.

Ease of erection - Small windload, light, short turning radius. I have a small rotator on a push up pole, about 35 feet.

Versatile - I do not seriously chase weak signals on higher frequencies, but might want to consider it in the future. Current use is local repeaters, CW, SSB, and packet. I will want to try satellite at some future time.

With all of that in mind, I discovered the M2 HO loop series, and they look very slick. They might not be all that well suited for satellite work, but seem to satisfy everything else exactly. Even better, they are advertised for just shy of 9 dB gain when stacked in phase.
My question, then, is "Has anyone actually used them?" I am very interested in feedback from those who have.

Thanks for reading. My apologies in advance for the spam blocked address.

73,

Adam Adkins, KM5N
(remove NoSpam to reply)

6141. Re: Does any one still make the 18HTS Hy-tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:38:58 UTC
From: Ed Cregger <nuke663jlm@vei.net>
Message-ID: <tc4fafherjkg42@corp.supernews.com>
Source record: 167315

Hygain was acquired by the Starkville, MS conglomerate
(MFJ). Go to their website and you will find that the 18HTS
is still being sold.
--
Ed Cregger, NM2K
nuke663jlm@vei.net

*Remove the "nuke" for correct email address

"W4FMS" <w4fms@aol.com> wrote in message
news:20010328132857.09235.00000944@ng-mm1.aol.com...
> Does anyone know if any companies are again making the
18HTS Hy-tower vertical
> or facsmile thereof. I don't recall seeing any verticals
currently available
> that use any type of lattice tower structure.
>
> Frank, W4FMS
> w4fms@aol.com

6142. Uniden 8100 Scanner; NEED Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:39:56 UTC
From: Sandy Lundquist <sandyl@wpgate1.ahs.state.vt.us>
Message-ID: <3AC23E0C.24A61AE4@wpgate1.ahs.state.vt.us>
Source record: 167316

Hi,
Anyone happen to have a mag mount antenna for a Uniden 8100 Scanner?

Responses: vpsdcain@madriverxcom Thanks.

6143. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 19:41:40 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <O_rw6.5953$JS5.1210542@e3500-chi1.usenetserver.com>
Source record: 167317

My first publication ever in QST was the first of seven installments of "Another Look At Reflections" (the fore-runner of my book "Reflections, etc"), which appeared in the April 1973 issue.

My concepts of wave mechanics on transmission lines in that article were so foreign (and even hostile) to some of the readers they thought it was the annual QST April Fool's story. Some of the responses to that effect were printed in the 'Correspondence' column. Some were not amused by my heretical idea that power can flow in both directions simultaneously on a transmission line.

My 1972 presentation was serious---could it be that Peter's imaginary jR is not?

Walt, W2DU

6144. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 20:51:54 UTC
From: richardharrison@webtv.net
Message-ID: <2351-3AC24EEA-50@storefull-114.iap.bryant.webtv.net>
Source record: 167220

Wes Stewart, N7WS wrote:
Why?

Nice call, Wes. In the near field of an antenna, the induction fields are not equal, in phase, nor do they decay at the same rate. Their relative strengths depend on the distance from the radiator.

As I said on Mar. 22, 2001, 9:16 am, the electric field declines as the sixth-power of the distance, and the magnetic field declines as the fourth-power of the distance.

Should you be very close to a noise source its electric field would be very much stronger relative to the magnetic field than would be obtained at greater distance.

So, when you happen to be close to a noise source, a Faraday shield on your loop may help the S/N ratio by eliminating electrostatic (which really means electrodynamic) coupling between the noise and the loop.

For loops in general, Terman says:
"The susceptibility of antennas to locally generated noise varies. In particular, a loop antenna responds much less to the induction field than does a simple wire antenna of comparable intercept area." (page 929, 1955 edition)

Best regards, Richard Harrison, KB5WZI

6145. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:10:08 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AC25330.7BFB6E11@bwcc.com>
Source record: 167219
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.misc

Dick Carroll wrote:
> So it was when columnist Mr. Carl Rowan, a rabid anti-gunner, shot an
> intruder.

On June 14, 1988, Carl Rowan shot and wounded Neil Smith,
a young intruder who had trespassed onto Rowan's property
to take a dip in his swimming pool.
This black kid was in his backyard, not his house.
This was in Washington, D.C., where handguns are illegal.
Mr. Rowan used unregistered .22 pistol.
He is also black.

6146. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:10:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC25331.BA839A9F@eznec.com>
Source record: 167318

I don't like the paragraph very much. It's incorrect at worst, and misleading at best. If you want to increase the current in your antenna without changing the antenna physically, there's only one way to do it: increase the power you deliver to it. To double the current, you need four times the power. No fiddling of the feedpoint impedance, resonating, or anything else you do will relieve you from this requirement.

Suppose you apply 100 watts to an antenna that has a feedpoint impedance of 100 + j100 ohms. How much current flows at the antenna feedpoint? (Answer: 1 ampere.) Then you tune out the reactance by adding a series capacitor having 100 ohms of reactance, making the feedpoint impedance 100 + j0 -- resonant, and again apply 100 watts. Now what's the current? (Answer: 1 ampere.) The Antenna Book paragraph implies that resonating the antenna would increase the current. But it doesn't.

The current would increase only if you were feeding the antenna with a voltage source. A rig isn't a voltage source, but let's see what would happen if it were. Say, 100 volts. You hook that to your 100 + j100 ohm antenna and get 0.71 ampere. The source has to deliver I^2 * R = 50 watts. Then you tune out the reactance, making the antenna 100 + j0. The current is now 1 ampere. But the source now has to deliver 100 watts. So you've increased the current by the square root of 2, but you've had to put twice the power into the antenna to do it. The relationship between antenna current and applied power is I = sqrt(P/R), where R is the feedpoint resistance of the antenna itself, regardless of the kind of source you have and any transformation of the feedpoint impedance you do. You can't get around it. And no fiddling with the reactance will give you more current for a given amount of applied power.

There are, certainly, practical issues involved with delivering power to a highly reactive load, but that's not the topic of the discussion. And while most modern rigs are designed to deliver full power into non-reactive loads, I could just as easily design a rig that would put more power into a 100 + j100 ohm load than into 100 + j0 or 50 + j0. (In fact, you can do it yourself, just by connecting a tuner to your tranmitter, adjusting the tuner for 50 + j0 in when the load is 100 + j100, and calling the tuner/tranmitter combination your "rig".)

Making an antenna resonant, either through matching or by design, won't cause it to radiate more, as the paragraph implies.

Roy Lewallen, W7EL

Richard Harrison wrote:
>

> Roger Leon, K6XQ wrote:
> "I have some difficulty understanding what you think is wrong with it."
> (An ARRL Antenna Book quotation)
>
> Actually there is nothing "wrong" if the whole paragraph is quoted.
>
> I thought Paul was complaining that the text said "---make the current
> as large as possible for a given amount of transmitter power."
>
> That might have seemed ARRL was recommending low impedance antennas. It
> turns out that later in the paragraph:
> "---the largest current will flow when the reactance is "tuned out"---."
> appears and explains the earlier sentence.
>
> Seems to me the author wanted not to say you need a "conjugate match" to
> maximize power to the antenna. Help! Walter! We need that new edition of
> "Reflections" PDQ.
>
> Best regards, Richard Harrison, KB5WZI

6147. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:26:46 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <qGsw6.8855$IA1.708364@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167222

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC23718.63182A08@eznec.com...
> Sorry for the additional posting, but I'm still struggling to figure out
> how to calculate and apply this new-found (to me) quantity of
> "dissipationless resistance". I know how to calculate resistance, but
> need some more help with the "dissipationless" kind. Any characteristic
> that can't be expressed numerically is of limited engineering use, so
> I'm sure "dissipationless" resistance can be easily calculated. But I
> need some help -- perhaps some of you more experienced folks could help
> me out. I've calculated the impedances of the following items, and the
> resistance is of course just the real part. But how much of each is
> "dissipative" and how much "dissipationless"?
>
> Impedance of free space, 377 ohms.
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______
>
> Impedance of average soil at 10 MHz, 30 + j26 ohms.
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______
>
> Impedance of lossless cable, 50 + j0 ohms.
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______
>
> Impedance of RG-58 at 150 MHz (6 dB/100 ft loss), 50 - j0.24 ohms.
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______
>
> Impedance of RG-58 at 1 MHz (0.32 dB/100 ft loss), 50 - j1.9 ohms
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______
>
> Transimpedance of National LM359 amplifier 314,000 ohms
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______
>
> I assume the models can have "dissipative" and "dissipationless"
> resistances in series for mathematical convenience. But if the two have
> to be connected in parallel, please so note. I also assume that when in
> series they directly add, or does "dissipationless" resistance have a
> phase angle associated with it? (And if it does, is the imaginary part
> "dissipative reactance"?)
>

> Your answers will help me, and I'm sure others, learn how to apply this
> useful concept. Thanks!
>
> Roy Lewallen

Hi Roy:

I enjoyed your post on magnetic fields/loops etc. It was excellent.

Anyway, I won't "fill in the blanks" above but I will respond. I know that you understand what I am going to say so this more of a general discussion . I think this issue is similar to the thread on "dissipation" and "radiation". It all may be a matter of semantics and interpretation.

The first point is defining dissipation. IMHO, I will stick to the definition that dissipation is the conversion of EM energy to heat, i.e.: thermal, IR, etc.

Second is the fact that before we consider power being dissipated in a system, we must first consider that power is delivered to the system. Once delivered to the system, some level of power will be dissipated, some will be radiated, etc.

In RF systems, voltages and currents are generally complex quantities that have an associated magnitude and phase, or a real and imaginary component. With V and I generally being complex, it is incorrect to think of the ratio of V/I as "resistance". In general, the ratio of V/I is impedance which also has a real and imaginary component. We generally define the real component of impedance as "resistance" and the imaginary component as "reactance".

The resistive component of the impedance is not defined by V/I when V and I are complex. It is defined as |V| cos(A)/|I| where A is the phase angle difference between V and I. In all cases, the real power "delivered" to the impedance will be equal to |V| * |I| * cos(A). This delivered power is also always equal to |I|^2 R. (I have seen some hams measure or calculate |V| and |I| in a circuit and then determine "resistance" and power incorrectly by neglecting the phase angle dependence).

So, the question now is what happens to the "delivered" power? Since the total power delivery is found from the total resistance and only a portion of the total power is dissipated, only a portion of the total resistance accounts for "dissipation". Hence the portion that does not account for dissipation is defined non-dissipative resistance (I don't particularly like the term).

This is exactly the same as the case where we consider power delivery to an antenna. Some portion of the delivered power is dissipated when the total antenna R has a component of loss. The component of R that does not "dissipate" power can be thought of as a non-dissipative resistance. There is however, power "delivered" to this non-dissipative resistance. With an antenna, this delivered power is radiated, hence the term radiation resistance.

In free space, I would liken the free space impedance of 377 ohms to a non-dissipative resistance as power flow or delivery occurs but dissipation as heat does not (IMHO).

With transmission lines this discussion gets much more complex. The level of steady state power "delivery" to the transmission line is determined from the input impedance. The level of power flow or travel in the forward and rearward direction are determined from Zo. In a purely lossless system, the real component of Zin could be considered a non-dissipative resistance, only because there is no loss in the system. In a real world system with loss, the resistive component of Zin cannot be considered to be non-dissipative. In a lossy transmission line system, the resistive component of Zin can be used to determine the level of power delivery to the transmission line. The dissipation in the transmission line is determined per unit length from alpha. Alpha is a function of R, L, G and C. Note that R in this case is not Ro (the real component of Zo). In general, most people do not divide the input resistance into a dissipative or non-dissipative component. Note also that the resistive component of Zo should not be considered to be a non-dissipative resistance in a lossy transmission line.

Steve VE9SRB

6148. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:40:37 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AC25A54.39C07B0B@dialpoint.net>
Source record: 167221

I have not checked it out but was told by an older ham the smaller
Johnson Matchbox was really designed for open wire feeders and does not
work very well with coax feed lines.

I am not big on the MFJ stuff, but if you have to buy a SWR meter then
one of the MFJ tuners that has a built in SWR meter such as the MFJ-948
is not too bad for the money. I recommend it over the similar MFJ
modles if you have a rig without tunig controls. YOu don't need the
built in dummy load some modles have and you really get an extra coax
output jack. The one I have does seem somewhat lossey on 80 meters on
the limitated testing I have done into a 50 ohm dummy load, but not
really too bad.

KA9CAR wrote:
>
> There are about 10 Johnson Matchbox tuners for sale on Ebay, all most all
> for less than $100.
>
>

6149. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:49:38 UTC
From: richardharrison@webtv.net
Message-ID: <2352-3AC25C72-14@storefull-114.iap.bryant.webtv.net>
Source record: 167228

Kevin, W9CF wrote:
"Generally what is a magnetic field B and what is an electric field E is determined (and defined for that matter) by the force on an electric charge q."

Looking at this, I started to answer with the revelations of Faraday, Ampere, Maxwell, and others, but I decided I can`t teach differential equations and vector analysis in a few postings.
So, I`ll give it up. I am getting lazy again.

Kevin addressed Cortland, and maybe he won`t have to work so hard to give answers.

Best regards, Richard Harrison, KB5WZI

6150. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:51:34 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac259bf.689336786@news.accessunited.com>
Source record: 167223

On Tue, 27 Mar 2001 19:12:49 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>You have been saying for some time now that one can't separate magnetic and
>electric fields anyway. If true, one could never tel what their ratio was to
>each other.

I've never said that. I said you can not separate the time-varying
magnetic field from the time-varying electric field....you take one to
zero...the other goes to zero.

All the shield on the loop does is become the actual antenna. It does
not change the field impedance of the antenna, nor does it eliminate
the effects of time-varying electric fields.

The shield solves common mode problems (that can also be solved by
balance, because they by definition are balance related).

It's basic, and everyone (with the exception of two people) seems to
agree.

This really is important, because if you understand that one
time-varying field can not exist without the other, and that radiation
is a different effect than the induction fields (both magnetic and
electric), you won't fall victim to nonsense like CFA antennas, the
"Magenetic Slot Radiator" in the antenna compendium, the DDRR antenna,
the Contra Wound Torid bunk, and all that other nonsense.

If a person considers the shield on a loop passes the time-varying
magnetic field at the operating frequency and "culls out" the electric
field, he will run into conflicts between the real world and his
understanding.

Did you read Roy's post, or did he waste his time?

73 Tom

6151. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 21:57:39 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <n7tw6.9023$9i1.737928@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167224

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC25331.BA839A9F@eznec.com...
> I don't like the paragraph very much. It's incorrect at worst, and
> misleading at best. If you want to increase the current in your antenna
> without changing the antenna physically, there's only one way to do it:
> increase the power you deliver to it. To double the current, you need
> four times the power. No fiddling of the feedpoint impedance,
> resonating, or anything else you do will relieve you from this
> requirement.
>
> Suppose you apply 100 watts to an antenna that has a feedpoint impedance
> of 100 + j100 ohms. How much current flows at the antenna feedpoint?
> (Answer: 1 ampere.) Then you tune out the reactance by adding a series
> capacitor having 100 ohms of reactance, making the feedpoint impedance
> 100 + j0 -- resonant, and again apply 100 watts. Now what's the current?
> (Answer: 1 ampere.) The Antenna Book paragraph implies that resonating
> the antenna would increase the current. But it doesn't.
>

Hi Roy:

It will if the same level of *forward* power is applied to the antenna in each case. This discussion is tricky because it really requires one to clearly define "applied" power. If you maintain the same level of forward power in the transmission line, the level of current, voltage and power delivery at the antenna will change with impedance.

To maintain the same level of delivered and radiated power with an impedance change, the level of forward power will have to be adjusted accordingly. If you were to check, for the same "delivered" power, there will be less forward power in the line with the resonant antenna (in the example you describe).

Steve

> The current would increase only if you were feeding the antenna with a
> voltage source. A rig isn't a voltage source, but let's see what would
> happen if it were. Say, 100 volts. You hook that to your 100 + j100 ohm
> antenna and get 0.71 ampere. The source has to deliver I^2 * R = 50
> watts. Then you tune out the reactance, making the antenna 100 + j0. The
> current is now 1 ampere. But the source now has to deliver 100 watts. So
> you've increased the current by the square root of 2, but you've had to
> put twice the power into the antenna to do it. The relationship between
> antenna current and applied power is I = sqrt(P/R), where R is the
> feedpoint resistance of the antenna itself, regardless of the kind of
> source you have and any transformation of the feedpoint impedance you

> do. You can't get around it. And no fiddling with the reactance will
> give you more current for a given amount of applied power.
>
> There are, certainly, practical issues involved with delivering power to
> a highly reactive load, but that's not the topic of the discussion. And
> while most modern rigs are designed to deliver full power into
> non-reactive loads, I could just as easily design a rig that would put
> more power into a 100 + j100 ohm load than into 100 + j0 or 50 + j0. (In
> fact, you can do it yourself, just by connecting a tuner to your
> tranmitter, adjusting the tuner for 50 + j0 in when the load is 100 +
> j100, and calling the tuner/tranmitter combination your "rig".)
>
> Making an antenna resonant, either through matching or by design, won't
> cause it to radiate more, as the paragraph implies.
>
> Roy Lewallen, W7EL
>
> Richard Harrison wrote:
> >
> > Roger Leon, K6XQ wrote:
> > "I have some difficulty understanding what you think is wrong with it."
> > (An ARRL Antenna Book quotation)
> >
> > Actually there is nothing "wrong" if the whole paragraph is quoted.
> >
> > I thought Paul was complaining that the text said "---make the current
> > as large as possible for a given amount of transmitter power."
> >
> > That might have seemed ARRL was recommending low impedance antennas. It
> > turns out that later in the paragraph:
> > "---the largest current will flow when the reactance is "tuned out"---."
> > appears and explains the earlier sentence.
> >
> > Seems to me the author wanted not to say you need a "conjugate match" to
> > maximize power to the antenna. Help! Walter! We need that new edition of
> > "Reflections" PDQ.
> >
> > Best regards, Richard Harrison, KB5WZI

6152. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 22:03:07 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac25e77.690544822@news.accessunited.com>
Source record: 167226

On Wed, 28 Mar 2001 10:25:29 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Tom W8JI wrote:
>> But doesn't your dipole have a system of stubs that must be switched?
>
>Not stubs, series section transformers in a 1,2,4,8,16 ft arrangement.
>Throwing the knife switches is lots easier than twisting three analog
>knobs.
>--
>http://www.mindspring.com/~w6rca

So you have five knife switches that switch a BCD weighted
transmission line to different lengths?

You use a truth table to of some form to get the sequence correct for
each band?

73 Tom

6153. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 22:06:18 UTC
From: ke4qkn@aol.com
Message-ID: <20010328170618.28073.00002185@ng-mi1.aol.com>
Source record: 167225

>So what is the bottom line??? Does the thing work??? Does your
>xmitter load with your present setup??? What SWR are you seeing measured
>with your xmitter and SWR meter??? Have you made any contacts???
>What were the signal reports???

The only thing I could come up with was the balun was "bad". I am not sure what caused that or how, but I had another balun that I bought at the same time and it worked just fine. SWR was 1.5:1 in the shack, 1.7:1 when I hung it. I checked into the MM net on 14.300 with it and got a good signal report.

I am sending that balun back to Van Gorden Engineering and requesting a replacement. Should be interesting to see how they respond.

Thanks for all the postings and replies, Mark

KE4QKN/AE

6154. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 22:10:23 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac25f96.690832492@news.accessunited.com>
Source record: 167227

On Wed, 28 Mar 2001 08:16:09 -0800, "Roger Leone"
<arleone@inreach.com> wrote:

>Paul:
>
>Because I don't see anything misleading about the quote from the ARRL
>Antenna Book, I have had some difficulty understanding what you think is
>wrong with it.

It sure appears like it is confusing to me! The ratio of rectance to
resistance has nothing to do with antenna efficiency.

IMO, this paragraph is similar to the statement that a dipole antenna
at 5/8 wl height has "gain" because the radiation resistance is lower,
causing more current to flow.

Someone has the cart before the horse.

73 Tom

6155. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 22:36:03 UTC
From: richardharrison@webtv.net
Message-ID: <6535-3AC26753-6@storefull-118.iap.bryant.webtv.net>
Source record: 167229

Roy wrote:
"The current would increase only if you were feeding the antenna with a voltage source."

True that the characteristics of the transmitter and feedline are involved. My response was only reflecting Pythagoras. The impedance of 100 ohms of resistance and 100 ohms of reactance is 141 ohms. If you put 100 volts to that, you get 0.7 amps on an angle of 45 degrees.

If you tune out the reactance, the current is 1.0 amp on an angle of 0 degrees.

Roy is absolutely right. There is no way to increase the current as described without boosting the power.

Best regards, Richard Harrison, KB5WZI

6156. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 22:49:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC26A70.9C55D61E@eznec.com>
Source record: 167230

I don't have any problem with people discussing and arguing about whether power is "dissipated" or not once it passes a particular point. This newsgroup shows that quite a few people enjoy this sort of endless and unresolvable philosophical and semantic discourse. I don't, but it's fine by me.

The point I was trying (and apparently failed) to make is this: A new (to me) quantity has been proposed, "dissipationless resistance". Other quantities I'm familiar with, such as resistance, impedance, capacitance, magnetic flux, electric field strength, force, and on and on, can all be calculated and measured, giving them real meaning and usefulness. If you can't calculate how many ohms of resistance are "dissipative" and how many are "dissipationless", then as far as I'm concerned, you don't have a quantity at all, but a vague concept. And vague it is. Can a resistance be only "dissipative" or "dissipationless", or can a combination exist? If a combination can exist, then how do I, as an engineer wanting to make practical use of this concept, calculate how much of each the resistance contains?

I'm sorry, but if I can't determine how much of a resistance (like the ones in my list) is "dissipationless", then as far as I'm concerned it's a philosophical construct rather than a useful engineering quantity. And the requirement for interpretation and debate over semantic minutia certainly put it outside the useful category in my book. I can get out my calculator and figure out the resistance a circuit contains. But it appears that I'll have to consult the philosophers, IEEE, semanticists, and magi to find out how much of it is "dissipationless". Anybody know any consulting thaumaturgists?

Roy Lewallen, W7EL

VE9SRB wrote:
>
> Hi Roy:
>
> I enjoyed your post on magnetic fields/loops etc. It was excellent.
>
> Anyway, I won't "fill in the blanks" above but I will respond. I know that
> you understand what I am going to say so this more of a general discussion .
> I think this issue is similar to the thread on "dissipation" and
> "radiation". It all may be a matter of semantics and interpretation.
>
> The first point is defining dissipation. IMHO, I will stick to the
> definition that dissipation is the conversion of EM energy to heat, i.e.:
> thermal, IR, etc.

>
> Second is the fact that before we consider power being dissipated in a
> system, we must first consider that power is delivered to the system. Once
> delivered to the system, some level of power will be dissipated, some will
> be radiated, etc.
>
> In RF systems, voltages and currents are generally complex quantities that
> have an associated magnitude and phase, or a real and imaginary component.
> With V and I generally being complex, it is incorrect to think of the ratio
> of V/I as "resistance". In general, the ratio of V/I is impedance which
> also has a real and imaginary component. We generally define the real
> component of impedance as "resistance" and the imaginary component as
> "reactance".
>
> The resistive component of the impedance is not defined by V/I when V and I
> are complex. It is defined as |V| cos(A)/|I| where A is the phase angle
> difference between V and I. In all cases, the real power "delivered" to the
> impedance will be equal to |V| * |I| * cos(A). This delivered power is also
> always equal to |I|^2 R. (I have seen some hams measure or calculate |V|
> and |I| in a circuit and then determine "resistance" and power incorrectly
> by neglecting the phase angle dependence).
>
> So, the question now is what happens to the "delivered" power? Since the
> total power delivery is found from the total resistance and only a portion
> of the total power is dissipated, only a portion of the total resistance
> accounts for "dissipation". Hence the portion that does not account for
> dissipation is defined non-dissipative resistance (I don't particularly like
> the term).
>
> This is exactly the same as the case where we consider power delivery to an
> antenna. Some portion of the delivered power is dissipated when the total
> antenna R has a component of loss. The component of R that does not
> "dissipate" power can be thought of as a non-dissipative resistance. There
> is however, power "delivered" to this non-dissipative resistance. With an
> antenna, this delivered power is radiated, hence the term radiation
> resistance.
>
> In free space, I would liken the free space impedance of 377 ohms to a
> non-dissipative resistance as power flow or delivery occurs but dissipation
> as heat does not (IMHO).
>
> With transmission lines this discussion gets much more complex. The level
> of steady state power "delivery" to the transmission line is determined from
> the input impedance. The level of power flow or travel in the forward and
> rearward direction are determined from Zo. In a purely lossless system, the
> real component of Zin could be considered a non-dissipative resistance, only
> because there is no loss in the system. In a real world system with loss,
> the resistive component of Zin cannot be considered to be non-dissipative.
> In a lossy transmission line system, the resistive component of Zin can be
> used to determine the level of power delivery to the transmission line. The

> dissipation in the transmission line is determined per unit length from
> alpha. Alpha is a function of R, L, G and C. Note that R in this case is
> not Ro (the real component of Zo). In general, most people do not divide
> the input resistance into a dissipative or non-dissipative component. Note
> also that the resistive component of Zo should not be considered to be a
> non-dissipative resistance in a lossy transmission line.
>
> Steve VE9SRB

6157. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 23:01:35 UTC
From: davemetz@muscanet.com
Message-ID: <3ac26aff.7827875@news.muscanet.com>
Source record: 167231

Ralph Mowery <rmowery@dialpoint.net> wrote:

>I have not checked it out but was told by an older ham the smaller
>Johnson Matchbox was really designed for open wire feeders and does not
>work very well with coax feed lines.
>
A few years ago the ARRL ran a two part artical comparing the various
antenna tuner circuits that are available. Its very interesting and
well worth looking up.

The old Johnson match boxes were excellent, but like you say, they are
primarly intended for matching to balanced open wire feedlines. The
popular "T" network tuners can match a wet noodle. The problem is
that they also suffer from high internal losses. They make great
advertising copy and that's about all.

The hands down winner is the old Collins 180S1 pi network tuner.
Collins as always "knows RF" and has the simplist and most efficiant
design. I built a duplicate of one using two 500pf transmitting
variable capacitors and a surplus roller inductor. I got the caps as
kits (yes kits!) for $40 each from Ten Tec. The inductor I found at a
hamfest for $20. The rest switches, fixed loading caps, etc. came out
of the junk box. BTW, you don't need a fancy box for a tuner. I've
built them on a wooden board and they worked just fine.

Bottom line, avoid the cheap stuff, if it sounds too good to be true,
it is! You can build a tuner for a fraction of what one costs
commercially. If you do want to buy one, check out the new "L"
network tuner of Ten Tec's. It will do most of what the old 180S1 did
and is available now. BTW, Ten Tec like Collins "knows RF," and their
equipment is very robust and repairable. I have their HF rig and it
is fantastic.

--73-- Dave WA0AUQ

6158. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 23:07:43 UTC
From: davemetz@muscanet.com
Message-ID: <3ac26dbc.8528383@news.muscanet.com>
Source record: 167232

"John (KB3CDF)" <murphman@erols.com> wrote:

>Dear Elmer:
>
>I am considering a permanent antenna mount for 2m/70cm. I am
>seriously considering a NMO in the center of the roof of my vehicle
>vs. any other type mount.

>~~~
>John
>73's de KB3CDF

Dear John,

I tried a through the window antenna on my last new car. That type of antenna is absolutly junk! I removed it from the car and replaced it with a hole mounted dual band (2M/70cm) right behind the sun roof. BTW, the car is Nisson 240SX. The dealer told me that the antenna hole had absolutly no affect on the trade in / resale value. They simply stick a cell phone antenna in its place and that is the end of the story.

Mag mounts have their own problems. Expect that you will replace the RG-58 coax frequently. Closing the car door on it will destroy it. Plus even with a pad under the magnet, the magnet will slowly damage the finish of the car's roof. Bottom line, drill the hole and enjoy mobile operation.

--73-- David WA0AUQ

6159. Ventenna Experience?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 23:20:06 UTC
From: Steve Ziegler <sziegler@frontiernet.net>
Message-ID: <99trj7$18oc$1@node17.cwnet.frontiernet.net>
Source record: 167233

Does anyone out there have experience with the Ventenna series of antennas?
Any input would be appreciated before I buy one of them.
Thanks,

Steve in Minnesota

--

6160. Re: Imaginary Resistance... Dissipationless Resistance... and all ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-28 23:27:11 UTC
From: richardharrison@webtv.net
Message-ID: <18619-3AC2734F-35@storefull-117.iap.bryant.webtv.net>
Source record: 167234

Steve, VE9SRB wrote:
"There is however, power "delivered" to this non-dissipative resistance (radiation resistance).

Steve`s description of dissipationless resistance is outstanding. I liked his presentation of impedance which includes a dissipationless real part along with a dissipating real part. That seemed very effective.

Best regards, Richard Harrison, KB5WZI

6161. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 00:27:53 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac27be9.698084463@news.accessunited.com>
Source record: 167235

On Wed, 28 Mar 2001 23:01:35 GMT, davemetz@muscanet.com (Dave Metz) wrote:

>The old Johnson match boxes were excellent, but like you say, they are >primarly intended for matching to balanced open wire feedlines. The >popular "T" network tuners can match a wet noodle. The problem is >that they also suffer from high internal losses. They make great >advertising copy and that's about all.

That isn't true Dave.

T network tuners are very efficient at most load impedances people will run into. They are no worse than any other configuratation.

>The hands down winner is the old Collins 180S1 pi network tuner.

Pi-networks and L networks have the most restricted matching range of any configuration. They are no more efficienct than a T using similar components.

>Collins as always "knows RF" and has the simplist and most efficiant >design. I built a duplicate of one using two 500pf transmitting >variable capacitors and a surplus roller inductor. I got the caps as >kits (yes kits!) for $40 each from Ten Tec. The inductor I found at a >hamfest for $20. The rest switches, fixed loading caps, etc. came out >of the junk box. BTW, you don't need a fancy box for a tuner. I've >built them on a wooden board and they worked just fine.

Maybe for your load impedances, but not most people! I exclusively use T networks here when feeding unknown loads.

Assuming resistive loads, the impedance limits of a pi-network tuner with 500 pF capacitors is:

No load less than ~600 ohms on 160 meters.

No load less than ~180 ohms on 80 meters.

No load less than ~50 ohms except on 10 MHz and above.

I didn't bother with ten meters, because I don't know the minimum C of the capacitors or the minimum L of the inductor. It is safe to assume it would have a restricted matching range on ten meters for high impedance loads.

Of course if the impedance presented at the tuner by the antenna system is close to 50 ohms R and has the equivalent of series capacitive reactance, you can null the capacitance with series

inductance and match low impedances, but that would be more luck than planning.

The real reason T's are popular is they match the widest range of impedances with the best results on the widest range of frequencies of any network configuration.

73 Tom

6162. R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 00:32:30 UTC
From: Ken Bessler <kg0wx@yahoo.com>
Message-ID: <3AC2829E.6F35@yahoo.com>
Source record: 167236

I'm thinking about getting one of the above listed antennas and would
like to hear opinions from users out there. Thanks!
--

Ken Bessler, Ham Callsign KGï¿½WX
Design Services Company
http://kg0wx.users.50megs.com/
Smoke free since 9/30/96!
ICQ# 63379650

6163. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 00:41:27 UTC
From: richardharrison@webtv.net
Message-ID: <26521-3AC284B7-122@storefull-113.iap.bryant.webtv.net>
Source record: 167239

As I read what I posted, another problem jumps at me. I quoted Terman: "----a loop responds much less to the induction field than does a simple wire antenna----."

It dawns on me that some readers may equate "induction field" with magnetic field when that is not Terman`s use of the term. Terman is referring to the reactive near field, includng the electric field and the magnetic field. There must be a word shortage, that words must have so many multiple meanings.

Best regards, Richard Harrison, KB5WZI

6164. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 01:01:52 UTC
From: richardharrison@webtv.net
Message-ID: <28233-3AC28980-102@storefull-112.iap.bryant.webtv.net>
Source record: 167240

As I read what I posted, another problem jumps at me. I quoted Terman: "----a loop responds much less to the induction field than does a simple wire antenna----."

It dawns on me that some readers may equate "induction field" with magnetic field when that is not Terman`s use of the term. Terman is referring to the reactive near field, includng the electric field and the magnetic field. There must be a word shortage, that words must have so many multiple meanings.

Best regards, Richard Harrison, KB5WZI

6165. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 01:06:47 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AC28AA7.1090110@hiwaay.net>
Source record: 167237

James- as usual, you will get some MFJ bashing on this subject (that is some peoples hobby) , but- having owned several, and now owning two, I have had nothing but good luck and results with the MFJ tuners. One exception was a case where , as it turns out, someone had sprayed a lacquer on the back, and I could get not contacts on the balanced wire connectors, until I scraped them clean. (It sure kept the metal from tarnishing, though)
MFJ has manuals available, and descriptive data on MANY tuners at www.mfjenterprises.com. there are always a large number of tuners, of all brands, on ebay- just search "antenna tuner"- (leave off the quotation marks, and dont use the plural.) They average 40 to 50 listings.

Good luck- Bill-W4BSG

Cm13141 wrote:
>
> I am looking to buy a antenna tuner to use with dipoles and other type of wire
> antennas.What is the best bang for the buck tuner that I should check out?I
> have a
> Kenwood TS-930S that i run barefoot.
> Thanks,
> James

6166. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 01:07:36 UTC
From: mover123@webtv.net
Message-ID: <573-3AC28AD8-46@storefull-245.iap.bryant.webtv.net>
Source record: 167238

Roy has my point right on! I know what the author was trying to say, but I do not like the way he said it. In other words, I don't think the reader should have to know as much as the guy writing the book to understand what is being said. What happens when the reader gets to a topic where he is weak? Then it is vitally important to be able to trust that the author's presentation is rigorous.

The case above deals with an almost trivial application of the general form of Ohm's law, I=V/Z, Z=R+jX. When X=0, current is maximum and maximum power is delivered to R. But in the section quoted, the author misleadingly fixes the delivered (real) power as he varies X. In so doing, he implies that for the same power delivered to the antenna you can increase radiated power by tuning out the reactance - not so.

A similarly discouraging issue exists in the Antenna Book when they talk about "charges" traveling along the entire length of an antenna during an RF cycle - doesn't happen.

Thank you all for responding.

Paul

6167. Beta match

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 01:16:41 UTC
From: Paul Coverdale <coverdale@sympatico.ca>
Message-ID: <3AC28D10.59BE49F4@sympatico.ca>
Source record: 167241

Can anyone point me to a good description of how a beta match is supposed to work ? I've looked at the description given in the ARRL Antenna Handbook (14th edition - latest one I have) and I understand that the basic theory is that the beta matching section effectively appears as an inductance in parallel with the (slightly capacitive, low resistance) antenna input impedance, and effectively raises the impedance to match 50 ohms. Problem is, if I do some quick calculations with typical values eg an antenna with an input impedance of 20-j10 ohms, I can't find a value of parallel inductance that will raise this to anywhere near 50 ohms. On the other hand, I run a Hy-Gain Explorer 14 which happens to use a beta match, and it gives a good 50 ohm match on all bands !

Paul, VE3ICV

6168. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 02:14:56 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <99u5r0dvq1@208.206.142.72>
Source record: 167242
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:
>
> Dick Carroll wrote:
> > None of those
> > voting against keeping code testing wanted his vote made public, and
> > without a individual poll of the vote it will not be, officially at
> > least.
>
> I had diphtheria when I was three years old. I would have died without
> antitoxin shots. The doctor didn't want me to hate him in later life
> so he had my mother hide my eyes so I wouldn't see who was hurting me
> for my own good. That's what the ARRL BOD did for you, Dick.

They did exactly what I expected them to do. I've watched the ARRL HQ
closely for so long they aren't a bit difficult to anticipate.

6169. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 02:48:46 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AC2A28E.8BE58B7C@hiwaay.net>
Source record: 167243

John- Back in the seventies, when "CB" was not such a bad scene, I mounted an antenna on the top of a dodge van. I put one of the "Lift and foldover" type antennas on a mount cut through the roof, just behind the drivers position. (I should have centered it, but- what did I know?)

I never had a problem with the hole or the mount. My Brother-in-Law has the van now (19 years old) and it still does not leak, at least at the antenna mount.

Bill-W4BSG

"John (KB3CDF)" wrote:
>
> Dear Elmer:
>
> I am considering a permanent antenna mount for 2m/70cm. I am
> seriously considering a NMO in the center of the roof of my vehicle
> vs. any other type mount.
>
> It is suspect that there would be a HUGE increase in performance with
> this type of installation.
>
> I am kind of "on the fence" with this decision.
>
> My concerns:
> 1.) parking garage issues
> 2.) resale or trade-in of the vehicle
> 3.) leaks ...rain or water issues???
>
> I am guessing there are many HAMs out there that have considered this
> and decided one way or the other for various reasons. I would love to
> hear your arguments in either direction.
>
> Thanks in advance,
> --
> ~~~
> John
> 73's de KB3CDF

6170. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 03:07:19 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AC2A6E7.6E2E4E26@bwcc.com>
Source record: 167244

Bill Aycock wrote:
> Back in the seventies, ... I mounted an antenna
> on the top of a dodge van.
> ...
> the van now (19 years old)
I don't follow your math.
Did you write this post back in the 1990s?

6171. Re: Visit - www.qsl.net/k7on

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 03:10:05 UTC
From: Brian Short <k7on@earthlink.net>
Message-ID: <MPG.152cb7faa41582be9896a2@news.earthlink.net>
Source record: 167245
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.policy

> Charles Johnston wrote:
> Lots of STUFF to do at http://www.qsl.net/k7on/ such as...
> --
> Support freedom of speech, or I'll kill you!

--
http://www.qsl.net/k7on/
--

6172. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 03:30:44 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E81693.7DBC%stewartx@sccoast.net>
Source record: 167246
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:

> Why not? I am simply asking for consistency:
> a thermonuclear device falls into the same
> category of "firearms" as a six-gun. They
> are both devices used for one purpose only:
> to kill people.

Oh, come on. Surely even you can see the difference. A gun can be used by an individual for self-defense, recreational shooting, hunting, and so forth, in addition to it's use as a weapon in warfare situations. A thermonuclear device, on the other hand, is strictly a weapon of war - it cannot be used by an individual for self-defense, hunting, or anything else not related to warfare. In other words, these are not at all in the same catagory (hince are not treated the same when it comes to the law).

> Now, it would seem to me that the very same
> amendment you guys are pulling in the case of
> handguns, rifles and automatic weaponry must
> cover *all* firearms.

Again, handguns, rifles, and automatic rifles or handguns, can all be used for self-defense, hunting, and recreational shooting. And, yes, contrary to the opinions of most anti-gun advocates, an automatic can be used for hunting. In fact, the primary appeal of the automatic is that it can fire a single round in hunting situations, but can also be used an automatic when needed for self-defense. And both modes offer value for the recreational shooter (target practice, competitions, etc). Therefore, it is perfectly reasonable to say that all of these should be covered by that amendment.

Now, perhaps you can answer a question I have about anti-gun advocates. The clear goal of these people is the total elimination of private gun ownership in this country. At the same time, most of very these same people also tend to be anti-police - they often advocate a reduction in the number of police and advocate restrictions on police authority and activities. It these two agendas are accomplished, exactly who is going to defend my family? Are you, an anti-gun advocate (and most likely an anti-police advocate), going to do it?

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

6173. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 03:44:16 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2AF90.1EB3A3C6@IEEE.org>
Source record: 167248

Roy Lewallen wrote:
> Impedance of lossless cable, 50 + j0 ohms.
> Disspative resistance, ohms ______
> Dissipationless resistance, ohms ______

This one seems easy. The characteristic impedance of a lossless
cable must be dissipationless, assuming dissipation = heat.
--
http://www.mindspring.com/~w6rca

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6174. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 03:51:48 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3AC2B154.5235CA5C@hiwaay.net>
Source record: 167247

Denver- That kind of math cannot be followed, except by "OOPS!"- it was
a 72 model, which makes it a little older than I said.
It still doesn't leak.
Bill-W4BSG

Denver Braughler wrote:
>
> Bill Aycock wrote:
> > Back in the seventies, ... I mounted an antenna
> > on the top of a dodge van.
> > ...
> > the van now (19 years old)
> I don't follow your math.
> Did you write this post back in the 1990s?

6175. Re: W&S 80+2?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 03:51:58 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2B15E.8D61902E@IEEE.org>
Source record: 167249

Tom W8JI wrote:
> So you have five knife switches that switch a BCD weighted
> transmission line to different lengths?

Not BCD. It's strictly binary - no wasted positions like BCD.

> You use a truth table to of some form to get the sequence correct for
> each band?

Yep, I have a truth table on the wall but I remember the settings for
my favorite bands. The setting changes by only one foot on 40m when
it's raining like now.
--
http://www.mindspring.com/~w6rca

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6176. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:03:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2B412.CA390374@IEEE.org>
Source record: 167250

VE9SRB wrote:
> To maintain the same level of delivered and radiated power with an impedance
> change, the level of forward power will have to be adjusted accordingly.

Actually, if a Z0-match is achieved (by an antenna tuner, for instance)
the forward power becomes a dependent variable and all the power
delivered by the generator is delivered to the antenna system because
the generator sees no reflected power. I think this is probably what Roy
had in mind.
--
http://www.mindspring.com/~w6rca

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6177. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:11:41 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2B5FD.6CF9EEF4@IEEE.org>
Source record: 167251

Tom W8JI wrote:
> Of course if the impedance presented at the tuner by the antenna
> system is close to 50 ohms R and has the equivalent of series
> capacitive reactance, you can null the capacitance with series
> inductance and match low impedances, but that would be more luck than
> planning.

Something I've always wondered - If the load is 50 ohms, a pi-net
tuner can be tuned for absolute minimum series inductance. Seems
under the same circumstances, a T-net inductor would be lossier.
--
http://www.mindspring.com/~w6rca

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6178. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:22:55 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <zMyw6.9374$IA1.749637@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167252

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:6535-3AC26753-6@storefull-118.iap.bryant.webtv.net...
> Roy wrote:
> "The current would increase only if you were feeding the antenna with a
> voltage source."
>
> True that the characteristics of the transmitter and feedline are
> involved. My response was only reflecting Pythagoras. The impedance of
> 100 ohms of resistance and 100 ohms of reactance is 141 ohms. If you put
> 100 volts to that, you get 0.7 amps on an angle of 45 degrees.
>
> If you tune out the reactance, the current is 1.0 amp on an angle of 0
> degrees.
>
> Roy is absolutely right. There is no way to increase the current as
> described without boosting the power.
>
> Best regards, Richard Harrison, KB5WZI
>

Richard:

It is critical to define "applied" power in the example. If the same forward power is applied to the antenna in both cases, the current will increase when the reactance is tuned out in the example Roy describes. As a result, the power "delivered" to the antenna will increase. I am assuming of course that a transmission line is connected between the transmitter and the antenna.

Steve

6179. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:27:03 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <rQyw6.9383$IA1.751891@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167253

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AC2B412.CA390374@IEEE.org...
> VE9SRB wrote:
> > To maintain the same level of delivered and radiated power with an
impedance
> > change, the level of forward power will have to be adjusted accordingly.
>
> Actually, if a Z0-match is achieved (by an antenna tuner, for instance)
> the forward power becomes a dependent variable and all the power
> delivered by the generator is delivered to the antenna system because
> the generator sees no reflected power. I think this is probably what Roy
> had in mind.
> --

Neglecting losses in the transmission line, I agree. In this case, the
forward power increases to compensate for the change in mismatch at the
antenna.

> http://www.mindspring.com/~w6rca
>
>
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6180. Re: Beta match

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:31:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2BAA2.48BF915D@IEEE.org>
Source record: 167255

Paul Coverdale wrote:
> Problem is, if I do some quick calculations
> with typical values eg an antenna with an input impedance of 20-j10
> ohms, I can't find a value of parallel inductance that will raise this
> to anywhere near 50 ohms.

For a single parallel component to be able to match 50 ohms, the
conductance must be 1/50 to start with. The conductance of 20-j10
is 1/25 so a parallel inductance will bring it to 25+j0 ohms.

The conductance of 20-j24.5 is 1/50 so you would need to add -j14.5
ohms in series (a capacitor) before you add the parallel inductance
to bring it to 50 ohms.
--
http://www.mindspring.com/~w6rca

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6181. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:31:59 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <3Vyw6.9391$IA1.752552@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167254

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC26A70.9C55D61E@eznec.com...
> I don't have any problem with people discussing and arguing about
> whether power is "dissipated" or not once it passes a particular point.
> This newsgroup shows that quite a few people enjoy this sort of endless
> and unresolvable philosophical and semantic discourse. I don't, but it's
> fine by me.
>
> The point I was trying (and apparently failed) to make is this: A new
> (to me) quantity has been proposed, "dissipationless resistance". Other
> quantities I'm familiar with, such as resistance, impedance,
> capacitance, magnetic flux, electric field strength, force, and on and
> on, can all be calculated and measured, giving them real meaning and
> usefulness. If you can't calculate how many ohms of resistance are
> "dissipative" and how many are "dissipationless", then as far as I'm
> concerned, you don't have a quantity at all, but a vague concept. And
> vague it is. Can a resistance be only "dissipative" or
> "dissipationless", or can a combination exist? If a combination can
> exist, then how do I, as an engineer wanting to make practical use of
> this concept, calculate how much of each the resistance contains?
>
> I'm sorry, but if I can't determine how much of a resistance (like the
> ones in my list) is "dissipationless", then as far as I'm concerned it's
> a philosophical construct rather than a useful engineering quantity. And
> the requirement for interpretation and debate over semantic minutia
> certainly put it outside the useful category in my book. I can get out
> my calculator and figure out the resistance a circuit contains. But it
> appears that I'll have to consult the philosophers, IEEE, semanticists,
> and magi to find out how much of it is "dissipationless". Anybody know
> any consulting thaumaturgists?
>
> Roy Lewallen, W7EL
>

Hi Roy:

No problem from my end. In analyzing practical systems, most engineers do
not concern themselves with the concept (IMO).

Take care,
Steve

6182. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 04:56:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC2C087.889061D9@IEEE.org>
Source record: 167257

VE9SRB wrote:
>
> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote:
> > Actually, if a Z0-match is achieved (by an antenna tuner, for instance)
> > the forward power becomes a dependent variable and all the power
> > delivered by the generator is delivered to the antenna system because
> > the generator sees no reflected power. I think this is probably what Roy
> > had in mind.
>
> Neglecting losses in the transmission line, I agree.

The transmission line is part of the antenna system so losses don't
have to be neglected for my statement to be correct.
--
http://www.mindspring.com/~w6rca

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6183. FA: Unbuilt Heathkit SA-2500 Automatic Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 05:28:47 UTC
From: Headhamster <headhamster@earthlink.net>
Message-ID: <jKzw6.5700$Uw.577494@newsread1.prod.itd.earthlink.net>
Source record: 167258
Cross-posted to: at.fido.shortwave,fido.shortwave,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap,sci.electronics.equipment

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1225991151

A rare opportunity to own a classic like new Heathkit!!!

6184. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 08:32:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac2f1fc.728315592@news.accessunited.com>
Source record: 167259

On Wed, 28 Mar 2001 22:11:41 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Tom W8JI wrote:
>> Of course if the impedance presented at the tuner by the antenna
>> system is close to 50 ohms R and has the equivalent of series
>> capacitive reactance, you can null the capacitance with series
>> inductance and match low impedances, but that would be more luck than
>> planning.
>
>Something I've always wondered - If the load is 50 ohms, a pi-net
>tuner can be tuned for absolute minimum series inductance. Seems
>under the same circumstances, a T-net inductor would be lossier.
>--
>http://www.mindspring.com/~w6rca

That's true, in the case where a tuner is not needed, a direct short
from the input to output will have lowest loss.

But in that case it is not a network.

So what you are saying is the lowest loss network is a direct zero
resistance connection. That makes perfect sense to me...except it
isn't a tuner. It's a short.

73 Tom

6185. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 08:49:54 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC2F78E.D03F3BC5@earthlink.net>
Source record: 167262
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dwight Stewart wrote:

> Zoran Brlecic wrote:
>
> > Why not? I am simply asking for consistency:
> > a thermonuclear device falls into the same
> > category of "firearms" as a six-gun. They
> > are both devices used for one purpose only:
> > to kill people.
>
> Oh, come on. Surely even you can see the difference. A gun can be used
> by an individual for self-defense, recreational shooting, hunting, and so
> forth, in addition to it's use as a weapon in warfare situations. A
> thermonuclear device, on the other hand, is strictly a weapon of war - it
> cannot be used by an individual for self-defense, hunting, or anything else
> not related to warfare. In other words, these are not at all in the same
> catagory (hince are not treated the same when it comes to the law).

Oh, OK, you got me. I'm just trying to piss you guys off. But, wait, what if you are attacked by a fairly large mob armed to the teeth and there's no way in hell you stand a chance with a six-gun. Can you at least use a flame-thrower on the punks? What about Mustard Gas?

> > Now, it would seem to me that the very same
> > amendment you guys are pulling in the case of
> > handguns, rifles and automatic weaponry must
> > cover *all* firearms.
>
> Again, handguns, rifles, and automatic rifles or handguns, can all be used
> for self-defense, hunting, and recreational shooting. And, yes, contrary to
> the opinions of most anti-gun advocates, an automatic can be used for
> hunting.

Although, some would say this becomes borderline genocide. Like shooting fish in the barrell. Like working DX in nets.

> In fact, the primary appeal of the automatic is that it can fire a
> single round in hunting situations, but can also be used an automatic when
> needed for self-defense.

Holy crap, which part of the country do you live in? East LA?

> Now, perhaps you can answer a question I have about anti-gun advocates.
> The clear goal of these people is the total elimination of private gun
> ownership in this country.

I wouldn't know. I am only a devil's advocate.

> At the same time, most of very these same people
> also tend to be anti-police - they often advocate a reduction in the number
> of police and advocate restrictions on police authority and activities. It
> these two agendas are accomplished, exactly who is going to defend my
> family? Are you, an anti-gun advocate (and most likely an anti-police
> advocate), going to do it?

Dwight, please read the last part of my previous post and then see how much of an anti-gun, anti-police and anti-whatever advocate I am.

73 ..... Zoran

--
Support freedom of speech, or I'll kill you!

6186. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 08:50:04 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC2F79A.85E9E6B7@earthlink.net>
Source record: 167261
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:

> Zoran Brlecic wrote:
> > Well, geez, every person who signed that Constitution was also a slave owner,
> > but you could hardly condone that nowadays, ...
>
> Because slave ownership is illegal nowadays while gun ownership is still
> protected by the 2nd Amendment.

We are dealing with legislation in both cases, and legislation is never written in stone. Just as slavery was legal one day and illegal the next one, the same thing can happen to the "right to bear arms". Surely there is such a thing as a constitutional procedure to repeal amendments.

> > ... a thermonuclear device falls into
> > the same category of "firearms" as a six-gun. They are both devices used for one
> > purpose only: to kill people.
>
> Actually, pistols are most often used as a deterrent to avoid killing
> people. All I had to do one night was to display my 9mm and the mugger
> with the knife broke an Olympic record running away.

Well, as long as we're swapping life stories, I'll admit that I've always been sorry that I did not have a shotgun when a burglar broke into my apartment some years ago (while I was in it). Not because he broke in and tried to rob me in order to feed his habit, but because the son of a bitch came back that night and set the balcony on fire and we almost got burned alive.

73 .... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6187. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 08:51:32 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC2F7FA.F181A9CB@earthlink.net>
Source record: 167260
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:

> Zoran Brlecic wrote:
> > I am simply asking for consistency: a thermonuclear device falls into
> > the same category of "firearms" as a six-gun. They are both devices used for one
> > purpose only: to kill people. Everything else is a smokescreen.
>
> You are just as wrong as you can possibly be, as most anti gun people
> consistantly are.

Do you guys read the damn thing to the end before you hit the Reply button, or what? Both you and Dwight called me an "anti-gun" advocate even though I clearly stated in my previous message that "I do support a right to bear a handgun or two".

> I have absolutely no intention of killing anyone with
> a gun, but I also have no intention of allowing you to confiscate them.

Fine, I have absolutely no intention of killing anyone with a TND, but I also have no intention of allowing you to confiscate it. Let's assume I have one, for the sake of the argument.

> I DO have an intent to use them - the mere existance and presence - to
> deflect those who would cause bodily harm to me and my family. Almost
> always, the mere sight a weapomn of defense is more than enough to put
> the coward to flight. Should the assailant be in an unusual state of
> mind, such as drugged or insane, and insist on forcing me to use a
> firearm to stop him, of course that would be the natural progression of
> things.

The problem arises when a monkey wrench is thrown into the "natural progression of things", like all those high schools shootings in the last few years.

> Soit was when columnist Mr. Carl Rowan, a rabid anti-gunner, shot an
> intruder. He sure changed his tune in a hurry. Curious thing, that he
> even OWNED a gun, what with all his anti-gun rhetoric, isn't it? Do YOU
> own gun, by the way?

:-)))))))) Please refer back to my previous message where it clearly says: "I own neither a handgun nor a TND".

> I'm not real eager to take seriously the opinion of anyone who can't
> differentiate between a personal firearm and a nuclear weapon. Looks
> like a screw may be loose somewhere.

It is mind boggling how quickly a reasonably normal discussion turns into name calling. This means either that you and your militia are already polishing a silver

bullet with my name on it, or you are out of arguments.

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6188. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 09:06:32 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC2FB67.AA4B3D98@earthlink.net>
Source record: 167263
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:

>
> > I'm not sure I follow you... What might those "ARRL's singular interests" be
>
> First and formost, selfpreserveation, on a the BOD level.

Fair enough, as the third law of thermodynamics states that every bureaucracy tends to expand exponentially almost at the rate of Starbucks.

> Consider the
> January vote on whether or not to support code testing at the next ITU
> meeting.
> The vote to drop code testing was by a voice vote, with no identity of
> who voted how. There was a lone effort by a BOD

Hmmm, BOD, BOD... Nope, please remind me what BOD stands for.

> Member to poll the BOD
> for each member's vote, which was quickly voted down. None of those
> voting against keeping code testing wanted his vote made public, and
> without a individual poll of the vote it will not be, officially at
> least. Since the BOD members are elected as individuals, the entire BOD
> can't be held accountable for such a vote since they can't be elected
> nor unseated en masse.
> Just a bit of defense against the will of a large bloc of ARRL
> members' wishes. Selfpreservation at it's finest.

Maybe so, but I still consider these issues non-crucial in the rapidly changing rules of the technology game today.

> and what
> > do you propose as an alternative to the *only* national amateur radio organization?
> > Cutting off one's own nose to spite the face is usually not a smart choice.
>
> Oh, no, alternatives haven't proved viable to date. Just understand that
> the enemy is not always outside looking in.

So, there are no alternatives, is that what you're saying?

> > Look, clearly it is in every US ham's interest to retain as much spectrum as possible
> > for as long as possible.
>
> Not at all. We use little of our UHF/SHF allocations, and it might very
> well be in our best interests to "trade" some of that unused real estate
> for some we could make better use of, maybe on HF or VHF.

How the hell you gonna trade it if and when you lose it? Your statement is paradoxical: on one hand you're saying that it is not in our interest to retain as much spectrum as possible, and on the other that we need to trade it. Even so, I got your point and I happen to agree with it - I would gladly give up MHz's of UHF/SHF allocations for expanded HF bands, but the only problem is that people who are willing to pay gold for UHF have nothing to offer in return - they don't own any HF and they don't care for it, unless one day 80 meters becomes the best bet for cellphone use.

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6189. need pls read

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 09:27:45 UTC
From: j_smith_11@hotmail.com
Message-ID: <3ac2ffb3.34261467@news.thezone.net>
Source record: 167256

need someone to make me a diapole
for 80 and 40 and 20 meters
is there soneone out there can help a fellow amateur
make it for me and i will pay you.

pleaswe email responses to

herbc@thezone.net

the the reply address here ok thanks.

6190. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 10:04:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC308A2.DCF09C64@eznec.com>
Source record: 167264

Hm. I thought that "power delivered to an antenna" was unambiguous. What I mean is that if 100 watts is delivered to an antenna, 100 watts is consumed by the antenna. This consumption consists of a combination of heating and radiation. That isn't "forward power", "reverse power", "reactive power" or "non-dissipative power". It's Re(VIconj), I^2*R, V^2/R.

Let's connect a transmitter directly to an antenna whose input impedance is 50 + j0 ohms, and adjust the transmitter to deliver 100 watts. Now put a half wavelength 50 ohm line between the transmitter and antenna. The transmitter still sees 50 + j0, and still delivers 100 watts. The "forward power" on the line is 100 watts, equal to the delivered power, and the "reverse power" is zero. The antenna current is 1.41 amps. Now replace the line with a half wavelength of 450 ohm line. The transmitter still sees 50 + j0 ohms. The delivered power is still 100 watts. The antenna current is still 1.41 amps. The antenna radiates just the same amount as before (namely, 100 watts less loss). But the "forward power" on the line is now 500 watts, or five times the delivered power, and the "reverse power" is 400 watts. I can get you just about any "forward power" you want without changing the power the transmitter has to deliver, the power delivered to the antenna, or the antenna current. In fact, I can hook several half wave lines of different impedance together and have a different "forward power" on each one all at the same time. So there's no fixed relationship between the "forward power" on the line and the antenna current. (Or between the "forward power" and the delivered power.) On the other hand, there's a definite and fixed relationship between the delivered power and the antenna current, namely I = sqrt(P/R).

Roy Lewallen, W7EL

VE9SRB wrote:
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:6535-3AC26753-6@storefull-118.iap.bryant.webtv.net...
> > Roy wrote:
> > "The current would increase only if you were feeding the antenna with a
> > voltage source."
> >
> > True that the characteristics of the transmitter and feedline are
> > involved. My response was only reflecting Pythagoras. The impedance of
> > 100 ohms of resistance and 100 ohms of reactance is 141 ohms. If you put
> > 100 volts to that, you get 0.7 amps on an angle of 45 degrees.
> >
> > If you tune out the reactance, the current is 1.0 amp on an angle of 0

> > degrees.
> >
> > Roy is absolutely right. There is no way to increase the current as
> > described without boosting the power.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
>
> Richard:
>
> It is critical to define "applied" power in the example. If the same
> forward power is applied to the antenna in both cases, the current will
> increase when the reactance is tuned out in the example Roy describes. As a
> result, the power "delivered" to the antenna will increase. I am assuming
> of course that a transmission line is connected between the transmitter and
> the antenna.
>
> Steve

6191. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 10:13:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC30AAE.C6580AD5@eznec.com>
Source record: 167265

I agree with Steve. In 25 years as a test equipment design engineer, I never heard the term. I also never encountered a design engineer who didn't understand what resistance was, how it was used, or what it meant, or who needed some other "kind" of resistance in order to understand it. I do admit that I spent most of my career working with what I've since discovered to be an exceptional group of people, so I suppose it's possible that there really are some confused folks out there who need more kinds of resistance. But if there are, let's give them something they can calculate and not just something to debate about.

Roy Lewallen, W7EL

VE9SRB wrote:
>
> No problem from my end. In analyzing practical systems, most engineers do
> not concern themselves with the concept (IMO).
>
> Take care,
> Steve

6192. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 10:17:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC30BB0.934CD567@eznec.com>
Source record: 167266

Thanks! Is it still a non-dissipative resistance if the cable is terminated with a 50 ohm resistor? Or in that case do we have a dissipationless characteristic resistance but a dissipative input resistance, making the input resistance and characteristic resistances equal in value but different in kind?

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > Impedance of lossless cable, 50 + j0 ohms.
> > Disspative resistance, ohms ______
> > Dissipationless resistance, ohms ______
>
> This one seems easy. The characteristic impedance of a lossless
> cable must be dissipationless, assuming dissipation = heat.
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6193. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 10:36:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <99v37u$b3h$1@nntp9.atl.mindspring.net>
Source record: 167267

Cecil:

[snip]
>
> This one seems easy. The characteristic impedance of a lossless
> cable must be dissipationless, assuming dissipation = heat.
> --
> http://www.mindspring.com/~w6rca
>
[snip]

By which law of physics or by whichmathematical formula did you arrive at that result? Maybe you measured it on your dissipationless resistance meter?

Let's see was it Ohm's Law, Snell's Law, Kirchoff's Third Law, Sadi Carnot's Second Law...?

Or perhaps or perhaps you used one of the Laws enscribed upon the Tablets presented to the founder of "The Church of Dissipationless Resistance".

In addition to having ac and dc voltage and current scales on it's face, my VOM has only one scale on it for resistance. Maybe Tripplett, or Fluke, or AVO, or... forget to add the dissipationless resistance scale to their meters? What?

That woulda been a real breakthrough to add the capability to measure dissipationless resistance to a meter don't you think?

Gimme a break... dissipationless resistance is another one of those silly religious "crocks" and ya'll know it! And... I ain't goin to drink any of that coolaid ya'll keep mixing up for me, even if the world is goin to end tomorrow!

Long live hard Science and Mathematics, thank God for giving us those immutable subjects to support our "fuzzy" thinking.

Dissipationless Resistance indeed! Pshawww!

-Peter K1PO

6194. 11 el 2mtr yagi and more

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 11:04:04 UTC
From: kg4fet@aol.combadspam
Message-ID: <20010329060404.09679.00000994@ng-fu1.aol.com>
Source record: 167268

I have a Cushcraft 11 el yagi with manual. It can be taken apart and shipped. I also have the Cushcraft stacking boom for 2 mtr beams and the cophasing harness for stacking them I would lke to part with as well.
All of this can be broken down and shipped no problem. I will mark the elements on the beam for easy reassembly. I would like 50.00 for the beam and 30.00 for the boom and harness both are plus shipping from 32208. I will accept trades as well let me know what ya got. I am looking for a 2 mtr low drive 150+watt amp with a working preamp
THanks and 73 de KG4FET Sandor

6195. Re: Antenna: Drill a hole or not to drill a hole /Mobile (2m/70cm)/

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 12:13:57 UTC
From: "John (KB3CDF)" <murphman@erols.com>
Message-ID: <99v8uj$n9b$1@bob.news.rcn.net>
Source record: 167169

Thanks for all your help, suggestions, stories, and encouragements.

Now, I have to make the decision. I am 75% in favor of it.

'Not a car appearence freak. The sight of antennas on a car was never
an issue.

Thanks for your help.

~~
John M. de KB3CDF

6196. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 14:06:40 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <QjHw6.62$RF1.7094@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167170

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC308A2.DCF09C64@eznec.com...
> Hm. I thought that "power delivered to an antenna" was unambiguous. What
> I mean is that if 100 watts is delivered to an antenna, 100 watts is
> consumed by the antenna. This consumption consists of a combination of
> heating and radiation. That isn't "forward power", "reverse power",
> "reactive power" or "non-dissipative power". It's Re(VIconj), I^2*R,
> V^2/R.
>
> Let's connect a transmitter directly to an antenna whose input impedance
> is 50 + j0 ohms, and adjust the transmitter to deliver 100 watts. Now
> put a half wavelength 50 ohm line between the transmitter and antenna.
> The transmitter still sees 50 + j0, and still delivers 100 watts. The
> "forward power" on the line is 100 watts, equal to the delivered power,
> and the "reverse power" is zero. The antenna current is 1.41 amps. Now
> replace the line with a half wavelength of 450 ohm line. The transmitter
> still sees 50 + j0 ohms. The delivered power is still 100 watts. The
> antenna current is still 1.41 amps. The antenna radiates just the same
> amount as before (namely, 100 watts less loss). But the "forward power"
> on the line is now 500 watts, or five times the delivered power, and the
> "reverse power" is 400 watts. I can get you just about any "forward
> power" you want without changing the power the transmitter has to
> deliver, the power delivered to the antenna, or the antenna current. In
> fact, I can hook several half wave lines of different impedance together
> and have a different "forward power" on each one all at the same time.
> So there's no fixed relationship between the "forward power" on the line
> and the antenna current. (Or between the "forward power" and the
> delivered power.) On the other hand, there's a definite and fixed
> relationship between the delivered power and the antenna current, namely
> I = sqrt(P/R).
>
> Roy Lewallen, W7EL
>

Hi Roy:

Just my 2 cents worth again.

There is a fixed relationship between forward power and delivered power.
There is also a fixed relationship between the forward power and the antenna
current. These fixed relationships are established by the reflection
coefficient of the antenna. The forward power is a lossless transmission
line is always related to the delivered power as follows:

PFWD = PDEL / (1 - |rho|^2)

In the example you describe above with the 450 ohm line: If the delivered power is 100 W, the forward power is 277.78 W. If 100 Watts of power is delivered to a 50 ohm antenna through a 450 ohm line, the forward power will always be 277.78 W regardless of the line length. If there is no tuner internal to the transmitter, the transmitter will have to be manually adjusted to maintain this 100 W of delivered power as the line length changes.

To maintain a constant delivered power to an antenna with changing impedance, there must be an external compensation or power adjustment. This compensation can be implemented with a tuner through establishing an impedance match at the tuner input. If no tuner exists in the system, then the output levels of the transmitter must be adjusted.

Steve
VE9SRB

6197. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 14:46:50 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC34ADA.4177CFCA@IEEE.org>
Source record: 167171

Tom W8JI wrote:
> So what you are saying is the lowest loss network is a direct zero
> resistance connection. That makes perfect sense to me...except it
> isn't a tuner. It's a short.

But the point is that a pi-net tuner is capable of a near short
and a T-net tuner isn't (unless there's a bypass switch). With
all three components at minimum values, the pi-net is low loss.
With all three components at maximum values, is the T-net low
loss? I'm not saying it isn't - I'm just asking.
--
http://www.mindspring.com/~w6rca

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6198. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 14:52:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC34C37.4955E8E9@IEEE.org>
Source record: 167172
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
> The problem arises when a monkey wrench is thrown into the "natural progression of
> things", like all those high schools shootings in the last few years.

More kids are killed in high school sports than in high school shootings.
Magnitudes more are killed in automobile accidents. We seem to have lost
all perspective when it comes to guns. Punish the criminals, not the guns.
--
http://www.mindspring.com/~w6rca

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6199. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 14:55:44 UTC
From: richardharrison@webtv.net
Message-ID: <13897-3AC34CF0-163@storefull-115.iap.bryant.webtv.net>
Source record: 167175

Tom, W8JI wrote:
"All the shield on the loop does is become the actual antenna."

A conducting surface enclosing an r-f coil, antenna, or some other electronic device, (remember tube shields?) shields it. The shield tends to keep r-f in or out of the enclosure. The shield does not need to be a solid continuous sheet enclosure to act as a terminus for nearly all electric field lines of force which approach its surface. But, a shield with gaps is not so effective at blocking magnetic lines of force.

These phenomena are perfected and exploited in the Faraday shield, and used to cut off electric flux without simultaneously affecting the magnetic field.

Yes, the electric and magnetic fields are separable no matter who says they aren`t, or how many times they say it.

See Terman`s "Electronic and Radio Engineering", 1955 edition, page 38.

The Faraday shield is made by surrounding the space to be shielded with a conducting cage, Elements of the cage are conducting bars or wires, connected and grounded at one end. At their other end the bars or wires are insulated from ground and each other.

This construction prevents any significant magnetically induced currents in the shield. By Lenz`s law, the induced shield current if allowed to circulate over a wide area would produce a commensurate magnetic field opposite to the inducing field. This circulating current if not banned by the bars or wires would end the progress of the magnetic field lines through the shield. In the Faraday shield, the magnetic lines go right through but the electric field lines don`t go through the shield.

The Faraday shield is an effective separator of magnetic and electric fields at its surface.

No one says that the magnetic field passing through the shield does not immediately generate a new electric field as the old field is ended at the shield.

Whatever disproportionate unwanted perturbances existed on the old electric field, they are terminated with the old field on the shield. That is why Faraday shields are widely used.

No reason has been offered by Tom to support his claim that Faraday shields are only good to balance capacitances.

Tom is dead wrong.

Best regards, Richard Harrison, KB5WZI

6200. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:02:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC34E9C.23A2DC1E@IEEE.org>
Source record: 167174
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
> We are dealing with legislation in both cases, and legislation is never written in
> stone. Just as slavery was legal one day and illegal the next one, the same thing can
> happen to the "right to bear arms". Surely there is such a thing as a constitutional
> procedure to repeal amendments.

Yep, the repeal of slavery took a constitutional amendment and the repeal of
the right to bear arms will take a constitutional amendment. If guns are outlawed,
unarmed citizens will be absolutely helpless against armed criminals who don't
care about gun laws. England is doctoring her stats to try to hide the fact
that their armed criminals are out of control. If an armed perp gets off on
a technicality, that crime is erased from the stats.

> Well, as long as we're swapping life stories, I'll admit that I've always been sorry
> that I did not have a shotgun when a burglar broke into my apartment some years ago
> (while I was in it). Not because he broke in and tried to rob me in order to feed his
> habit, but because the son of a bitch came back that night and set the balcony on
> fire and we almost got burned alive.

In this country, guns have always been used for more good than evil. The
liberal press simply doesn't report the good done by guns. Gun laws will
disarm the good guys and leave the bad guys armed - bad idea.
--
http://www.mindspring.com/~w6rca

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6201. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:11:33 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac34d7b.751741939@news.accessunited.com>
Source record: 167173

On Thu, 29 Mar 2001 14:06:40 GMT, "VE9SRB" <srbest@att.net> wrote:

>always be 277.78 W regardless of the line length. If there is no tuner
>internal to the transmitter, the transmitter will have to be manually
>adjusted to maintain this 100 W of delivered power as the line length
>changes.

My IC751A will run more power into an 80 ohm load than into a 50 ohm load. Suppose the feedline presents 80 ohms j0. I don't need a tuner then..

My DX-100 will deliver full power into a 450 ohm line, with no external tuner.

If I build a meter that is normalized at 450 ohms and measure power in a 450 ohm line terminated in 450 ohms j0, the forward power will be 100 watts and reflected power zero watts. that is true no matter what transmitter impedance I have.

If I make no changes to the system and measure power with a meter normalized to 50 ohms, the forward power will be higher and reflected power "suddenly appears".

If I move a 50 ohm meter along a long 450 ohm line terminated in 50 ohms, I'll find points where reflected power is zero watts. I'll see the forward power varies all over the place.

Why does the forward power return to normal when I measure it with a meter normalized to the impedance of the line at the point where I measure, if there is really all that extra power in the line?

It amazes me how people take models that are meant to make life easy as the way things actually work.

73 Tom

6202. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:14:08 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC35140.2386E4E@IEEE.org>
Source record: 167176

Roy Lewallen wrote:
> Thanks! Is it still a non-dissipative resistance if the cable is
> terminated with a 50 ohm resistor? Or in that case do we have a
> dissipationless characteristic resistance but a dissipative input
> resistance, making the input resistance and characteristic resistances
> equal in value but different in kind?

If the voltage and current are in phase at a point and there is no dissipation taking place at that point then the resistance at that point is, by definition, dissipationless, i.e. zero dissipation.

If a 50 ohm resistor is the load for a 50 ohm lossless line, the dissipation is taking place in the resistor, not in the line, so the 50+j0 characteristic impedance is dissipationless. The same power simply cannot be dissipated in two completely different places.

If all the power is dissipated in the load, then none is dissipated in the line even though, in the line, the voltage and current are in phase. As far as I can tell, in this example at least, everything is 100% consistent.
--
http://www.mindspring.com/~w6rca

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6203. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:23:42 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac3501a.752413441@news.accessunited.com>
Source record: 167177

On Thu, 29 Mar 2001 08:46:50 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>But the point is that a pi-net tuner is capable of a near short
>and a T-net tuner isn't (unless there's a bypass switch). With
>all three components at minimum values, the pi-net is low loss.
>With all three components at maximum values, is the T-net low
>loss? I'm not saying it isn't - I'm just asking.

In the real world the limits of the components always prevent perfect
devices.

The T is a mirror of the pi. If you could set all the components in a
T for maximum values, it would be the same as setting all the
components in a pi for minimum values.

The ideal network would probably be one that allows the same
components to be switched from a T to a Pi.....but that won't happen
because of complexty.

But all of this is beside my point.

My point is the pi network offers the LOWEST impedance/frequency range
of any network configuration with given components, and that is why
they have fallen out of favor for antenna tuners.

It isn't that people are stupid, or cheap, or bad engineers and
foolishly select a T network out of pure unvarnished stupidity.

The truth is simply that dollar for dollar you get the widest matching
range, best overall efficiency, and power handling from a T network.

73 Tom

6204. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:25:06 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC353D2.BE86799B@IEEE.org>
Source record: 167178

"Peter O. Brackett" wrote:
> By which law of physics or by whichmathematical formula did you arrive at
> that result? Maybe you measured it on your dissipationless resistance
> meter?

It's the principle of conservation of energy. If the RF energy out
of a transmission line equals the RF energy into a transmission line,
then even though the current and voltage are in phase providing a pure
resistance at any point of measurement in the line, that measured
resistance is dissipationless. You simply cannot dissipate (RF to heat)
the same power in two completely different places. You have 50 ohms
resistance existing at an infinite number of points in the transmission
line yet no power is dissipated in the transmission line. It doesn't
take a rocket scientist to figure out that the resistance measured in
the transmission line is dissipationless cuz the load got hot and the
line didn't.
--
http://www.mindspring.com/~w6rca

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6205. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:32:18 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC35582.574D4876@IEEE.org>
Source record: 167180

VE9SRB wrote:
> There is a fixed relationship between forward power and delivered power.

Not if you change Z0 which changes the reflection coefficient.

> There is also a fixed relationship between the forward power and the antenna
> current. These fixed relationships are established by the reflection
> coefficient of the antenna.

Doesn't Z0 have an effect on the reflection coefficient which changes
the magnitude of forward and reflected power?
--
http://www.mindspring.com/~w6rca

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6206. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:37:33 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC356BD.4F969DE2@IEEE.org>
Source record: 167183

Tom W8JI wrote:
> The truth is simply that dollar for dollar you get the widest matching
> range, best overall efficiency, and power handling from a T network.

Plus a high pass filter. :-)
--
http://www.mindspring.com/~w6rca

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6207. A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:37:36 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <4FIw6.21831$PR.181354@news1.wwck1.ri.home.com>
Source record: 167179

As I understand it, a transmatch is a two-fold device that variably adjusts Inductive Reactance on the transmitter side, and Capacitive Reactance on the feedline/antenna side of a station. When the feedline impedance equals that of the antenna, the antenna is supposedly purely resistive and it becomes an electrical load, which feedline capacitive reactance should be near zero. The load (antenna) then distributes 100% of the energy supplied from the feedline whereas zero energy can return back to the transmitter (1:1 match) because the coax outer shielding and center conductor are phased 180 degrees apart, thus canceling any energy emanating from the coax itself further insuring the distribution of energy to the load.

Here are my questions:

1. If one were to install a transmatch in feedline system that already has an antenna that is purely resistive (1:1 match) what would be the insertion loss in dB resulting from the insertion of this device? Ive never really thought about it until recently.

2. What is/Is there a linear relationship of insertion loss resulting from the transmatch installation in relation to the inductive reactance present at the transmitter? i.e.. At what point are you better off having the radio fold back somewhat as compared to the insertion loss incurred by the installing a of transmatch?

Thanks and 73

6208. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:39:35 UTC
From: richardharrison@webtv.net
Message-ID: <26522-3AC35737-74@storefull-113.iap.bryant.webtv.net>
Source record: 167181

Cortland Richmond wrote:
"You have been saying for some time now that one can`t separate magnetic and electric fields anyway. If true, one could never tell what their ratio was to each other."

Tom, W8JI wrote:
"I`ve never said that. I said you can not separate the time-varying magnetic field from the time-varying electric field....you take one to zero....the other goes to zero.'

Weasel words, Tom. The meaning is clear when discussing r-f coupling that magnetic and electric refer to r-f. It isn`t needed to continuously define r-f as time-varying.

You certainly can separate the magnetic and electric components of r-f. Millions of examples are at use at this moment in the Faraday shields in transformers, broadcast antenna systems, and shielded loops.

You can take one to zero without killing a signal. Example: Two coils in separate tight shield cans. A tiny hole in each allows interconnection through a capacitor and disallows magnetic coupling. Vigorous representations of the signal exist in both cans though the signal originates only in one. Another example: Two coils are aligned on the same axis on opposite sides of a Faraday shield. The shield kills the electric field between the two coils yet allows magnetic coupling. It works! It works!

In both examples, the missing field is immediately generated by the remaining field which makes the trip to the second coil.

Tom is dead wrong.

Best regards, Richard Harrison, KB5WZI

6209. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:49:40 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <oQIw6.322$rk4.14882@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167182

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac34d7b.751741939@news.accessunited.com...
> On Thu, 29 Mar 2001 14:06:40 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >always be 277.78 W regardless of the line length. If there is no tuner
> >internal to the transmitter, the transmitter will have to be manually
> >adjusted to maintain this 100 W of delivered power as the line length
> >changes.
>

The 277.78 W of measured power assumed a Zo wattmeter.
A 50-ohm wattmeter measuring the same forward traveling voltage would
indicate 2500 W of forward power.

> My IC751A will run more power into an 80 ohm load than into a 50 ohm
> load. Suppose the feedline presents 80 ohms j0. I don't need a tuner
> then..
>
> My DX-100 will deliver full power into a 450 ohm line, with no
> external tuner.
>
> If I build a meter that is normalized at 450 ohms and measure power in
> a 450 ohm line terminated in 450 ohms j0, the forward power will be
> 100 watts and reflected power zero watts. that is true no matter what
> transmitter impedance I have.
>
> If I make no changes to the system and measure power with a meter
> normalized to 50 ohms, the forward power will be higher and reflected
> power "suddenly appears".
>

If you measure 100 W of forward power with the 450-ohm wattmeter, you will
measure 2500 W of forward power with the 50 ohm meter. I assume they both
measure the same forward traveling voltage.

If the 450 ohm line is terminated in 450 ohms, there is no rearward
traveling voltage or power. How does a meter of any impedance translate 0
volts and 0 amps into real power?

> If I move a 50 ohm meter along a long 450 ohm line terminated in 50
> ohms, I'll find points where reflected power is zero watts. I'll see
> the forward power varies all over the place.
>

Please explain this.

> Why does the forward power return to normal when I measure it with a
> meter normalized to the impedance of the line at the point where I
> measure, if there is really all that extra power in the line?
>
> It amazes me how people take models that are meant to make life easy
> as the way things actually work.
>

The statement of mine that you quote above in correct, so please explain what you see wrong with it.

Steve

6210. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:52:21 UTC
From: Thomas Beltran <tbeltran@earthlink.net>
Message-ID: <VSIw6.7572$aP5.643680@newsread2.prod.itd.earthlink.net>
Source record: 167184

I bought a used Heath SA 2060A, and I've been very happy with it. The Heath replaced my MFJ-941E, which is now just a tuner for a shortwave receiver. These two tuners are on opposite ends of the spectrum. The MFJ had a low power handling capacity and fixed inductor positions. The Heath handles a full gallon (or so the book says) but has a fully variable inductor. Inside, the components are very heavy duty looking. With the MFJ, I always felt that the optimum position was "in between" the fixed positions. With the Heath tuner, I am able to tune up everything I need. This is not a bash on MFJ, the comparison would well be accurate for any similar tuner.

So, I would agree with others who have posted, get a tuner with the widest range, and as much power handling ability as possible. I had lots of arching problems with the smaller MFJ and I've had none with the Heath. I also did not personally like the crossed-needle meter on it. The Heath has dual meters which read SWR and power output - very convenient.

And if price is an issue (as it was for me) get a used tuner.

--
Thomas E. Beltran
Attorney at Law
2501 West Burbank Blvd.
Suite 200
Burbank, California 91505

(818) 567-1776
(818) 955-9877

www.thomasbeltran.com

"Cm13141" <cm13141@aol.com> wrote in message
news:20010328011036.20499.00001078@ng-fz1.aol.com...
> I am looking to buy a antenna tuner to use with dipoles and other type of
wire
> antennas.What is the best bang for the buck tuner that I should check
out?I
> have a
> Kenwood TS-930S that i run barefoot.
> Thanks,
> James

6211. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:54:33 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <ZUIw6.328$rk4.14650@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167185

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AC35582.574D4876@IEEE.org...
> VE9SRB wrote:
> > There is a fixed relationship between forward power and delivered power.
>
> Not if you change Z0 which changes the reflection coefficient.
>
> > There is also a fixed relationship between the forward power and the
antenna
> > current. These fixed relationships are established by the reflection
> > coefficient of the antenna.
>
> Doesn't Z0 have an effect on the reflection coefficient which changes
> the magnitude of forward and reflected power?
> --

The fixed relationship is Pdelivered = Pforward - Preflected.

The fixed relationship is Pforward = Pdelivered / (1 - |rho|^2)

Change anything you want to, these relationship do not change.

Steve

6212. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:54:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC35ABF.D69B2AD3@IEEE.org>
Source record: 167188

VE9SRB wrote:
> The fixed relationship is Pforward = Pdelivered / (1 - |rho|^2)

That's not a fixed relationship. That's a variable relationship.
That relationship depends on the independent variable rho.
--
http://www.mindspring.com/~w6rca

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6213. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 15:56:59 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <fXIw6.331$rk4.15041@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167186

> "Tom W8JI" <2w8ji@akorn.net> wrote in message
> news:3ac34d7b.751741939@news.accessunited.com...
> > On Thu, 29 Mar 2001 14:06:40 GMT, "VE9SRB" <srbest@att.net> wrote:
> >

>
> > If I move a 50 ohm meter along a long 450 ohm line terminated in 50
> > ohms, I'll find points where reflected power is zero watts. I'll see
> > the forward power varies all over the place.
> >
>
> Please explain this.
>
>

Never mind. Thinking about it for 5 seconds, it was obvious.

Steve

6214. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:00:32 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <A_Iw6.338$rk4.15314@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167187

> "Tom W8JI" <2w8ji@akorn.net> wrote in message
> news:3ac34d7b.751741939@news.accessunited.com...
> > On Thu, 29 Mar 2001 14:06:40 GMT, "VE9SRB" <srbest@att.net> wrote:
> >
> >
> > If I build a meter that is normalized at 450 ohms and measure power in
> > a 450 ohm line terminated in 450 ohms j0, the forward power will be
> > 100 watts and reflected power zero watts. that is true no matter what
> > transmitter impedance I have.
> >
> > If I make no changes to the system and measure power with a meter
> > normalized to 50 ohms, the forward power will be higher and reflected
> > power "suddenly appears".
> >

Again, after 5 seconds thought, it was obvious.

Steve

6215. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:08:00 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <A5Jw6.111$RF1.14695@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167189

Please, you know what I mean.

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AC35ABF.D69B2AD3@IEEE.org...
> VE9SRB wrote:
> > The fixed relationship is Pforward = Pdelivered / (1 - |rho|^2)
>
> That's not a fixed relationship. That's a variable relationship.
> That relationship depends on the independent variable rho.
> --
> http://www.mindspring.com/~w6rca
>
>
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6216. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:09:41 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC35E45.7BEE8000@IEEE.org>
Source record: 167191

VE9SRB wrote:
> Please, you know what I mean.

I guess I do now. You and I have a different definition of 'fixed'.

> "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote

> > VE9SRB wrote:
> > > The fixed relationship is Pforward = Pdelivered / (1 - |rho|^2)
> >
> > That's not a fixed relationship. That's a variable relationship.
> > That relationship depends on the independent variable rho.
--
http://www.mindspring.com/~w6rca

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6217. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:17:31 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <veJw6.301$oQ5.72065@paloalto-snr1.gtei.net>
Source record: 167190
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AC34C37.4955E8E9@IEEE.org...
> Zoran Brlecic wrote:
> > The problem arises when a monkey wrench is thrown into the "natural
progression of
> > things", like all those high schools shootings in the last few years.
>
> More kids are killed in high school sports than in high school shootings.
> Magnitudes more are killed in automobile accidents. We seem to have lost
> all perspective when it comes to guns. Punish the criminals, not the
guns.
> --

How true. When I went to school in Los Angels areas of California in the 60's and 70's almost every kid I knew had access to a firearm at home. Back then you could buy a gun over the counter at Sears, Montgomery Wards, JC Penny, Pep Boys, True Value Hardware, etc. cash and carry. You had to be 16 to buy a long gun, and 21 to buy a pistol but there were no laws against your parents buying you a pistol if they wanted to.

Many of the kids I went to school with were regular hunters and outdoorsmen along with their fathers, uncles, etc. I had three younger siblings and we all had our own rifles which our parents gave us as Christmas presents around the ages of 10 or 12.

There was never a firearms related incident in any of my schools, or even in my neighborhood (unless you count the time one of my neighbors shot some low-life who was trying to rob the local shoe store during the original Watts Riots).

There were also no drug dealers and gang bangers on every corner when I was in school. The record companies would never dream of putting out any of the "Cop Killer" Rap music which is present today - and the kids' parents would kick their butts if they ever tried to bring that kind of crap home.

The police were allowed to actively suppress crime rather than just reacting to it after the fact, but now days every hoodlum is taught at a young age "I know my rights, I'll sue you for ..." And parents are regularly prosecuted for "Child Abuse" if they try to make any attempts to prevent an out-of-control juvenile from running wild on the streets.

Yes, we have a big problem these days in the schools - and in society in general - but it is not, and has never been, a gun problem. It's a people problem, and as long as nobody in power has the "brass" to address it for what it is, it will only get worse...

73 de W6DKN

6218. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:31:22 UTC
From: richardharrison@webtv.net
Message-ID: <18621-3AC3635A-13@storefull-117.iap.bryant.webtv.net>
Source record: 167193

It seems like months ago now, but I quoted numerous experts who say a Faraday shield works.

I`ll relist some: Terman, Griffith, Dean, and Christiansen. I referenced the work of others:
Stanford Goldman, "A Shielded Loop for Noise Reduction in Broadcast Reception", Electronics, Oct. 1938, pp 20-22, Dudley E. Foster and C.W. Finnigan, "A Method of Measuring the Effectiveness of Electrostatic Loop Shielding", Proc. IRE, June, 1943, pp 253-255.

So many experts! They are all wrong and Tom is right? Don`t bet on it.

Best regards, Richard Harrison, KB5WZI

6219. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:45:22 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <CEJw6.377$rk4.17791@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167192

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AC35E45.7BEE8000@IEEE.org...
> VE9SRB wrote:
> > Please, you know what I mean.
>
> I guess I do now. You and I have a different definition of 'fixed'.
>
> > "W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote
>

I simply meant that there is a defined relationship between Pdelivered and Pforward. Obviously, as rho changes, given a fixed Pforward, the delivered power changes. Delivered power is the end result of the process of how the forward power develops.

Lately, discussions on the NG seem to be more focused on word definitions than concepts. I will have to choose my words and phrasing very carefully.

6220. Positioning of Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 16:48:56 UTC
From: moa1213@aol.com
Message-ID: <20010329114856.09648.00001133@ng-fu1.aol.com>
Source record: 167194

Hello Readers

I currently own a GP9NC Antenna for my scanner radios and am looking at getting another for my ham radios. The GP6 has been recommended to me and I was just wondering if I would be able to mount the GP6 on the same mast as the GP9NC or would it cause interference and "burn" the GP9 out?

Let me know
MOA1213@aol.com

6221. Re: Beta match

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 17:04:38 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3ac36b23.7138991@news.aepnet.com>
Source record: 167195

On Thu, 29 Mar 2001 01:16:41 GMT, Paul Coverdale <coverdale@sympatico.ca> wrote:

>Can anyone point me to a good description of how a beta match is
>supposed to work ? I've looked at the description given in the ARRL
>Antenna Handbook (14th edition - latest one I have) and I understand
>that the basic theory is that the beta matching section effectively
>appears as an inductance in parallel with the (slightly capacitive, low
>resistance) antenna input impedance, and effectively raises the
>impedance to match 50 ohms. Problem is, if I do some quick calculations
>with typical values eg an antenna with an input impedance of 20-j10
>ohms, I can't find a value of parallel inductance that will raise this
>to anywhere near 50 ohms. On the other hand, I run a Hy-Gain Explorer 14
>which happens to use a beta match, and it gives a good 50 ohm match on
>all bands !
>
>Paul, VE3ICV

This is basically an L-network problem. The (typically) lower feedpoint resistance (Ra) of the driven element is transformed to the higher value of the real part of the transmission line characteristic impedance (Ro) as follows:

Using your number, Ra = 20

Assuming a 50 ohm line, Ro = 50

Determine Q = sqrt ((Ro / Ra) - 1) = 1.225

Then the shunt reactance (inductive in this case) is:

L = Ro / Q = 40.825

The series (capacitive) reactance is:

C = - Q * Ra = -24.495

So the driven element must be shortened from resonance to present a ~24.5 ohm capacitive reactance and the stub must be adjusted to provide ~41 ohm of inductive reactance.

I believe that your confusion results from not changing to the proper equivalents when doing your analysis. Remember that the feedpoint impedance is just that; an impedance, i.e., a *series* equivalent. However, when you shunt the transmission line with the inductive stub, you must do it in the *parallel* form, i.e., as an admittance.

So the line plus stub combination is:

G = 1 / Ro || 1 / 40.825 = 0.02 - j 0.0245

Converting back to series form:

Z = 1 / G = 20 + j 24.495

This series equivalent is the conjugate of the (adjusted) feedpoint Z and you have a match.

73,

Wes Stewart N7WS
>

6222. Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 18:40:50 UTC
From: nfn04028@naples.net
Message-ID: <90738EEC1marty1225earthlinkne@207.217.77.26>
Source record: 167196

Some years ago I heard several references to a "snake antenna" being used for portable operation. It was said to be just a length of coax that you unrolled on the ground. I don't remember whether it was terminated in some way or not, cut to resonance or whether some sort of tuner needed to be used.

Has anyone heard of or used anything like this? Any comments plus or minus would be appreciated. I'm down to last resorts in an antenna restricted area.

Marty K1FHR

6223. Re: Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 19:59:12 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <kuMw6.161669$p66.46299074@news3.rdc1.on.home.com>
Source record: 167197

Well I would imagine it wouldn't work too well ... after all an unterminated
piece of coax doesn't radiate too well ... especially on the ground =)

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"marty" <nfn04028@naples.net> wrote in message
news:90738EEC1marty1225earthlinkne@207.217.77.26...
> Some years ago I heard several references to a "snake antenna" being used
> for portable operation. It was said to be just a length of coax that you
> unrolled on the ground. I don't remember whether it was terminated in some
> way or not, cut to resonance or whether some sort of tuner needed to be
> used.
>
> Has anyone heard of or used anything like this? Any comments plus or
minus
> would be appreciated. I'm down to last resorts in an antenna restricted
> area.
>
> Marty K1FHR

6224. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 20:05:03 UTC
From: w9vhe1@email.msn.com
Message-ID: <3ac39544.283905746@netnews.msn.com>
Source record: 167198

Based on web posts and personal experience with their products, I
would go with the GAP antenna.

On Wed, 28 Mar 2001 18:32:30 -0600, Ken Bessler <kg0wx@yahoo.com>
wrote:

>I'm thinking about getting one of the above listed antennas and would
>like to hear opinions from users out there. Thanks!

6225. Re: Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 20:22:48 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <9a05lr$rf3$1@bob.news.rcn.net>
Source record: 167199

the snake antenna is a "receive" only antenna with a preamplifier connected
to it...it is claimed to have low noise capability with negative
gain--that's why a preamp is used...
"marty" <nfn04028@naples.net> wrote in message
news:90738EEC1marty1225earthlinkne@207.217.77.26...
> Some years ago I heard several references to a "snake antenna" being used
> for portable operation. It was said to be just a length of coax that you
> unrolled on the ground. I don't remember whether it was terminated in some
> way or not, cut to resonance or whether some sort of tuner needed to be
> used.
>
> Has anyone heard of or used anything like this? Any comments plus or
minus
> would be appreciated. I'm down to last resorts in an antenna restricted
> area.
>
> Marty K1FHR

6226. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 20:30:33 UTC
From: Cortland Richmond <Cortland.Richmond@usa.alcatel.com>
Message-ID: <3AC39B69.4983F723@usa.alcatel.com>
Source record: 167200

Point of view seems one of the issues we have been having (and avoiding) here.

The electric field component of a signal incident on the loop is vertically polarized. If I shunt that field (I used the example of a metal roofed porch) I have effectively eliminated it; a short rod antenna sensitive to the electric field will indeed indicate a reduction of signal under a grounded roof. But a loop antenna will still show the same level of signal it did outside. This is indicative of its responding to something other than the vertically polarized electric filed I have shunted.

The experiment of placing an entire (small) radio with electric probe antenna inside a conducting tube shows that the electric field does not much enter the tube; placing a loopstick-equipped radio inside shows that a signal can still be received. This is indicative that the grounded roof example is carried over in the example of conducting tube.

I don't argue that electrons are accelerated by an electric field. But it isn't impossible that they can be accelerated by a magnetic field, for permanent magnet generators would not work unless they could be.

Given that there are always orthogonal counterparts to the electric or a magnetic component of the electromagnetic field, then there has to be an electric field inside the shield, associated with electrons accelerated by the magnetic component of an incident electromagnetic field. But it's a different electric field than exists outside, as is demonstrated by the fact that electrons are still made to flow in the loop conductor even when we shunt the external electric field.

It seems likely to me that these differing viewpoints explain some of the conflicts we have been having in this thread.

Cortland

atkes@imap1.asu.edu wrote:

> Cortland Richmond (Cortland.Richmond@usa.alcatel.com) wrote:
> : You have been saying for some time now that one can't separate magnetic and
> : electric fields anyway. If true, one could never tel what their ratio was to
> : each other.
>
> : Cortland
>
> : Tom W8JI wrote:
>
> snip
>
> Cortland,
>

> I wanted to make a few comments and I couldn't quite figure out which
> message to follow up. I chose yours, but I think that you and Tom both
> agree that you can, in principle, separately measure the electric and
> magnetic fields.
>
> Generally what is a magnetic induction B and what is an electric field E is
> determined (and defined for that matter) by the force on an electric
> charge q, F = q (E + v x B), where E and B are evaluated at the position
> of the charge. You then in principle measure the fields separately by
> measuring the part of the force that is independent of velocity, and
> the part that is dependent on the velocity.
>
> Since the charges in copper have a relatively tiny magnetic moment
> compared to their charge, the force on them is well described by this
> equation. The average velocity of the charges in a small region of the
> copper is zero with no field applied. Therefore, if you somehow only
> applied a magnetic field, no current would flow, since the net force
> on the charges is zero. As many have been saying here, Maxwell's
> equations tell you that a changing magnetic field in a finite region
> gives some electric field in that region too. There just isn't any way
> around this if you accept Faraday's law, since it says that the average
> electric field along any closed loop is proportional to the changing
> magnetic induction averaged over the area through the loop. The only way to
> have the electric field zero everywhere is to have zero oscillating
> magnetic induction everywhere.
>
> Notice that Faraday's law does not contain any material properties, so
> this is equally true in copper and in vacuum.
>
> In a small loop antenna (or a transformer winding for that matter) the
> charges are being pushed primarily by that electric field. The fact that
> it is easier to calculate the electric field component that contributes by
> using the magnetic field is why this is called magnetic coupling. However
> the fact remains that it is the electric field that is doing the work.
> When you think about how the magnetic field is used in calculations, it
> is obvious that a loop antenna is not really responding to the magnetic
> field. When the loop response is calculated from the magnetic field, it
> is the magnetic field through the area surrounded by the loop that
> is used. There is no copper there and therefore no copper electrons.
> Instead, this changing magnetic field must be accompanied by an average
> electric field around the perimeter of the loop. It is this electric
> field that pushes the electrons around the loop. That is, charges are
> pushed by the fields at their position. They are not pushed by fields
> somewhere else. That we can calculate the field that is doing the work
> by calculating the fields somewhere else does not change this fact.
>
> 73 Kevin w9cf

6227. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 20:41:34 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AC39DFE.AC2@wt.net>
Source record: 167201

Texas Rangers Fan Since 1972 wrote:
>
> >So what is the bottom line??? Does the thing work??? Does your
> >xmitter load with your present setup??? What SWR are you seeing measured
> >with your xmitter and SWR meter??? Have you made any contacts???
> >What were the signal reports???
>
> The only thing I could come up with was the balun was "bad". I am not sure what
> caused that or how, but I had another balun that I bought at the same time and
> it worked just fine. SWR was 1.5:1 in the shack, 1.7:1 when I hung it. I
> checked into the MM net on 14.300 with it and got a good signal report.
>
> I am sending that balun back to Van Gorden Engineering and requesting a
> replacement. Should be interesting to see how they respond.
>
> Thanks for all the postings and replies, Mark
>
> KE4QKN/AE

It wasn't bad if you had a 2:1 swr. That is not very far from 1.5:1. The
balun just had a slightly different tranformation ratio. They will tell
you it's good, which it is most likely. You can shift the feedpoint of
the antenna to get a good SWR. MK

--
http://web.wt.net/~nm5k

6228. END FED ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 21:19:28 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <9a0903$d7o$1@bob.news.rcn.net>
Source record: 167203

can an end fed ant (80-10 mtrs) be made with just coax, a balun & 130 ft of wire with the use of an ant tuner?

6229. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 21:23:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC3A7E9.22E0316F@eznec.com>
Source record: 167202

Steve is correct that on the 450 ohm line terminated with 50 ohms, the forward power is 277.78 watts, not 500 as I had stated. (The reverse power is 177.78, not 400.) I neglected to take a square root when I should have. Thanks to Steve for pointing out the error.

I also agree with the facts in the remainder of Steve's posting. We seem to have a different interpretation about the meaning of a "fixed relationship", however. But I still retain my opinion that the Antenna Book article is misleading at best. A determination of its factuality shouldn't have to depend on a discussion of forward and reverse power, reflection coefficients, line lengths, and impedance matches.

Roy Lewallen, W7EL

VE9SRB wrote:
>
> Hi Roy:
>
> Just my 2 cents worth again.
>
> There is a fixed relationship between forward power and delivered power.
> There is also a fixed relationship between the forward power and the antenna
> current. These fixed relationships are established by the reflection
> coefficient of the antenna. The forward power is a lossless transmission
> line is always related to the delivered power as follows:
>
> PFWD = PDEL / (1 - |rho|^2)
>
> In the example you describe above with the 450 ohm line: If the delivered
> power is 100 W, the forward power is 277.78 W. If 100 Watts of power is
> delivered to a 50 ohm antenna through a 450 ohm line, the forward power will
> always be 277.78 W regardless of the line length. If there is no tuner
> internal to the transmitter, the transmitter will have to be manually
> adjusted to maintain this 100 W of delivered power as the line length
> changes.
>
> To maintain a constant delivered power to an antenna with changing
> impedance, there must be an external compensation or power adjustment. This
> compensation can be implemented with a tuner through establishing an
> impedance match at the tuner input. If no tuner exists in the system, then
> the output levels of the transmitter must be adjusted.
>
> Steve
> VE9SRB

6230. Re: Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 21:37:59 UTC
From: Ed Peterson <epeterson@aerostich.com>
Message-ID: <3AC3AB36.C5C882F6@aerostich.com>
Source record: 167204

marty wrote:

> Has anyone heard of or used anything like this?

Could it be it this?

http://users.erols.com/k3mt/graswire/graswire.htm

Ed Peterson
KC0IDX

DISCLAIMER: Unless otherwise indicated, this correspondence is a personal opinion and NOT an official statement of Aero Design and Mfg. Co. Inc.

6231. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 21:49:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC3ADED.B685EF5E@eznec.com>
Source record: 167205

Thanks again, now I'm getting the hang of it. If I measure the resistance of a leaded resistor by connecting a meter to the resistor's leads, it's dissipationless resistance because there's no dissipation at that point, in the wires. But if I connect the leads directly to the resistor body or if I measure a surface mount resistor, it's dissipative resistance. To make a model of a leaded resistor, then, it looks like I need a new component -- a resistance "converter". I start with a "dissipative" resistor, then connect a "dissipation converter" in series, then model the leads. That way, anything connected to the leads sees a "non-dissipative" resistance, but on the other side of the "converter" it's "dissipative". Do I have the right idea?

But I'm still confused about that amplifier transresistance. Maybe you can help out with that, too.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > Thanks! Is it still a non-dissipative resistance if the cable is
> > terminated with a 50 ohm resistor? Or in that case do we have a
> > dissipationless characteristic resistance but a dissipative input
> > resistance, making the input resistance and characteristic resistances
> > equal in value but different in kind?
>
> If the voltage and current are in phase at a point and there is no
> dissipation taking place at that point then the resistance at that
> point is, by definition, dissipationless, i.e. zero dissipation.
>
> If a 50 ohm resistor is the load for a 50 ohm lossless line, the
> dissipation is taking place in the resistor, not in the line, so
> the 50+j0 characteristic impedance is dissipationless. The same
> power simply cannot be dissipated in two completely different places.
>
> If all the power is dissipated in the load, then none is dissipated
> in the line even though, in the line, the voltage and current are
> in phase. As far as I can tell, in this example at least, everything
> is 100% consistent.
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

6232. G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 21:52:37 UTC
From: "Dave Cook", com
Message-ID: <F8Ow6.642973$U46.19745922@news1.sttls1.wa.home.com>
Source record: 167206

I built a 1/2 size G5RV - the ARRL handbook said you could cut the dimensions in half to work 40 - 10. The dipole dimensions were too short, so I had to lengthen them to get resonance on 40 mtrs. It works fine on 40, 20, and 10, and I even get a 3:1 swr on 30 and 12 meters. But 30 (who cares?) and 15 mtrs are way off the SWR meter. Is the G5RV really an "all-band" antenna? Any suggestions on where I might be going wrong? The final dimensions for this one are about 55' for the dipole, 15' for the feeder, a coax choke at the feedpoint, and about 50' of coax feed.

Thanks for any advice,
-- Dave, WA0TTN

6233. Re: Power cap of #18 ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:06:49 UTC
From: "R.P.Haviland" <bobh@iag.net>
Message-ID: <QgOw6.952$BC6.298684@e3500-chi1.usenetserver.com>
Source record: 167207

BarryG wrote in message ...
>Would appreciate info on power handling capability of #18AWG 450 ohm window
>line - approx 250ft run at 3.5/7Mhz at low SWR.
>
Any practical transmission line has two limitations. One is the breakdown voltage, almost always given in line specifications. The second is the current capacity, almost never given. The reason is complex, since (at least) the conditions around the line in the way of air flow, insulation, etc plus the way the line is installed (bend radius, forces on line, etc) plus the length of time the line is in use all are important.

For an estimate, use the allowable current ratings found in wire tables for transformer windings, usually for a 40 deg C rise. This gives for transmitting twinlead perfectly matched 4 KW power capability. Even at SWR=25, the line can handle 800 watts. These are continous ratings, so the handling capability is even greater with CW, SSB.

I've never had a line fail by voltage breakkdown, but have had failures in coax and twinlead due to heating. In each case it was at a bend, where fairly high SWR put a high current point close to the bend. None happened until after some time had passed.

bob w4mb

6234. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:11:52 UTC
From: "Dave Cook", com
Message-ID: <IqOw6.643078$U46.19747926@news1.sttls1.wa.home.com>
Source record: 167208

Ooops, I meant to say 17 and 15 meters are way off.

"Dave Cook" <nospam.davepc2@netdave.,com> wrote in message
news:F8Ow6.642973$U46.19745922@news1.sttls1.wa.home.com...
> I built a 1/2 size G5RV - the ARRL handbook said you could cut the
> dimensions in half to work 40 - 10. The dipole dimensions were too short,
so
> I had to lengthen them to get resonance on 40 mtrs. It works fine on 40,
20,
> and 10, and I even get a 3:1 swr on 30 and 12 meters. But 30 (who cares?)
> and 15 mtrs are way off the SWR meter. Is the G5RV really an "all-band"
> antenna? Any suggestions on where I might be going wrong? The final
> dimensions for this one are about 55' for the dipole, 15' for the feeder,
a
> coax choke at the feedpoint, and about 50' of coax feed.
>
> Thanks for any advice,
> -- Dave, WA0TTN
>
>

6235. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:27:11 UTC
From: richardharrison@webtv.net
Message-ID: <13898-3AC3B6BF-88@storefull-115.iap.bryant.webtv.net>
Source record: 167215

Cortland Richmond wrote:
"Point of view seems to be one of the issues we have been having (and avoiding) here."

A small loop has a directional response like a doughnut with a null through its axis.

A rod has nulls off its ends.

Vertical loops are used to take advantage of vertically polarized waves. If a loop is horizontal, it is responsive to horizontally polarized waves. A small horizontal loop has equal response in all horizontal directions.

A small loop has tangential electric vectors "chasing each other" around the loop.

Small loops are usually vertically polarized because vertical groundwaves propagate well. Horizontally polarized groundwaves do not propagate well. Attenuation is very high for horizontal waves along the ground.

Skywaves have polarizations scrambled by the ionosphere and this is deleterious to directional response by the loop.

Antenna response depends on polarity matching among other factors.

Best regards, Richard Harrison, KB5WZI

6236. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:27:51 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC3B6E7.56D26E93@oio.net>
Source record: 167210

Dave,
To answer one of your question, no, it really isn't
an all-band antenna and was never ment to be. It just
happens that it had 'sort of' reasonable 'match' on
other bands ~if~ you used a tuner. What are you doing
wrong? Thinking that your going to get something for
nothing. Sorry 'bout that...
'Doc

6237. Re: END FED ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:30:37 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC3B78D.61A28CF4@oio.net>
Source record: 167211

marvin,
Probably. Forget the balun and use a good ground, it'll
work even 'better'... probably. Will either be a 'good'
all band antenna, nope, but it'll work.
'Doc

6238. Re: Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:34:24 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC3B870.9E617380@oio.net>
Source record: 167212

marty,
Works pretty good as a receive only antenna. It was
described as at least 1 wavelength long and terminated
in a 50 ohm non-inductive resister. You don't have a
lot of noise, but you also have 'less' signal to work
with too.
'Doc

6239. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:36:24 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AC3B8E8.FEA02881@dialpoint.net>
Source record: 167209

I think you have the theory all wrong about the transmatch. Anyway without getting into the theory part a transmatch can loose about 5 to 10 percent of the power if it is working as it should and more if it is not. My MFJ looses about 10 watts out of 100 going into it on 80 meters when fed into a good dummy load and less as I move toward the higher frequencies. The mfj is not the greatest but typical of the inexpensive ones.

For question number 2, The loss is in the feed line from the transmatch to the antenna. Unless you plan on putting the transmatch at the antenna you will have the same losses in the feedline if you do or do not use the transmatch not counting the 5 to 10 % loss in the transmatch. YOu do not want the transmitter to fold back as it is not operating efficently and will put stress on the transmiter circuits and possiably shorten the life of the transmitter. YOu use the transmatch to mask the swr so the transmitter will operate with more efficency.

Paul wrote:
>
> As I understand it, a transmatch is a two-fold device that variably adjusts
> Inductive Reactance on the transmitter side, and Capacitive Reactance on the
> feedline/antenna side of a station. When the feedline impedance equals that
> of the antenna, the antenna is supposedly purely resistive and it becomes an
> electrical load, which feedline capacitive reactance should be near zero.
> The load (antenna) then distributes 100% of the energy supplied from the
> feedline whereas zero energy can return back to the transmitter (1:1 match)
> because the coax outer shielding and center conductor are phased 180 degrees
> apart, thus canceling any energy emanating from the coax itself further
> insuring the distribution of energy to the load.
>
> Here are my questions:
>
> 1. If one were to install a transmatch in feedline system that already has
> an antenna that is purely resistive (1:1 match) what would be the insertion
> loss in dB resulting from the insertion of this device? Ive never really
> thought about it until recently.
>
> 2. What is/Is there a linear relationship of insertion loss resulting from
> the transmatch installation in relation to the inductive reactance present
> at the transmitter? i.e.. At what point are you better off having the radio
> fold back somewhat as compared to the insertion loss incurred by the
> installing a of transmatch?
>
> Thanks and 73

6240. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:41:21 UTC
From: dcollin@connix.com
Message-ID: <3ac3bb15.25991931@news.mybizz.net>
Source record: 167213

On 28 Mar 2001 06:10:36 GMT, cm13141@aol.com (Cm13141) wrote:

>I am looking to buy a antenna tuner to use with dipoles and other type of wire
>antennas.What is the best bang for the buck tuner that I should check out?I
>have a
>Kenwood TS-930S that i run barefoot.
>Thanks,
>James

Hard to say ... they range from MFJ to Nye-Viking MBVA ... quite a
range.

1) not MFJ
2) Vectronic DLP300 is a nicely built, good performing tuner (built by
MFJ now, so I can't say what they're like now)
3) Take a look at LDG Electronics autotuner AT-11!

Look on eham.net for product reviews to see what users think about
their tuners.

6241. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:42:08 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC3BA40.CA49C087@oio.net>
Source record: 167214

Paul,
If the tuner is at the feedline/antenna junction, your
assumptions may be correct. If it's at the radio end of
the feedline, then you have changed nothing about the SWR,
any reflected power in the system before using the tuner is
still there. (system = feedline and antenna)
Never measured the insertion losses, no idea what they
may be, but there will be losses, even if the systemSWR
is close to 1.0:1.
'Doc

6242. Re: Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 22:56:08 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <c4Pw6.72572$Ok4.5789600@news1.rdc1.ct.home.com>
Source record: 167216

It was described in QST by Doug DeMaw back in the 70s, I believe, or maybe even the early 80s. If you have a way to search the QST indexes, you will find it.

Peter

"marty" <nfn04028@naples.net> wrote in message news:90738EEC1marty1225earthlinkne@207.217.77.26...
> Some years ago I heard several references to a "snake antenna" being used
> for portable operation. It was said to be just a length of coax that you
> unrolled on the ground. I don't remember whether it was terminated in some
> way or not, cut to resonance or whether some sort of tuner needed to be
> used.
>
> Has anyone heard of or used anything like this? Any comments plus or minus
> would be appreciated. I'm down to last resorts in an antenna restricted
> area.
>
> Marty K1FHR

6243. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 23:12:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC3C167.207E5598@IEEE.org>
Source record: 167218

Roy Lewallen wrote:
> Thanks again, now I'm getting the hang of it. If I measure the
> resistance of a leaded resistor by connecting a meter to the resistor's
> leads, it's dissipationless resistance because there's no dissipation at
> that point, in the wires.

That's correct. The same power cannot be dissipated both in the leads
going to the resistor and also in the resistor itself. Resistor leads
have always been considered dissipationless because there is usually
negligible I^2*R loss in resistor leads. Why is that so hard to accept?
--
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6244. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 23:16:36 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC3C254.4E603121@IEEE.org>
Source record: 167119

Mark Keith wrote:
> It wasn't bad if you had a 2:1 swr. That is not very far from 1.5:1. The
> balun just had a slightly different tranformation ratio. They will tell
> you it's good, which it is most likely. You can shift the feedpoint of
> the antenna to get a good SWR. MK

Keeping the load resistance fixed, the input impedance of a balun
will change with frequency and so will the measured SWR. I once
asked Amidon to measure the inductance of one of their baluns on
10m. It was capacitive.
--
http://www.mindspring.com/~w6rca

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6245. Re: Snake antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 23:22:37 UTC
From: Joe <joeamp@mindspring.com>
Message-ID: <9a0fjc$ch2$1@slb2.atl.mindspring.net>
Source record: 167217

Doc, you mean like a beverage antenna
http://www.hard-core-dx.com/nordicdx/antenna/wire/babybev.html

A snake antenna described here http://www.kc7nod.20m.com/snake.htm say's
short the open end center to the shield with "no" terminating resistor.

The antenna described in the link
http://users.erols.com/k3mt/graswire/graswire.htm
looks like a wire wire with matching transformer w taps

'Doc wrote in message <3AC3B870.9E617380@oio.net>...
>
>
>marty,
> Works pretty good as a receive only antenna. It was
>described as at least 1 wavelength long and terminated
>in a 50 ohm non-inductive resister. You don't have a
>lot of noise, but you also have 'less' signal to work
>with too.
> 'Doc

6246. Re: END FED ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 23:25:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC3C480.753EF174@IEEE.org>
Source record: 167120

marvin rosen wrote:
> can an end fed ant (80-10 mtrs) be made with just coax, a balun & 130 ft of
> wire with the use of an ant tuner?

How can a balun do any balancing when one side doesn't go anywhere?

End fed antennas work best when a single wire (not coax) is fed
against ground or a counterpoise. In general, coax should not
be used with non-resonant antennas.
--
http://www.mindspring.com/~w6rca

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-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6247. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 23:33:34 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC3C64E.3A809008@IEEE.org>
Source record: 167121

Dave Cook wrote:
>
> I built a 1/2 size G5RV - the ARRL handbook said you could cut the
> dimensions in half to work 40 - 10. The dipole dimensions were too short, so
> I had to lengthen them to get resonance on 40 mtrs. It works fine on 40, 20,
> and 10, and I even get a 3:1 swr on 30 and 12 meters. But 30 (who cares?)
> and 15 mtrs are way off the SWR meter. Is the G5RV really an "all-band"
> antenna? Any suggestions on where I might be going wrong? The final
> dimensions for this one are about 55' for the dipole, 15' for the feeder, a
> coax choke at the feedpoint, and about 50' of coax feed.

The G5RV is NOT an all-band antenna. The full-sized G5RV works well
with an antenna tuner on 80m, 40m, 20m, and 12m. Follow the G5RV link
on my web page to find out why. That means the half-sized G5RV works
well on 40m, 20m, 10m, and maybe 6m. It is absolutely lousey on 15m
just like the full-sized G5RV is lousey on 30m.

An antenna tuner is necessary for a G5RV except maybe on one or two
bands. A half-sized G5RV would be naturally resonant on 10m, its
designed-for frequency.
--
http://www.mindspring.com/~w6rca

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6248. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-29 23:51:07 UTC
From: richardharrison@webtv.net
Message-ID: <6534-3AC3CA6B-31@storefull-118.iap.bryant.webtv.net>
Source record: 167123

Tom, W8JI wrote:
"All the shield on the loop does is become the actual antenna."

There is a large difference between the characteristics of the open-circuit shield over a shielded small loop and the characteristics of the closed-circuit inner loop by itself.

The radiation resistance of a small closed loop is 123 times the perimeter in wavelengths raised to the fourth power.

The radiation resistance of a small open loop is 12.3 times the perimeter in wavelengths squared.

The radiation resistance formulas are thanks to Arnold Bailey`s "TV and Other Receiving Antennas". These formulas are for small rectangular loops. For circular loops, the radiation resistances must be multiplied by 1.62 to account for the differences in area between rectangular and circular loops.

The broken loop has currents in-phase in its two halves, similar to a short center-fed dipole. Its directional response is also like a short center-fed rod.

The closed loop has nearly the same current all of the way around. It is after all just a big short-circuit. Viewed from broadside, currents on opposite sides of either loop are in opposite directions. But, current distributions are quite different for the two loops.

The implications are for major differences between the open-circuit Faraday shield and the closed-circuit inside loop, which is shielded by the outer loop, when they are compared as receiving devices.

Best regards, Richard Harrison, KB5WZI

6249. Re: Beta match

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 00:06:47 UTC
From: Paul Coverdale <coverdale@sympatico.ca>
Message-ID: <3AC3CE2E.AD9B3E71@sympatico.ca>
Source record: 167122

Thanks to Wes and others for providing the explanation. I was trying to get a match to 50 ohms by changing the parallel inductance only. For a given antenna feedpoint resistive component, you have to alter the reactive component too.

Paul
VE3ICV

Wes Stewart wrote:

>
>
> This is basically an L-network problem. The (typically) lower feedpoint
> resistance (Ra) of the driven element is transformed to the higher value of the
> real part of the transmission line characteristic impedance (Ro) as follows:
>
> Using your number, Ra = 20
>
> Assuming a 50 ohm line, Ro = 50
>
> Determine Q = sqrt ((Ro / Ra) - 1) = 1.225
>
> Then the shunt reactance (inductive in this case) is:
>
> L = Ro / Q = 40.825
>
> The series (capacitive) reactance is:
>
> C = - Q * Ra = -24.495
>
> So the driven element must be shortened from resonance to present a ~24.5 ohm
> capacitive reactance and the stub must be adjusted to provide ~41 ohm of
> inductive reactance.
>
> I believe that your confusion results from not changing to the proper
> equivalents when doing your analysis. Remember that the feedpoint impedance is
> just that; an impedance, i.e., a *series* equivalent. However, when you shunt
> the transmission line with the inductive stub, you must do it in the *parallel*
> form, i.e., as an admittance.
>
> So the line plus stub combination is:
>
> G = 1 / Ro || 1 / 40.825 = 0.02 - j 0.0245
>
> Converting back to series form:
>

> Z = 1 / G = 20 + j 24.495
>
> This series equivalent is the conjugate of the (adjusted) feedpoint Z and you
> have a match.
>
> 73,
>
> Wes Stewart N7WS
> >

6250. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 00:28:47 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac3cd90.784536562@news.accessunited.com>
Source record: 167124

On Thu, 29 Mar 2001 12:30:33 -0800, Cortland Richmond
<Cortland.Richmond@usa.alcatel.com> wrote:

>Point of view seems one of the issues we have been having (and avoiding) here.
>
>The electric field component of a signal incident on the loop is vertically
>polarized. If I shunt that field (I used the example of a metal roofed porch) I
>have effectively eliminated it; a short rod antenna sensitive to the electric
>field will indeed indicate a reduction of signal under a grounded roof. But a loop
>antenna will still show the same level of signal it did outside. This is
>indicative of its responding to something other than the vertically polarized
>electric filed I have shunted.

The roof becomes the antenna, the field impedance of the antenna
changes. But the electric field does NOT go to zero. As a matter of
fact if the roof has no vertical conducting surfaces you do almost
nothing to a vertically polarized signal.

If you have a small loop under the roof, and remove the roof, you
still have a low field impedance.

A several dozen feet away from the antenna the dominant magnetic field
becomes a dominant electric field.

So what on earth do you accomplish? Nothing.

You don't change the sensitivity to noise in any predictable way. You
don't improve balance in any predictable way.

Naturally if you have a low field impedance structure and you couple
to it with a loop the sensitivity is higher than with a rod antenna
that has been optimized to be in a clear area. I see that when I drive
under wires with my mobile antenna.

>The experiment of placing an entire (small) radio with electric probe antenna
>inside a conducting tube shows that the electric field does not much enter the
>tube; placing a loopstick-equipped radio inside shows that a signal can still be
>received. This is indicative that the grounded roof example is carried over in the
>example of conducting tube.

How many dB down did the signal go in each case? Not "At least I can
still hear it".... but how many db? Did the "magnetic field" pass
unattenuated?

If you take the time-varying electric field to zero the magnetic field
will do the same. There is no way around that.

Let me give an example of how a time-varying field can NOT pass through a conductor several skin depths thick.

Some time ago I measured the field on the opposite side of a wall of single sided PC board material. It was about two foot square. It was a wall inside a four sided box seperating the inside halves from each other.

On one side I had a buss wire from a connector to another connector, the far connector terminated in a dummy load the near connector to a 100 watt HF radio.

I made a probe with a small hunk of wire in a dipole for the electric probe, and a small pancake loop for the magnetic field.

The field directly opposite the wall just 1/2 inch or less from the wire was almost zero, and was not even parallel with the wire on the other side. The field increased as I got to the edges, and clearly showed what current appeared on the other side was simply spilling around the edges of the board.

The ratio of electric field to magnetic field was essentially the same on either side of the board, and at any place on the board.

Why didn't the magnetic field go right through the board? Why was it strongest at the edges?

73 Tom

6251. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 00:41:59 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac3d2dc.785892526@news.accessunited.com>
Source record: 167125

On Thu, 29 Mar 2001 10:31:22 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>It seems like months ago now, but I quoted numerous experts who say a
>Faraday shield works.
>
>I`ll relist some: Terman, Griffith, Dean, and Christiansen. I referenced
>the work of others:
>Stanford Goldman, "A Shielded Loop for Noise Reduction in Broadcast
>Reception", Electronics, Oct. 1938, pp 20-22, Dudley E. Foster and C.W.
>Finnigan, "A Method of Measuring the Effectiveness of Electrostatic Loop
>Shielding", Proc. IRE, June, 1943, pp 253-255.
>
>So many experts! They are all wrong and Tom is right? Don`t bet on it.
>
>Best regards, Richard Harrison, KB5WZI

Richard,

Why single me out, and insult me?

What about the half dozen or more other people who disagree with you here? Are they all wrong also?

73 Tom

6252. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 01:00:58 UTC
From: kb7qhc@home.com
Message-ID: <3ac3d1e8.250379166@news.seanet.com>
Source record: 167126

On Thu, 29 Mar 2001 17:12:39 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>
>That's correct. The same power cannot be dissipated both in the leads
>going to the resistor and also in the resistor itself. Resistor leads
>have always been considered dissipationless because there is usually
>negligible I^2*R loss in resistor leads. Why is that so hard to accept?

Hi Cecil,

That in itself is a rather simple answer too. It is hard to accept
because when resistance is acknowledged
> there is usually
>negligible I^2*R loss in resistor leads
it is immediately dismissed as negligible (it doesn't exist) to
support the proof of what is being said (even though the statement is
a direct self-contradiction).

Roy, the whole rationale behind this dissipationlessness is to create
the basis for "proving" the internal resistance of generator is
"non-dissipative." What is being swept under the rug, is that this
proof has nothing to do with reality (it is a convention used to
explain a theoretical consideration - not an actual observation).
This illusion is then leveraged to support the misapplication of
Thevenin in non-linear designs (which produce heat in accordance with
already accepted tenets).

The future argument (once dissipationlessness is accepted) is that
when the Zsource is reconsidered, there will be some who step forward
to proclaim, "the R of the generator is dissipationless." Then we
will get into some really contrived proofs of how reflected power is
not lost in the source, because it is dissipationless (in spite of the
heat produced - now try and imagine that!). I can hear some of the
sophistries now: "energy applied in one direction is dissipative while
in another direction it is not!"

As I've said elsewhere, dissipationlessness is the hinge around which
another argument must turn. Frankly, it is a poor application of an
even poorer definition. It has all the qualities of "the tuner fools
your antenna into thinking it is matched to the source." "Fools?"
"Thinks?" Yes these are the same howlers of language that are decried
by technical purists - and yet it is the same sophistication of logic
being pursued here to describe the Rsource as being dissipationless.

It is the straw the drowning pluck at.

73's
Richard Clark, KB7QHC

6253. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 01:24:21 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac3ddec.788724850@news.accessunited.com>
Source record: 167127

On Thu, 29 Mar 2001 17:51:07 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom, W8JI wrote:
>"All the shield on the loop does is become the actual antenna."
>
>There is a large difference between the characteristics of the
>open-circuit shield over a shielded small loop and the characteristics
>of the closed-circuit inner loop by itself.
>
>The radiation resistance of a small closed loop is 123 times the
>perimeter in wavelengths raised to the fourth power.
>
>The radiation resistance of a small open loop is 12.3 times the
>perimeter in wavelengths squared.
>

Not so.

The shield is NOT an open loop because it is heavily coupled to the inner loop.

It makes no difference at all in field impedance or efficiency if you move the tuning capacitor across the gap in the loop, or across the wire inside the loop.

You don't change a thing by adding the shield except for balance of the system, and changing loss a bit because the "shield" adds conductor length and a large diameter counductor.

Mutual coupling makes the outer loop resonant when the inner one is resonant. Build one, and measure the voltage across the gap sometime. Stop tuning the inner loop, and tune the gap. The impedance is essentially identical, less the loss changes in the capacitor.

73 Tom

6254. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 01:47:05 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac3dfcd.789205466@news.accessunited.com>
Source record: 167129

On Thu, 29 Mar 2001 15:49:40 GMT, "VE9SRB" <srbest@att.net> wrote:

> If you measure 100 W of forward power with the 450-ohm wattmeter, you will
>measure 2500 W of forward power with the 50 ohm meter. I assume they both
>measure the same forward traveling voltage.

Not true.

Wattmeters do not measure voltage alone, they sample current and
voltage. Voltage and phase are summed with consideration of phase
before the RF is detected and converted to dc voltage.

>If the 450 ohm line is terminated in 450 ohms, there is no rearward
>traveling voltage or power. How does a meter of any impedance translate 0
>volts and 0 amps into real power?

A meter normalized for 450 ohms will read zero reflected power and 100
watts. A meter normalized for 50 ohms will, in the very same line
without standing waves, indicate reflected power and "extra" forward
power. If you deduct the reflected power from forward, the result will
be about 100 watts.

There is no magic, the entire transmission line (when in a steady
state) can be looked at without waves and it works out perfectly.

>> If I move a 50 ohm meter along a long 450 ohm line terminated in 50
>> ohms, I'll find points where reflected power is zero watts. I'll see
>> the forward power varies all over the place.
>
>Please explain this.

Get away fromn theory, and look at a wattmeter Steve.

It has two coupling modes. One mode employs a current transformer than
develops a given voltage for a given line current. The second employs
a voltage divider that is across the line.

These two sampled outputs are in series, and the ratios are set so
when line impedance, the across and through vectors, are the correct
ratio (E/I = 50:1 for a 50 ohm line) for the design Zo the sampled
voltages are identical.

Obviously in one direction the volages sum, and if the generator and
load are swapped the phase in the current transformer reverses.

If you design a meter for 50 ohms, and measure SWR while moving it
along a 450 ohm line (or any other line that is NOT 50 ohms) you will
find SWR varies all over the place.

>The statement of mine that you quote above in correct, so please explain
>what you see wrong with it.

Simple. Lets say I mismatch a 450 ohm line by adding a 50 ohm load. If I move the meter along the line, the forward and reflected power will change all over the place. At exact 1/2 wl multiples from the load, the meter will indicate a 1:1 SWR.

The SWR varies along the line.

If I normalize the meter for 450 ohms, the reflected and forward power are constant along the 450 ohm line no matter what the termination.

The SWR does not vary along the line, and only the meter null setting was changed (it could be a pot or trimmer capacitor I adjusted).

If I have a 50 ohm meter, and terminate the line in 450 ohms, the flat line shows a constant ratio of reflected power to forward power along the line and that forward power is the SAME as in a 450 ohm line terminated with 50 ohms measured with a 450 ohm meter.

In either case the meter indicates a 9:1 SWR.

When the meter null is not set for the line Zo, SWR and forward power vary all along the line.

See how simple it is?

73 Tom

6255. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 01:48:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC3E5EB.DB99144F@eznec.com>
Source record: 167128

You could reproduce the results of your experiment by using a capacitor instead of an aluminum shield. Place a capacitor with reactance of, say, 50 ohms from the base of a short whip (feedpoint Z thousands of ohms) to circuit ground and see what happens to the signal. Then put the capacitor across the feedpoint of a resonated loop (feedpoint Z of a few ohms, depending on loss) and see what happens. You'll get the same result as you did with the shield, and the capacitor doesn't intercept any field at all.

If I'm correct about what's happening, you'll also be able to kill the signal to the radio with short whip just by grounding the shield to the radio chassis and putting it close to the whip -- the whip can stay completely outside the shield. If the setup is still handy, it would be interesting to see the results of this experiment.

Roy Lewallen, W7EL

Cortland Richmond wrote:
>
> Point of view seems one of the issues we have been having (and avoiding) here.
>
> The electric field component of a signal incident on the loop is vertically
> polarized. If I shunt that field (I used the example of a metal roofed porch) I
> have effectively eliminated it; a short rod antenna sensitive to the electric
> field will indeed indicate a reduction of signal under a grounded roof. But a loop
> antenna will still show the same level of signal it did outside. This is
> indicative of its responding to something other than the vertically polarized
> electric filed I have shunted.
>
> The experiment of placing an entire (small) radio with electric probe antenna
> inside a conducting tube shows that the electric field does not much enter the
> tube; placing a loopstick-equipped radio inside shows that a signal can still be
> received. This is indicative that the grounded roof example is carried over in the
> example of conducting tube.
>
> I don't argue that electrons are accelerated by an electric field. But it isn't
> impossible that they can be accelerated by a magnetic field, for permanent magnet
> generators would not work unless they could be.
>
> Given that there are always orthogonal counterparts to the electric or a magnetic
> component of the electromagnetic field, then there has to be an electric field
> inside the shield, associated with electrons accelerated by the magnetic
> component of an incident electromagnetic field. But it's a different electric
> field than exists outside, as is demonstrated by the fact that electrons are still
> made to flow in the loop conductor even when we shunt the external electric field.

>
> It seems likely to me that these differing viewpoints explain some of the
> conflicts we have been having in this thread.
>
> Cortland
>
> atkes@imap1.asu.edu wrote:
>
> > Cortland Richmond (Cortland.Richmond@usa.alcatel.com) wrote:
> > : You have been saying for some time now that one can't separate magnetic and
> > : electric fields anyway. If true, one could never tel what their ratio was to
> > : each other.
> >
> > : Cortland
> >
> > : Tom W8JI wrote:
> >
> > snip
> >
> > Cortland,
> >
> > I wanted to make a few comments and I couldn't quite figure out which
> > message to follow up. I chose yours, but I think that you and Tom both
> > agree that you can, in principle, separately measure the electric and
> > magnetic fields.
> >
> > Generally what is a magnetic induction B and what is an electric field E is
> > determined (and defined for that matter) by the force on an electric
> > charge q, F = q (E + v x B), where E and B are evaluated at the position
> > of the charge. You then in principle measure the fields separately by
> > measuring the part of the force that is independent of velocity, and
> > the part that is dependent on the velocity.
> >
> > Since the charges in copper have a relatively tiny magnetic moment
> > compared to their charge, the force on them is well described by this
> > equation. The average velocity of the charges in a small region of the
> > copper is zero with no field applied. Therefore, if you somehow only
> > applied a magnetic field, no current would flow, since the net force
> > on the charges is zero. As many have been saying here, Maxwell's
> > equations tell you that a changing magnetic field in a finite region
> > gives some electric field in that region too. There just isn't any way
> > around this if you accept Faraday's law, since it says that the average
> > electric field along any closed loop is proportional to the changing
> > magnetic induction averaged over the area through the loop. The only way to
> > have the electric field zero everywhere is to have zero oscillating
> > magnetic induction everywhere.
> >
> > Notice that Faraday's law does not contain any material properties, so
> > this is equally true in copper and in vacuum.
> >

> > In a small loop antenna (or a transformer winding for that matter) the
> > charges are being pushed primarily by that electric field. The fact that
> > it is easier to calculate the electric field component that contributes by
> > using the magnetic field is why this is called magnetic coupling. However
> > the fact remains that it is the electric field that is doing the work.
> > When you think about how the magnetic field is used in calculations, it
> > is obvious that a loop antenna is not really responding to the magnetic
> > field. When the loop response is calculated from the magnetic field, it
> > is the magnetic field through the area surrounded by the loop that
> > is used. There is no copper there and therefore no copper electrons.
> > Instead, this changing magnetic field must be accompanied by an average
> > electric field around the perimeter of the loop. It is this electric
> > field that pushes the electrons around the loop. That is, charges are
> > pushed by the fields at their position. They are not pushed by fields
> > somewhere else. That we can calculate the field that is doing the work
> > by calculating the fields somewhere else does not change this fact.
> >
> > 73 Kevin w9cf

6256. Re: Ventenna Experience?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:00:51 UTC
From: " Dave Davis, Kc6old" <gunnerd@earthlink.net>
Message-ID: <3AC3E900.A657A0A7@earthlink.net>
Source record: 167131

Until it melted it's performance was worse than a 1/4 wave on the
fileing cabinet.

Steve Ziegler wrote:
>
> Does anyone out there have experience with the Ventenna series of antennas?
> Any input would be appreciated before I buy one of them.
> Thanks,
>
> Steve in Minnesota
>
> --

--
Just Remember: Those GREAT kite flying days will be subtracted from your
time in paradise! (And WELL worth it!)

6257. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:03:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC3E97F.C7AC7A5B@eznec.com>
Source record: 167130

To accept it, I have to understand it and figure out how to apply it. Thanks to your help, my understanding is deepening, and with the new "resistance type converter", I can now model resistors more accurately. Several people have been tossing "dissipationless resistance" around like they know exactly what it is. I'm just trying to get you to pass along what you know so I can also use it with such confidence.

I'm still having a little trouble with the Z0 of a lossy cable. The 50 ohm cable with 6 dB/100 foot loss has a characteristic R of 50 ohms. At any given point along the cable, there's loss. But the Z0 doesn't necessarily represent the impedance at any point along the line; it maintains this Z0 regardless of the load impedance or the impedance seen across the cable at any point. So is the whole 50 ohms "dissipationless", is it "dissipative", or some of each? If only some, how much?

The lack of a response to the question of transresistance is getting noticeable, too. Which pigeonhole does that go into?

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > Thanks again, now I'm getting the hang of it. If I measure the
> > resistance of a leaded resistor by connecting a meter to the resistor's
> > leads, it's dissipationless resistance because there's no dissipation at
> > that point, in the wires.
>
> That's correct. The same power cannot be dissipated both in the leads
> going to the resistor and also in the resistor itself. Resistor leads
> have always been considered dissipationless because there is usually
> negligible I^2*R loss in resistor leads. Why is that so hard to accept?
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6258. FS: FORCE 12 C3 TRIBANDER

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:09:08 UTC
From: aidehua@aol.com
Message-ID: <20010329210908.19823.00001376@ng-cb1.aol.com>
Source record: 167132

I HAVE ONE OF THESE IN GOOD SHAPE. WILL SHIP, BUT WOULD PREFER LOCAL PICK-UP
IN LOS ANGELES.

THANKS,

ED NI6S

PLEASE E-MAIL IF INTERESTED

6259. FS: FORCE 12 C3 TRIBANDER (W/PRICE!)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:12:50 UTC
From: aidehua@aol.com
Message-ID: <20010329211250.19870.00001216@ng-cb1.aol.com>
Source record: 167133

I HAVE ONE OF THESE IN GOOD SHAPE. WILL SHIP, BUT WOULD PREFER LOCAL PICK-UP
IN LOS ANGELES. $200/OBO

THANKS,

ED NI6S

PLEASE E-MAIL IF INTERESTED

6260. FS: CUSHCRAFT A3S TRIBANDER

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:13:25 UTC
From: aidehua@aol.com
Message-ID: <20010329211325.19870.00001217@ng-cb1.aol.com>
Source record: 167134

I HAVE ONE OF THESE IN GOOD SHAPE. WILL SHIP, BUT WOULD PREFER LOCAL PICK-UP
IN LOS ANGELES. $150/OBO

THANKS,

ED NI6S

PLEASE E-MAIL IF INTERESTED

6261. 160 receive antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:37:02 UTC
From: richl@cyberdude.com
Message-ID: <3AC3F14E.890E3EEE@cyberdude.com>
Source record: 167136

Group,

I am looking for input for the best SMALL 160m receive antenna.
It will be put up in an open area (read no trees) and the worst ground
electrical and mechanical that I have found,mostly rock and the water
table at 400 + feet. I have about 1 acre to put this up. I tried a
beverage but it didn't work as well as expected.

help

Rich L
KB7YEB

6262. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 02:37:40 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <=e3DOp=yy8+qg5Z1DVnGys9NTJCF@4ax.com>
Source record: 167135

cm13141@aol.com (Cm13141) wrote:

>I am looking to buy a antenna tuner to use with dipoles and other type of wire
>antennas.What is the best bang for the buck tuner that I should check out?I
>have a
>Kenwood TS-930S that i run barefoot.
>Thanks,
>James

That's like asking which mini-van gives the best bang for the buck.

A lot of them do...

I've had good luck with an MFJ 989C. No complaints. Great metering system. Rugged looking components. Whether it's good bang for the buck, who knows?

You really don't have a lot of choices. MFJ makes a bunch of tuners. Ten Tec makes one. Vectronics makes a few. Ameritron makes a couple. Nye-Viking makes one. There's an X-Match tuner that runs over a thousands dollars.

I'd just get an MFJ. When it arrives, take the case off, and make sure there are no cold solder joints. Re-solder them, if necessary. Put it back together... I'd recommend getting one of their kilowatt or plus models, regardless of the power you're running. Your components can never be too rugged.

There's always eBay, but you never know whether those tuners have been hit by lightening or whatever...

Good luck!

Bob
k5qwg

6263. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 03:05:36 UTC
From: n4jzh@knology.net
Message-ID: <3ac3f7d9.796702765@news.knology.net>
Source record: 167138

On Fri, 30 Mar 2001 02:37:40 GMT, Bob Miller <bamiller@texas.net>
wrote:

>cm13141@aol.com (Cm13141) wrote:
>
>>I am looking to buy a antenna tuner to use with dipoles and other type of wire
>>antennas.What is the best bang for the buck tuner that I should check out?I
>>have a
>>Kenwood TS-930S that i run barefoot.
>>Thanks,
>>James
>
>That's like asking which mini-van gives the best bang for the buck.
>
>A lot of them do...
>
>I've had good luck with an MFJ 989C. No complaints. Great metering system.
>Rugged looking components. Whether it's good bang for the buck, who knows?
>
>You really don't have a lot of choices. MFJ makes a bunch of tuners. Ten Tec
>makes one. Vectronics makes a few. Ameritron makes a couple. Nye-Viking makes
>one. There's an X-Match tuner that runs over a thousands dollars.
>
>I'd just get an MFJ. When it arrives, take the case off, and make sure there are
>no cold solder joints. Re-solder them, if necessary. Put it back together... I'd
>recommend getting one of their kilowatt or plus models, regardless of the power
>you're running. Your components can never be too rugged.
>
>There's always eBay, but you never know whether those tuners have been hit by
>lightening or whatever...
>
>Good luck!
>
>Bob
>k5qwg
>

NYE VIKING=No Substitute...

6264. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 03:07:22 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AC3F86A.5B95FA50@dialpoint.net>
Source record: 167137

Should have mentioned the NEW one I got did have a loose screw or two in
it.

>
>
> I'd just get an MFJ. When it arrives, take the case off, and make sure there are
> no cold solder joints. Re-solder them, if necessary. Put it back together... I'd
> recommend getting one of their kilowatt or plus models, regardless of the power
> you're running. Your components can never be too rugged.
>
>

6265. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 03:37:54 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac3fea3.797101346@news.accessunited.com>
Source record: 167139

On Fri, 30 Mar 2001 03:05:36 GMT, n4jzh@knology.net (Donnie) wrote:

> NYE VIKING=No Substitute...

Unless you want wide impedance matching range on 160, 80 or 10 meters.

73 Tom

6266. Re: 160 receive antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 03:45:32 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <wjTw6.163306$p66.47200633@news3.rdc1.on.home.com>
Source record: 167140

Why not a random wire length around the perimeter of the yard ? Simple and
effective enough./ Specially if you have a fence

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
<richl@cyberdude.com> wrote in message
news:3AC3F14E.890E3EEE@cyberdude.com...
> Group,
>
> I am looking for input for the best SMALL 160m receive antenna.
> It will be put up in an open area (read no trees) and the worst ground
> electrical and mechanical that I have found,mostly rock and the water
> table at 400 + feet. I have about 1 acre to put this up. I tried a
> beverage but it didn't work as well as expected.
>
> help
>
> Rich L
> KB7YEB

6267. Re: 160 receive antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 03:56:54 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ac405f2_2@news3.prserv.net>
Source record: 167141

Rich:
An acre is big enough for a Beverage for 10 meters, but a few thousand feet shy for 160. Believe it or not, your best bet for a good receive antenna for 160 is an amplified, shielded loop.

--
Crazy George
<richl@cyberdude.com> wrote in message
news:3AC3F14E.890E3EEE@cyberdude.com...
> Group,
>
> I am looking for input for the best SMALL 160m receive antenna.
> It will be put up in an open area (read no trees) and the worst ground
> electrical and mechanical that I have found,mostly rock and the water
> table at 400 + feet. I have about 1 acre to put this up. I tried a
> beverage but it didn't work as well as expected.
>
> help
>
> Rich L
> KB7YEB

6268. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 04:28:07 UTC
From: kelly@dvol
Message-ID: <3ac409d8.99325254@news2.dvol.com>
Source record: 167142

On Thu, 29 Mar 2001 15:37:36 GMT, "Paul" <pvanasse@mail.direcpc.com>
wrote:

>As I understand it, a transmatch is a two-fold device that variably adjusts
>Inductive Reactance on the transmitter side, and Capacitive Reactance on the
>feedline/antenna side of a station. When the feedline impedance equals that
>of the antenna, the antenna is supposedly purely resistive and it becomes an
>electrical load, which feedline capacitive reactance should be near zero.
>The load (antenna) then distributes 100% of the energy supplied from the
>feedline whereas zero energy can return back to the transmitter (1:1 match)
>because the coax outer shielding and center conductor are phased 180 degrees
>apart, thus canceling any energy emanating from the coax itself further
>insuring the distribution of energy to the load.
>
>Here are my questions:
>
>1. If one were to install a transmatch in feedline system that already has
>an antenna that is purely resistive (1:1 match) what would be the insertion
>loss in dB resulting from the insertion of this device? Ive never really
>thought about it until recently.
>
>2. What is/Is there a linear relationship of insertion loss resulting from
>the transmatch installation in relation to the inductive reactance present
>at the transmitter? i.e.. At what point are you better off having the radio
>fold back somewhat as compared to the insertion loss incurred by the
>installing a of transmatch?
>
>Thanks and 73
>
Probably an impondeable on a theoretical basis. Dial up some JA and
ask him how much your signal droops on his s-meter when you switch in
the Transmatch.
>
w3rv

6269. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 04:47:57 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC40FFD.5583B9B1@IEEE.org>
Source record: 167143

Richard Clark wrote:
> The future argument (once dissipationlessness is accepted) is that
> when the Zsource is reconsidered, there will be some who step forward
> to proclaim, "the R of the generator is dissipationless."

Actually, I've often wondered - why wouldn't a power source be a
negative resistance?
--
http://www.mindspring.com/~w6rca

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6270. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:00:32 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac417a3$0$15025$cc9e4d1f@news.dial.pipex.com>
Source record: 167145

"Dave Cook" wrote ...
> I built a 1/2 size G5RV - the ARRL handbook said you could cut the
> dimensions in half to work 40 - 10. The dipole dimensions were too short,
so
> I had to lengthen them to get resonance on 40 mtrs. It works fine on 40,
20,
> and 10, and I even get a 3:1 swr on 30 and 12 meters. But 30 (who cares?)
> and 15 mtrs are way off the SWR meter. Is the G5RV really an "all-band"
> antenna? Any suggestions on where I might be going wrong? The final
> dimensions for this one are about 55' for the dipole, 15' for the feeder,
a
> coax choke at the feedpoint, and about 50' of coax feed.
>
> Thanks for any advice,

For what it's worth this is how mine measures up:

G5RV/2 Frequency -v- Efficiency
1.75 MHz__82.58% Bad reading STRONG QRM, most likely much less than 10%
3.50 MHz__16.55%
7.00 MHz__52.59%
10.00 MHz__17.01%
14.00 MHz__83.69%
18.00 MHz__43.72%
21.00 MHz__14.94%
24.00 MHz__2.46%
28.00 MHz__26.52%
29.00 MHz__22.60%

--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6271. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:03:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC413B8.9C126C28@IEEE.org>
Source record: 167144

Roy Lewallen wrote:
> I'm still having a little trouble with the Z0 of a lossy cable. The 50
> ohm cable with 6 dB/100 foot loss has a characteristic R of 50 ohms. At
> any given point along the cable, there's loss. But the Z0 doesn't
> necessarily represent the impedance at any point along the line; it
> maintains this Z0 regardless of the load impedance or the impedance seen
> across the cable at any point. So is the whole 50 ohms
> "dissipationless", is it "dissipative", or some of each? If only some,
> how much?

The ratio of the forward voltage to the forward current is fixed at Z0
which is lossless because L is lossless and C is lossless and L/C is Z0.
Any actual losses are due to I^2*R losses and dielectric losses which have
absolutely nothing to do with Z0. Z0 is the same for RG-174 and LMR1700
but the actual losses are quite different.

With a 50 ohm coax transmission line and a 50 ohm load, the 50 ohms
measured at the transmitter end is dissipationless because all the
power is dissipated in the load at the other end. The same power cannot
be dissipated at two different ends of a transmission line so one end
has to be dissipationless.

> The lack of a response to the question of transresistance is getting
> noticeable, too. Which pigeonhole does that go into?

I don't know what transresistance is.
--
http://www.mindspring.com/~w6rca

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6272. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:11:27 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4157F.F66C63CC@IEEE.org>
Source record: 167146

Tom W8JI wrote:
> When the meter null is not set for the line Zo, SWR and forward power
> vary all along the line.

The assumption is that the SWR meter is being used in a transmission
line which has the Z0 for which the SWR meter was calibrated. If that
assumption is not true, then the SWR meter reading is perfectly predictable
but invalid on the meter face.
--
http://www.mindspring.com/~w6rca

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6273. Re: antenna tuner,best bang for the buck?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:12:53 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC415D5.DAC277F2@IEEE.org>
Source record: 167148

Ralph Mowery wrote:
> Should have mentioned the NEW one I got did have a loose screw or two in
> it.

Sounds like my ex-wife.
--
http://www.mindspring.com/~w6rca

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6274. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:24:09 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E982A6.7F2A%stewartx@sccoast.net>
Source record: 167147
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:

> Oh, OK, you got me. I'm just trying to
> piss you guys off. But, wait, what if
> you are attacked by a fairly large mob
> armed to the teeth and there's no way in
> hell you stand a chance with a six-gun.
> Can you at least use a flame-thrower on
> the punks? What about Mustard Gas?

Okay, in that case you can use thermonuclear device. However, you'll have to limit it's yield, say perhaps to a small tactical device capable of taking out a smaller town instead of the whole city. :-)

> Although, some would say this becomes
> borderline genocide. Like shooting fish
> in the barrell. Like working DX in nets.

Well, that might be true. Of course, it depends on what you're shooting at. My brother-in-law uses an assualt rifle to keep the bears and coyote (wolves, or whatever they are) away from his farm animals in Wyoming. Of course, it is also effective for smaller animals also - he can't hit them, but the sound, and dirt flying up from nearby hits, is enough to scare the holy heck out of them.

> Holy crap, which part of the country do
> you live in? East LA?

Not at the moment (my mother-in-law lives there, though). No, its fairly peaceful where I'm at now, so I mainly use my guns for target practice at the moment. However, when I move (yes, I've been saying that for a year), I intend to move a little further in the woods, and would appreciate having a good weapon around (just for my own peace of mind).

> Dwight, please read the last part of my
> previous post and then see how much of
> an anti-gun, anti-police and anti-whatever
> advocate I am.

Sorry, I didn't mean to insult you by suggesting you were an anti-gun advocate. That was just the impression I had from reading your message. Besides, that last part was really meant to provoke others into commenting, not necessarily just to get a response from you.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

6275. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:29:30 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E983EA.7F2B%stewartx@sccoast.net>
Source record: 167149
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:

> Do you guys read the damn thing to the
> end before you hit the Reply button, or
> what? Both you and Dwight called me an
> "anti-gun" advocate even though I clearly
> stated in my previous message that "I do
> support a right to bear a handgun or two".

Sorry, again, Zoran. But, your message did seem to challenge the
ownership of private firearms, even if that wasn't your intent.

> This means either that you and your
> militia are already polishing a silver
> bullet with my name on it, or you are
> out of arguments.

Bullet? The heck with that. Just remember that you were the one who
brought up the use of a nuclear weapon. :-)

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

6276. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:39:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC41C28.F8B46C01@IEEE.org>
Source record: 167152

Gary Peach wrote:
> For what it's worth this is how mine measures up:
> 3.50 MHz__16.55%

The G5RV has about a 5:1 SWR on 80m. Where, exactly, are the
7.8dB losses?
--
http://www.mindspring.com/~w6rca

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6277. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:42:04 UTC
From: Dwight Stewart <stewartx@sccoast.net>
Message-ID: <B6E986DC.7F2C%stewartx@sccoast.net>
Source record: 167150
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6DKN wrote:

> Yes, we have a big problem these days
> in the schools - and in society in
> general - but it is not, and has
> never been, a gun problem. It's a people
> problem, and as long as nobody in power
> has the "brass" to address it for
> what it is, it will only get worse...

Absolutely well written, W6DKN. The problem is not guns, or the cars used for joy riding, or the street corners used to sell drugs, or anything else beyond the people involved. Until attitudes change, and we end this seemingly endless tolerance to everything subversive to civilized society, the problems are simply not going to stop.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net

6278. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 05:48:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC41E46.9A5B64E2@eznec.com>
Source record: 167151

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > I'm still having a little trouble with the Z0 of a lossy cable. The 50
> > ohm cable with 6 dB/100 foot loss has a characteristic R of 50 ohms. At
> > any given point along the cable, there's loss. But the Z0 doesn't
> > necessarily represent the impedance at any point along the line; it
> > maintains this Z0 regardless of the load impedance or the impedance seen
> > across the cable at any point. So is the whole 50 ohms
> > "dissipationless", is it "dissipative", or some of each? If only some,
> > how much?
>
> The ratio of the forward voltage to the forward current is fixed at Z0
> which is lossless because L is lossless and C is lossless and L/C is Z0.
> Any actual losses are due to I^2*R losses and dielectric losses which have
> absolutely nothing to do with Z0. Z0 is the same for RG-174 and LMR1700
> but the actual losses are quite different.

Z0 is the square root of L/C only for a lossless line. More generally, it's sqrt((R+jwL)/(G+jwC)). In a line with loss, either R or G or both are non-zero, resulting in a complex characteristic impedance. When the impedance is complex, the real part isn't simply sqrt(L/C), as you can see from a bit of manipulation of the more general equation. So your assumptions aren't valid for a lossy cable. Nonetheless, are you saying that the real part of any line's characteristic impedance is "dissipationless"?

> With a 50 ohm coax transmission line and a 50 ohm load, the 50 ohms
> measured at the transmitter end is dissipationless because all the
> power is dissipated in the load at the other end. The same power cannot
> be dissipated at two different ends of a transmission line so one end
> has to be dissipationless.

When a cable has loss, not all the power is dissipated in the load. Some is dissipated in the cable.

> > The lack of a response to the question of transresistance is getting
> > noticeable, too. Which pigeonhole does that go into?
>
> I don't know what transresistance is.

It's the voltage at the output of an amplifier divided by the current at the input.

Roy Lewallen, W7EL

6279. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 06:45:18 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3AC42A8B.B555A072@earthlink.net>
Source record: 167153

The experiment was meant to learn if the electric field got inside a conductor, especially a tube. You can do a lot to get rid of a signal, sure. But that would not tell me if an electric field was detectible inside a shield.

Cortland

Roy Lewallen wrote:

> You could reproduce the results of your experiment by using a capacitor
> instead of an aluminum shield. Place a capacitor with reactance of, say,

6280. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 07:10:26 UTC
From: KB9WFK <KB9WFK@mindspring.com>
Message-ID: <9a3vphuql1@slb1.atl.mindspring.net>
Source record: 166981

D.C. has NO law banning handguns. It is not possible to get a concealed carry license but this does not pertain to private property.
Concealed Carry : There is no permit system to acquire a permit to carry a hidden handgun.
Purchase Limitations : Washington, DC has no purchase limitations.
Licensing : All firearms must be registered with District law enforcement.
Possession By Minors : Must be over 21 to obtain permit. However, an 18-21 year old may apply with parental consent.
Gun Storage : There is no Child Access Prevention (CAP) or safe storage laws in the District.
Waiting Period : The Chief has 60 days to approve or deny an application for a registration certificate

--

"Keith Wood" <kw@bctv.com> wrote in message
news:3AC5593D.1950E24@bctv.com...
>
>
> "David G. Nagel" wrote:
> >
> > Steve Robeson LPN wrote:
>
>
> > > > >Mr. Rowan used unregistered .22 pistol.
> > > >
> > > > A registered one wouldn't have hurt as much?
> > >
> > > The gun Mr. Rowan used was given to him by his FBI Special Agent son....
>
> . . .which is a violation of several FEDERAL laws, plus the DC law
> banning handguns.

6281. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 07:27:01 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9a1cg5iov0@208.207.71.157>
Source record: 167154
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
>
> Dick Carroll wrote:
>
> > Zoran Brlecic wrote:
> > > I am simply asking for consistency: a thermonuclear device falls into
> > > the same category of "firearms" as a six-gun. They are both devices used for one
> > > purpose only: to kill people. Everything else is a smokescreen.
> >
> > You are just as wrong as you can possibly be, as most anti gun people
> > consistantly are.
>
> Do you guys read the damn thing to the end before you hit the Reply button, or what?
> Both you and Dwight called me an "anti-gun" advocate even though I clearly stated in
> my previous message that "I do support a right to bear a handgun or two".

Well Zoran, apologies are in order if you really are a valid supporter,
but you surely understand that the anti gunners, like hte anti coders,
talk out of both sides of their mouths.

>
> > I have absolutely no intention of killing anyone with
> > a gun, but I also have no intention of allowing you to confiscate them.
>
> Fine, I have absolutely no intention of killing anyone with a TND, but I also have no
> intention of allowing you to confiscate it. Let's assume I have one, for the sake of
> the argument.
>
> > I DO have an intent to use them - the mere existance and presence - to
> > deflect those who would cause bodily harm to me and my family. Almost
> > always, the mere sight a weapomn of defense is more than enough to put
> > the coward to flight. Should the assailant be in an unusual state of
> > mind, such as drugged or insane, and insist on forcing me to use a
> > firearm to stop him, of course that would be the natural progression of
> > things.
>
> The problem arises when a monkey wrench is thrown into the "natural progression of
> things", like all those high schools shootings in the last few years.

Univarsal was the fact that the perps telegraphed their intentions and
no one turned them in. The kids gotta take it to the school officials
when they talk that way.

>
> It is mind boggling how quickly a reasonably normal discussion turns into name
> calling. This means either that you and your militia are already polishing a silver
> bullet with my name on it, or you are out of arguments.

This subject has been pretty well chewed over here before and you just
landed on the wrong side of it, from what was *most* evident in your
post.

6282. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 07:30:52 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9a1cnc$j7g$0@208.207.71.157>
Source record: 167155
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
>
> Dick Carroll wrote:
>
> >
> > > I'm not sure I follow you... What might those "ARRL's singular interests" be
> >
> > First and formost, selfpreserveation, on a the BOD level.
>
> Fair enough, as the third law of thermodynamics states that every bureaucracy tends to
> expand exponentially almost at the rate of Starbucks.
>
> > Consider the
> > January vote on whether or not to support code testing at the next ITU
> > meeting.
> > The vote to drop code testing was by a voice vote, with no identity of
> > who voted how. There was a lone effort by a BOD
>
> Hmmm, BOD, BOD... Nope, please remind me what BOD stands for.
>
> > Member to poll the BOD
> > for each member's vote, which was quickly voted down. None of those
> > voting against keeping code testing wanted his vote made public, and
> > without a individual poll of the vote it will not be, officially at
> > least. Since the BOD members are elected as individuals, the entire BOD
> > can't be held accountable for such a vote since they can't be elected
> > nor unseated en masse.
> > Just a bit of defense against the will of a large bloc of ARRL
> > members' wishes. Selfpreservation at it's finest.
>
> Maybe so, but I still consider these issues non-crucial in the rapidly changing rules of
> the technology game today.
>
> > and what
> > > do you propose as an alternative to the *only* national amateur radio organization?
> > > Cutting off one's own nose to spite the face is usually not a smart choice.
> >
> > Oh, no, alternatives haven't proved viable to date. Just understand that
> > the enemy is not always outside looking in.
>
> So, there are no alternatives, is that what you're saying?
>
> > > Look, clearly it is in every US ham's interest to retain as much spectrum as possible

> > > for as long as possible.
> >
> > Not at all. We use little of our UHF/SHF allocations, and it might very
> > well be in our best interests to "trade" some of that unused real estate
> > for some we could make better use of, maybe on HF or VHF.
>
> How the hell you gonna trade it if and when you lose it? Your statement is paradoxical:
on
> one hand you're saying that it is not in our interest to retain as much spectrum as
> possible, and on the other that we need to trade it. Even so, I got your point and I
happen
> to agree with it - I would gladly give up MHz's of UHF/SHF allocations for expanded HF
> bands, but the only problem is that people who are willing to pay gold for UHF have
nothing
> to offer in return - they don't own any HF and they don't care for it, unless one day 80
> meters becomes the best bet for cellphone use.

The trade would be by/with the FCC, not other users. The Amateur Radio
Spectrum Protection bill that has been kicking around in congress for a
few years says something to that effect, not that it will ever actually
become law.

6283. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 08:17:25 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC44176.D75461F9@earthlink.net>
Source record: 167156
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:

> > Do you guys read the damn thing to the end before you hit the Reply button, or what?
> > Both you and Dwight called me an "anti-gun" advocate even though I clearly stated in
> > my previous message that "I do support a right to bear a handgun or two".
>
> Well Zoran, apologies are in order if you really are a valid supporter,
> but you surely understand that the anti gunners, like hte anti coders,
> talk out of both sides of their mouths.

No one's taking your guns away, Dick. If we lived in a perfect world where everybody's happy and friendly and lovey-dovey, there would be no need for firearms, but sadly this will never be. Until then, it will take a majority of Americans to amend the Second Amendment, and it's not happening in our lifetime.

Anyway, 73 to you and Dwight and everyone else taking part in this gun-free exchange. I'm QRT.

..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6284. Re: Heck with ARRL

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 08:44:01 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC447B0.21260C53@earthlink.net>
Source record: 167157
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Dick Carroll wrote:

> > How the hell you gonna trade it if and when you lose it? Your statement is paradoxical: on
> > one hand you're saying that it is not in our interest to retain as much spectrum as
> > possible, and on the other that we need to trade it. Even so, I got your point and I happen
> > to agree with it - I would gladly give up MHz's of UHF/SHF allocations for expanded HF
> > bands, but the only problem is that people who are willing to pay gold for UHF have nothing
> > to offer in return - they don't own any HF and they don't care for it, unless one day 80
> > meters becomes the best bet for cellphone use.
>
> The trade would be by/with the FCC, not other users. The Amateur Radio
> Spectrum Protection bill that has been kicking around in congress for a
> few years says something to that effect, not that it will ever actually
> become law.

The FCC does not own any spectrum, but they are more or less a combination of the Wall Street and
Judge Judy when it comes to spectrum assignment. The Wall Street part of them would like to auction off every Hz to the highest bidder, and the Judge Judy in them would like to make everybody happy while collecting a large salary. Since this is irreconcilable, we have a problem,
and that problem is an increased pressure on our bands. Now, the real owner of the bands is actually everyone and no one, which means that regular Joe Sixpacks eventually may get to determine the fate of amateur radio (indirectly, of course - whoever heard of Joe Sixpacks running the country; that's what we have politicians for). As a matter of fact, "our" bands are
not at all ours, since we have already stated that everyone owns the spectrum, and the ham-radio
population happens to be a very small percentage of the US (and world) population, which means
that Joe Sixpacks don't give a rat's behind about us and our perceived needs. Therefore, if there
is no strong, organized and unified effort of the entire ham-radio population, the spectrum will
start to disappear no matter how many no-code licenses are given out and no matter how many VHF
radios are sold. By far the best vehicle for such an effort is always a national ham-radio organization, which in the US happens to be the ARRL. That is why it is my belief that every US
radio-amateur should support the ARRL in one way or another, even if he/she differs

philosophically with it in some or most other issues.
I haven't even begun to address the problem of the international scope: the HF spectrum demands
of the developing countries. The WARC and ITU will not so much as glance at petitions coming from
any sources other than recognized national ham-radio organizations. The FCC can only go so far
within the limits of the international agreements, so the real battleground is actually outside
of the US soil.

And now I rest my case.

73 ..... Zoran

--
Support freedom of speech, or I'll kill you!

6285. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 08:51:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC448FE.BACE2622@eznec.com>
Source record: 167158

It would tell you whether the receiver went dead because the field
didn't get inside the tube, or because the shield is simply acting as
one branch of a simple capacitive voltage divider.

Roy Lewallen, W7EL

Cortland Richmond wrote:
>
> The experiment was meant to learn if the electric field got inside a conductor,
> especially a tube. You can do a lot to get rid of a signal, sure. But that would not
> tell me if an electric field was detectible inside a shield.
>
> Cortland
>
> Roy Lewallen wrote:
>
> > You could reproduce the results of your experiment by using a capacitor
> > instead of an aluminum shield. Place a capacitor with reactance of, say,

6286. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 10:11:26 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9a1m48ott1@slb1.atl.mindspring.net>
Source record: 167159

Roy et al:

I believe that everyone here on the thread now agrees...

The Antenna Book article and statement are misleading!

As to Wattmeters, SWR meters, Forward, Incident, Reflected, Transmitted and Delivered Power and such...

Waves are completely arbitrary!

As they say, beauty is in the eye of the beholder, and the reality of waves is just a function of your viewpoint (aka bridge reference impedance).

Everyone seems to agree that it's clear that you can get any answers you want among these "wave units" just by varying the basis of your metrology... it all depends upon the reference impedance (Zo) used as the normalizing basis for measuring the "waves".

I once asked on our newsgroup if any manufacturer makes directional couplers (and/or directional wattmeters) with a variable reference impedance. No one answered my query.

We should recall that a directional coupler is nothing more nor less than an elementary bridge circuit, the unknown impedance is simply compared to a known (reference) impedance connected to the "bridge" arms by measuring the difference (voltage or current) across another bridge arm. If the unknown impedance equals the reference impedance, then the bridge is balanced and the reflected wave is zero! Nothing mysterious there. Change the known impedance and the difference reading changes! Everything on the line is the same. You can make the meter read whatever you want!

The so-called "reflected wave" is nothing more nor less than an artifice created in the bridge by the comparison to the reference impedance. Change the meter's reference impedance and you change the measured wave! It's completely arbitrary. As they say at Burger King, you can have it your way!

As near as I can tell, ALL of ham related directional couplers/wattmeters that you can buy from Ham Radio jobbers use 50 Ohms resistive as the reference impedance. So my point is moot. Most hams BELIEVE that all wave mechanics is measured against 50 Ohms. They simply have no choice, the meter manufacturers give them no equipment to do otherwise.

In principle one could build or manufacture directional wattmeters with any arbitrary reference impedance. I would like to be able to buy one with a programmable reference impedance. It's just that the transmission line work done by hams is very simple compared to the general case since it is assumed that all ham transmission lines of interest have exactly 50 Ohms resistive

surge impedance. What?

In my professional work we had, and still have, reason to construct directional couplers that use (extremely) complex high order reference impedances. Why? Because the impedance of our transmission lines varies all over the map, by as much as several orders of magnitude within our band of interest! It's a very wide band.

The surge impedance on our wideband transmission lines in the lower part of the band is several thousand ohms and highly capacitive, and in another part of the band the surge impedance is less than 100 Ohms and very lossy. And the surge impedance varies all over the map in between the band ends. Crazy but true!

Attempting to "separate" the incident and reflected waves on those lines is a problem that opens your eyes to the reality of forward and reflected waves and the over-simplicity of much of the associated metrology!

But we do it every day on millions of lines. There are probably about 150 million such lines and transmitter receivers in use daily. And forward and reflected "waves" are being separated on those lines daily by directional couplers using extremely high complexity reference impedances. Certainly not 50 Ohms!

Even in my ham work, I don't know the characteristic impedance of my "home made" transmission lines, don't know and don't care. They are lossless lines for all practical purposes, but have characteristic or surge impedances far.. far... away from 50 Ohm's resistive. The only reason I use a 50 Ohm resitive reference directional wattmeter, is because the manufacturer of my transmitters designed the PA's to "like" 50 Ohms. Has nothing whatsoever to do with my antennas and transmission lines...

My ham radio directional wattmeter is just a 50 Ohm bridge that I use to assist me to adjust my arbitrary unknown impedance so that my transmitter PA's are "happy".

Who knows or cares about the direction of those "arbitrary" waves on my lines.

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC3A7E9.22E0316F@eznec.com...
> Steve is correct that on the 450 ohm line terminated with 50 ohms, the
> forward power is 277.78 watts, not 500 as I had stated. (The reverse
> power is 177.78, not 400.) I neglected to take a square root when I
> should have. Thanks to Steve for pointing out the error.
>
> I also agree with the facts in the remainder of Steve's posting. We seem
> to have a different interpretation about the meaning of a "fixed
> relationship", however. But I still retain my opinion that the Antenna
> Book article is misleading at best. A determination of its factuality
> shouldn't have to depend on a discussion of forward and reverse power,

> reflection coefficients, line lengths, and impedance matches.
>
> Roy Lewallen, W7EL
>
> VE9SRB wrote:
> >
> > Hi Roy:
> >
> > Just my 2 cents worth again.
> >
> > There is a fixed relationship between forward power and delivered power.
> > There is also a fixed relationship between the forward power and the
antenna
> > current. These fixed relationships are established by the reflection
> > coefficient of the antenna. The forward power is a lossless
transmission
> > line is always related to the delivered power as follows:
> >
> > PFWD = PDEL / (1 - |rho|^2)
> >
> > In the example you describe above with the 450 ohm line: If the
delivered
> > power is 100 W, the forward power is 277.78 W. If 100 Watts of power is
> > delivered to a 50 ohm antenna through a 450 ohm line, the forward power
will
> > always be 277.78 W regardless of the line length. If there is no tuner
> > internal to the transmitter, the transmitter will have to be manually
> > adjusted to maintain this 100 W of delivered power as the line length
> > changes.
> >
> > To maintain a constant delivered power to an antenna with changing
> > impedance, there must be an external compensation or power adjustment.
This
> > compensation can be implemented with a tuner through establishing an
> > impedance match at the tuner input. If no tuner exists in the system,
then
> > the output levels of the transmitter must be adjusted.
> >
> > Steve
> > VE9SRB

6287. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 10:22:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9a1moirrs1@nntp9.atl.mindspring.net>
Source record: 167160

Roy:

Yes transresitance, and transconductance for that matter, seems to have the folks at the "Church of Dissipationless Resistance" mystified.

Then there is that other resistance. You know... The ratio of the voltage across the power entrance panel at the Brackett home divided by the current flowing into the power entrance panel of the Lewallen home. Now that particular ratio has units of Ohms and is then certainly a resistance.

I wonder if it can be classed as dissipationless?

Now that the members of the "Church of Dissipationless Resistance" seem to have "legitimized" dissipationless resistance, I wonder if we can sell it to those poor folks out there in California, so that they can heat and light their homes using the wonderful dissipationless effect.

Dissipationless Resistance should be proposed to Gray Davis and the California legislature as the "cure" for the Golden State's power shortage problems.

Dissipationless Resistance indeed!

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC3E97F.C7AC7A5B@eznec.com...
> To accept it, I have to understand it and figure out how to apply it.
> Thanks to your help, my understanding is deepening, and with the new
> "resistance type converter", I can now model resistors more accurately.
> Several people have been tossing "dissipationless resistance" around
> like they know exactly what it is. I'm just trying to get you to pass
> along what you know so I can also use it with such confidence.
>
> I'm still having a little trouble with the Z0 of a lossy cable. The 50
> ohm cable with 6 dB/100 foot loss has a characteristic R of 50 ohms. At
> any given point along the cable, there's loss. But the Z0 doesn't
> necessarily represent the impedance at any point along the line; it
> maintains this Z0 regardless of the load impedance or the impedance seen
> across the cable at any point. So is the whole 50 ohms
> "dissipationless", is it "dissipative", or some of each? If only some,
> how much?
>
> The lack of a response to the question of transresistance is getting
> noticeable, too. Which pigeonhole does that go into?
>
> Roy Lewallen, W7EL

>
> W6RCecilA wrote:
> >
> > Roy Lewallen wrote:
> > > Thanks again, now I'm getting the hang of it. If I measure the
> > > resistance of a leaded resistor by connecting a meter to the
resistor's
> > > leads, it's dissipationless resistance because there's no dissipation
at
> > > that point, in the wires.
> >
> > That's correct. The same power cannot be dissipated both in the leads
> > going to the resistor and also in the resistor itself. Resistor leads
> > have always been considered dissipationless because there is usually
> > negligible I^2*R loss in resistor leads. Why is that so hard to accept?
> > --
> > http://www.mindspring.com/~w6rca
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6288. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 10:52:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC46574.E2BE973D@eznec.com>
Source record: 167161

I don't agree that waves are arbitrary. If you apply a signal to a transmission line of a known impedance and velocity factor and terminate it with a known impedance, you can say with certainty what the value (both voltage and current) of forward and reflected waves are on the line, how they interfere with each other, what the SWR (i.e., ratio of maximum to minimum voltage along the line) is, what the impedance is looking into any point along the line, what the voltage and current -- both magnitude and phase -- are at any point along the line, how much power is flowing in the line, and, if you like, you can separate the power into "forward" and "reverse" components with known values. The values of these quantities do not vary with measurement method, but are determined solely by the characteristic impedance and velocity factor of the line (or more concisely by its complex propagation constant), the load impedance, and the applied voltage, current, or power. You can find the simple equations to do this in numerous references. My favorite is Reference Data For Radio Engineers.

What happens, though, is that some people, particularly amateurs, do careless measurements or misinterpret the measurements they're making. For example, a person connects a transmitter to a 75 ohm line through a 50 ohm SWR meter and mistakenly thinks that the meter reading is the SWR on the line. It isn't. Likewise a directional power meter. Certainly, you can reach all sorts of bizarre and incorrect conclusions by claiming that you're measuring something that you're not. But waves are real, well defined, and readily calculable, and don't depend at all on how they're measured.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy et al:
>
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> known (reference) impedance connected to the "bridge" arms by measuring the
> difference (voltage or current) across another bridge arm. If the unknown
> impedance equals the reference impedance, then the bridge is balanced and
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> impedance and the difference reading changes! Everything on the line is the
> same. You can make the meter read whatever you want!
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> mechanics is measured against 50 Ohms. They simply have no choice, the
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> arbitrary reference impedance. I would like to be able to buy one with a
> programmable reference impedance. It's just that the transmission line work
> done by hams is very simple compared to the general case since it is assumed
> that all ham transmission lines of interest have exactly 50 Ohms resistive
> surge impedance. What?
>
> In my professional work we had, and still have, reason to construct
> directional couplers that use (extremely) complex high order reference
> impedances. Why? Because the impedance of our transmission lines varies
> all over the map, by as much as several orders of magnitude within our band
> of interest! It's a very wide band.
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> waves and the over-simplicity of much of the associated metrology!
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> not 50 Ohms!
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> impedances far.. far... away from 50 Ohm's resistive. The only reason I use
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> assist me to adjust my arbitrary unknown impedance so that my transmitter
> PA's are "happy".
>
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> lines.
>
> -Peter K1PO
>
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> news:3AC3A7E9.22E0316F@eznec.com...
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> > relationship", however. But I still retain my opinion that the Antenna
> > Book article is misleading at best. A determination of its factuality
> > shouldn't have to depend on a discussion of forward and reverse power,
> > reflection coefficients, line lengths, and impedance matches.
> >
> > Roy Lewallen, W7EL
> >
> > VE9SRB wrote:
> > >
> > > Hi Roy:
> > >
> > > Just my 2 cents worth again.
> > >
> > > There is a fixed relationship between forward power and delivered power.
> > > There is also a fixed relationship between the forward power and the
> antenna

> > > current. These fixed relationships are established by the reflection
> > > coefficient of the antenna. The forward power is a lossless
> transmission
> > > line is always related to the delivered power as follows:
> > >
> > > PFWD = PDEL / (1 - |rho|^2)
> > >
> > > In the example you describe above with the 450 ohm line: If the
> delivered
> > > power is 100 W, the forward power is 277.78 W. If 100 Watts of power is
> > > delivered to a 50 ohm antenna through a 450 ohm line, the forward power
> will
> > > always be 277.78 W regardless of the line length. If there is no tuner
> > > internal to the transmitter, the transmitter will have to be manually
> > > adjusted to maintain this 100 W of delivered power as the line length
> > > changes.
> > >
> > > To maintain a constant delivered power to an antenna with changing
> > > impedance, there must be an external compensation or power adjustment.
> This
> > > compensation can be implemented with a tuner through establishing an
> > > impedance match at the tuner input. If no tuner exists in the system,
> then
> > > the output levels of the transmitter must be adjusted.
> > >
> > > Steve
> > > VE9SRB

6289. Re: Moble HF

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 11:13:29 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AC46A59.4887@wt.net>
Source record: 167167

Rudy Marcelletti wrote:
>
> What do you have to do to change bands on these setups? How many bands do
> you get out of a coil? What kind of "plugs" are you putting in the ends and
> what kind of "sticks" do you mount them on?

I turn helical wound "hamsticks" etc into "plastic bugcatchers". On my
all band version, the coil is only used for 80/40 meters. There is one
tap for 40m. Small changes can be had by adjusting the stinger. The
stick in this case is an old firestick cb antenna I got free. It's 5 ft
tall and the coil is halfway up it. For 80/40m ,I use about a 4 ft
stinger on top of that. About 9 ft total. 20-10m are tuned by bypassing
the coil with a jumper and using a different stinger for each band. This
antenna properly works all bands 80-10 including warc.
But you have to get out and change it. But takes me 2 min. My usual
practice is 40m in the day. When traveling I'll hit a gas station on the
interstate when it gets dark, and change over to 80m while the car is
filling up. I think I'm going to try 160m mobile next winter. Little
late this winter for the noise, and I need to get a small solid state
amp to run. Also will have to scheme up a new antenna or coil add on for
that band.
I would have done it by now, except my old radio didn't have 160m, so I
never got to try it. My new one does, so I will have to check it out.
I'm a glutton for punishment. 160 mobile will be a real challenge. But
it does work. I've talked to many of them. Most all run a bit of juice
though. 500w would be just dandy. MK
--
http://web.wt.net/~nm5k

6290. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 11:38:22 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac46e85.825747046@news.accessunited.com>
Source record: 167163

On Fri, 30 Mar 2001 00:51:10 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>It would tell you whether the receiver went dead because the field
>didn't get inside the tube, or because the shield is simply acting as
>one branch of a simple capacitive voltage divider.
>
>Roy Lewallen, W7EL

We also don't know how *much* each field changed.

I asked if the signal on the loopstick also decreased a large amount.
I'll wager it did.

Wth that in mind, what is the relative sensitivity? Does the radio
disconnect the loopstick when using the rod, and vice versa? Virtually
all don't. If so, how do you know what the response is.

73 Tom

6291. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 11:40:13 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac46fac.826042324@news.accessunited.com>
Source record: 167162

On Thu, 29 Mar 2001 23:11:27 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Tom W8JI wrote:
>> When the meter null is not set for the line Zo, SWR and forward power
>> vary all along the line.
>
>The assumption is that the SWR meter is being used in a transmission
>line which has the Z0 for which the SWR meter was calibrated. If that
>assumption is not true, then the SWR meter reading is perfectly predictable
>but invalid on the meter face.

Who assumed that? There was no assumption, the settings were stated.

73 Tom

6292. magnetic loop ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 11:45:52 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <9a1rom$sk8$1@bob.news.rcn.net>
Source record: 167164

is it possible to build/or is there such a device as a 80-10 mtr magnetic
loop ant?

6293. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 11:52:26 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac4704b.826201848@news.accessunited.com>
Source record: 167165

On Fri, 30 Mar 2001 02:52:36 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>What happens, though, is that some people, particularly amateurs, do
>careless measurements or misinterpret the measurements they're making.
>For example, a person connects a transmitter to a 75 ohm line through a
>50 ohm SWR meter and mistakenly thinks that the meter reading is the SWR
>on the line. It isn't. Likewise a directional power meter. Certainly,
>you can reach all sorts of bizarre and incorrect conclusions by claiming
>that you're measuring something that you're not. But waves are real,
>well defined, and readily calculable, and don't depend at all on how
>they're measured.
>

The point I was going to make is the meter does not really measure SWR
or forward and reflected power. It is calibrated to read those things,
but it really looks at one slice of the line and "has no idea" what is
happening with standing waves.

Now if you moved a detector along the line, you could see the standing
waves. It would not have to be calibrated to the line, it would only
have to indicate the ratios of the parameter it reads (voltage or
current) accurately.

Traditional meters are circuit systems, not transmission line systems
where waves stand. They are set to null on a certain ratio of in-phase
voltage and current. They can very easily give the wrong answer if
they are not used in a line that is the same Zo they were calibrated
to be used in.

Predicting what the meter will read is dangerous, unless you know what
the meter actually measures. It doesn't mean there are no standing
waves, just because someone is giving the meter credit for doing
something it can not do Peter.

73 Tom

6294. dipole vs magnetic loop ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 11:53:05 UTC
From: marvin rosen <n3bqa@starpower.net>
Message-ID: <9a1s67$102$1@bob.news.rcn.net>
Source record: 167166

which would be more efficient on one frequency at a height of 60 ft: a full size dipole or a magnetic loop ant for 20 mtrs?

6295. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:08:27 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac472ff.826893892@news.accessunited.com>
Source record: 167069

On Thu, 29 Mar 2001 15:37:36 GMT, "Paul" <pvanasse@mail.direcpc.com>
wrote:

>As I understand it, a transmatch is a two-fold device that variably adjusts
>Inductive Reactance on the transmitter side, and Capacitive Reactance on the
>feedline/antenna side of a station.

No, not at all. A tuner can work three ways:

It can cancel either the parallel or series reactance, and leave the
real part of the impedance.

It can act like a resonant transformer.

It can act like a transmission line of variable Zo and electrical
length.

>When the feedline impedance equals that
>of the antenna, the antenna is supposedly purely resistive and it becomes an
>electrical load, which feedline capacitive reactance should be near zero.

Purely resistive means the reactance is zero, both inductive and
capacitive.

>1. If one were to install a transmatch in feedline system that already has
>an antenna that is purely resistive (1:1 match) what would be the insertion
>loss in dB resulting from the insertion of this device? Ive never really
>thought about it until recently.

Depends on the tuner and how you adjust it, as well as the load
impedance. Most tuners are pretty efficient, because virtually all of
the loss is concentrated in the inductor. Even a small amount of loss
really shows up at high power, because even a few percent loss exceeds
the dissipation limit of most components.

>2. What is/Is there a linear relationship of insertion loss resulting from
>the transmatch installation in relation to the inductive reactance present
>at the transmitter? i.e.. At what point are you better off having the radio
>fold back somewhat as compared to the insertion loss incurred by the
>installing a of transmatch?

First, your perception of how the tuner works is incorrect. Any answer
would either be very very long, or might confuse you.

You might get a copy of the book "Reflections" by Walt Maxwell and
read it.

To answer your question simply, the best condition for the tuner is adjusted for a 1:1 SWR at the radio. This assumes your radio was designed correctly.

The proper way to adjust a "T" network tuner is for the lowest SWR while having one or both capacitors at the maximum possible capacitance that allows a match. Efficiency in the tuner gets gradually and slightly worse as you open the capacitors more than is necessary, and power handling drops off quite a bit because voltages get high.

There are a lot of myths, misunderstandings, and folklore about tuners. That's 90% of the problem, rather than the tuners themselves.

73 Tom

6296. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:10:04 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac47695.827812097@news.accessunited.com>
Source record: 167168

On Thu, 29 Mar 2001 17:36:24 -0500, Ralph Mowery
<rmowery@dialpoint.net> wrote:

>I think you have the theory all wrong about the transmatch. Anyway
>without getting into the theory part a transmatch can loose about 5 to
>10 percent of the power if it is working as it should and more if it is
>not. My MFJ looses about 10 watts out of 100 going into it on 80 meters
>when fed into a good dummy load and less as I move toward the higher
>frequencies. The mfj is not the greatest but typical of the inexpensive
>ones.

I'm just curious. How did you measure that?

73 Tom

6297. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:14:34 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac47741.827984141@news.accessunited.com>
Source record: 167070

On Fri, 30 Mar 2001 06:00:32 +0100, "Gary Peach"
<xcg34@dial.pipex.com> wrote:

>For what it's worth this is how mine measures up:
>
> G5RV/2 Frequency -v- Efficiency
>1.75 MHz__82.58% Bad reading STRONG QRM, most likely much less than 10%
> 3.50 MHz__16.55%
> 7.00 MHz__52.59%
>10.00 MHz__17.01%
>14.00 MHz__83.69%
>18.00 MHz__43.72%
>21.00 MHz__14.94%
>24.00 MHz__2.46%
>28.00 MHz__26.52%
>29.00 MHz__22.60%

Gary,

Please share with us how you determined the efficiency of your system.

Most of your numbers are totally unrealistic, in particular 160 meters
and 80 meters.

So tell us, how did you determine the efficiency?

73 Tom

6298. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:20:26 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC47A0A.BD39861A@IEEE.org>
Source record: 167073

Roy Lewallen wrote:
> Nonetheless, are you saying
> that the real part of any line's characteristic impedance is
> "dissipationless"?

The part of the line's characteristic impedance that doesn't dissipate
any power is dissipationless, by definition.

> When a cable has loss, not all the power is dissipated in the load. Some
> is dissipated in the cable.

The example was for a lossless cable. Whatever part of Z0 exists that
doesn't dissipate any power, it doesn't dissipate any power. The same
power cannot be dissipated in two separate places.

> It's the voltage at the output of an amplifier divided by the current at
> the input.

The voltage at your house times the current at my house is meaningless.
--
http://www.mindspring.com/~w6rca

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6299. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:22:21 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac4782e.828220941@news.accessunited.com>
Source record: 167071

On Thu, 29 Mar 2001 21:52:37 GMT, "Dave Cook"
<nospam.davepc2@netdave.,com> wrote:

>I built a 1/2 size G5RV - the ARRL handbook said you could cut the
>dimensions in half to work 40 - 10. The dipole dimensions were too short, so
>I had to lengthen them to get resonance on 40 mtrs. It works fine on 40, 20,
>and 10, and I even get a 3:1 swr on 30 and 12 meters.

Despite all the folklore and how the antenna was originally intended,
the normal G5RV works fairly well as a three band antenna (and is
quite usable on other bands with a tuner). The typical G5RV has a
modest SWR at the low end of 80, the high end of 40, and 20 meters.

If yours was exactly half size, it should have a moderate SWR on 10
meters, 20 meters, and 40 meters.

That seems to be what you are having, and so everything looks OK.

Efficiency will be good on those three bands. Virtually all of the
losses are feedline losses, and the feedline you have is short. Also
the SWR is fairly low on at least three bands.

Don't expect a low SWR on other bands, it probably won't happen
without a tuner in line.

73 Tom

6300. Re: best commercial 4:1 balun for beam antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:27:17 UTC
From: Guy Shields <w4gbu@mindspring.com>
Message-ID: <3AC47BA5.C0D51626@mindspring.com>
Source record: 167072

Rudy,
I have a X7 up and will change the whimpy cushcraft balun when I rework and check the X7 in a couple of months. I will be putting a Centaur 4:1 balun on the antenna.
http://www.baluns.com/b41y.htm

I'm using this 4:1 balun currently on an 80 meter antenna at the bottom of 40 feet of ladder line with coax into a tuner. Works gud on all bands..

Guy Shields, W4GBU
http://www.mindspring.com/~w4gbu

Rudy Marcelletti wrote:

> CC wants something like $80.00 for their "match box" for my X7 beam that I
> don't even know is bad yet but I need to have one on hand for the tower guys
> when they come to help. I think it is unlikely that traps went bad. CC
> wants about $35.00 to $40.00 each for those as well. I could always use the
> balun on something else if the XM79 box is still good.
>
> Who makes a good 2kw 4:1 balun?
>
> What is the best way to test a balun (on the tower)?

6301. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:30:16 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC47C58.9DA256B4@IEEE.org>
Source record: 167076
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Zoran Brlecic wrote:
> If we lived in a perfect world where everybody's
> happy and friendly and lovey-dovey, there would be no need for firearms, ...

Now, wait just a minute. There's a need to fill my freezer with venison.

> Until then, it will take a majority of Americans to amend the Second
> Amendment, and it's not happening in our lifetime.

Don't look now, but the Second Amendment has already been essentially
repealed. Am I free to bear arms inside a US Post Office? A lot of
the federal gun laws are unconstitutional.
--
http://www.mindspring.com/~w6rca

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6302. Re: 160 receive antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:32:26 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac479eb.828665701@news.accessunited.com>
Source record: 167074

On Thu, 29 Mar 2001 19:37:02 -0700, richl@cyberdude.com wrote:

>Group,
>
> I am looking for input for the best SMALL 160m receive antenna.
>It will be put up in an open area (read no trees) and the worst ground
>electrical and mechanical that I have found,mostly rock and the water
>table at 400 + feet. I have about 1 acre to put this up. I tried a
>beverage but it didn't work as well as expected.
>
Hi Rich,

Although 160 would benefit from lengths longer than 400 and less than about 900 feet, a 400 foot long Beverage, if properly installed, would be a reasonably good 160 meter receiving antenna for most applications.

At 400 feet, the antenna would be failry directive. It might hurt the reception if it is not "aimed" at the desired direction. It would be quite directional on 80 and higher, of course.

The best antenna is always the most directional one that fits your needs, and no one can answer that question without knowing a lot more information than you gave.

What direction(s) do you want to receive? What distances? What is the source of your noise, is it power lines and stuff nearby or distant noises?

How much clear area away from power lines, antennas, and other large conductors do you have?

I'm afraid you will just get random off-the-cuff answers unless all of that is known.

73 Tom

6303. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:35:33 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac47c6f.829310158@news.accessunited.com>
Source record: 167075

On Thu, 29 Mar 2001 15:54:33 GMT, "VE9SRB" <srbest@att.net> wrote:

>
>The fixed relationship is Pdelivered = Pforward - Preflected.
>
>The fixed relationship is Pforward = Pdelivered / (1 - |rho|^2)
>
>Change anything you want to, these relationship do not change.
>
>Steve

Even though the relationship doesn't change, the meter will change how
it indicates them if it is not normalized to the line Zo.

73 Tom

6304. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:36:56 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC47DE8.1AE76B18@IEEE.org>
Source record: 167077

Tom W8JI wrote:
>
> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> >The assumption is that the SWR meter is being used in a transmission
> >line which has the Z0 for which the SWR meter was calibrated. If that
> >assumption is not true, then the SWR meter reading is perfectly predictable
> >but invalid on the meter face.
>
> Who assumed that?

The designer of the SWR meter. If the design assumptions are meet,
the SWR meter works fine. Any instrument can be misused.
--
http://www.mindspring.com/~w6rca

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6305. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:45:50 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC47FFE.6DA8D9F7@IEEE.org>
Source record: 167078

"Peter O. Brackett" wrote:
> I once asked on our newsgroup if any manufacturer makes directional couplers
> (and/or directional wattmeters) with a variable reference impedance. No one
> answered my query.

Any directional wattmeter with a calibration adjustment has a variable
reference impedance. Assuming the current pickup coil is fixed, if you
design the voltage pickoff capacitive divider with enough range, the
reference impedance can be varied over a wide range and could even have
a selectable calibration knob on the front panel.
--
http://www.mindspring.com/~w6rca

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6306. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:52:44 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4819C.D521D8C8@IEEE.org>
Source record: 167079

Roy Lewallen wrote:
> I don't agree that waves are arbitrary. If you apply a signal to a
> transmission line of a known impedance and velocity factor and terminate
> it with a known impedance, you can say with certainty what the value
> (both voltage and current) of forward and reflected waves are on the
> line, how they interfere with each other, what the SWR (i.e., ratio of
> maximum to minimum voltage along the line) is, what the impedance is
> looking into any point along the line, what the voltage and current --
> both magnitude and phase -- are at any point along the line, how much
> power is flowing in the line, and, if you like, you can separate the
> power into "forward" and "reverse" components with known values. The
> values of these quantities do not vary with measurement method, but are
> determined solely by the characteristic impedance and velocity factor of
> the line (or more concisely by its complex propagation constant), the
> load impedance, and the applied voltage, current, or power. You can find
> the simple equations to do this in numerous references. My favorite is
> Reference Data For Radio Engineers.

One fact that is a bit of an eye-opener for some people is that the
modulation on the waves can be located exactly where and when it
should be according to wave theory. Modulation can be used to identify
the individual waves in space-time.

> But waves are real,
> well defined, and readily calculable, and don't depend at all on how
> they're measured.

Like I said in another posting, the designer of the SWR meter assumes
something about the characteristics of the waves. In particular, he
assumes the forward voltage divided by the forward current is equal
to the reference impedance of the SWR meter.
--
http://www.mindspring.com/~w6rca

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6307. Re: dipole vs magnetic loop ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:55:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac47d92.829600583@news.accessunited.com>
Source record: 167081

On Fri, 30 Mar 2001 06:53:05 -0500, "marvin rosen"
<n3bqa@starpower.net> wrote:

>which would be more efficient on one frequency at a height of 60 ft: a full
>size dipole or a magnetic loop ant for 20 mtrs?

There is no magic to any antenna.

Radio waves are electromagnetic, NOT magnetic. You can not have a
time-varying electric field without a magnetic field, and vice versa.

I assume you are talking about real "magnetic" loops and not
confusing large loops with "magnetic" loops. "Magnetic" loops, by
definition, are very small. They are generally less than 1/10th
wavelength or so in circumference.

"Magnetic loops", just a few feet from the antenna on 20 meters,
actually have a stronger electric field than magnetic field. But very
quickly, as distance is increased, it becomes exactly the same as the
field from a dipole or any other antenna. It is only right next to the
antenna that they are magnetic dominant, and they STILL have an
electric field.

"Magnetic loops", contrary to myth and rumor, are no better than any
other antenna for transmitting. As a matter of fact, they are
generally worse. While a full-size dipole is nearly 100% efficient, a
magnetic loop would be hard pressed to make even 30% efficiency.

The real advantage of magnetic loops are the small size, and wide
tuning range. Changing a single component (a capacitor) will allow a
single antenna to operate over a wide frequency range...perhaps 30
through ten meters or 40 through 15 meters.

The bandwidth for each setting will be narrow however, so you have to
watch the capacitor setting carefully.

By all means, if you have the room, use a dipole!

73 Tom

6308. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 12:58:25 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac48216.830757120@news.accessunited.com>
Source record: 167083

On Fri, 30 Mar 2001 06:36:56 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Tom W8JI wrote:
>>
>> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>> >The assumption is that the SWR meter is being used in a transmission
>> >line which has the Z0 for which the SWR meter was calibrated. If that
>> >assumption is not true, then the SWR meter reading is perfectly predictable
>> >but invalid on the meter face.
>>
>> Who assumed that?
>
>The designer of the SWR meter. If the design assumptions are meet,
>the SWR meter works fine. Any instrument can be misused.

Steve did not seem to be following that line of thinking.

73 Tom

6309. Re: dipole vs magnetic loop ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:01:27 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC483A7.9E27CB06@IEEE.org>
Source record: 167082

marvin rosen wrote:
> which would be more efficient on one frequency at a height of 60 ft: a full
> size dipole or a magnetic loop ant for 20 mtrs?

It's hard to beat the efficiency of a 1/2WL dipole at a height
of 1/2WL+. A lot of power can be lost in the necessary matching
circuitry for a small loop and in the loop itself.
--
http://www.mindspring.com/~w6rca

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6310. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:07:35 UTC
From: k4yz@aol.com
Message-ID: <20010330080735.18122.00000532@ng-mi1.aol.com>
Source record: 167080

>Subject: Re: Back to bullets
>From: Denver Braughler Braughler@bwcc.com
>Date: 03/28/01 4:10 PM Eastern Standard Time

>On June 14, 1988, Carl Rowan shot and wounded Neil Smith,
>a young intruder who had trespassed onto Rowan's property
>to take a dip in his swimming pool.

So he says. Convienient "excuse" for someone who needs a big dose of sympathy for having broken the law and then having got caught.

>This black kid was in his backyard, not his house.

I know you'll give me the same song-and-dance about how this was not a scenario for fearing for his life, but then again, how many steps was it from one to the other?

People are tired of the liberal whine about the injustice of holding people accountable for thier actions. If the kid had been playing hoops at the "Y" instead of crossing the fence to private property, this wouldn't have happened.

>This was in Washington, D.C., where handguns are illegal.

In Kennesaw, GA, domestic intrusions STAY low simply because it is a REQUIREMENT that the head of each household maintains a firearm in the home.

Would YOU enter a home clandestinely if you thought the owner was serving .44 caliber hors' dourves?

>Mr. Rowan used unregistered .22 pistol.

A registered one wouldn't have hurt as much?

>He is also black.

Thank God. Jesse Jackson and the Irrevrent Al Sharpton would have been on the 6 o'clock news alledging the kid had been coereced to do break the law by Mr. Rowan and THEN shot.

"Gun Control" means hitting what you aim at.

Steve

6311. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:09:22 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC48582.6E8BA4D1@IEEE.org>
Source record: 167084

Steve Robeson LPN wrote:
> "Gun Control" means hitting what you aim at.

I thought it meant using both hands.
--
http://www.mindspring.com/~w6rca

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6312. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:23:46 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <CN%w6.99$6f2.29183@paloalto-snr1.gtei.net>
Source record: 167087
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"Zoran Brlecic" <zbrlecic@earthlink.net> wrote in message
news:3AC44176.D75461F9@earthlink.net...
> No one's taking your guns away, Dick. If we lived in a perfect world
where everybody's
> happy and friendly and lovey-dovey, there would be no need for firearms,
but sadly this
> will never be. Until then, it will take a majority of Americans to amend
the Second
> Amendment, and it's not happening in our lifetime.
> SNIP

Thank God! You had better hope and pray that those in power are never able to convene a Constitutional Convention again. With the current beliefs and attitudes of many in Congress these days the Second Amendment is not the only thing that would be at risk. The First Amendment would be right behind it, and then the Fourth, etc.

A Constitutional Convention is the single most dangerous thing that the current crop of politicians could do. The aftermath would be the end of the United States as we know it...

73 de W6DKN

6313. Anyone have schematics for HD-73 and HAM 3 rotors ??

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:25:39 UTC
From: "Jack B. Lovell" <radioman@rochelle.net>
Message-ID: <3ACC6704@MailAndNews.com>
Source record: 167085

Would anyone have schematics for Alliance HD-73 and CDE Ham 3
control boxes and heads around ?? Please email a scan if
possible to radioman@rochelle.net.
Trying to prototype a different type of PC rotor controller and
need copies of original schematics and ratings.

TNX & 73's Jack Lovell. WD9IFW radioman@rochelle.net or

wd9ifw@arrl.net

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POP3 mailbox from anywhere with just a web browser.

6314. Re: How does a trap "go bad"

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:35:46 UTC
From: k3ky@erols.spamnocom
Message-ID: <3ac48b6f.83025140@news.erols.com>
Source record: 167086

This does not sound like a trap problem. More likely a
feedline/balun/driven elements problem. 73, K3KY

On Mon, 26 Mar 2001 11:52:34 -0500, "Rudy Marcelletti"
<rudym@net-link.net> wrote:

>There are no traps that are "driven" or "reflector" traps on the Cushcraft
>X7 triband beam--only traps on one director element at end of boom. Would
>arcing still occur? I don't think we have the little wasps referred to in
>Michigan. Maybe spiders, but most bugs spiders are after are lower than 100
>feet, aren't they? Would a bad match box cause high swr on 20 and 15 but
>not on 10?
>
>I will try to use a spotting scope to look at the traps. Maybe it is
>different problem?
>Rudy Marcelletti wrote in message
><3abb68f9$0$88180$bbae4d71@news.net-link.net>...
>>If a trap, such as the 15 and 20 meter traps on my Cushcraft X7 beam, are
>>mechanically sound, and are properly installed, with the drain holes down,
>>just how does a trap go bad? Power levels have always been well within
>>specs (no more than 600 watts PEP and traps are rated for 2KW). I am
>>baffled. There are no moving parts!
>>
>>
>
>

6315. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 13:58:47 UTC
From: richardharrison@webtv.net
Message-ID: <25848-3AC49117-17@storefull-112.iap.bryant.webtv.net>
Source record: 167090

Tom, W8JI wrote:
"The time-varying fields can NOT pass through a conductor several skin depths thick."

Tom is saying the magnetic component of an electromagnetic wave cannot penetrate the concentric shield over a loop antenna. That misconception must be at the bottom of his claim that the electrostatic Faraday shield becomes the antenna.

Tom is dead wrong. The shield is broken with an insulator in the middle which has no current path shunting the insulator. The shield can`t have significant current flow, so no effective opposing counter-field is generated, ala Lenz.
This makes the shield as porous as a sieve for the magnetic field, and the external r-f field passes right through the metal external shield. The shield remains impervious for the electric field.

The above action is how the Faradauy shield works.

Best regards, Richard Harrison, KB5WZI

6316. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:05:49 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <1p0x6.164052$p66.48152526@news3.rdc1.on.home.com>
Source record: 167088

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message
news:3AC48582.6E8BA4D1@IEEE.org...
> Steve Robeson LPN wrote:
> > "Gun Control" means hitting what you aim at.
>
> I thought it meant using both hands.

If that were the case all those gang banging POS I had to deal with in
Detroit would definately be very much guilty of not following with gun
control hehe

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/

6317. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:07:48 UTC
From: richardharrison@webtv.net
Message-ID: <25848-3AC49334-18@storefull-112.iap.bryant.webtv.net>
Source record: 167091

Tom wrote:
"If you short a turn ---(of the multiturn loop) --- the loop goes dead."

This is standard transformer action and is irrelevant to the action of a Faraday shield. Tom may have been concoting a case for "the shield is the primary of a transformer and this shield is the real antenna." I only know what I read.

Best regards, Richard Harrison, KB5WZI

6318. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:08:26 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <ur0x6.1289$IJ1.118336@bgtnsc05-news.ops.worldnet.att.net>
Source record: 167089

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3AC3A7E9.22E0316F@eznec.com...
> Steve is correct that on the 450 ohm line terminated with 50 ohms, the
> forward power is 277.78 watts, not 500 as I had stated. (The reverse
> power is 177.78, not 400.) I neglected to take a square root when I
> should have. Thanks to Steve for pointing out the error.
>
> I also agree with the facts in the remainder of Steve's posting. We seem
> to have a different interpretation about the meaning of a "fixed
> relationship",

Fixed ... Defined ... eh??

Evidently you and Cecil are using the WEBSTER dictionary. Although it is a
great dictionary, it is not the BEST dictionary.

>however. But I still retain my opinion that the Antenna
> Book article is misleading at best. A determination of its factuality
> shouldn't have to depend on a discussion of forward and reverse power,
> reflection coefficients, line lengths, and impedance matches.
>
> Roy Lewallen, W7EL
>
> VE9SRB wrote:
> >
> > Hi Roy:
> >
> > Just my 2 cents worth again.
> >
> > There is a fixed relationship between forward power and delivered power.
> > There is also a fixed relationship between the forward power and the
antenna
> > current. These fixed relationships are established by the reflection
> > coefficient of the antenna. The forward power is a lossless
transmission
> > line is always related to the delivered power as follows:
> >
> > PFWD = PDEL / (1 - |rho|^2)
> >
> > In the example you describe above with the 450 ohm line: If the
delivered
> > power is 100 W, the forward power is 277.78 W. If 100 Watts of power is
> > delivered to a 50 ohm antenna through a 450 ohm line, the forward power
will
> > always be 277.78 W regardless of the line length. If there is no tuner

> > internal to the transmitter, the transmitter will have to be manually
> > adjusted to maintain this 100 W of delivered power as the line length
> > changes.
> >
> > To maintain a constant delivered power to an antenna with changing
> > impedance, there must be an external compensation or power adjustment.
This
> > compensation can be implemented with a tuner through establishing an
> > impedance match at the tuner input. If no tuner exists in the system,
then
> > the output levels of the transmitter must be adjusted.
> >
> > Steve
> > VE9SRB

6319. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:22:26 UTC
From: richardharrison@webtv.net
Message-ID: <25848-3AC496A2-21@storefull-112.iap.bryant.webtv.net>
Source record: 167092

Tom, W8JI wrote:
"If you short the gap (of the loop shield), you force the voltage to zero and the loop goes dead."

That seems to be another example of Tom`s misconception of how a Faraday shield works. It is not destruction of transformer action that kills the signal.

Of course you kill a loop antenna when you short the gap in the shield. Lenz`s law comes down on you. The external r-f field can now generate a counter field which, when added to the inciting field, add to nearly zero at the surface of the shield. That is how the shield on coax works to keep signals in and out. Break the shield, and magnetic coupling can occur, and the shield is no longer effective for the magnetic component of the EM wave.

Best regards, Richard Harrison, KB5WZI

6320. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:26:47 UTC
From: richardharrison@webtv.net
Message-ID: <25848-3AC497A7-22@storefull-112.iap.bryant.webtv.net>
Source record: 167094

Tom W8JI wrote:
"We know fields don`t penetrate coaxial cables---."

Of course, Lenz`s law prohibits penetration of coax by r-f.

Best regards, Richard Harrison, KB5WZI

6321. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:36:43 UTC
From: richardharrison@webtv.net
Message-ID: <25849-3AC499FB-11@storefull-112.iap.bryant.webtv.net>
Source record: 167093

Tom, W8JI wrote:
"Noise is a signal just like any other signal."

I would say that noise behaves just as a signal does and follows the same propagation rules.

Close to the source of either signals or noise, the electric field is significantly a larger part of the EM field, so if we can sieve it out of the combined field, the magnetic field passed on to the antenna near that noise source produces a better signal to noise ratio. The Faraday shield does just that.

Best regards, Richard Harrison, KB5WZI

6322. Use velocity factor for folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:39:15 UTC
From: Rick Matthews <matthews@wfu.edu>
Message-ID: <3AC49A93.71DED4AA@wfu.edu>
Source record: 167096

When designing a folded dipole made from twinlead, should one use the velocity factor of the twinlead in calculating the length?

I would have assumed so, but the various web pages I have found with antenna length formulae seem to have the length pretty close to a half wavelength in free space, not the 17% or so less I would have expected.

What am I missing?

--
Rick Matthews, WA4GSP matthews@wfu.edu
Department of Physics http://www.wfu.edu/~matthews
Wake Forest University 336-758-5340 (Voice)
Winston-Salem, NC 27109-7507 336-758-6142 (FAX)
USA

6323. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:44:19 UTC
From: richardharrison@webtv.net
Message-ID: <25848-3AC49BC3-36@storefull-112.iap.bryant.webtv.net>
Source record: 167098

Tom, W8JI wrote:
"About 1/10 of a wavelength beyond the small loop antenna, the field impedance inverts....'

Field impedance doesn`t add to the understanding of how the Faraday shield works, for me.

Best regards, Richard Harrison, KB5WZI

6324. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:53:04 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <k51x6.1316$IJ1.121126@bgtnsc05-news.ops.worldnet.att.net>
Source record: 167095

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac3dfcd.789205466@news.accessunited.com...
> On Thu, 29 Mar 2001 15:49:40 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> > If you measure 100 W of forward power with the 450-ohm wattmeter, you
will
> >measure 2500 W of forward power with the 50 ohm meter. I assume they
both
> >measure the same forward traveling voltage.
>
> Not true.
>

It is if the forward voltages in both meters are the same. That is why I
qualified my statement with that assumption.

I would agree that my assumption is incorrect in the example that you
describe.

> Wattmeters do not measure voltage alone, they sample current and
> voltage. Voltage and phase are summed with consideration of phase
> before the RF is detected and converted to dc voltage.
>
> >If the 450 ohm line is terminated in 450 ohms, there is no rearward
> >traveling voltage or power. How does a meter of any impedance translate
0
> >volts and 0 amps into real power?
>
> A meter normalized for 450 ohms will read zero reflected power and 100
> watts. A meter normalized for 50 ohms will, in the very same line
> without standing waves, indicate reflected power and "extra" forward
> power. If you deduct the reflected power from forward, the result will
> be about 100 watts.
>

You make these statements like something out of the ordinary is happening or
that models can't predict this real world behavior.

In the 450 ohm line terminated with 450 ohms there are no standing waves. A
450 ohm meter will read forward power and zero reflected power.

Insert a 50-ohm wattmeter into a 450 ohm line and what happens? You just
created an impedance discontinuity in the 450 ohm line.

The output side of the 50 ohm wattmeter sees a 450 ohm steady state line
impedance: It sees a 9:1 SWR. As a result of this 9:1 SWR, there is now a

standing wave in the 50 ohm wattmeter. By inserting the 50-ohm wattmeter you created the reflection that it indicates. The reflection it indicates is very real.

The 50 ohm wattmeter indicates a higher forward power as a result of the re-reflections created at its input. Looking rearward it sees a 450 ohm impedance discontinuity.

In the 450 ohm line in front of the 50 ohm wattmeter, the SWR will go up only slightly (1.1:1) because the line length in the 50-ohm wattmeter is very short and it does not transform the 450 ohm steady state line impedance very much. So, a 450 ohm wattmeter will not read very much reflected power. It will not read "zero" reflected power.

> There is no magic, the entire transmission line (when in a steady
> state) can be looked at without waves and it works out perfectly.
>
> >> If I move a 50 ohm meter along a long 450 ohm line terminated in 50
> >> ohms, I'll find points where reflected power is zero watts. I'll see
> >> the forward power varies all over the place.
> >
> >Please explain this.
>
> Get away fromn theory, and look at a wattmeter Steve.
>

I am not sure why you have a problem with theory or models. They work quite well to explain the situation you are describing. The real world does not behave differently than the models predict, even with a 50 ohm wattmeter in a 450 ohm line.

The 50-ohm wattmeter will indicate zero reflected power every 1/2 wavelength from the termination because it sees a 50 ohm steady state line impedance at that point. Move it slightly and the impedance it sees is no longer 50 ohms. It now indicates a reflection.

> It has two coupling modes. One mode employs a current transformer than
> develops a given voltage for a given line current. The second employs
> a voltage divider that is across the line.
>
> These two sampled outputs are in series, and the ratios are set so
> when line impedance, the across and through vectors, are the correct
> ratio (E/I = 50:1 for a 50 ohm line) for the design Zo the sampled
> voltages are identical.
>
> Obviously in one direction the volages sum, and if the generator and
> load are swapped the phase in the current transformer reverses.
>
> If you design a meter for 50 ohms, and measure SWR while moving it
> along a 450 ohm line (or any other line that is NOT 50 ohms) you will
> find SWR varies all over the place.
>

Only when the 450 line is not terminated in 450 ohms.

When you move the 50-ohm wattmeter along the line, the steady state line impedance it sees varies. That's why the SWR varies. Everything that happens here is consistent with transmission line theory.

> >The statement of mine that you quote above in correct, so please explain
> >what you see wrong with it.
>
> Simple. Lets say I mismatch a 450 ohm line by adding a 50 ohm load. If
> I move the meter along the line, the forward and reflected power will
> change all over the place. At exact 1/2 wl multiples from the load,
> the meter will indicate a 1:1 SWR.
>
> The SWR varies along the line.
>
> If I normalize the meter for 450 ohms, the reflected and forward power
> are constant along the 450 ohm line no matter what the termination.
>
> The SWR does not vary along the line, and only the meter null setting
> was changed (it could be a pot or trimmer capacitor I adjusted).
>
> If I have a 50 ohm meter, and terminate the line in 450 ohms, the flat
> line shows a constant ratio of reflected power to forward power along
> the line and that forward power is the SAME as in a 450 ohm line
> terminated with 50 ohms measured with a 450 ohm meter.
>
> In either case the meter indicates a 9:1 SWR.
>
> When the meter null is not set for the line Zo, SWR and forward power
> vary all along the line.
>
> See how simple it is?
>
> 73 Tom

I agree that it is very simple. It is also easily explained with the theory you choose to "get away from"

73, Steve

6325. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:53:53 UTC
From: richardharrison@webtv.net
Message-ID: <25848-3AC49E01-43@storefull-112.iap.bryant.webtv.net>
Source record: 167100

Tom, W8JI wrote:
"The time-varying fields can NOT pass through a conductor several skin depths thick."

Tom, followed that declaration with: "Not only does shielding NOT happen (by a Faraday shield on a loop antenna)..."

These were items in his same posting!

How can a conductor not permit passage of signals and noise and NOT happen to act as a shield? Tom can`t have it both ways.

6326. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 14:57:18 UTC
From: richardharrison@webtv.net
Message-ID: <25849-3AC49ECE-20@storefull-112.iap.bryant.webtv.net>
Source record: 167101

Tom, W8JI wrote:
"All the shield does is allow us to balance the antenna...."

No, it also screens out the electric field.

Best regards, Richartd Harrison, KB5WZI

6327. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 15:10:02 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <el1x6.1518$RF1.120007@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167097

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac47c6f.829310158@news.accessunited.com...
> On Thu, 29 Mar 2001 15:54:33 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >
> >The fixed relationship is Pdelivered = Pforward - Preflected.
> >
> >The fixed relationship is Pforward = Pdelivered / (1 - |rho|^2)
> >
> >Change anything you want to, these relationship do not change.
> >
> >Steve
>
> Even though the relationship doesn't change, the meter will change how
> it indicates them if it is not normalized to the line Zo.
>
> 73 Tom

I am not sure of your point here. The relationships I stated above are
correct.

A wattmeter, will indicate a forward and reflected power. The power
delivered is equal to Pforward - Preflected.

If the meter is not normalized to Zo, it will not indicate the same forward
and reflected power as a Zo wattmeter. The power that the non-Zo wattmeter
indicates is correct for its Zo design.

Steve

6328. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 15:14:22 UTC
From: richardharrison@webtv.net
Message-ID: <25849-3AC4A2CE-25@storefull-112.iap.bryant.webtv.net>
Source record: 167102

Tom, W8JI wrote:
"Faraday shields, for RF applications, are strictly common-mode devices...."

No, a Faraday shield can`t usually be called just a common-mode device. The Faraday shield in nearly every mediumwave broadcast station in the world is a grounded shield between unbalanced coils (one end of each coil is grounded). Where is any common-mode there?

For a common-mode, there has to be at least a pair of something, or you`ve nothing to have something in common with. You have to have a balanced pair of wires, inputs to a balanced amplifier, or something besides an unbalanced feed.

Anyway, this is just another diversion from the straight-skinny on how the Faraday shield on a loop antenna works.

Best regards, Richard Harrison, KB5WZI

6329. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 15:17:06 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Sr1x6.1526$RF1.120834@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167099

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac48216.830757120@news.accessunited.com...
> On Fri, 30 Mar 2001 06:36:56 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Tom W8JI wrote:
> >>
> >> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> >> >The assumption is that the SWR meter is being used in a transmission
> >> >line which has the Z0 for which the SWR meter was calibrated. If that
> >> >assumption is not true, then the SWR meter reading is perfectly
predictable
> >> >but invalid on the meter face.
> >>
> >> Who assumed that?
> >
> >The designer of the SWR meter. If the design assumptions are meet,
> >the SWR meter works fine. Any instrument can be misused.
>
> Steve did not seem to be following that line of thinking.
>
> 73 Tom

My line of thinking was only focused on responsding to Roy's post, which had virtually nothing to do with Zo and non-Zo wattmeters. My statements to Roy were correct. You still have not explained why you think they are incorrect.

Steve

6330. Re: Use velocity factor for folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 15:36:02 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4A7E2.359A20D8@IEEE.org>
Source record: 167103

Rick Matthews wrote:
> When designing a folded dipole made from twinlead, should one use
> the velocity factor of the twinlead in calculating the length?

Nope, the specified velocity factor of a transmission line is
referenced to differential currents. The currents in the antenna
portion of a folded dipole are common-mode and the common-mode
velocity factor is pretty high, maybe around 0.95.
--
http://www.mindspring.com/~w6rca

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6331. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 15:48:10 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <_U1x6.1353$IJ1.124617@bgtnsc05-news.ops.worldnet.att.net>
Source record: 167104

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac3dfcd.789205466@news.accessunited.com...
> On Thu, 29 Mar 2001 15:49:40 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> > If you measure 100 W of forward power with the 450-ohm wattmeter, you
will
> >measure 2500 W of forward power with the 50 ohm meter. I assume they
both
> >measure the same forward traveling voltage.
>
> Not true.
>
> Wattmeters do not measure voltage alone, they sample current and
> voltage. Voltage and phase are summed with consideration of phase
> before the RF is detected and converted to dc voltage.
>
> >If the 450 ohm line is terminated in 450 ohms, there is no rearward
> >traveling voltage or power. How does a meter of any impedance translate
0
> >volts and 0 amps into real power?
>
> A meter normalized for 450 ohms will read zero reflected power and 100
> watts. A meter normalized for 50 ohms will, in the very same line
> without standing waves, indicate reflected power and "extra" forward
> power. If you deduct the reflected power from forward, the result will
> be about 100 watts.
>

The 50 ohm meter will indicate 277.78 W forward, 177.78 reflected.

6332. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:08:17 UTC
From: k3bu@aol.com
Message-ID: <20010330110817.08265.00001377@ng-co1.aol.com>
Source record: 167105

>>1. If one were to install a transmatch in feedline system that already has
>>an antenna that is purely resistive (1:1 match) what would be the insertion
>>loss in dB resulting from the insertion of this device? Ive never really
>>thought about it until recently.
>>

Typical built in tuner in modern rigs loses about 20% of power.
Easy to verify, load the rig to dummy load, put external wattmeter between the rig and the dummy and switch your tuner in and out, you will see about 20 % drop, like instead of 100W you will get 80 watts.
I value my watts and always try to design antennas that have 50 ohm feedpoint.

Yuri

6333. Re: Imaginary Resistance... Dissipationless Resistance... and all ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:20:45 UTC
From: richardharrison@webtv.net
Message-ID: <29411-3AC4B25D-23@storefull-116.iap.bryant.webtv.net>
Source record: 167109

Roy, W7EL wrote:
"But, I`m still confused about that amplifier transresistance."

It has to be the inverse of transconductance.

You put something in over here and it affects something over there. This is like mutual impedance where a voltage across a pair of terminals over here causes current in a circuit over there.

In these "trans" and "mutual" things there are intervening variables depending on how close the relationship really is. That`s why I proposed the term "ringer resistance" as a generic type resistance which would include "transresistance". A ringer is a likeness, but not the real thing.

Best regards, Richard Harrison, KB5WZI

6334. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:22:12 UTC
From: "Dave Cook", com
Message-ID: <Uo2x6.646643$U46.19909066@news1.sttls1.wa.home.com>
Source record: 167106

Thank you all for the very informative feedback on this.It seems that Tom, W8JI's answer is the short and sweet one - the half-size G5RV is good for 40, 20, and 10. I can live with this, it was just that the ARRL handbook's brief description lead me to believe that it truely was an all-band design. But even the fact that it works on 40, 20, and 10 without any other tuning apparatus is quite remarkable. So, I guess it's back up into the trees to string an additional 15 meter dipole.

Thanks again for all the info and 73's,
-- Dave WA0TTN

"Dave Cook" <nospam.davepc2@netdave.,com> wrote in message news:F8Ow6.642973$U46.19745922@news1.sttls1.wa.home.com...
> I built a 1/2 size G5RV - the ARRL handbook said you could cut the
> dimensions in half to work 40 - 10. The dipole dimensions were too short, so
> I had to lengthen them to get resonance on 40 mtrs. It works fine on 40, 20,
> and 10, and I even get a 3:1 swr on 30 and 12 meters. But 30 (who cares?)
> and 15 mtrs are way off the SWR meter. Is the G5RV really an "all-band"
> antenna? Any suggestions on where I might be going wrong? The final
> dimensions for this one are about 55' for the dipole, 15' for the feeder, a
> coax choke at the feedpoint, and about 50' of coax feed.
>
> Thanks for any advice,
> -- Dave, WA0TTN
>
>

6335. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:24:18 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AC4B331.203D@pacbell.net>
Source record: 167027

W6RCecilA wrote:
(snip)
>
> > It's the voltage at the output of an amplifier divided by the current at
> > the input.
>
> The voltage at your house times the current at my house is meaningless.

That's true, it is, but, in network theory, transresistance is
convenient for describing the behavior of a current-controlled voltage
source. Your house and Roy's house don't constitute a
current-controlled voltage source do they Cecil?

Tom Donaly KA6RUH

6336. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:32:40 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3AC4B528.3930E390@wb6hqk.ampr.org>
Source record: 167107

Richard Harrison wrote:
>
> Tom, W8JI wrote:
> "The time-varying fields can NOT pass through a conductor several skin
> depths thick."
>
> Tom is saying the magnetic component of an electromagnetic wave cannot
> penetrate the concentric shield over a loop antenna. That misconception
> must be at the bottom of his claim that the electrostatic Faraday shield
> becomes the antenna.

The statement that time-vaying fields can NOT pass through a conductor
several skin depths thick is correct.

If a time varying magnetic field did exist inside a good conductor than
it would be necessary for a time varying electric field to
simultaneously circulate in a perpendicular direction. Ohms law states
that the existence of such an electric field would also require
conduction currents to flow in the conductor. In the case of a good, but
not perfect, conductor, the conduction currents will lag (in time)
behind the originally postulated magnetic field. The magnetic field
associated with the conduction current will be in a direction which
opposes changes in the original field but will lag in time and not
result in complete cancellation of the original field until a depth of
several skin depths is reached.

> Tom is dead wrong.

I think nearly everyone posting to this thread is attempting to over
simplify the physics involved. Electric and magnetic fields are
vector fields, that means they have both magnitude and direction. The
laws of electromagnetics, including Ohms law, require treating both the
electric and magnetic fields as vectors at all times. It is common
practice in special cases such as transmission lines where the electric
field can be assumed transverse to the direction of propagation and the
conduction current longitudinal, to drop the vector notation since the
fields can be completely determined from the voltage, current and
transmission line physical characteristics.

The concept of 'field impedance' has some value when considering a
propagating wave where the electric and magnetic fields are mutually
perpendicular, and normal to the direction of propagation. In general,
the operation of dividing one vector by another is not defined.
Therefore dividing the electric field by the magnetic field has no
meaning unless other information is also somehow specified. Dividing the
magnitude of E by the magnitude of H gives the relative proportion of

energy stored in the electric and magnetic fields but provides no
insight into where the stored energy might be moving.

> The shield is broken with an insulator in the middle
> which has no current path shunting the insulator. The shield can`t have
> significant current flow, so no effective opposing counter-field is
> generated, ala Lenz.

Correct, assuming the antenna is orientated for maximum response to an
incident electromagnetic wave. Note that a correctly polarized wave
arriving broadside to the direction of maximum response _will_ induce a
current into the shield which will couple to the pickup loop. Usually
this results in increased response to high angle horizontally polarized
waves arriving broadside and is one of the reasons loops are marginal
direction finding antennas at HF.

> This makes the shield as porous as a sieve for the magnetic field, and
> the external r-f field passes right through the metal external shield.

What evidence do you have the magnetic field penetrates the shield? What
observable behavior of the system suggests the magnetic field penetrates
the outer shield? Tom's point is that the voltage induced in the pickup
loop (per turn) is identical to the voltage induced in the shield. If
Tom is correct, then negligible magnetic field from the oncoming wave
penetrates the shield. Can you devise a practical experiment which
could disprove Tom's assertion?

bart
wb6hqk

6337. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:34:15 UTC
From: richardharrison@webtv.net
Message-ID: <29411-3AC4B587-24@storefull-116.iap.bryant.webtv.net>
Source record: 167108

Dick Carroll wrote:
"Universal was the fact that the perps telegraphed their intentions and
no one turned them in."

Oh good! We had just as well eradicate what telegraph remains.

Best regards, Richard Harrison, KB5WZI

6338. Anyone using the Anttron 8010B? I need info.....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:48:41 UTC
From: nz8c@aol.com
Message-ID: <20010330114841.08009.00001342@ng-fm1.aol.com>
Source record: 167110

I posted about the Anttron 8010B antenna a few days or so back but heard nothing. I am looking to hear from people who are using this antenna. How do you have it mounted and how well does it work? Please email me direct at: NZ8C@aol.com
73,
Renee

6339. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 16:52:50 UTC
From: kb7qhc@home.com
Message-ID: <3ac4b9b0.309715186@news.seanet.com>
Source record: 167111

On Fri, 30 Mar 2001 06:20:26 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>
>The part of the line's characteristic impedance that doesn't dissipate
>any power is dissipationless, by definition.
>

Hi Cecil,

That is one rare jewel of a definition. ;-)

73's
Richard Clark, KB7QHC

6340. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:07:42 UTC
From: kb7qhc@home.com
Message-ID: <3ac5bb40.310115632@news.seanet.com>
Source record: 167112

On Thu, 29 Mar 2001 22:47:57 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Richard Clark wrote:
>> The future argument (once dissipationlessness is accepted) is that
>> when the Zsource is reconsidered, there will be some who step forward
>> to proclaim, "the R of the generator is dissipationless."
>
>Actually, I've often wondered - why wouldn't a power source be a
>negative resistance?

Hi Cecil,

Why "wouldn't?" Or why "couldn't?".

As negative resistance (a real example found in some semiconductors)
presents a step discontinuity to an increase in voltage, it would make
a very problematic Thevenin source. It would also have a tendency to
oscillate depending on the load.

You sure Enron hasn't already got this patented for power contracts to
California?

73's
Richard Clark, KB7QHC

6341. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:22:16 UTC
From: Paul <pvanasse@mail.direcpc.com>
Message-ID: <qi3x6.36201$m8.300646@news.direcpc.com>
Source record: 167113

: I think you have the theory all wrong about the transmatch. Anyway without
getting into the theory

How so? The transmatch is essencially a variable capacitor that when
inserted into a perfectly matched feed system will produce (vary) inductive
reactance on the transmitter side and insert capacitive reactance (unless
tuned) on the antenna side to zero, regardless of of where the transmatch is
located in the feed line. Are you saying that no inductive reactance is
present? Please explain your theory.

: can loose about 5 to
: 10 percent of the power if it is working as it should and more if it is
: not. My MFJ looses about 10 watts out of 100 going into it on 80 meters
: when fed into a good dummy load and less as I move toward the higher
: frequencies. The mfj is not the greatest but typical of the inexpensive
: ones.

Where did these numbers come from? Are these the stated numbers that come
with the specs of the transmatch or are these practical numbers observed at
your station?

Using the MFJ numbers you stated the total insertion loss resulting from the
transmatch installation would be:

dB = 10 log (.9) = .45 dB insertion loss.

If one adds this loss number to the losses incurred by running100' of
RG-213/U at 3.5 Mhz (.4 dB), the total loss over the entire feedline would
be .85 dB.

This equates to:

.85 dB loss / 10 Inverse Log = 1.22 Power Loss Factor

100 Watts / 1.22 Power Loss Factor = 81.97 watts seen at the antenna feed
point or a 18% overall loss using the transmatch.

Now lets say the same 100 watt radio is folding back 10% due to a slight
mismatch and one decides to NOT use a transmatch, however they still use the
and the same RG-213/U cable at 3.5 Mhz.

.4 dB loss / 10 Inverse Log = 1.1 Power Loss Factor

90 watts / 1.1 Power Loss Factor = 81.82 watts seen at the antenna feed
point or 8.2% overall loss using no transmatch.

The numbers are practically identical. Granted, the radio will be working
alittle harder converting energy into heat but I dont think that a 10% or

even a 20% foldback ever really hurt a transmitter. On the flipside, the Law of Reciprocity states that this ficticious transmitter (the one without the transmatch) would loose 10% of its receive capabilities, but how serious is 10% with the noise floor of modern tranceivers?

:
: For question number 2, The loss is in the feed line from the transmatch
: to the antenna. Unless you plan on putting the transmatch at the
: antenna you will have the same losses in the feedline if you do or do
: not use the transmatch not counting the 5 to 10 % loss in the
: transmatch. YOu do not want the transmitter to fold back as it is not
: operating efficently and will put stress on the transmiter circuits and
: possiably shorten the life of the transmitter. YOu use the transmatch
: to mask the swr so the transmitter will operate with more efficency.

See above.

Thanks for the response and 73

6342. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:25:41 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac4bdde.846063396@news.accessunited.com>
Source record: 167114

On Fri, 30 Mar 2001 08:07:48 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom wrote:
>"If you short a turn ---(of the multiturn loop) --- the loop goes dead."
>
>This is standard transformer action and is irrelevant to the action of a
>Faraday shield. Tom may have been concoting a case for "the shield is
>the primary of a transformer and this shield is the real antenna." I
>only know what I read.
>
>Best regards, Richard Harrison, KB5WZI

You seem to be stuttering with multiple posts saying I am wrong Richard, instead of addressing the question. You also are arguing against yourself.

Clearly a time-varying magnetic field can not pass through a conductor several skin depths think, and clearly (you agree to this in a later stutter-post) the loop acts like a transformer between the secondary (the inside winding) and the primary (the outside shield). When you resonante the rpimary, mutual coupling resonates the seconday. If you resonate the secondy, mutual coupling will resonate the primary.

That transformer action is how the "shielded" loop transfers energy from the shield to the center. The shield, resonanted through mutual coupling to the resonant secondary inside, becomes the antenna. The field impedance of that antenna is very little different than the secondary winding alone would be without the shield.

The only major difference is the amount of reactance to resonante the loop can change, and the balance can change. If you do NOT ground the shield in the electrical center of the shield it can actually hurt the system balance, and increase response to undesired electric fields.

The shield has a very high impedance across the gap in a loop that is resonant, and the impedance is no different than if the tuning capacitor was moved across the gap and re-adjusted to resonance at the new location.

There really isn't anything magic about all of this, it's pretty basic stuff. You can't have the loop violate the same "laws" and principles you are attempting to use to support your claims the shield is NOT the antenna in a shielded loop.

Why not take a deep breath, and read what Bart wrote if you don't like my way of explaining it?

73 Tom

6343. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:32:59 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3ac4c32d$0$12818$1dc6e903@news.corecomm.net>
Source record: 167115

Steve Robeson LPN wrote:
>
> >Subject: Re: Back to bullets
> >From: Denver Braughler Braughler@bwcc.com
> >Date: 03/28/01 4:10 PM Eastern Standard Time
>
> >On June 14, 1988, Carl Rowan shot and wounded Neil Smith,
> >a young intruder who had trespassed onto Rowan's property
> >to take a dip in his swimming pool.
>
Snip, Snip

> >This was in Washington, D.C., where handguns are illegal.
>
> In Kennesaw, GA, domestic intrusions STAY low simply because it is a
> REQUIREMENT that the head of each household maintains a firearm in the home.
>
> Would YOU enter a home clandestinely if you thought the owner was serving
> .44 caliber hors' dourves?
>
> >Mr. Rowan used unregistered .22 pistol.
>
> A registered one wouldn't have hurt as much?

The gun Mr. Rowan used was given to him by his FBI Special Agent son....

>
> >He is also black.
>
> Thank God. Jesse Jackson and the Irrevrent Al Sharpton would have been on
> the 6 o'clock news alledging the kid had been coereced to do break the law by
> Mr. Rowan and THEN shot.
>
> "Gun Control" means hitting what you aim at.
>
> Steve

6344. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:37:59 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac4c112.846883391@news.accessunited.com>
Source record: 167116

On Fri, 30 Mar 2001 14:53:04 GMT, "VE9SRB" <srbest@att.net> wrote:
Hi Steve,

>In the 450 ohm line terminated with 450 ohms there are no standing waves. A
>450 ohm meter will read forward power and zero reflected power.
>
>Insert a 50-ohm wattmeter into a 450 ohm line and what happens? You just
>created an impedance discontinuity in the 450 ohm line.

No, there is no discontinuity at all over what the normal sampling of
a meter for another Zo would cause.

I am only trying to point out HOW the meters we normally use
work,since that seems to be what is tripping you up a bit in some of
your comments. I'm not disagreeing with your transmission line
analysis, just with what you say a meter will indicate.

>The output side of the 50 ohm wattmeter sees a 450 ohm steady state line
>impedance: It sees a 9:1 SWR. As a result of this 9:1 SWR, there is now a
>standing wave in the 50 ohm wattmeter. By inserting the 50-ohm wattmeter
>you created the reflection that it indicates. The reflection it indicates
>is very real.

A well-designed meter looks like nothing at all to the line. The Zo
setting of the meter has nothing to do with reflections on the line.

>The 50 ohm wattmeter indicates a higher forward power as a result of the
>re-reflections created at its input. Looking rearward it sees a 450 ohm
>impedance discontinuity.

No, it does not. It indicates a higher power because the voltage
divider has more voltage. It is a simple circuit that sums voltages
provided by current through the line and voltages across the line.

>In the 450 ohm line in front of the 50 ohm wattmeter, the SWR will go up
>only slightly (1.1:1) because the line length in the 50-ohm wattmeter is
>very short and it does not transform the 450 ohm steady state line impedance
>very much. So, a 450 ohm wattmeter will not read very much reflected power.
>It will not read "zero" reflected power.

It will not read zero reflected power because the ratio of voltage
provided by the current sample is changed when compared to violtage
across the line.

>I am not sure why you have a problem with theory or models. They work quite
>well to explain the situation you are describing. The real world does not
>behave differently than the models predict, even with a 50 ohm wattmeter in

>a 450 ohm line.

I think the problem is in understanding the meters, not the model.

>The 50-ohm wattmeter will indicate zero reflected power every 1/2 wavelength
>from the termination because it sees a 50 ohm steady state line impedance at
>that point. Move it slightly and the impedance it sees is no longer 50
>ohms. It now indicates a reflection.

Right, when the line is terminated in 50 ohms that is true.

>> Obviously in one direction the volages sum, and if the generator and
>> load are swapped the phase in the current transformer reverses.
>>
>> If you design a meter for 50 ohms, and measure SWR while moving it
>> along a 450 ohm line (or any other line that is NOT 50 ohms) you will
>> find SWR varies all over the place.
>
>Only when the 450 line is not terminated in 450 ohms.

I said that.

>When you move the 50-ohm wattmeter along the line, the steady state line
>impedance it sees varies. That's why the SWR varies. Everything that
>happens here is consistent with transmission line theory.

Now you've got it.

73 Tom

6345. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:47:19 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <3ac4c8ea$0$15028$cc9e4d1f@news.dial.pipex.com>
Source record: 167019
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

"W6RCecilA" wrote ...
> Zoran Brlecic wrote:
> > If we lived in a perfect world where everybody's
> > happy and friendly and lovey-dovey, there would be no need for firearms,
...
>
> Now, wait just a minute. There's a need to fill my freezer with venison.

A bow and arrow was good enough for Robin Hood.
--
Gary7SLL
51° 23' 50" N 1° 19' 58"W
www.gary.peach.dial.pipex.com/

6346. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:48:53 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac4c3e8.847609293@news.accessunited.com>
Source record: 167117

On 30 Mar 2001 16:08:17 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:
>
>Typical built in tuner in modern rigs loses about 20% of power.
>Easy to verify, load the rig to dummy load, put external wattmeter between the
>rig and the dummy and switch your tuner in and out, you will see about 20 %
>drop, like instead of 100W you will get 80 watts.
>I value my watts and always try to design antennas that have 50 ohm feedpoint.

Yuri, I just checked my FT1000D. The worse band is 160 meters, as it
is with most T network tuners.

On 160 meters with no tuner, the power to the load is 200 watts. With
the tuner, the power to the load is 187 watts. That's 93.5% of the
power delivered, or .29 dB loss.

On 40 meters output power with no tuner is 182 watts. With the
internal tuner it is 179 watts. That's 98% efficient, and only .07dB
loss.

Very few tuners lose 20% of the power, even on 160, unless the load
impedance is very low.

Can you tell me where you numbers come from?

73 Tom

6347. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 17:53:21 UTC
From: atkes@imap1.asu.edu
Message-ID: <9a2h6hpdg1@news.asu.edu>
Source record: 167118

Cortland Richmond (Cortland.Richmond@usa.alcatel.com) wrote:

>Point of view seems one of the issues we have been having (and avoiding) here.

I will try to respond to your comments, although if you really
don't think Faraday's law is correct, it may be pointless.

>The electric field component of a signal incident on the loop is
>vertically polarized. If I shunt that field (I used the example of a
>metal roofed porch) I have effectively eliminated it; a short rod
>antenna sensitive to the electric field will indeed indicate a
>reduction of signal under a grounded roof. But a loop antenna will
>still show the same level of signal it did outside. This is indicative
>of its responding to something other than the vertically polarized
>electric filed I have shunted.

You cannot eliminate the electric field in a region and leave an oscillating
magnetic field. It violates Maxwell's equations. If you have
Curl E = -dB/dt, you cannot have a nonzero right hand side and a zero
left hand side. If E=0 throughout a finite region, the left side is zero,
and an oscillating B field is not possible.

>The experiment of placing an entire (small) radio with electric probe
>antenna inside a conducting tube shows that the electric field does not
>much enter the tube; placing a loopstick-equipped radio inside shows
>that a signal can still be received. This is indicative that the
>grounded roof example is carried over in the example of conducting
>tube.

I am not sure if I understand your experiment, but assuming your
conducting tube was thick enough, you basically have a waveguide below
cutoff. You could test this by making the tube longer. The signal
detected should drop exponentially with length with the usual wave
guide far below cutoff result:
Attenuation = 40*pi/ln(10) (l/lambda_c)
where l is the length and lambda_c is the cutoff wavelength of the
relevant mode, ln(10) is the natural logarithm of 10 about 2.3026. The
lowest mode has a cutoff wavelength of about 1.7 times the diameter.
Therefore for a 7 inch diameter and 15 inches to the middle, I expect
an attenuation of around 10 dB for the lowest mode. Higher modes will
have a few dB more attenuation. So if you could make the 30 inch pipe
twice as long, your signal would drop by about 10 dB assuming the pipe
is many skin depths thick. This would demonstrate that the signal is
not coming through the metal, but rather in through the ends of the
pipe. Once the pipe is long enough, the lowest waveguide mode will
dominate, and you can look up the field patterns in many places and see

how to orient various antennas to maximize coupling.

>I don't argue that electrons are accelerated by an electric field. But
>it isn't impossible that they can be accelerated by a magnetic field,
>for permanent magnet generators would not work unless they could be.

Yes, I gave the Lorentz force equation which tells how the magnetic field produces forces on charges.

The electrons in a region of copper in your antenna are initially at rest (assuming that we are talking about a stationary antenna). In a permanent magnet generator, either the magnet is spinning in which case there is an electric field that drives the electrons, or the copper wire is moving through the magnetic field. In that case the electrons aren't initially at rest but have a net velocity (the velocity of the wire) and they certainly respond to the magnetic field. However, I assumed we were talking about stationary antennas. Even in the case of moving wires, in the rest frame of the wire it is the electric field that is doing the work. There is no way to have a force on a charge at rest from a magnetic field if you accept the Lorentz Force equation. The work done on the electrons in a loop antenna is done by the electric field.

>Given that there are always orthogonal counterparts to the electric or
>a magnetic component of the electromagnetic field, then there has to be
>an electric field inside the shield, associated with electrons
>accelerated by the magnetic component of an incident electromagnetic
>field. But it's a different electric field than exists outside, as is
>demonstrated by the fact that electrons are made to flow in the loop
>conductor even when we shunt the external electric field.

If you have been arguing that there is an electric field everywhere but sometimes it is a "different" electric field, then, since I have no idea what measurement to make to tell which fields are the "same" and which are "different", I will stop commenting. If you are saying that you always have an electric field in a finite region when you have an oscillating magnetic field then that is what others have been saying too. Since the electric field goes to zero exponentially in a distance of a few skin depths, both the magnetic field and the electric field deep in the shield go to zero if it is many skin depths thick. The field energy then gets from outside the shield to inside or from one side to the other by going through the gaps. That is what Tom, Roy and others have been saying, and possibly you agree too.

73 Kevin w9cf

6348. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:10:03 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <%Z3x6.1622$RF1.132144@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167020

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac4c112.846883391@news.accessunited.com...
> On Fri, 30 Mar 2001 14:53:04 GMT, "VE9SRB" <srbest@att.net> wrote:
> Hi Steve,
>
> >In the 450 ohm line terminated with 450 ohms there are no standing waves.
A
> >450 ohm meter will read forward power and zero reflected power.
> >
> >Insert a 50-ohm wattmeter into a 450 ohm line and what happens? You just
> >created an impedance discontinuity in the 450 ohm line.
>
> No, there is no discontinuity at all over what the normal sampling of
> a meter for another Zo would cause.
>

Inserting a short section of 50 ohm line into a 450 ohm line causes an
impedance discontinuity. It may not make much difference in what you see in
the 450 ohm line before the discontinuity but it has everything to do with
what you see in the short section of 50 ohm line.

> I am only trying to point out HOW the meters we normally use
> work,since that seems to be what is tripping you up a bit in some of
> your comments. I'm not disagreeing with your transmission line
> analysis, just with what you say a meter will indicate.
>
> >The output side of the 50 ohm wattmeter sees a 450 ohm steady state line
> >impedance: It sees a 9:1 SWR. As a result of this 9:1 SWR, there is now
a
> >standing wave in the 50 ohm wattmeter. By inserting the 50-ohm wattmeter
> >you created the reflection that it indicates. The reflection it
indicates
> >is very real.
>
> A well-designed meter looks like nothing at all to the line. The Zo
> setting of the meter has nothing to do with reflections on the line.
>

Take the plug out of a bird wattmeter and look at the 50 ohm line. This 50
ohm line behaves no differently than a 3 inch air dielectric transmission
line. There will be a rearward traveling wave on this line. That's why the
50 ohm wattmeter indicates reflected power.

> >The 50 ohm wattmeter indicates a higher forward power as a result of the
> >re-reflections created at its input. Looking rearward it sees a 450 ohm

> >impedance discontinuity.
>
> No, it does not. It indicates a higher power because the voltage
> divider has more voltage. It is a simple circuit that sums voltages
> provided by current through the line and voltages across the line.
>

Yes it does. Transmission theory and the behavior of traveling waves does
not change because the line is short.

The voltage divider has more voltage because of the impedance
discontinuities created by the 450 / 50 / 450 ohm mismatch.

> >In the 450 ohm line in front of the 50 ohm wattmeter, the SWR will go up
> >only slightly (1.1:1) because the line length in the 50-ohm wattmeter is
> >very short and it does not transform the 450 ohm steady state line
impedance
> >very much. So, a 450 ohm wattmeter will not read very much reflected
power.
> >It will not read "zero" reflected power.
>
> It will not read zero reflected power because the ratio of voltage
> provided by the current sample is changed when compared to violtage
> across the line.
>

Your describing how the circuit works. You need to consider why the
voltages and currents are changing.

> >I am not sure why you have a problem with theory or models. They work
quite
> >well to explain the situation you are describing. The real world does
not
> >behave differently than the models predict, even with a 50 ohm wattmeter
in
> >a 450 ohm line.
>
> I think the problem is in understanding the meters, not the model.
>
> >The 50-ohm wattmeter will indicate zero reflected power every 1/2
wavelength
> >from the termination because it sees a 50 ohm steady state line impedance
at
> >that point. Move it slightly and the impedance it sees is no longer 50
> >ohms. It now indicates a reflection.
>
> Right, when the line is terminated in 50 ohms that is true.
>
>
> >> Obviously in one direction the volages sum, and if the generator and
> >> load are swapped the phase in the current transformer reverses.
> >>

> >> If you design a meter for 50 ohms, and measure SWR while moving it
> >> along a 450 ohm line (or any other line that is NOT 50 ohms) you will
> >> find SWR varies all over the place.
> >
> >Only when the 450 line is not terminated in 450 ohms.
>
> I said that.
>
> >When you move the 50-ohm wattmeter along the line, the steady state line
> >impedance it sees varies. That's why the SWR varies. Everything that
> >happens here is consistent with transmission line theory.
>
> Now you've got it.
>
> 73 Tom

6349. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:11:16 UTC
From: Butch Magee <lynyrd@netdoor.com>
Message-ID: <3AC4CC44.90E1E29A@netdoor.com>
Source record: 167021

The GAP Titan Is the best vertical ever made! NO Tuner, NO Coils and it is right up the middle of each band except for 75/80 you must ttell the retail outlet which one you want on the bottom band.

Ken Bessler wrote:

> I'm thinking about getting one of the above listed antennas and would
> like to hear opinions from users out there. Thanks!
> --
>
> Ken Bessler, Ham Callsign KGï¿½WX
> Design Services Company
> http://kg0wx.users.50megs.com/
> Smoke free since 9/30/96!
> ICQ# 63379650

6350. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:25:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC4CF90.8BF0D817@eznec.com>
Source record: 167022

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > Nonetheless, are you saying
> > that the real part of any line's characteristic impedance is
> > "dissipationless"?
>
> The part of the line's characteristic impedance that doesn't dissipate
> any power is dissipationless, by definition.

That's fine, but does the characteristic impedance dissipate any power? If not, I assume that the characteristic impedance of all cables, regardless how lossy, is "dissipationless". So If I have a very long and lossy cable, I can lose all my power in a line with "dissipationsless" Z0?

>
> > When a cable has loss, not all the power is dissipated in the load. Some
> > is dissipated in the cable.
>
> The example was for a lossless cable. Whatever part of Z0 exists that
> doesn't dissipate any power, it doesn't dissipate any power. The same
> power cannot be dissipated in two separate places.

No, the question is about a cable with loss. A lossless cable is a trivial case that even I can figure out.

> > It's the voltage at the output of an amplifier divided by the current at
> > the input.
>
> The voltage at your house times the current at my house is meaningless.

Indeed. But the voltage out of an amplifier divided by the current in is valid and useful. "Norton" amplifiers, which have a low impedance input and whose output is determined primarily by the input current, often are specified this way. Transresistance is a useful parameter. But if it bothers you, let's talk about transconductance instead, since it's probably more familiar. This is the output current divided by the input voltage, and is often used as a specification for tubes and FETs. Since we have dissipationless resistance, we surely must also have dissipationless conductance, no? So is a tube or FET transconductance dissipative, dissipationless, or some of each? If some of each, how much?

Roy Lewallen, W7EL

6351. Re: Imaginary Resistance... Dissipationless Resistance... and all...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:32:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC4D15A.B20B4241@eznec.com>
Source record: 167023

No, the transresistance of an amplifier (output voltage divided by the input current) is the reciprocal of its transconductance (output current divided by the input voltage) only if the voltage gain is the reciprocal of the current gain.

Wow, I'm getting richer every day. Just a short time ago, all I had to work with was resistance. Now I have "dissipative", "dissipationless" and "ringer" resistances. They just seem to keep popping out of the woodwork. How many more kinds are there? I've learned that resistor leads act as a type converter, converting between "dissipative" and "dissipationless" resistances. Are there converters to convert "ringer" resistance to the other kinds?

Cecil, do you agree with this? That is, is there a third pigeon hole where we can put the pesky resistances that aren't obviously "dissipative" or "dissipationless"?

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy, W7EL wrote:
> "But, I`m still confused about that amplifier transresistance."
>
> It has to be the inverse of transconductance.
>
> You put something in over here and it affects something over there. This
> is like mutual impedance where a voltage across a pair of terminals over
> here causes current in a circuit over there.
>
> In these "trans" and "mutual" things there are intervening variables
> depending on how close the relationship really is. That`s why I proposed
> the term "ringer resistance" as a generic type resistance which would
> include "transresistance". A ringer is a likeness, but not the real
> thing.
>
> Best regards, Richard Harrison, KB5WZI

6352. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:38:34 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4D2AA.E3F215B0@IEEE.org>
Source record: 167024

Paul wrote:
> How so? The transmatch is essencially a variable capacitor that when
> inserted into a perfectly matched feed system will produce (vary) inductive
> reactance on the transmitter side and insert capacitive reactance (unless
> tuned) on the antenna side to zero, regardless of of where the transmatch is
> located in the feed line. Are you saying that no inductive reactance is
> present? Please explain your theory.

The transmatch usually matches the R +/- jX at the input of a transmission line to the 50+j0 required by the transmitter. The antenna reactance can be either inductive or capacitive or zero. The antenna resistance can be low, medium, or high. The meaning of your statement above is unclear. The transmatch is not a variable capacitor. The transmatch is a matching network containing (typically) one variable inductance and two variable capacitors.
--
http://www.mindspring.com/~w6rca

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6353. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:43:49 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4D3E5.CC33C49A@IEEE.org>
Source record: 167025

Yuri Blanarovich wrote:
> Typical built in tuner in modern rigs loses about 20% of power.
> Easy to verify, load the rig to dummy load, put external wattmeter between the
> rig and the dummy and switch your tuner in and out, you will see about 20 %
> drop, like instead of 100W you will get 80 watts.
> I value my watts and always try to design antennas that have 50 ohm feedpoint.

A pi-net tuner will have lower losses than that into a 50 ohm dummy load.

I design antenna systems that have a 50 ohm feedpoint at the transmitter
end of the transmission line. For instance, a one-wavelength dipole has
gain over a 1/2WL dipole. If the feedpoint impedance is 4050 ohms, 1/4WL
of 450 ohm ladder-line will result in a perfect match for a 50 ohm
transmitter.
--
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6354. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:46:02 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4D46A.9B1AEF56@IEEE.org>
Source record: 167026

Dave Cook wrote:
> Thank you all for the very informative feedback on this.It seems that Tom,
> W8JI's answer is the short and sweet one - the half-size G5RV is good for
> 40, 20, and 10.

A quick look indicates that it should also work on 6m.
--
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6355. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 18:54:52 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4D67C.3FF64BDC@IEEE.org>
Source record: 167028
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Gary Peach wrote:
>
> "W6RCecilA" wrote ...
> > Now, wait just a minute. There's a need to fill my freezer with venison.
>
> A bow and arrow was good enough for Robin Hood.

I'm a Cowboy, not an Indian. :-) And Robin Hood would probably have traded
his bow and arrow for my SKS with a 30 round magazine full of armor-piercing
ammo. Can you imagine the king's armored knights charging Robin Hood equipped
with an SKS?
--
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6356. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:00:14 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4D7BE.181F8B9D@IEEE.org>
Source record: 167030

Richard Clark wrote:
>
> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> >The part of the line's characteristic impedance that doesn't dissipate
> >any power is dissipationless, by definition.
> >
> That is one rare jewel of a definition. ;-)

If a resistance isn't dissipating power then it is obviously dissipationless.
One cannot make a silk purse out of a sow's ear. :-)

Seriously, let's say we have a one-wavelength dipole with a feedpoint
impedance of 4050 ohms. We feed it with 1/4WL of 450 ohm ladder-line.
We measure a resistance of 50 ohms at the input to the transmission
line. That 50 ohm resistance is dissipationless.
--
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6357. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:08:36 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <3AC4D9B4.FE67ADC2@west.raytheon.com>
Source record: 167029

Richard Harrison wrote:
>
> Tom, W8JI wrote:
> "All the shield does is allow us to balance the antenna...."
>
> No, it also screens out the electric field.

All of it, or only a part? If only a part, which part is suppressed
and which is unaffected?

bart
wb6hqk

6358. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:10:40 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4DA30.8BE2FBBD@IEEE.org>
Source record: 167031

Roy Lewallen wrote:
> That's fine, but does the characteristic impedance dissipate any power?

The part of Z0 due to the distributed L and C is dissipationless.
I'm not sure about the other part. I generally conceptualize
only about lossless lines.

> So is a tube or FET transconductance
> dissipative, dissipationless, or some of each?

Does V*I*cos(theta) have any meaning at all when dealing with
transconductance. I don't see that it does. After all, if a
voltage and current are not together, they cannot produce any
power. I would say the ability of transconductance to dissipate
power is undefined.
--
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6359. Re: Imaginary Resistance... Dissipationless Resistance... and all...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:16:03 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4DB73.7225DA80@IEEE.org>
Source record: 167032

Roy Lewallen wrote:
> Wow, I'm getting richer every day. Just a short time ago, all I had to
> work with was resistance. Now I have "dissipative", "dissipationless"
> and "ringer" resistances. They just seem to keep popping out of the
> woodwork. How many more kinds are there? I've learned that resistor
> leads act as a type converter, converting between "dissipative" and
> "dissipationless" resistances. Are there converters to convert "ringer"
> resistance to the other kinds?
>
> Cecil, do you agree with this?

From Webster's: "ringer - one that enters a competition under false
representation". Richard might be onto something. Is a "ringer" and
a "troll" the same thing? :-)
--
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6360. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:20:30 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4DC7E.B683F2E@IEEE.org>
Source record: 167033

VE9SRB wrote:
> Inserting a short section of 50 ohm line into a 450 ohm line causes an
> impedance discontinuity. It may not make much difference in what you see in
> the 450 ohm line before the discontinuity but it has everything to do with
> what you see in the short section of 50 ohm line.

Tom is probably thinking about the non-slotted line SWR meters that
can be recalibrated to another Z0 by adjusting one variable capacitor.
There's no change in what the transmission sees.
--
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6361. Re: Imaginary Resistance... Dissipationless Resistance... and all ...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:25:23 UTC
From: richardharrison@webtv.net
Message-ID: <24153-3AC4DDA3-8@storefull-113.iap.bryant.webtv.net>
Source record: 167036

Richard Clark wrote:
"Actually, I`ve often wondered - why wouldn`t a power source be a
negative resistance?"

To the phone company, a power source is often a negative resistance.
Phone companies amplify traffic on their lines with "negative resistance
repeaters". All that can be done on a 2-wire circuit is offset circuit
loss, else it will "sing".
Signal processing could change all that. I`m referring to ancient
technology. Digitally, time slots could be assigned to transmission
directions to keep the signals separate on the same pair of wires. That
is done with analog multiplex carrier, but you seldom have a 4-wire
phone set. With a codec in the phone set? Why not all the gain you want
in both directions, anytime?

Best regards, Richard Harrison, KB5WZI

6362. Re: END FED ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:31:57 UTC
From: kelly@dvol
Message-ID: <3ac4dd35.153437917@news2.dvol.com>
Source record: 167034

On Thu, 29 Mar 2001 16:19:28 -0500, "marvin rosen"
<n3bqa@starpower.net> wrote:

> can an end fed ant (80-10 mtrs) be made with just coax, a balun & 130 ft of
>wire with the use of an ant tuner?
>
What would be the purpose of the balun?
>
The answer to your question is no. The feedpoint impedance will be
very high and variable on most bands. The only way you can get the
wire feedpoint impedance transformed to 50 ohms resitive is with a
wide-range tuner like several of the MFJs. You'll also need a good
ground and/or a counterpoise to complete the circuit.
>
w3rv

6363. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:33:33 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4DF8D.1F2E4372@IEEE.org>
Source record: 167035

Donaly wrote:
> ... in network theory, transresistance is
> convenient for describing the behavior of a current-controlled voltage
> source. Your house and Roy's house don't constitute a
> current-controlled voltage source do they Cecil?

My point was that if the voltage and current being considered don't
exist in the same space-time, then V*I*cos(theta) is meaningless.
--
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6364. Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 19:55:55 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC4E4CB.CA8063DD@IEEE.org>
Source record: 167037

I'm going to put up an elevated radial 40m vertical and drove up to Texas Towers on Wednesday to get the necessary aluminum tubing. They have a program that calculates wind loading. To my amazement, my design would fail at the base at 44 mph.

So I got to thinking about how to strengthen the base and came up with the idea to run a fiberglas pipe inside the bottom section and then a water pipe inside the fiberglas pipe. Now I'm wondering what effect the grounded water pipe would have on the vertical.

I guess the question is: Does RF flow on the inside of aluminum tubing being used as a vertical element? Would the insulated grounded rod on the inside of the aluminum tubing have any effect?
--
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6365. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 20:35:48 UTC
From: John O'Flaherty <oflahert@toast.net>
Message-ID: <3AC4EE24.EE9B4DDC@toast.net>
Source record: 167038

W6RCecilA wrote:

> I'm going to put up an elevated radial 40m vertical and drove
> up to Texas Towers on Wednesday to get the necessary aluminum
> tubing. They have a program that calculates wind loading. To
> my amazement, my design would fail at the base at 44 mph.
>
> So I got to thinking about how to strengthen the base and
> came up with the idea to run a fiberglas pipe inside the
> bottom section and then a water pipe inside the fiberglas
> pipe. Now I'm wondering what effect the grounded water pipe
> would have on the vertical.
>
> I guess the question is: Does RF flow on the inside of aluminum
> tubing being used as a vertical element? Would the insulated
> grounded rod on the inside of the aluminum tubing have any
> effect?

It sounds like you'd have a fiberglass dielectric capacitor, that would be important to the degree that the aluminum tube has a different rf voltage than the copper tube inside.

john

6366. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 20:56:49 UTC
From: richardharrison@webtv.net
Message-ID: <194-3AC4F311-48@storefull-111.iap.bryant.webtv.net>
Source record: 167039

Tom W8JI wrote:
"Try your nonsense on Bill awhile."

I did a search on "Faraday shield" a few minutes ago for grins and to see if there weren`t more experts that anyone could click on to hear-out for themselves.

My mouth dropped wide when I saw the first item up. It was something that Tom apparently wrote on 30 Sept. 1996. Title was "Faraday shield and Beverages".

I haven`t read it all but I suppose anyone can find it the same as I. I was flabbergasted reading from the first few lines which I`ll reprint out of context and incomplete as I haven`t even read the whole thing, and I think I never will.

"A Faraday shield is really just an extra plate of a capacitor placed between the primary and secondary. It makes the original small capacitance between windings look like two larger values (more than double the original value). The junction of these "new" capacitors can be connected to ground. This allows us to "shunt" capacitively coupled currents to the common point."

Well, I`m through re-typing Tom`s baloney. There is more for anyone that wants to search it out.

Best regards, Richard Harrison, KB5WZI

6367. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 21:19:21 UTC
From: richardharrison@webtv.net
Message-ID: <3687-3AC4F859-79@storefull-118.iap.bryant.webtv.net>
Source record: 167041

Bart Rowlett, WB6HQK wrote:
"Richard Harrison wrote:
Tom W8JI wrote:
"All the shield does is allow us to balance the antenna...."
No, it also screens out the electric field.

Bart then asks: "All of it or only a part?"

Normally, the Faraday shield is quite effective, but that means little without quantitification, and I have no numbers.

A Faraday shield is a picket fence. The number and spacing of the pickets obviously affects the electric field terminations and screening, but the gaps can be ever so fine and they will still prevent circulation of induction current, so there nis no real problem.

Best regards, Richard Harrison, KB5WZI

6368. Re: Imaginary Resistance... Dissipationless Resistance... and all...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 21:22:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3AC4F923.560BEAC4@eznec.com>
Source record: 167040

This has been entertaining, but I really have to get back to work.

Thanks for all the comments. I now have a good idea of what "dissipationless" resistance is -- a vague, philosophical concept to which a numerical value can't be assigned (except in obvious, trivial cases), and not a quantity that can be used for any sort of analytical analysis. I'll stick to the one definition of resistance that's served me and my colleagues so well, and leave it to others to sort out "disspative", "dissipationless", and "ringer" resistances from one another. As far as I'm concerned, any analysis requiring "dissipationless" resistance for support may as well invoke poltergeists too.

Roy Lewallen, W7EL

6369. Proper type of coax for automotive use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 22:14:04 UTC
From: Big Ron <bigron@ematic.com>
Message-ID: <4o0act4rdd6c1sk5r0g16c5nj5jjopq3oi@4ax.com>
Source record: 167044
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.antenna

I plan on installing a permanent mount (NMO) in my car for an antenna and curious as to what type of coax cable is best for use in a car. It needs to fit under headliner/carpet/under moldings etc, but I want as low of loss cable as possible under most frequencies (VHF will be used mostly). I could buy a mount with coax already attached but I don't know if, 1) the coax is high quality and 2) if the included cable is long enough.

6370. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 22:24:07 UTC
From: kb7qhc@home.com
Message-ID: <3ac50743.329574513@news.seanet.com>
Source record: 167042

On Fri, 30 Mar 2001 13:10:40 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

> I would say the ability of transconductance to dissipate
>power is undefined.

Hi Cecil,

Your definitions are far more entertaining than those of the IEEE.
;-)

73's
Richard Clark, KB7QHC

6371. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 22:46:33 UTC
From: nospam_n7ws@arrl.net
Message-ID: <3ac50b5c.27222226@news.aepnet.com>
Source record: 167043

On Fri, 30 Mar 2001 13:55:55 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:

>I'm going to put up an elevated radial 40m vertical and drove
>up to Texas Towers on Wednesday to get the necessary aluminum
>tubing. They have a program that calculates wind loading. To
>my amazement, my design would fail at the base at 44 mph.
>
>So I got to thinking about how to strengthen the base and
>came up with the idea to run a fiberglas pipe inside the
>bottom section and then a water pipe inside the fiberglas
>pipe. Now I'm wondering what effect the grounded water pipe
>would have on the vertical.
>
>I guess the question is: Does RF flow on the inside of aluminum
>tubing being used as a vertical element? Would the insulated
>grounded rod on the inside of the aluminum tubing have any
>effect?
>--
>http://www.mindspring.com/~w6rca

I believe we would call this arrangement a "coaxial capacitor."

I think that you would have more strength at lower cost, if you used aluminum
for increasing the wall thickness of the bottom of the vertical. This doesn't
solve the insulation problem however.

73,

Wes N7WS Tucson, AZ where it's approaching 90 degrees F today.
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6372. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 22:56:18 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac502c8.981813@news.accessunited.com>
Source record: 167045

Hi Steve,

I said:
>> No, there is no discontinuity at all over what the normal sampling of
>> a meter for another Zo would cause.

On Fri, 30 Mar 2001 18:10:03 GMT, "VE9SRB" <srbest@att.net> wrote:
>
>Inserting a short section of 50 ohm line into a 450 ohm line causes an
>impedance discontinuity. It may not make much difference in what you see in
>the 450 ohm line before the discontinuity but it has everything to do with
>what you see in the short section of 50 ohm line.

That's where you are missing my point Steve. You keep clinging to the
idea the meter "looks like" a certain Zo line. It does, but the Zo a
typical lumped component dorectional coupler "looks like" has little
or nothing to do with the impedance it is set for.

It is a current transformer in series with the line, that looks like
very low series resistance with negligable inductance. It is a divider
across the line, that looks like a very high impedance.

Neither of those values are selected to "look like" anything in
particular.

I can take a 50 ohm meter, and with no change but a simple adjust,
make it a 25 meter or a 100 ohm meter. The impedance looking through
the meter won't change any measureable amount.

>> A well-designed meter looks like nothing at all to the line. The Zo
>> setting of the meter has nothing to do with reflections on the line.
>
>Take the plug out of a bird wattmeter and look at the 50 ohm line. This 50
>ohm line behaves no differently than a 3 inch air dielectric transmission
>line. There will be a rearward traveling wave on this line. That's why the
>50 ohm wattmeter indicates reflected power.

No, that's why the meter offers a nearly perfect impedance on bands
where the line inside the meter is a few degrees long. The directivity
comes from the temination in the slug, not the line section.

I can make a Bird meter, by adjusting a resistor inside the slug,
measure 75 ohm lines just fine. Of course on VHF and higher it would
start to put a "lump" in the 75 ohm line because the meter has extra
lead length outside the area where the sampling takes place. But at
lower frequencies, the Zo of the line section has nothing to do with
the null impedance of the directional coupler. We can make the null

impedance anything we want within reason.

The more common-lumped component meter is generally designed so the shunt impedance is many times the line Zo, and the series impedance many times less. The surge impedance of the meter has nothing to do with the null setting of the direction coupler section.

Wide-range RF bridges work this way, by varing one or two elements in the sampling section. You don't have to change the meter's Zo to change the null impedance.

Now at microwave, or even at UHF, things are a bit different because generally the line sections are long enough to have an affect. In that case you want them close to the line Zo, so they don't cause a mismatch.

>> No, it does not. It indicates a higher power because the voltage
>> divider has more voltage. It is a simple circuit that sums voltages
>> provided by current through the line and voltages across the line.
>>
>
>Yes it does. Transmission theory and the behavior of traveling waves does
>not change because the line is short.

This is not a line section type of sampling unit. It does not sample voltages or currents at two isolated areas spaced a large fractuion of a wavelength apart.

Its impedance does not matter much, the only thing that matters is the null adjustement for a give line volatge an line current when current and volatge are in phase.

>The voltage divider has more voltage because of the impedance
>discontinuities created by the 450 / 50 / 450 ohm mismatch.

Nope, doesn't have to do that. This does not have to be a fractional wavelength sampling section, it can be a lumped device....and almost always is at lower VHF, HF and lower.

>Your describing how the circuit works. You need to consider why the
>voltages and currents are changing.

That's right. I am describing how the sampling circuit works. It is a simple device that compares through current to across voltage, and sums the sampled voltages directly before rectification.

I can design them all day and all night without giving a "hoot" about the impedance of the sampling section. All that is necessary is the current transformer look like a very low Z, and the volatge divider look like a very high Z to the line....and the voltages from each be exactly equal when the I and E on the line are in-phase (or exactly out-of-phase) are in the correct ratio for the line Zo.

None of this requires the surge impedance of the sampling sections to equal the line Zo.

73 Tom

6373. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:00:28 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac50e94.4001923@news.accessunited.com>
Source record: 167047

On Fri, 30 Mar 2001 13:20:30 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>VE9SRB wrote:
>> Inserting a short section of 50 ohm line into a 450 ohm line causes an
>> impedance discontinuity. It may not make much difference in what you see in
>> the 450 ohm line before the discontinuity but it has everything to do with
>> what you see in the short section of 50 ohm line.
>
>Tom is probably thinking about the non-slotted line SWR meters that
>can be recalibrated to another Z0 by adjusting one variable capacitor.
>There's no change in what the transmission sees.

That's right. I am thinking about the most common type of directional
coupler used at low VHF and lower. Even a Bird behaves this way below
upper VHF.

You can get inside the slug and set the null for any line Zo you like,
without changing the line section impedance.

The Zo of the meter has nothing to do with detecting the forward and
reverse power. At upper VHF and higher, other methods are more
popular.

73 Tom

6374. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:05:10 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9a33f0eei1@slb0.atl.mindspring.net>
Source record: 167048

Tom:

At any point along a transmission line at any particular frequency one can measure a voltage V and a current I. This is completely unambiguous, however it is but one "view" of the transmission line. The view seen by a voltmeter and an ammeter. Other instruments and metrolgy will view it differently.

You can only measure one voltage across the line at one point at one frequency. Call it V.

Then if you wished to do so, you can resolve V (or I) into components in any way you might wish. It's arbitrary...

Its' sort of like finding the "components" of the number 42.

42 is the answer as you know!

And 42 can be resolved in an infinite number of ways...

For example 42 = 40 + 2, or 42 = 35 + 7 or, 42 = 35 + 10 -3, or 42 = 6 x 7 or... etc... How many ways can you express 42? An infinite number of ways. How many ways can you analyze and express the V and I at a point on a transmission line? An infinite number of ways, all of them valid and completely quantitative. [No dissipationless resistances here!]

Another way of looking at this is to look at a 2D circle in three dimensions. Sometimes it looks like an oval, sometimes it even looks like a line, but...it's still a circle according to one view. Or looking at a skeleton cube in two dimensions. Asking which of these views is valid is not really a proper question, they are all valid! Similarily there are many valid views of the voltage and current at a point on a transmission line.

What you are doing when you "observe" the voltage V and current I on a transmission line through a sampling directional coupler is to resolve V and I into sums according to a certain prescribed algorithm (view). Think of this as a computation done by a simple analog computer called incidently a directional coupler. If the coupler's sampling impedance is high enough [i.e. it's a very good directional coupler and it's insertion into the line does not affect the signals on the line, like the action of a high impedance voltmeter.] the signals V or I on the line will not even change or notice the insertion of the directional coupler. And the coupler will compute according to it's prescribed algorithm, or circuit design.

This algorithm, in most cases for ham directional couplers, used to "resolve" waves is simply:

Vr = V -IZo and Vi = V + IZo where:

Vr is the "so called" reflected voltage and Vi is the so called incident voltage. Change Zo then Vr and Vi change, but V and I are still the same "reality".

In terms of linear transformations what the directional coupler does is to rotate the vector [V, I] by means of a linear transformation based upon Zo into a new vector [Vr, Vi]. It's the same vector... just viewed from another angle...

In matrix format this rotation looks like (Reflected Wave, Incident Wave) = Transformation x (Voltage, Current) or...

```
Vr| = | 1 -Zo| |V|
Vi| | 1 Zo| |I |
```

So this question of the significance of waves revolves around the "significance" of Zo to some perceived or assumed "reality". The reference impedance of the directional coupler and the linear transformation it makes in the vector space of [V, I] is arbitrarily related to the meter/coupler not to the transmission line.

This is the basis of the "Generalized Scattering Formalism" wherein one can express or measure voltages and currents in terms of a set of arbitrary impedances. They don't even have to be real, they can be imaginary or complex or even functions.

If the reference impedance of the directional coupler Zo happens to be exactly equal to the surge impedance of a transmission line then one can use the directional coupler to "resolve" V and I into incident and reflected waves that correspond to a particular physical view of that special transmission line which supports (the numerous non-unique) solutions to the partial differential wave equations governing the lines.

However since those solutions are not unique we are not guaranteed that our view is the "real" one. And who cares? This view is no more or less valid than any other view, and one can easily perform all the quantitative scientific and engineering analysis and design one cares to perform to find other values of V and I anywhere on the system from any such view. Using any particular Zo as the basis for the view is no different or any less quantitative than using any other finite non-zero reference impedance. The oval is still the circle!

If you give me a directional wattmeter with any old reference impedance Zo, as long as I know its' Zo precisely, then I can use it to make measurements in any system of any other impedance or even of a non-constant impedance (wrt frequency) and I can use those measurments and results to calculate or design and predict quantitatively any other derivable quantities be they arbitrary waves or actual currents and voltages.

Now what is the appropriate Zo to use in a directional coupler for a line whose "surge impedance" varies over several orders of magnitude in both real part and imaginary part (surge resistance and surge reactance) within the band of interest? This is the "broad band" directional coupler problem! And... does it really matter? It all has to do with observability and

controllabilty. As long as observability is maintained under any assumed reference impedance then go ahead and measure those arbitrary waves with confidence, you can accomplish anything you need to do with those arbitrary views.

Now I assert that many hams using VSWR meters, especially those like me, who use them connected into unknown characteristic impedance lines connected to unknown impedance antennas to indicate when our "tuners" have satisfied the 50 Ohm requirements of our transmitter PA's, are measuring completely arbitrary "waves" which have no real physical significance to any particular model of the world. The meter indicates nothing about the actual waves on the system at all.

That's why I assert that "waves are arbitrary and non-unique" and depend only upon the metrology used to analyze and view them.

There may be some particular cases where a Zo in a sampling directional coupler corresponds exactly to some laboratory transmission line set up and thus measures a Vr and Vi that can be "seen" or expressed in another way that makes the observer feel warm and fuzzy about his particular view of reality, but... who the heck cares?

-Peter K1PO

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac4704b.826201848@news.accessunited.com...
> On Fri, 30 Mar 2001 02:52:36 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >What happens, though, is that some people, particularly amateurs, do
> >careless measurements or misinterpret the measurements they're making.
> >For example, a person connects a transmitter to a 75 ohm line through a
> >50 ohm SWR meter and mistakenly thinks that the meter reading is the SWR
> >on the line. It isn't. Likewise a directional power meter. Certainly,
> >you can reach all sorts of bizarre and incorrect conclusions by claiming
> >that you're measuring something that you're not. But waves are real,
> >well defined, and readily calculable, and don't depend at all on how
> >they're measured.
> >
>
> The point I was going to make is the meter does not really measure SWR
> or forward and reflected power. It is calibrated to read those things,
> but it really looks at one slice of the line and "has no idea" what is
> happening with standing waves.
>
> Now if you moved a detector along the line, you could see the standing
> waves. It would not have to be calibrated to the line, it would only
> have to indicate the ratios of the parameter it reads (voltage or
> current) accurately.
>
> Traditional meters are circuit systems, not transmission line systems
> where waves stand. They are set to null on a certain ratio of in-phase

> voltage and current. They can very easily give the wrong answer if
> they are not used in a line that is the same Zo they were calibrated
> to be used in.
>
> Predicting what the meter will read is dangerous, unless you know what
> the meter actually measures. It doesn't mean there are no standing
> waves, just because someone is giving the meter credit for doing
> something it can not do Peter.
>
> 73 Tom

6375. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:07:24 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9a33e1$l2p$1@slb6.atl.mindspring.net>
Source record: 167049

Richard:

Negative resistance is found in many places, not just in semiconductors.

I have built many of them myself and used them to good purpose.

-Peter K1PO

"Richard Clark" <kb7qhc@home.com> wrote in message
news:3ac5bb40.310115632@news.seanet.com...
> On Thu, 29 Mar 2001 22:47:57 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Richard Clark wrote:
> >> The future argument (once dissipationlessness is accepted) is that
> >> when the Zsource is reconsidered, there will be some who step forward
> >> to proclaim, "the R of the generator is dissipationless."
> >
> >Actually, I've often wondered - why wouldn't a power source be a
> >negative resistance?
>
> Hi Cecil,
>
> Why "wouldn't?" Or why "couldn't?".
>
> As negative resistance (a real example found in some semiconductors)
> presents a step discontinuity to an increase in voltage, it would make
> a very problematic Thevenin source. It would also have a tendency to
> oscillate depending on the load.
>
> You sure Enron hasn't already got this patented for power contracts to
> California?
>
> 73's
> Richard Clark, KB7QHC

6376. Re: Proper type of coax for automotive use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:07:44 UTC
From: "Rob St.Denis" <tstdenis3160@home.com>
Message-ID: <4l8x6.166185$p66.48810277@news3.rdc1.on.home.com>
Source record: 167050
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.antenna

rg-58 is fine under 20' for vhf or uhf

--
Rob St.Denis

Telecommunications Technician
/---\
| Cell Phone (613)296-0094 |
| e-mail fzxdude@yahoo.ca, robstdenis@hotmail.com |
| Home Page http://robstdenis.home.dhs.org |
\---/
"Big Ron" <bigron@ematic.com> wrote in message
news:4o0act4rdd6c1sk5r0g16c5nj5jjopq3oi@4ax.com...
> I plan on installing a permanent mount (NMO) in my car for an antenna
> and curious as to what type of coax cable is best for use in a car.
> It needs to fit under headliner/carpet/under moldings etc, but I want
> as low of loss cable as possible under most frequencies (VHF will be
> used mostly). I could buy a mount with coax already attached but I
> don't know if, 1) the coax is high quality and 2) if the included
> cable is long enough.

6377. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:08:56 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac50fef.4349283@news.accessunited.com>
Source record: 167051

On Fri, 30 Mar 2001 12:22:16 -0500, "Paul" <pvanasse@mail.direcpc.com>
wrote:

>
>: I think you have the theory all wrong about the transmatch. Anyway without
>getting into the theory
>
>How so? The transmatch is essencially a variable capacitor that when
>inserted into a perfectly matched feed system will produce (vary) inductive
>reactance on the transmitter side and insert capacitive reactance (unless
>tuned) on the antenna side to zero, regardless of of where the transmatch is
>located in the feed line. Are you saying that no inductive reactance is
>present? Please explain your theory.

I explained that one.

The transmatch can be considered to look like three things, in any
combination:

1.) a Transmission line of some electrical length and impedance

2.) A transformer

3.) A shunt or series reactance of any sign.

>100 Watts / 1.22 Power Loss Factor = 81.97 watts seen at the antenna feed
>point or a 18% overall loss using the transmatch.
>
>Now lets say the same 100 watt radio is folding back 10% due to a slight
>mismatch and one decides to NOT use a transmatch, however they still use the
>and the same RG-213/U cable at 3.5 Mhz.
>
>.4 dB loss / 10 Inverse Log = 1.1 Power Loss Factor
>
>90 watts / 1.1 Power Loss Factor = 81.82 watts seen at the antenna feed
>point or 8.2% overall loss using no transmatch.
>
>The numbers are practically identical. Granted, the radio will be working

Unless I'm missing something you did not consider the extra loss
caused by SWR on the feedline, which is pretty complex when the line
is short since losses are not distributed evenly between dielectric
and conductor losses.

73 Tom

6378. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:11:07 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac5118e.4764103@news.accessunited.com>
Source record: 167052

On Fri, 30 Mar 2001 12:43:49 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>A pi-net tuner will have lower losses than that into a 50 ohm dummy load.

A C-L-C pi-netwpork tuner is virtually useless at lower frequencies
when trying to match low Z or moderate Z loads.

73 Tom

6379. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:12:10 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AC512CA.7C458D4E@dialpoint.net>
Source record: 167046

I used an Icom 706mk2G to Struthers Wattmeter then a Bird meter with
short pieces of coax to the MFJ then to a good dummyload. Ran the ICOM
to 100 watts out. Then moved the Bird to the other side of the MFJ.
Left the other wattmeter inline to make sure the refferance power did
not change. This was to a MFJ 948. The MFJ was adjusted for the
minimum reflected power on the built in wattmeter and the tuning was not
changed on the MFJ when the Bird was moved to the other side. This was
done at 80 meters then 20 and ten meters.

Tom W8JI wrote:
>
> >not. My MFJ looses about 10 watts out of 100 going into it on 80 meters
> >when fed into a good dummy load and less as I move toward the higher
> >frequencies. The mfj is not the greatest but typical of the inexpensive
> >ones.
>
> I'm just curious. How did you measure that?
>
> 73 Tom

6380. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:20:14 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AC514AE.2E5A@pacbell.net>
Source record: 167055

W6RCecilA wrote:
>
> Donaly wrote:
> > ... in network theory, transresistance is
> > convenient for describing the behavior of a current-controlled voltage
> > source. Your house and Roy's house don't constitute a
> > current-controlled voltage source do they Cecil?
>
> My point was that if the voltage and current being considered don't
> exist in the same space-time, then V*I*cos(theta) is meaningless.
> --
> http://www.mindspring.com/~w6rca
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

Transresistance is nothing more than a constant of proportionality
between the input current and the output voltage. It just
happens to have the units of ohms which accounts for the "resistance"
part of the name. The people who thought up network theory were
fond of these little confusions. Nobody could ever mistake a
current-controlled amplifier with a resistor could he? Well?

Tom Donaly KA6RUH

6381. W9INN antennas web page

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-30 23:56:00 UTC
From: Charles Johnston <ctj92@earthlink.net>
Message-ID: <k29x6.11050$aP5.1000394@newsread2.prod.itd.earthlink.net>
Source record: 167053
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

W9INN (Bill) has granted me permission to create and publish a web page devoted to his outstanding antennas. It includes a diagram of one of his more popular 5-band resonant HF fan-dipoles - the MPD-5C which comes in either a 78ft or 87 ft model. I have included contact info for Bill and included the measured 2:1 VSWR bandwidths I obtained.

Just click on this link http://www.ab7sl.com and then the W9INN Antennas button .

I have worked 289 DXCC countries (ssb-only) on Bill's antenna (in less than 5 years) and felt he deserved a little internet presence as he has yet to create his own site. All the info you need to reach Bill is on this page. 73 / DX

--

Charles Johnston
charles@ab7sl.com

AB7SL - Ham Radio Pages
http://www.ab7sl.com

6382. Re: Proper type of coax for automotive use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 00:08:17 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <Rd9x6.1510$6f2.208642@paloalto-snr1.gtei.net>
Source record: 167054

Good quality RG8-X is fine for VHF runs up to about 20 feet. It's a slight bit bigger than RG-58, but has a little better loss figure. It's still small enough to easily route behind your interior coverings.

73 de W6DKN

From: "Big Ron" <bigron@ematic.com>
Subject: Proper type of coax for automotive use
Date: Friday, March 30, 2001 2:14 PM

I plan on installing a permanent mount (NMO) in my car for an antenna and curious as to what type of coax cable is best for use in a car. It needs to fit under headliner/carpet/under moldings etc, but I want as low of loss cable as possible under most frequencies (VHF will be used mostly). I could buy a mount with coax already attached but I don't know if, 1) the coax is high quality and 2) if the included cable is long enough.

6383. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 00:30:14 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac523e9.9463668@news.accessunited.com>
Source record: 167056

On Fri, 30 Mar 2001 18:12:10 -0500, Ralph Mowery
<rmowery@dialpoint.net> wrote:

>I used an Icom 706mk2G to Struthers Wattmeter then a Bird meter with
>short pieces of coax to the MFJ then to a good dummyload. Ran the ICOM
>to 100 watts out. Then moved the Bird to the other side of the MFJ.
>Left the other wattmeter inline to make sure the refferance power did
>not change. This was to a MFJ 948. The MFJ was adjusted for the
>minimum reflected power on the built in wattmeter and the tuning was not
>changed on the MFJ when the Bird was moved to the other side. This was
>done at 80 meters then 20 and ten meters.

Sounds good to me. Many people would not do that as well as you did.

Did you use maximum possible C? I've never measured a 948, just
curious.

73 Tom

6384. Re: G5RV problems

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 00:36:42 UTC
From: "Dave Cook", com
Message-ID: <uE9x6.649173$U46.19973723@news1.sttls1.wa.home.com>
Source record: 167057

Thank you Cecil. I didn't mean to neglect to mention that I checked your Web pages and really got a great education on the G5RV theory.

So, I guess I'll climb back up in the trees and pull down the 6 meter wire now ;-)...

Dave, WA0TTN

"W6RCecilA" <Cecil.A.Moore@IEEE.org> wrote in message news:3AC4D46A.9B1AEF56@IEEE.org...
> Dave Cook wrote:
> > Thank you all for the very informative feedback on this.It seems that Tom,
> > W8JI's answer is the short and sweet one - the half-size G5RV is good for
> > 40, 20, and 10.
>
> A quick look indicates that it should also work on 6m.
> --
> http://www.mindspring.com/~w6rca
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6385. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 00:57:30 UTC
From: kelly@dvol
Message-ID: <3ac52b76.4165275@news2.dvol.com>
Source record: 167059

On Fri, 30 Mar 2001 13:55:55 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>
>So I got to thinking about how to strengthen the base and
>came up with the idea to run a fiberglas pipe inside the
>bottom section and then a water pipe inside the fiberglas
>pipe.
>
That program would also let you determine what height vertical would
survive your design wind speed. The full-size vertical would have to
be supported to that height.
>
> Now I'm wondering what effect the grounded water pipe
>would have on the vertical.
>
>I guess the question is: Does RF flow on the inside of aluminum
>tubing being used as a vertical element? Would the insulated
>grounded rod on the inside of the aluminum tubing have any
>effect?
>
Seems to me that the RF would be on the outer surface of the aluminum
until you stuck the pipe in it at which point you'd have a helluva big
capacitance to ground. Would work like the old telescoping tubing
tuning caps in gamma matches.
>
The strength of tubing goes up as the fourth power of the diameter. It
won't take much to boost the strength a bunch. I'd slip a bigger
diameter aluminum sleeve over what you already have for the first 8-10
feet ,
>
>--
>http://www.mindspring.com/~w6rca
>
w3rv

6386. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 01:07:57 UTC
From: atkes@imap1.asu.edu
Message-ID: <9a3ald$13u$1@news.asu.edu>
Source record: 167060

Bart Rowlett (bart@wb6hqk.ampr.org) wrote:

: The statement that time-vaying fields can NOT pass through a conductor
: several skin depths thick is correct.

: If a time varying magnetic field did exist inside a good conductor than
: it would be necessary for a time varying electric field to
: simultaneously circulate in a perpendicular direction. Ohms law states
: that the existence of such an electric field would also require
: conduction currents to flow in the conductor. In the case of a good, but
: not perfect, conductor, the conduction currents will lag (in time)
: behind the originally postulated magnetic field. The magnetic field
: associated with the conduction current will be in a direction which
: opposes changes in the original field but will lag in time and not
: result in complete cancellation of the original field until a depth of
: several skin depths is reached.

I have an animated plot of the magnetic field and current on my web
page if anyone cares. Most texts have plots that show what Bart
describes, but if anyone has trouble picturing the magnitude and phase
of the current and magnetic field, the animation may help. Be aware
that the animation may be jerky until the whole file is downloaded;
its about 130Kbytes,

http://fermi.la.asu.edu/w9cf/skin

73 Kevin w9cf

6387. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 01:08:32 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AC52E10.799D2FBE@dialpoint.net>
Source record: 167058

Not sure what the C value was. I used the same L setting on 80 meters
as I use on a dipole that is resonate around 3850. The dipole has
almost no SWR in the shack on that frequency (fed with 100 feet of
rg-8x) (only about 20 feet up as I like to work a couple of friends
about 100 miles away and getting more height is difficult for me for
that antenna).

On 20 and 10 meters I set the capacitors almost full value and set the
coil switch to the lowest swr via the mfj meter, then adjusted the C for
the lowest swr on the mfj meter. I found I could get more power out
into the dummy load if I adjusted the MFJ for max power on the wattmeter
on the output side but could not be sure if that was because the input
power was changing or not. I could see the wattmeter on the input side
change, but did not take time to determin if the total out of the Icom
was changing or not.

I was just looking to see how much power was lost in the MFJ going into
a 50 ohm load and was hoping that the efficency does not change much
from that as I hook up some antennas.

73 de KU4PT

Tom W8JI wrote:
>
>
> >not change. This was to a MFJ 948. The MFJ was adjusted for the
> >minimum reflected power on the built in wattmeter and the tuning was not
> >changed on the MFJ when the Bird was moved to the other side. This was
> >done at 80 meters then 20 and ten meters.
>
> Sounds good to me. Many people would not do that as well as you did.
>
> Did you use maximum possible C? I've never measured a 948, just
> curious.
>
> 73 Tom

6388. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 01:26:59 UTC
From: Zoran Brlecic <zbrlecic@earthlink.net>
Message-ID: <3AC532C5.88F23495@earthlink.net>
Source record: 167061
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6RCecilA wrote:

> Don't look now, but the Second Amendment has already been essentially
> repealed. Am I free to bear arms inside a US Post Office?

I don't know. Are you a disgruntled postal worker?

73 ..... Zoran WA7AA

--
Support freedom of speech, or I'll kill you!

6389. FS - New VHF / UHF Tri-Band Mobile Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 01:33:12 UTC
From: kk4tl@aol.com
Message-ID: <20010330203312.09290.00002629@ng-cg1.aol.com>
Source record: 167062

New - Never installed, never used Comet SB-15 antenna. Covers 6m, 2m and 440 Mhz bands. Details and specs at - http://www.cometantenna.com/mobile.html $89.95 plus shipping from HRO and a few others. Get this NEW one for $70.00 shipped to your door in the US. Includes wrapping, instruction sheet and allen wrench. If interested, email direct to KK4TL@AOL.COM - personal checks, money orders or Pay-Pal fine with me.

6390. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 02:00:40 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac538f2.14849763@news.accessunited.com>
Source record: 167063

On Fri, 30 Mar 2001 20:08:32 -0500, Ralph Mowery
<rmowery@dialpoint.net> wrote:

>the lowest swr on the mfj meter. I found I could get more power out
>into the dummy load if I adjusted the MFJ for max power on the wattmeter
>on the output side but could not be sure if that was because the input
>power was changing or not. I could see the wattmeter on the input side
>change, but did not take time to determin if the total out of the Icom
>was changing or not.

You might not have measured the lowest loss possible on 80, since that
would be with maximum possible C that allows matching the load.

When a network has loss, maximum power transfer occurs with a little
mismatch. So the result you have where a slight mismatch raises load
power might be from that. It also could be from the transmitter not
"favoring" a perfect 50 ohm load. Most transmitters are like that.

73 Tom

6391. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 02:32:11 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac540e3.16882857@news.accessunited.com>
Source record: 167064

On Sat, 31 Mar 2001 02:00:40 GMT, 2w8ji@akorn.net (Tom W8JI) wrote:

>On Fri, 30 Mar 2001 20:08:32 -0500, Ralph Mowery
><rmowery@dialpoint.net> wrote:
>
>>the lowest swr on the mfj meter. I found I could get more power out
>>into the dummy load if I adjusted the MFJ for max power on the wattmeter
>>on the output side but could not be sure if that was because the input
>>power was changing or not. I could see the wattmeter on the input side
>>change, but did not take time to determin if the total out of the Icom
>>was changing or not.

And oh yes, thanks for taking the time to answer my questions.. 73
Tom

6392. 160 receive antenna more information.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 02:54:23 UTC
From: richl@cyberdude.com
Message-ID: <3AC546DF.21E5123C@cyberdude.com>
Source record: 167065

group,

I am in chino valley arizona north of prescott and I'm trying to get the east coast and europe.
I haven't found the noise source yet still working on that. The power lines run to the north and east of the property, the antenna will be pointing right at it,it's a corner lot. mostly rural power delivery. No other antennas or large conductors in the way.

thanks

rich l
KB7YEB

6393. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:12:45 UTC
From: Keith Wood <kw@bctv.com>
Message-ID: <3AC5593D.1950E24@bctv.com>
Source record: 167067

"David G. Nagel" wrote:
>
> Steve Robeson LPN wrote:

> > >Mr. Rowan used unregistered .22 pistol.
> > >
> > A registered one wouldn't have hurt as much?
> >
> The gun Mr. Rowan used was given to him by his FBI Special Agent son....

. . .which is a violation of several FEDERAL laws, plus the DC law
banning handguns.

6394. Re: MFJ 40 to 15 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:16:08 UTC
From: Lawrence Ober <leo@jove.com>
Message-ID: <9a3lj9$pd6$1@bob.news.rcn.net>
Source record: 167066

I have an MFJ 40-15 loop in the attic of my condo townhouse. It's fairly worthless on 40m but will get out on the higher bands. I originally wanted to buy the 30-10m version. But after four months of backorder, at that time, I settled on the only unit MFJ, HRO or AES had in stock anywhere in the US. Using the loop indoors is frustrating if you're used to decent outdoor wire, verticals, etc. The worst aspect is the High Q. Bandwidth is extremely narrow so you end up retuning every few KHz. You pretty much have to be the one calling CQ. By the time you get the thing tuned someone else has answered or the calling station has gone away. The antenna is better than not operating at all but absolutely anything outside will be better. After 2 1/2 years of this agony I am looking for another solution. BTW, you can be successful on PSK31 since it's low power and many stations are concurrently working in the same SSB bandwidth. As for phone....

Larry, W1MW

"eborys" <eborys@home.com> wrote in message
news:v0Gl6.6824$t67.193040@news1.rdc1.il.home.com...
> Does anyone here own of the MFJ loops? How is it working out for you?
> Thanks,
> Emil
> ak9i
>
>

6395. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:46:20 UTC
From: richardharrison@webtv.net
Message-ID: <11779-3AC5611C-77@storefull-115.iap.bryant.webtv.net>
Source record: 166976

Tom, W8JI wrote:
"That transformer action is how the "shielded" loop transfers energy from the shield to the center."

The center is the loop coil which Tom imagines is his secondary and the shield over the loop is his imagined primary.

Problem is that the shield is broken in the middle with an insulator so that no current can flow around the shield. Fact is: No primary current, no secondary current. Tom`s scenario can`t possibly work.

There is no current flowing around the shield, which, were it to flow, would by Lenz`s law have to oppose the field which induces it in the first place. The imposed and induced fields would then be nearly equal and opposite and cancel each other leaving nothing for the inner loop.

This is what Tom correctly says happens when the gap in the conductive shield is shorted. No signal gets into the loop. This is the same as, for example, a loop of coax. When the shield is intact and conducts from end-to-end, the coax is effective in keeping r-f inside or outside the coax shield. If the coax shield is broken, the shield is no longer effective in keeping signals and noise in or out. Why does coax with a broken shield no longer keep r-f in or out? Because no current can flow through the shield. No counter field can be generated to cancel the magnetic component of the incident r-f. The incident r-f is free to induce signals as if the shield weren`t there. Not so with the electric field component of the r-f field. That time-varying electrictic flux alights on the shield and with proper balance in the grounding of the shield has no effect on the other side of the shield.

The broken shield action is how the Faraday shield works. It is effective in shielding the electric field while allowing excellent coupling of the magnetic field. This doesn`t offend J.C. Maxwell at all. The magnetic field penetrating the shield immediately generates a new electric field on the other side of the Faraday shield.

All of this has been known for about a century. It is taught in standard curricula. Why don`t you believe it?

Best regards, Richard Harrison, KB5WZI

6396. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:47:05 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <djdx6.528600$ge4.188082041@news2.rdc2.tx.home.com>
Source record: 166969

Hi Ken, from what I read on newsgroups, published tests, fellow hams that own the antennas, and personal experience working these antennas on the air, these are my observations:
R8, OK performance on 40 and 30, best of the group on 20 and 15 on up.
Gap Titan, poor on 80m, OK on 40 - 30m , good on 20, 17 very good , fair on 10m.
MFJ 1798, Fragile construction (easily wind damaged), fair on 80 and 40, close to the R8 on 20, good on 15 and up.

Hope this helps...
Cliff N0HC

"Ken Bessler" <kg0wx@yahoo.com> wrote in message
news:3AC2829E.6F35@yahoo.com...
> I'm thinking about getting one of the above listed antennas and would
> like to hear opinions from users out there. Thanks!
> --
>
>
> Ken Bessler, Ham Callsign KG�WX
> Design Services Company
> http://kg0wx.users.50megs.com/
> Smoke free since 9/30/96!
> ICQ# 63379650

6397. Antenna suggestions for Icom 706MKG

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:48:10 UTC
From: John Reed <jreed@NOSPAM.thor.atl.ga.us>
Message-ID: <tcao4u5bi54iad@corp.supernews.com>
Source record: 167068

HI folks:

I bought an Icom 706 Mk2G back in Janurary and I have been contemplating my antenna configuration.

Currently, I'm like this:

Comet SBB-5 2m/440 antenna coming out the VHF/UHF port on the 706MK2G
Larson 6m on the HF port.
(I'm buying a Screwdriver Antenna from Jerry Oxendine very soon)

I was originally planning on dropping a duplexer on the HF port so that I could run the Screwdriver on 10-80 and have a dedicated, resonant antenna on 6m.

Here's what I'm thinking about now:

I currently have the VHF/UHF antennas on MagMounts - and I hope to drill holes, soon. There's also a 220Mhz antenna up on the roof as well, so currently, that'd be 3 holes.

My idea was to put in a Comet 6/2/440 antenna (one hole to drill) and have another hole for the NMO 220 antenna. Since I'm putting the Screwdriver into the mix, it looks like I'm going to need 2 duplexers:

A duplexer to split out the 6m from the 2m/440 port.
A second duplexer to split out 6m from the HF port.

My question to the group is what are you doing with your 706MK2G? Jerry tells me that the Screwdriver antenna will show resonance on 6m if I stretch it out somewhere in the 7mhz area. Although I don't disagree with him, wouldn't an antenna cut for 6m be better?

Also, since I have 2 duplexers in the mix there, is that going to screw things up?

Thanks in advance!

John, N4TII

6398. Re: Imaginary Resistance... Dissipationless Resistance... and all...

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:48:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC561A7.82CBE3D7@IEEE.org>
Source record: 166972

Roy Lewallen wrote:
>
> This has been entertaining, but I really have to get back to work.
>
> Thanks for all the comments. I now have a good idea of what
> "dissipationless" resistance is ...

It is certainly related to the joules/second (power) measured at
a point. If power exists, it must be supported by a resistance,
i.e. at least part of the voltage and current must be in phase.
If the power measured at two different points in the same energy
pipe is the same, then the resistance at the first point must
be dissipationless.
--
http://www.mindspring.com/~w6rca

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6399. Re: Back to 11 Meters.

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:51:04 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <9a3nno$at9$3@208.206.142.87>
Source record: 166970
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

Gary Peach wrote:
>
> "W6RCecilA" wrote ...
> > Zoran Brlecic wrote:
> > > If we lived in a perfect world where everybody's
> > > happy and friendly and lovey-dovey, there would be no need for firearms,
> ...
> >
> > Now, wait just a minute. There's a need to fill my freezer with venison.
>
> A bow and arrow was good enough for Robin Hood.

Yeah, for Geronimo too. So what?

6400. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:55:56 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5635C.9F677C6A@IEEE.org>
Source record: 166973

Tom W8JI wrote:
>
> On Fri, 30 Mar 2001 12:43:49 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >A pi-net tuner will have lower losses than that into a 50 ohm dummy load.
>
> A C-L-C pi-netwpork tuner is virtually useless at lower frequencies
> when trying to match low Z or moderate Z loads.

Is 50 ohms "low Z"?
--
http://www.mindspring.com/~w6rca

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6401. Improving reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 04:58:33 UTC
From: George <pmjb@netzero.net>
Message-ID: <3AC563F9.7BFF917F@netzero.net>
Source record: 166971

Received a RadioShack DX-397 (analog) Shortwave Radio as a gift. It has a telescopic whip antenna and no external antenna jack. I'm looking for a way to improve reception of this smaller radio and decrease interference before I make the move a better radio. Is there a pre-tuner, a filter, or a method to add an extenal antenna? Additionally how to ground such an addition as the portable has no connection for an external ground? Thanks,

George

6402. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 05:03:57 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5653D.FE490BF3@IEEE.org>
Source record: 166975

Wes Stewart wrote:
> I believe we would call this arrangement a "coaxial capacitor."

So there is RF on the inside of the aluminum tubing? If so, what happens
to the photons emitted inside the tube?

> I think that you would have more strength at lower cost, if you used aluminum
> for increasing the wall thickness of the bottom of the vertical.

I already have the fiberglas and I don't have the aluminum. :-) In
fact, I chose the size of the bottom tube to fit snugly over the
fiberglas pipe.

Last time I used a wooden dowel to strengthen the fiberglas pole
but the wood got wet, swelled up, and split the pole. I assume
I can decrease the capacitance effect by insulating the six foot
water pipe from ground.
--
http://www.mindspring.com/~w6rca

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6403. Re: magnetic loop ant

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 05:09:44 UTC
From: Cliff Holloway <cholloway14@home.com>
Message-ID: <sEdx6.528737$ge4.188150976@news2.rdc2.tx.home.com>
Source record: 166974

I've seen some European loops with some wide coverage's. The catch is this, a 10-80m loop's natural frequency is 10m. Here it is 95% efficient or better, but as you tune it lower this changes dramatically, by the time you tuned it down to 80 (you would need a killer capacitor) it's efficiency would be like 3% or less. The best way to go (loop wise) would having at least two loops, one for 10-30m another for 30 or 40-80m.
73 Cliff N0HC

"marvin rosen" <n3bqa@starpower.net> wrote in message
news:9a1rom$sk8$1@bob.news.rcn.net...
> is it possible to build/or is there such a device as a 80-10 mtr magnetic
> loop ant?
>
>

6404. Re: Proper type of coax for automotive use

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 05:23:17 UTC
From: Jim <jspaz@i-55.com>
Message-ID: <3AC569C5.66BFA83D@i-55.com>
Source record: 166977
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.antenna

if you purchase the mount new from Larson, it will come with 18
feet of RG-58 already attached. been using them for over 15
years on 100 watt commercial radios. They work with no problems.

One hint on installing it. Put some silicon grease on the screw
threads. Makes it go together easy. When it comes time to
remove it several years down the road, it will come apart. No
lubrication, have fun trying to remove it. Have even used some
"Never Seize" (TM) when I didn't have any silicon with me.

Jim.

Big Ron wrote:
>
> I plan on installing a permanent mount (NMO) in my car for an antenna
> and curious as to what type of coax cable is best for use in a car.
> It needs to fit under headliner/carpet/under moldings etc, but I want
> as low of loss cable as possible under most frequencies (VHF will be
> used mostly). I could buy a mount with coax already attached but I
> don't know if, 1) the coax is high quality and 2) if the included
> cable is long enough.

6405. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 05:33:27 UTC
From: n2ey@aol.com
Message-ID: <20010331003327.19540.00000432@nso-fr.aol.com>
Source record: 166978

In article <3AC4E4CB.CA8063DD@IEEE.org>, W6RCecilA <Cecil.A.Moore@IEEE.org>
writes:

>I'm going to put up an elevated radial 40m vertical and drove
>up to Texas Towers on Wednesday to get the necessary aluminum
>tubing. They have a program that calculates wind loading. To
>my amazement, my design would fail at the base at 44 mph.

Good thing you checked tht out, Cecil! What size tubing were you thinking of
using?
>
>So I got to thinking about how to strengthen the base and
>came up with the idea to run a fiberglas pipe inside the
>bottom section and then a water pipe inside the fiberglas
>pipe. Now I'm wondering what effect the grounded water pipe
>would have on the vertical.

It will be a real mess. Looks like a big capacitor to ground.

How about guying the thing? Or using thickwalled fiberglass tubing for the base
insulator?
>
>I guess the question is: Does RF flow on the inside of aluminum
>tubing being used as a vertical element?

Normally, no - but putting that grounded pipe inside will change the current
distribution markedly.

>Would the insulated
>grounded rod on the inside of the aluminum tubing have any
>effect?

Sure - particularly if the capacitive reactance of the capacitor formed is low
enough.

Let's do the math. Assume a coaxial capacitor with an effective diameter of
1.27 inches. Its area is about 4 square inches per inch of length. Say you have
two feet of this - the area is 96 square inches. If the dielectric thickness is
1/4 inch, the capacitance is:

C = .224 x Area/spacing = 86 pF for air dielectric.

I don't know the dielectric constant of the fiberglass you want to use, but
it's at least 2 or 3, so you wind up with about 200 pF of capacitance across
the feedpoint of the vertical. If you use bigger tubing or a longer overlap it
just gets worse. 2-1/2 inch tubing and a three foot overlap with 1/4 inch
insulation gives about 250 pF with air insulation!

Good luck with it. What size tubing and what lengths are you considering?

73 de Jim, N2EY

6406. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 06:05:50 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC573BE.C5B5D517@IEEE.org>
Source record: 166980

N2EY wrote:
> Good thing you checked tht out, Cecil! What size tubing were you thinking of
> using?

Already bought it, Jim. The largest is 1.25" ID to slip over a
fiberglas pole that I already have. I've got six 6ft sections in
decending diameters. I was going to go with three 12ft sections
but the six sections were cheaper with less wind load.

> It will be a real mess. Looks like a big capacitor to ground.

Which means that there is RF on the inside of the tubing. Where do
the photons go?

> How about guying the thing? Or using thickwalled fiberglass tubing for the base
> insulator?

I've decided to do both. One of the three upper guys will be my 80m dipole.
--
http://www.mindspring.com/~w6rca

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6407. Re: Improving reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 06:08:38 UTC
From: 'Doc <w5lz@oio.net>
Message-ID: <3AC57466.28EFBAF4@oio.net>
Source record: 166979

George,
A quick and dirty way of adding an external antenna is
to simply wrap several turns of wire around the 'whip, run
the wire out a window, throw it over the house. Or, some
variation of that (over the house). Quick, dirty, cheap!
'Doc

6408. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 07:25:29 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <ih1bctsn6c5as1kibeai9opkl9i8f6fbjh@4ax.com>
Source record: 166982

On 31 Mar 2001 01:07:57 GMT, atkes@imap1.asu.edu wrote:

>I have an animated plot of the magnetic field and current on my web
>page if anyone cares. Most texts have plots that show what Bart
>describes, but if anyone has trouble picturing the magnitude and phase
>of the current and magnetic field, the animation may help. Be aware
>that the animation may be jerky until the whole file is downloaded;
>its about 130Kbytes,
>
>http://fermi.la.asu.edu/w9cf/skin
>
>73 Kevin w9cf

Hi Kevin,

Quite nice - do more!

73's
Richard Clark, KB7QHC

6409. Re: Glass Antennas and NMO no good for 23cm?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 07:42:26 UTC
From: Lewis Barnett <labdab@sprint.ca>
Message-ID: <PYfx6.5924$9N4.131336@newscontent-01.sprint.ca>
Source record: 166983
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Mike,
I have been using a "Larsen" glass-mount antenna for
approximately 5 years now. I have removed it from and re-installed it on 5
different vehicles. The only problem I ever encountered was the interference
caused by a malfunctioning rear-window defroster on one of those vehicles.
Aside from that one minor problem the antenna has performed flawlessly. I
highly recommend it for your application.

Lewis Barnett
Edmonton, Alberta
Mike P. Storke <storkus@packard-hell.storkus.com> wrote in message
news:98ucfilm1@nnrp.atgi.net...
> I drive a taxicab for a living, and have been struggling for some time
now
> to try to figure out how to use an outside antenna without making
permanent
> modifications. The problem, of course, is that all 4 doors of the car are
> opened and closed routinely while I work, making using a mag-mount with
the
> coax going out the window a pain.
> While I won't get more than 2 bands out of it, I'm considering a glass-
> mount antenna. Since I've never used one before, I have some questions
> hopefully a few of you can answer:
>
> 1. How well do they REALLY work?
> 2. The Larsens say they can be attached and removed easily for putting on
> another vehicle, while one I saw at Radio Shack said that removing it
> would "permanently damage" it. Realistically, how easily are they to
> remove and re-install as I see fit?
> 3. Are there any references to rolling your own? I'd love to make one for
> 23 cm and 6m, but I'm probably asking for too much on these bands
> (too much stray reactance--or maybe not enough?--on 23cm, and the whip
> would be physically too big at 6m to hold to the glass, most likely).
>
> Ok, my second question is that I found and looked through the antennas
> in the print-version of HRO's catalog, and noticed something interesting
in
> the Diamond antenna section: none of their 23cm antennas came in NMO
mount--
> only with an N-connector. When I first started considering an antenna for
> 23cm, I really had some doubts about the NMO, not the least of which is
its
> size relative to the small wavelength. Since I have yet to get my hands

on
> a meter that will measure reflected power at that frequency (one of these
> days...), I really have no idea just how good or bad a match to my antenna
> I'm really getting at 23cm (as I pointed out in earlier messages, the
> antenna is an Austin Antennas "Pentenna", and yes, it comes in NMO). This
> is sort of exasperated by the fact that the bottom part of the NMO is a
> thru-hole that has to pass through the steel of the mag mount which in
turn
> is connected to the shield--thus producing a short (1cm or so) run of
"coax"
> of a very different response.
> So the question is: are my fears valid? Is NMO a bad mount to use at
23cm?
> I've seen them used (apparently successfully) in commercial 800 MHz
> installations, so they seem to work there--hell, my cab is using such an
> arrangement! The antenna seems to work, but I have no idea how efficient
> it really is--it's hard to tell by reception.
>
> Thanks again!
>
> Mike

6410. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 08:13:57 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <3q1bctsui8midki948d060gtanm8c51k44@4ax.com>
Source record: 166984

On Fri, 30 Mar 2001 15:19:21 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Bart Rowlett, WB6HQK wrote:
>"Richard Harrison wrote:
>Tom W8JI wrote:
>"All the shield does is allow us to balance the antenna...."
>No, it also screens out the electric field.
>
>Bart then asks: "All of it or only a part?"
>
>Normally, the Faraday shield is quite effective, but that means little
>without quantitification, and I have no numbers.
>
>A Faraday shield is a picket fence. The number and spacing of the
>pickets obviously affects the electric field terminations and screening,
>but the gaps can be ever so fine and they will still prevent circulation
>of induction current, so there nis no real problem.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I presume by these picket fence pickets, you are speaking of the standard representation of fields graphically. This visualization technique is found widely in waveguide literature where the scale can bring examples into the lab or schoolroom.

However, at the other end of the spectrum I have encountered these pickets, literally. I have calibrated precision DC bridges that when you looked at the connections inside, you would swear at the lousy wiring and solder job. You would find half inch wire spikes tack soldered around the circuitry for no obvious reason (merely confirming the impression of sloppiness). However, as rude as it appears, these were calibrations applied to the bridge to allow it to measure another decade deeper into the null. The tacked on wires were used to balance the geometry of the fields that were upset by the choice of component placement (which is guaranteed to occur no matter what choice you make).

This balance of fields was part and parcel to calibration of capacitors and inductors too. And for the Faraday shield (you were at a loss for a number) we applied that technique to the isolation of windings in a transformer and could achieve winding-to-winding capacitance of less that 0.01 picoFarad. In Metrology, we employed variable transformers that span many (dozen) decades of

voltage/current range. The stray coupling of input to output has to
be strictly controlled and some times 0.01 pF is not enough separation
- even at low source/load Z's of 50 to 600 Ohms.

Your mileage may vary.

73's
Richard Clark, KB7QHC

6411. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 08:41:31 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <bg4bctgtl57tassubdfdcv80fqp7hoep83@4ax.com>
Source record: 166985

On Fri, 30 Mar 2001 09:14:22 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Tom, W8JI wrote:
>"Faraday shields, for RF applications, are strictly common-mode
>devices...."
>
>No, a Faraday shield can`t usually be called just a common-mode device.
>The Faraday shield in nearly every mediumwave broadcast station in the
>world is a grounded shield between unbalanced coils (one end of each
>coil is grounded). Where is any common-mode there?
>
>For a common-mode, there has to be at least a pair of something, or
>you`ve nothing to have something in common with. You have to have a
>balanced pair of wires, inputs to a balanced amplifier, or something
>besides an unbalanced feed.
>
>Anyway, this is just another diversion from the straight-skinny on how
>the Faraday shield on a loop antenna works.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

The common mode is a current loop (distinct from the current loop of the primary circuit, and the current loop of the secondary circuit) that shares the same reference from input to output (hence the meaning of "common" and nearly always what we consider to be ground). Your example above solves many problems...

1. the primary loop, already mentioned;
2. the secondary loop, ditto;
3. from the ground, up through the generator, to the hot side of primary coil, through capacitance, to hot side of secondary coil, to load, to ground.

Insertion of the Faraday Shield upsets only one of these current loops. That one is the common mode loop. The Shield neither reduces nor negates the existing capacitance (it remains unchanged), it presents a new circuit. That is, there is a new path for current, and that former hot-to-hot coupling seeks ground through the shield instead of the load.

73's
Richard Clark, KB7QHC

6412. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 08:48:48 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <k56bctc5m3oo7qthsoc4amtbfljop7f13c@4ax.com>
Source record: 166986

On Fri, 30 Mar 2001 15:20:14 -0800, Donaly <dtdonaly@pacbell.net>
wrote:

>W6RCecilA wrote:
>>
>> Donaly wrote:
>> > ... in network theory, transresistance is
>> > convenient for describing the behavior of a current-controlled voltage
>> > source. Your house and Roy's house don't constitute a
>> > current-controlled voltage source do they Cecil?
>>
>> My point was that if the voltage and current being considered don't
>> exist in the same space-time, then V*I*cos(theta) is meaningless.
>> --
>> http://www.mindspring.com/~w6rca
>>
>> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----
>
>Transresistance is nothing more than a constant of proportionality
>between the input current and the output voltage. It just
>happens to have the units of ohms which accounts for the "resistance"
>part of the name. The people who thought up network theory were
>fond of these little confusions. Nobody could ever mistake a
>current-controlled amplifier with a resistor could he? Well?
>
>Tom Donaly KA6RUH

Hi Tom,

tsk, tsk, didn't your mother ever tell you its wicked to mock the
afflicted? ;-)
(reference "Up Pompeii")

73's
Richard Clark, KB7QHC

6413. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 10:34:27 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac5aec7.45019557@news.accessunited.com>
Source record: 166987

Hi Richard,

On Fri, 30 Mar 2001 22:46:20 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Tom, W8JI wrote:
>"That transformer action is how the "shielded" loop transfers energy
>from the shield to the center."
>
>The center is the loop coil which Tom imagines is his secondary and the
>shield over the loop is his imagined primary.
>
>Problem is that the shield is broken in the middle with an insulator so
>that no current can flow around the shield. Fact is: No primary current,
>no secondary current. Tom`s scenario can`t possibly work.

It will work perfectly well. The reason it works is we are talking
about impedances in a coupled circuit.

If I have a transformer with an open seconday the impedance across
that secondary, with the primary resonanted, will be very high. The
only way to make the secondary a low impedance, like that of the wire
itself, would be to remove it fromthe transformer so mutual coupling
has no effect.

>There is no current flowing around the shield, which, were it to flow,
>would by Lenz`s law have to oppose the field which induces it in the
>first place.

If there is no current flowing around the shield, you are in trouble.
The antenna can not possibly receive a signal. It will be stone dead.

Imagine taking a clamp-on meter and clamping it over the shield wile
the loop is excited with RF from a transmitter connected to the inner
conductor in a normal manner. We will read current in the shield. If
we take a voltmeter and tap it across a section of the shield, we will
read voltage.

If we measure voltage across the gap, it will be just as high as if we
feed the shield directly. Nothing changes except system balance.

>The imposed and induced fields would then be nearly equal
>and opposite and cancel each other leaving nothing for the inner loop.

Nope. Just the opposite happens.

The center of the loop is driven by current flowing on the inside
wall. We can consider that current to be driven by the voltage across

the gap in the loop.

If we take the voltage outside the loop to zero, as you say it does, all current flow inside the loop stops. We can do that by closing the gap with a short.

This is where you go wrong:

>broken shield no longer keep r-f in or out? Because no current can flow
>through the shield. No counter field can be generated to cancel the
>magnetic component of the incident r-f. The incident r-f is free to
>induce signals as if the shield weren`t there. Not so with the electric
>field component of the r-f field. That time-varying electrictic flux
>alights on the shield and with proper balance in the grounding of the
>shield has no effect on the other side of the shield.
>
>The broken shield action is how the Faraday shield works. It is
>effective in shielding the electric field while allowing excellent
>coupling of the magnetic field. This doesn`t offend J.C. Maxwell at all.
>The magnetic field penetrating the shield immediately generates a new
>electric field on the other side of the Faraday shield.
>
>All of this has been known for about a century. It is taught in standard
>curricula. Why don`t you believe it?

Because your understanding is not correct. EVERYONE disagrees with you, not just me. Perhaps you have missed the posts by Kevin, Reg, Roy, Bart, and others? Why not take a few minutes, and read the many explainations that were offered instead of beating a dead horse??

73 Tom

6414. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 10:43:40 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac5b27d.45969303@news.accessunited.com>
Source record: 166988

On Fri, 30 Mar 2001 22:55:56 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>Tom W8JI wrote:
>>
>> On Fri, 30 Mar 2001 12:43:49 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
>> wrote:
>>
>> >A pi-net tuner will have lower losses than that into a 50 ohm dummy load.
>>
>> A C-L-C pi-netwpork tuner is virtually useless at lower frequencies
>> when trying to match low Z or moderate Z loads.
>
>Is 50 ohms "low Z"?

There are enough silly arguments here Cecil, to the point where when
trying to make a point anyone trying to learn something is probably
totally confused.

If the load is 50 ohms resistive, you don't NEED a tuner. The
pi-network is NOT a pi-network when matching 50 ohms to 50 ohms unless
it has reactances of less than 50 ohms, which would be a very big
capacitor.

My statement is correct, a pi-network tuner is a very poor system for
matching wide-impedance range and frequency range loads because of the
very awkward component values required. It has an especially bad time
with low impedances on low bands, requiring thousands of pF of
capacitance. When you do that, you can't cover ten meters well if at
all....or high voltages that come with high impedances.

73 Tom

6415. Re: Antenna suggestions for Icom 706MKG

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 12:19:03 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3AC5CB37.8FFCE995@dialpoint.net>
Source record: 166989

There is no 6 meter output from the 2m/440 port. You only need one
duplexer to split the 6 meter signal from the HF port if you want a
seperate 6 m antenna.

John Reed wrote:
>
> HI folks:
>
> I bought an Icom 706 Mk2G back in Janurary and I have been contemplating my
> antenna configuration.
>
>
> into the mix, it looks like I'm going to need 2 duplexers:
>
> A duplexer to split out the 6m from the 2m/440 port.
> A second duplexer to split out 6m from the HF port.
>
>

6416. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 13:17:23 UTC
From: Denver Braughler <Braughler@bwcc.com>
Message-ID: <3AC5D8E3.625CD552@bwcc.com>
Source record: 166990

Steve Robeson LPN wrote:
> >On June 14, 1988, Carl Rowan shot and wounded Neil Smith,
> >a young intruder who had trespassed onto Rowan's property
> >to take a dip in his swimming pool.
>
> So he says. Convienient "excuse" for someone who needs a big dose of
> sympathy for having broken the law and then having got caught.

I believe it to be factual.

>
> >This black kid was in his backyard, not his house.
>
> I know you'll give me the same song-and-dance about how this was not a
> scenario for fearing for his life, but then again, how many steps was it from
> one to the other?

No song and dance.
It was just he could have called the police instead. His life was not in peril.
Regardless, I was just pointing out another fact.

> People are tired of the liberal whine about the injustice of holding
> people accountable for thier actions. If the kid had been playing hoops at the
> "Y" instead of crossing the fence to private property, this wouldn't have
> happened.
I have no disagreement with that.

> >This was in Washington, D.C., where handguns are illegal.
That should say unless registered.

> In Kennesaw, GA, domestic intrusions STAY low simply because it is a
> REQUIREMENT that the head of each household maintains a firearm in the home.
I'm in favor of that.

> Would YOU enter a home clandestinely if you thought the owner was serving
> .44 caliber hors' dourves?
I wouldn't regardless.

> >Mr. Rowan used unregistered .22 pistol.
> A registered one wouldn't have hurt as much?
That makes no difference.
The difference is that the Mr. Rowan was also committing a crime.

> Jesse Jackson and the Irrevrent Al Sharpton would have been on
> the 6 o'clock news alledging the kid had been coereced to do break the law by
> Mr. Rowan and THEN shot.
I know how that goes.

If a black man is afraid of a black boy, then a white man could reasonably have the same fear.

> "Gun Control" means hitting what you aim at.
And not aiming at anyone you don't want to kill.

6417. Re: Back to bullets

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 13:21:39 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5D9E3.ACCB79F@IEEE.org>
Source record: 166991

KB9WFK wrote:
> D.C. has NO law banning handguns.
> Licensing : All firearms must be registered with District law enforcement.

D.C. has one of the highest crime rates involving unregistered
handguns so gun registration is not working there.
--
http://www.mindspring.com/~w6rca

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6418. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 13:33:27 UTC
From: n2ey@aol.com
Message-ID: <20010331083327.09572.00000412@nso-mm.aol.com>
Source record: 166992

In article <3AC573BE.C5B5D517@IEEE.org>, W6RCecilA <Cecil.A.Moore@IEEE.org>
writes:

>N2EY wrote:
>> Good thing you checked tht out, Cecil! What size tubing were you thinking
>of
>> using?
>
>Already bought it, Jim. The largest is 1.25" ID to slip over a
>fiberglas pole that I already have.

So my guess was pretty good. If you have 1/4 inch thick fiberglass, and we
assume the fiberglass has a dielectric constant of 4, you'll wind up with about
15 pF for every inch of overlap. Two feet works out to 360 pF or so. How thick
is the fiberglass, and how much overlap would you use?

Is the concern is that the fiberglass will fail or the aluminum will fail? I
presume the fiberglass, because it's at the point of highest stress.

> I've got six 6ft sections in
>decending diameters. I was going to go with three 12ft sections
>but the six sections were cheaper with less wind load.

You probably have just enough tubing for 1/4 wave resonance. If you overlap
each joint by six inches, the resultant antenna length is 36 feet minus 30
inches (five joints in six pieces) or 33 feet, 6 inches. The taper raises the
resonant frequency.
>
>> It will be a real mess. Looks like a big capacitor to ground.
>
>Which means that there is RF on the inside of the tubing.

Yup. Skin effect makes the RF current travel on the outside of the conductor.

>Where do
>the photons go?

They circulate in the reactance of the coaxial capacitor formed by the inside
of the tubing and the outside of the water pipe. They're not radiated.
>
>> How about guying the thing? Or using thickwalled fiberglass tubing for the
>base
>> insulator?
>
>I've decided to do both. One of the three upper guys will be my 80m dipole.
>--
Works for me. How many radials?

I've had good luck with EMT for verticals. Yes, the conductivity is far less, but at reasonable diameters the difference is negligible. Lots cheaper, but the joints are a pain.

73 de Jim, N2EY

6419. Re: A question about Transmatches - Please wiegh in!

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 13:36:36 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5DD64.852B140F@IEEE.org>
Source record: 166993

Tom W8JI wrote:
>
> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
>
> >Tom W8JI wrote:
> >>
> >> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote:
> >> >A pi-net tuner will have lower losses than that into a 50 ohm dummy load.
> >>
> >> A C-L-C pi-netwpork tuner is virtually useless at lower frequencies
> >> when trying to match low Z or moderate Z loads.
> >
> >Is 50 ohms "low Z"?
>
> There are enough silly arguments here Cecil, to the point where when
> trying to make a point anyone trying to learn something is probably
> totally confused.
>
> If the load is 50 ohms resistive, you don't NEED a tuner.

Please pay attention, Tom. He made his test measurements using a
50 ohm dummy load. That was the context. Here's what he said:

"Easy to verify, load the rig to dummy load, put external wattmeter
between the rig and the dummy and switch your tuner in and out, you
will see about 20 % drop, like instead of 100W you will get 80 watts."

I responded to that statement. The context was a 50 ohm dummy load.

> My statement is correct, ...

So is mine and mine is even relevant to the contextual system
test configuration to which I was responding. :-)
--
http://www.mindspring.com/~w6rca

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6420. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 14:01:33 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AC5E33C.56F5@pacbell.net>
Source record: 167015

Richard Clark wrote:
>
> On Fri, 30 Mar 2001 15:20:14 -0800, Donaly <dtdonaly@pacbell.net>
> wrote:
>
> >W6RCecilA wrote:
> >>
> >> Donaly wrote:
> >> > ... in network theory, transresistance is
> >> > convenient for describing the behavior of a current-controlled voltage
> >> > source. Your house and Roy's house don't constitute a
> >> > current-controlled voltage source do they Cecil?
> >>
> >> My point was that if the voltage and current being considered don't
> >> exist in the same space-time, then V*I*cos(theta) is meaningless.
> >> --
> >> http://www.mindspring.com/~w6rca
> >>
> >> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> >> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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> >
> >Transresistance is nothing more than a constant of proportionality
> >between the input current and the output voltage. It just
> >happens to have the units of ohms which accounts for the "resistance"
> >part of the name. The people who thought up network theory were
> >fond of these little confusions. Nobody could ever mistake a
> >current-controlled amplifier with a resistor could he? Well?
> >
> >Tom Donaly KA6RUH
>
> Hi Tom,
>
> tsk, tsk, didn't your mother ever tell you its wicked to mock the
> afflicted? ;-)
> (reference "Up Pompeii")
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
yes, it is wicked, but it would take a character far
stronger than mine to resist doing it.

73's

Tom Donaly KA6RUH

6421. Balun or not?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 14:11:27 UTC
From: Eric Ruuska <eruuska@netnitco.net>
Message-ID: <3ac5e510@news.netnitco.net>
Source record: 166994

Hey all, a really green newbie has a question.

I'm putting up a wire antenna on my roof, anchored in the center by my former TV aerial mast. The question on the table is: Assuming I have equal lengths on either side of the center point, is there any need for a balun? Elmer gave me one, and for some odd reason I feel obligated to use it. Do I need it or no?

Also, is there any reason I can't have a couple-three different lengths of wire coming off the center point? Or is this a situation where a balun might be useful?

Pardon my ignorance,
Eric Ruuska

6422. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 14:32:59 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5EA9B.395046E7@IEEE.org>
Source record: 166995

N2EY wrote:
> How thick is the fiberglass, and how much overlap would you use?

The fiberglas is 1/8" thick, 1 1/4" OD. The fiberglas pole on the other
end of my dipole broke and I use about 4.5' of overlap there.

> Is the concern is that the fiberglass will fail or the aluminum will fail? I
> presume the fiberglass, because it's at the point of highest stress.

Yep, my other fiberglas pole broke at the U-bolt. Due to the location
of my fence posts, the guys were not 120 degrees apart leaving me with
an undetected bistable condition. A big wind bent the fiberglas pole
into the undesired stable condition and the pole broke a few hours
later.

> Skin effect makes the RF current travel on the outside of the conductor.

The outside of the conductor on the inside of the tubing? Does that happen
if the water pipe is not inside the aluminum tubing? Is the current on
the inside of the tubing equal to the current on the outside of the tubing?

> >Where do the photons go?
>
> They circulate in the reactance of the coaxial capacitor formed by the inside
> of the tubing and the outside of the water pipe. They're not radiated.

Are electrons or photons circulating in that reactance?
Wouldn't photon circulation technically be called radiation?

> How many radials?

I'm going to start with four and make field strength measurements with
the radials laying on the ground and at 5' height intervals up to a
height of 25'. I suspect the field strength will be greatest with the
radials at 25'. I will then add four more radials and take the field
strength readings. I'll probably turn the results into a short article
for Worldradio magazine.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

6423. Re: Balun or not?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 14:38:16 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5EBD8.6DA61A7C@IEEE.org>
Source record: 166996

Eric Ruuska wrote:
> I'm putting up a wire antenna on my roof, anchored in the center by my
> former TV aerial mast. The question on the table is: Assuming I have
> equal lengths on either side of the center point, is there any need for
> a balun? Elmer gave me one, and for some odd reason I feel obligated
> to use it. Do I need it or no?

It is good engineering practice to use a balun at a balanced to unbalanced
junction. A center-fed dipole is balanced. Coax is unbalanced. Not all
hams follow good engineering practice.
--
http://www.mindspring.com/~w6rca

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6424. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 14:55:45 UTC
From: EAG <n5nug@ix.netcom.com>
Message-ID: <9a4r5dhhi1@nntp9.atl.mindspring.net>
Source record: 166997

What is the ID of the aluminum tubing you are using? I have several rejected base insulators for the CTSVR that could possible be cut down for your use. The insulator is UV resistant blue PVC 15" long, 1.75" OD, and turned down to 1.685" OD for a steel mast to slip over. 73, Ed - N5NUG

6425. QST-QST-QST--INVITATION TO THREE ANTENNA-RELATED REFLECTORS (LISTS)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 14:59:26 UTC
From: fractenna@aol.com
Message-ID: <20010331095926.08237.00001869@ng-mn1.aol.com>
Source record: 166998

QST--

You are invited to join one or all of the following lists on yahoo groups(formerly
e-groups). All these reflectors are e-mail based, friendly, objective, and moderated ,so that no spam, porn, off-topic, or personal-offensive posts are sent out. Membership is screened against those with a history of disrupting/trolling. You will receive no off-list e-mails by subscribing: again; no spam.

Occassionally free offers of antenna files and other info are presented, along with photos of relevant antennas (unlike most NG's you CAN do attachments).

These lists (with some recent subscriber sizes) are:
ANTENNAS@YAHOOROUPS.COM 220 members
CROSSFIELDANTENNA@YAHOOGROUPS.COM 70 members
FRACTALANTENNA@YAHOOGROUPS.COM 310 members

Please review the descriptions at:

http://www.yahoogroups.com

Note the CFA list specifically deals with this antenna in an objectively critical fashion and no posts will be allowed that make grandiose claims without supporting data presented. To date, no data has been presented which requires the extraordinary claims made by some pundits: there is no evidence for better performance than any other small vertical antenna (and that performance is poor).

Fractal antenna posts should go the the fractal antenna reflector; not the antennas reflector. Note that Dr. Cohen, N1IR, the founder of fractal element antenna technology, uses this forum to answer questions on the web--exclusively. If you have a web-based question for him, kindly post it on the FAR assuming it is of general interest.

To subscribe to any list, either go through the process at egroups, or to skip the process (and some say 'annoying questions') just do:

---------- -subscribe@yahoogroups.com
where the ---------- is the name of a given list (such as 'fractalantenna')

Kindly do not query this e-mail address; the info here is complete for your information pleasure.

73,
Phil de

N1ZKT

6426. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:07:18 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5F2A6.708DB4E5@IEEE.org>
Source record: 167000

EAG wrote:
> What is the ID of the aluminum tubing you are using?

The ID of the aluminum tubing at the base is 1.259" and was chosen
for a snug fit over my 1.25" fiberglas pole. Here's what I plan
to do with radial guy wires at 'X'. This is fixed (Courier) font.

```
X ======================================
==================================
-------------------------+ |
water pipe | Fiberglas | Aluminum Tubing
-------------------------+ |
==================================
X ======================================
--
http://www.mindspring.com/~w6rca
```

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6427. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:11:24 UTC
From: richardharrison@webtv.net
Message-ID: <13085-3AC5F39C-40@storefull-111.iap.bryant.webtv.net>
Source record: 167007

Bart, WB6HQK wrote:
"The statement that time varying fields can NOT pass through a conductor several skin depths thick is CORRECT.

Yes, if the conductor is extensive and unbroken.

I will repeat Terman`s 1955 comments.

Aluminum having low electrical resistivity is a practical shield for magnetic flux at radio frequencies.

"Magnetic flux in attempting to pass through such a shield induces voltages in the shield which give rise to eddy currents. These eddy currents oppose the action of the flux, and in large measure prevent its penetration through the shield."

"---Joints which interfere with eddy currents by adding resistance to the eddy current paths greatly reduce the effectiveness of a conducting shield". (Try insulators and see what happens.)

"---However, fairly effective electrostatic shielding can be obtained by a metal mesh made of any good to fair electrical conductor, which would be a rather poor shield for magnetic flux."

"It is possible to shield electrostatic flux without simultaneously affecting the magnetic field by surrounding the space to be shielded with a conducting cage that is made in such a way as to provide no low resistance path for flow of eddy currents, while at the same time offering a metallic terminal upon which electrostatic lines can terminate." (A Faraday shield)

Tom, W8JI is dead wrong that the electric field and magnetic fields are "INSEPARABLE". The Faraday shield was devised for exactly the purpose of separating the magnetic field from the electrostatic field in a "time-varying" EM wave.

Tom`s declaration that the Faraday shield is just the plate of a capacitor is laughable.

Best regards, Richard Harrison, KB5WZI

6428. CQ Magazine-3dB gain HF mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:14:30 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac5ef27.61501563@news.accessunited.com>
Source record: 166999

The latest issue of CQ contains an interesting tidbit of information.

On page 61, the author states "A number of readers have urged me to discusss the concept of phasing two mobile antennas for big signal mobiling...."

I'll bet they have!!!

The author goes on to say if you run two HF mobile antennas on your car, one on each side of the trunk and feed them in parallel, you gain 3dB!!!!! Now he admits "wider whip spacing is preferable for 40 and 80 meters"...but he goes on to say the 3 dB does appear on 30 meters and above.

The author pontificates about cable length, advising people to stay away form pesky "resonant lengths like 1/4 wl or 1/2 wl" that cause problems.

He talks about how, when we space antennas 1/2wl apart, the gain is "4 or 5dB" but since we can't get that spacing a "trunk width is good for 3dB".

In other articles by the same author, I learned the radiaton in a mobile antenna all comes from the area ABOVE the loading coil. I learned about power amplifiers, and how they work. One thing....these articles are dependable. They are all of the same educational quality and accuracy.

I did write him once, and he wrote back saying I was the only one who thought his articles contained errors.

73 Tom

6429. WTB: UHF duplexer in Ontario

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:24:03 UTC
From: Jay <jgoldring@direcpc.com>
Message-ID: <_Cmx6.36248$m8.305554@news.direcpc.com>
Source record: 167001
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

I am looking for a UHF duplexer to use with a low power repeater (15 watts).
All offers considered.

Please reply to jgoldring@primus.ca

6430. Re: QST-QST-QST--INVITATION TO THREE ANTENNA-RELATED REFLECTORS (LISTS)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:26:15 UTC
From: k1bqt@aol.com
Message-ID: <20010331102615.27480.00001590@ng-mj1.aol.com>
Source record: 167002

>Kindly do not query this e-mail address<

Words to live by!

Rick K1BQT

6431. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:33:16 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <0Nmx6.3883$RF1.233154@bgtnsc06-news.ops.worldnet.att.net>
Source record: 167003

"Tom W8JI" <2w8ji@akorn.net> wrote in message
news:3ac502c8.981813@news.accessunited.com...
> Hi Steve,
>
> I said:
> >> No, there is no discontinuity at all over what the normal sampling of
> >> a meter for another Zo would cause.
>
> On Fri, 30 Mar 2001 18:10:03 GMT, "VE9SRB" <srbest@att.net> wrote:
> >
> >Inserting a short section of 50 ohm line into a 450 ohm line causes an
> >impedance discontinuity. It may not make much difference in what you see
in
> >the 450 ohm line before the discontinuity but it has everything to do
with
> >what you see in the short section of 50 ohm line.
>
> That's where you are missing my point Steve. You keep clinging to the
> idea the meter "looks like" a certain Zo line. It does, but the Zo a
> typical lumped component dorectional coupler "looks like" has little
> or nothing to do with the impedance it is set for.
>
> It is a current transformer in series with the line, that looks like
> very low series resistance with negligable inductance. It is a divider
> across the line, that looks like a very high impedance.
>
> Neither of those values are selected to "look like" anything in
> particular.
>
> I can take a 50 ohm meter, and with no change but a simple adjust,
> make it a 25 meter or a 100 ohm meter. The impedance looking through
> the meter won't change any measureable amount.
>

Hi Tom:

You're talking about adjusting the sampling or measuring circuit to indicate power as if it were a 25 ohm or a 100 ohm meter. I agree that the impedance in the meter does not change. As a result, the voltages and currents that are measured do not change either. You have just changed the circuit to indicate different power levels.

That's like me saying take the slug out, no power is indicated on the meter, therefore the power must be zero. I agree that you can adjust the circuit to indicate just about any power level. This does not change what is

physically happening in the transmission line section of the meter.

> >> A well-designed meter looks like nothing at all to the line. The Zo
> >> setting of the meter has nothing to do with reflections on the line.
> >
> >Take the plug out of a bird wattmeter and look at the 50 ohm line. This
50
> >ohm line behaves no differently than a 3 inch air dielectric transmission
> >line. There will be a rearward traveling wave on this line. That's why
the
> >50 ohm wattmeter indicates reflected power.
>
> No, that's why the meter offers a nearly perfect impedance on bands
> where the line inside the meter is a few degrees long. The directivity
> comes from the temination in the slug, not the line section.
>

You're talking about the directivity function in the measuring circuit. Again, you're discussing how the bird circuit works, not what's happening in the transmision line section of the meter.

In the example you describe, the output connector of the bird meter effectively "sees" a 450 ohm "termination". A rearward traveling reflected wave is created at this termination. This rearward wave does not travel rearward beyond the bird input because of the 450 / 50 ohm discontinuity seen in the rearward direction (assuming a 450 ohm transmitter output impedance).

The level of reflected wave traveling in the 450 ohm line in front of the bird meter is a direct function of the impedance seen looking rearward into the 450 ohm line from the meter input. Let's assume that the transmitter output impedance is not 450 ohms. If you adjust the length of the 450 ohm line such that this rearward impedance becomes 50 ohms (or some other low 50 ohm SWR value), a rearward wave will now travel in the 450 ohm line. When the transmitter output impedance is not 450 ohms, the location of the 50 ohm bird meter will impact the level of forward and rearward power traveling in the 450 ohm line in front of the meter.

This is why the 50 ohm meter indicates different forward and rearward powers as you move it along a 450 ohm line. The output termination it sees remains 450 ohms. The rearward impedance it sees changes, causing a different level of re-reflected power. Hence the forward and rearward power levels change.

> I can make a Bird meter, by adjusting a resistor inside the slug,
> measure 75 ohm lines just fine. Of course on VHF and higher it would
> start to put a "lump" in the 75 ohm line because the meter has extra
> lead length outside the area where the sampling takes place. But at
> lower frequencies, the Zo of the line section has nothing to do with
> the null impedance of the directional coupler. We can make the null
> impedance anything we want within reason.
>
> The more common-lumped component meter is generally designed so the

> shunt impedance is many times the line Zo, and the series impedance
> many times less. The surge impedance of the meter has nothing to do
> with the null setting of the direction coupler section.
>
> Wide-range RF bridges work this way, by varing one or two elements in
> the sampling section. You on't have to change the meter's Zo to
> change the null impedance.
>
> Now at microwave, or even at UHF, things are a bit different because
> generally the line sections are long enough to have an affect. In that
> case you want them close to the line Zo, so they don't cause a
> mismatch.
>
> >> No, it does not. It indicates a higher power because the voltage
> >> divider has more voltage. It is a simple circuit that sums voltages
> >> provided by current through the line and voltages across the line.
> >>
> >
> >Yes it does. Transmission theory and the behavior of traveling waves
does
> >not change because the line is short.
>
> This is not a line section type of sampling unit. It does not sample
> voltages or currents at two isolated areas spaced a large fractuion of
> a wavelength apart.
>
> Its impedance does not matter much, the only thing that matters is the
> null adjustement for a give line volatge an line current when current
> and volatge are in phase.
>
> >The voltage divider has more voltage because of the impedance
> >discontinuities created by the 450 / 50 / 450 ohm mismatch.
>
> Nope, doesn't have to do that. This does not have to be a fractional
> wavelength sampling section, it can be a lumped device....and almost
> always is at lower VHF, HF and lower.
>
> >Your describing how the circuit works. You need to consider why the
> >voltages and currents are changing.
>
> That's right. I am describing how the sampling circuit works. It is a
> simple device that compares through current to across voltage, and
> sums the sampled voltages directly before rectification.
>
>
> I can design them all day and all night without giving a "hoot" about
> the impedance of the sampling section. All that is necessary is the
> current transformer look like a very low Z, and the volatge divider
> look like a very high Z to the line....and the voltages from each be
> exactly equal when the I and E on the line are in-phase (or exactly

> out-of-phase) are in the correct ratio for the line Zo.
>
> None of this requires the surge impedance of the sampling sections to
> equal the line Zo.
>

I do not disagree with your discussion of how the circuit works, or the fact that the circuit can be adjusted to work with any Zo section. You are however (IMO), seem to be missing what is happening in that section of line.

Take care,
Steve

> 73 Tom

6432. Check Out: NX7U mobile multi-multi-mode station

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:35:39 UTC
From: nx7u@primenet.com
Message-ID: <3ac5f8c9.60795480@news.primenet.com>
Source record: 167004
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Continually updated with HF/VHF/Satellite etc.., mobile operating
info/equipment/pix/etc.
Plus, I just put a new counter on the page and I want to see it work
<g>

6433. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:35:58 UTC
From: Bill Bishop <wbishop@micron.net>
Message-ID: <3AC5F95E.7AFD8FBD@micron.net>
Source record: 167005

Ken --

Had my Titan for 3 months. If the others are better, folks would have to hear you before you push the xmit switch. I think all of them are credible ants.

All of them have narrow bandwidth on 80 M. Just make sure that your expectations for 80 are reasonable. Also be aware that on ground wave QSOs, the vertical polarization will make a difference -- unless you're talking to another vertical.

All and all, the GAP is a great antenna -- but plan on guying it. It's solid, but unguyed, it's pretty spooky. Dacron string be cheaper than a new antenna.

I don't work for GAP or a distributor, and the suckers haven't offered to bribe me -- dang it.

6434. How to make a Saddle Clamp or What is a SAM ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:41:42 UTC
From: arrow146@aol.com
Message-ID: <20010331104142.20713.00001832@ng-fy1.aol.com>
Source record: 167006

This is a post from Arrow Antenna.

As some of you may know, we have moved to a bigger shop.
Some new photos have been added to our Photo Tour of Arrow Antenna
<A HREF="http://members.aol.com/_ht_a/Arrow146/shop.html">Photo Tour</A>
Included is photo's of a SAM (Simi. Automated Machine)
These are simple machines I have made to aid in production.

Thought some might be interested in how a machine can be Automated
using simple 555 timer IC's.

We have a threading machine, a saw for making Saddle Clamps, and
even an Automated Drill Press. (Will be making more).

Come take a look, let me know what you think.

73 Al Lowe N0IMW
ArrowAntenna.com

6435. Re: CQ Magazine-3dB gain HF mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:46:23 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <jZmx6.2620$rk4.226689@bgtnsc04-news.ops.worldnet.att.net>
Source record: 167008

Hi Tom,

Yeah, that was good for a laugh!

I thought that it was that pesky April fools
issue thing...

But after reading the article I realized that
he was serious! The trouble is that many
less experienced people take these articles
at face value.

Oh, Well!

73,
Gary, WG7X

Tom W8JI <2w8ji@akorn.net> wrote in message
news:3ac5ef27.61501563@news.accessunited.com...
> The latest issue of CQ contains an interesting tidbit of
information.
> The author goes on to say if you run two HF mobile antennas on
your
> car, one on each side of the trunk and feed them in parallel,
you gain
> 3dB!!!!! Now he admits "wider whip spacing is preferable for 40
and 80
> meters"...but he goes on to say the 3 dB does appear on 30
meters and
> above.

6436. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:50:01 UTC
From: k1bqt@aol.com
Message-ID: <20010331105001.27480.00001595@ng-mj1.aol.com>
Source record: 167009

Hi Cecil--

I'm with you. I have a dummy load on my bench with 50 Ohms of dissipationless resistance captured inside. I suspect it will remain so until I connect something and turn on the juice.

Dissipationless resistance strikes me as a philosophical dillemma--like the sound of one hand clapping. Without an extra hand, how do you get the clap?

Rick K1BQT

6437. Re: CQ Magazine-3dB gain HF mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 15:51:41 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5FD0D.8D472ED1@IEEE.org>
Source record: 167011

Tom W8JI wrote:
> The author goes on to say if you run two HF mobile antennas on your
> car, one on each side of the trunk and feed them in parallel, you gain
> 3dB!!!!!

Well, there is a tiny grain of truth there. 1/8WL on 28.4 MHz is
4.33ft. If we feed two 8.25ft whips 180deg apart, we can expect
close to 3dB gain over a single whip.

My pickup is just about 1/8WL long on 40m. Seems I could get
3dB gain on 40m with proper phasing of bumper mounted phased
verticals. 2dB sure would help at a 75m mobile shootout. :-)

On 17m with a rear bumper mounted screwdriver, I can gain an S-unit
(probably not 6dB) by pointing my truck in the direction of the
receiver. It is similar to a vertical with one very fat radial.
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6438. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:00:05 UTC
From: "Dennis P. Stahr" <irfutures@earthlink.net>
Message-ID: <9anx6.12357$aP5.1178663@newsread2.prod.itd.earthlink.net>
Source record: 167010

How about throwing the Butternut HF9V into the equation?

I have been considering a vertical also, and thought this would be a great choice, but now you guys have me almost converted to the Titan...

Any comments on the Butternut??

Dennis Stahr - W6NYC

"Can't locate the California Governor, Gray "Duffus" Davis? Just look in the pocket of any power company executive and you'll find him!!!!

"Ken Bessler" <kg0wx@yahoo.com> wrote in message
news:3AC2829E.6F35@yahoo.com...
> I'm thinking about getting one of the above listed antennas and would
> like to hear opinions from users out there. Thanks!
> --
>
>
> Ken Bessler, Ham Callsign KG�WX
> Design Services Company
> http://kg0wx.users.50megs.com/
> Smoke free since 9/30/96!
> ICQ# 63379650

6439. Re: Check Out: NX7U mobile multi-multi-mode station

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:00:37 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <3AC5FF25.16009B45@IEEE.org>
Source record: 167013
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Scott Townley wrote:
>
> Continually updated with HF/VHF/Satellite etc.., mobile operating
> info/equipment/pix/etc.
> Plus, I just put a new counter on the page and I want to see it work
> <g>

How's the counter gonna work if you don't post the URL? :-)
--
http://www.mindspring.com/~w6rca

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

6440. Re: Check Out: NX7U mobile multi-multi-mode station

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:03:01 UTC
From: Brian Short <k7on@earthlink.net>
Message-ID: <MPG.1530102a891914799896a6@news.earthlink.net>
Source record: 167012
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

This is wonderful (well?), but where is the URL?

In article <3ac5f8c9.60795480@news.primenet.com>, nx7u@primenet.com
says...
> Continually updated with HF/VHF/Satellite etc.., mobile operating
> info/equipment/pix/etc.
> Plus, I just put a new counter on the page and I want to see it work
> <g>
>
>

--
mailto:k7on@earthlink.net >< http://www.qsl.net/k7on/
--

6441. Re: Balun or not?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:19:10 UTC
From: poissondanlo@aol.com
Message-ID: <20010331111910.07378.00001553@ng-mc1.aol.com>
Source record: 167014

hi
a balun is not obligated but equalize magnitudes and there is minus of problems
in the TV
currents are equals in each arms
the neighbours are happy !
excuses for bad english langage
Serge / F5JTM

6442. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:35:25 UTC
From: richardharrison@webtv.net
Message-ID: <13085-3AC6074D-50@storefull-111.iap.bryant.webtv.net>
Source record: 167018

Richard Clark, KB7QHC wrote:
"Insertion of the Faraday Shield upsets only one of these current loops."

Yes, it upsets, in fact prevents, an induced current loop in the Faraday shield by slicing it up into little pieces.

The shield could be made from rows or columns of wires soldered to a copper plane. An insulated wire or wires could be routed between the ranks of wires.

In a forest of grounded wires, a conductor running through the forest would be susceptible to external magnetic fields, but not so susceptible to electrostatic fields. That is how a Faraday shield works.

Terman briefly describes the effects of coil proximity to shields, the addition of high permeability materials to improve magnetic shielding, and placements which might lead to pot-core construction. But, all of this is outside the function of a Faraday shield which works the same way in a 60-Hz transformer, broadcast transmitter antenna coupler, or a shielded loop, for the most part.

Electrostatic field shielding means the same thing as time-varying electric field shielding, and magnetic field shielding means the same thing as time-varying magnetic field shielding to the "Ancients" when they discuss the Faraday shield.

The Ancients were not discussing balancing bridge capacitance with strategically placed grounded wires when they were discussing shielded loops. That technique could well be beneficial as Richard Clark noted. But the basic function of the Faraday shield is to hold off the electric field and let the magnetic field couple into a loop or coil. This works!

The Faraday shield does benefit from capacitive balance to avoid error when it is being used as a direction finder, and this balance may be used to maximize electric field insensitivity.

Richard Clark gave a nice description of how insertion of a shield affects pre-existing capacitance and produces new capacitances. Pages more could be added, but wouldn`t necessarily help zero-in on the function of a Faraday shield.

Best regards, Richard Harrison, KB5WZI

6443. Re: Improving reception

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:36:32 UTC
From: kelly@dvol
Message-ID: <3ac60355.46086851@news2.dvol.com>
Source record: 167017

On Fri, 30 Mar 2001 22:58:33 -0600, George <pmjb@netzero.net> wrote:

> Received a RadioShack DX-397 (analog) Shortwave Radio as a gift. It
>has a telescopic whip antenna and no external antenna jack. I'm looking
>for a way to improve reception of this smaller radio
>
Attach a length of wire to the top of the whip.
>
>and decrease
>interference before I make the move a better radio. Is there a
>pre-tuner, a filter, or a method to add an extenal antenna?
>
A better antenna brings up all signals in the passband including
interference. There are directive antennas out there like the various
tunable loops which are useful in reducing intereference but the
selectivity of the radio is by far the most critical factor in
reducing intereference. Selectivity costs money, etc.
>
>Additionally how to ground such an addition as the portable has no
>connection for an external ground? Thanks,
>
You'd have to get inside the radio to get to it's ground. Not worth it
for receiving purposes.
>
>George
>
w3rv

6444. Re: Antenna suggestions for Icom 706MKG

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:38:37 UTC
From: John Reed <jreed@NOSPAM.thor.atl.ga.us>
Message-ID: <tcc1p0jan5dqcb@corp.supernews.com>
Source record: 167016

Ralph:

I think I mis-typed what I meant to say.

I'll need 2 duplexers....

One to split 6m off from the HF port.
One to COMBINE 6m with the 2m/440 signal to a single coax going to antenna.

See what I'm trying to do? I'm trying to figure out the best way to run a 6m/2m/440 antenna (like the one KK4TL is selling, but I'm going to get the shorter one), AND still be able to have the Screwdriver antenna.

(That leaves the single NMO up front, dead center on the roof, for my 220 antenna - only 2 holes to drill).

John

----- Original Message -----
From: "Ralph Mowery" <rmowery@dialpoint.net>
Newsgroups: rec.radio.amateur.antenna
Sent: Saturday, March 31, 2001 7:19 AM
Subject: Re: Antenna suggestions for Icom 706MKG

> There is no 6 meter output from the 2m/440 port. You only need one
> duplexer to split the 6 meter signal from the HF port if you want a
> seperate 6 m antenna.
>
>
> John Reed wrote:
> >
> > HI folks:
> >
> > I bought an Icom 706 Mk2G back in Janurary and I have been contemplating
my
> > antenna configuration.
> >
> >
> > into the mix, it looks like I'm going to need 2 duplexers:
> >
> > A duplexer to split out the 6m from the 2m/440 port.
> > A second duplexer to split out 6m from the HF port.
> >
> >

6445. Re: How to make a Saddle Clamp or What is a SAM ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 16:49:02 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <2Unx6.75921$Ok4.6076381@news1.rdc1.ct.home.com>
Source record: 166919

This url seems to work better, at least on IE5:

http://members.aol.com/_ht_a/Arrow146/shop.html

Pete

"Arrow146" <arrow146@aol.com> wrote in message
news:20010331104142.20713.00001832@ng-fy1.aol.com...
> This is a post from Arrow Antenna.
>
> As some of you may know, we have moved to a bigger shop.
> Some new photos have been added to our Photo Tour of Arrow Antenna
> <A HREF="http://members.aol.com/_ht_a/Arrow146/shop.html">Photo Tour</A>
> Included is photo's of a SAM (Simi. Automated Machine)
> These are simple machines I have made to aid in production.
>
> Thought some might be interested in how a machine can be Automated
> using simple 555 timer IC's.
>
> We have a threading machine, a saw for making Saddle Clamps, and
> even an Automated Drill Press. (Will be making more).
>
> Come take a look, let me know what you think.
>
> 73 Al Lowe N0IMW
> ArrowAntenna.com

6446. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 17:05:51 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <2q2cctcreusot4aj98h0714oakm4k55bd6@4ax.com>
Source record: 166920

On Sat, 31 Mar 2001 15:33:16 GMT, "VE9SRB" <srbest@att.net> wrote:

>
>This is why the 50 ohm meter indicates different forward and rearward powers
>as you move it along a 450 ohm line. The output termination it sees remains
>450 ohms. The rearward impedance it sees changes, causing a different level
>of re-reflected power. Hence the forward and rearward power levels change.

Hi Steve,

The technical name for this observation is Mismatch Uncertainty, and
is common where the Source Z, the Transmission Line Z, and the Load Z
are all different (or different in such a way as to present the
measuring device huge mismatches at both the input and output).

Most Lab nomographs indicate that a 2:1 mismatch at both terminals
will present erroneous power readings of ï¿½50% MINIMUM (whereas 1.15:1
mismatches merely present erroneous power readings of 5%). Mismatches
of 9:1 are literally off-the-chart.

73's
Richard Clark, KB7QHC

6447. Re: Frustrating dipole construction

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 17:14:19 UTC
From: Greg Blair <gblair@sympatico.ca>
Message-ID: <3AC6111A.2665A753@sympatico.ca>
Source record: 166921

You checked into the MM net on 14.300 with your 10 meter antenna????

Texas Rangers Fan Since 1972 wrote:

> >So what is the bottom line??? Does the thing work??? Does your
> >xmitter load with your present setup??? What SWR are you seeing measured
> >with your xmitter and SWR meter??? Have you made any contacts???
> >What were the signal reports???
>
> The only thing I could come up with was the balun was "bad". I am not sure what
> caused that or how, but I had another balun that I bought at the same time and
> it worked just fine. SWR was 1.5:1 in the shack, 1.7:1 when I hung it. I
> checked into the MM net on 14.300 with it and got a good signal report.
>
> I am sending that balun back to Van Gorden Engineering and requesting a
> replacement. Should be interesting to see how they respond.
>
> Thanks for all the postings and replies, Mark
>
> KE4QKN/AE

6448. Re: How to make a Saddle Clamp or What is a SAM ?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 17:21:40 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <8g4cct0d65t5v1thdqhdb1qgmbp25ho56g@4ax.com>
Source record: 166922

On 31 Mar 2001 15:41:42 GMT, arrow146@aol.com (Arrow146) wrote:

>This is a post from Arrow Antenna.
>
>As some of you may know, we have moved to a bigger shop.
>Some new photos have been added to our Photo Tour of Arrow Antenna
><A HREF="http://members.aol.com/_ht_a/Arrow146/shop.html">Photo Tour</A>
>Included is photo's of a SAM (Simi. Automated Machine)
>These are simple machines I have made to aid in production.
>
>Thought some might be interested in how a machine can be Automated
>using simple 555 timer IC's.
>
>We have a threading machine, a saw for making Saddle Clamps, and
>even an Automated Drill Press. (Will be making more).
>
>Come take a look, let me know what you think.
>
>73 Al Lowe N0IMW
>ArrowAntenna.com

Hi Al,

Nice Page, nice operation too.

73's
Richard Clark, KB7QHC

6449. Sailboat Antenna options

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 17:33:38 UTC
From: Loose Lines Limited <looselines@lavac.com>
Message-ID: <wxox6.2261$e9.69013@news1.fdn.com>
Source record: 166923

We are moving aboard our boat and looking for an antenna system. Several options are available but only four are practical.

1. Insulated backstay.
Pros: Relatively easy to do and easy to hook up.
Cons: Relatively expensive as a rigger would have to add the insulators, fixed length of about 40 feet

2. Just hook up to standing rigging with no insulators (use whole rig)
Pros: Very easy to do, inexpensive
Cons: I have no idea the radiation pattern or reception capabilities but some have said no problems

3. Freestanding whip
Pros: Moderately easy to do
Cons: Relatively expensive to purchase and mount

4. Wire center fed dipole hoisted up when radio is in use
Pros: Inexpensive, very good transmission/reception characteristics
Cons: Damned awkward to keep hoisting and retreiving the thing.

Equipment is a new ICOM 718 (snipped) and a SGC 237 tuner.

By the way, the dipole has other advantages as the boat at present is not rigged for HF transmissions and an extensive ground will have to be installed for all the other antennas.

Environment is salt water cruising.

I would appreciate any input or thoughts on the matter. I am brand new to amateur radio and any assistance would be most welcome.

Tom

6450. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 17:37:11 UTC
From: 2w8ji@akorn.net
Message-ID: <3ac614d3.71147423@news.accessunited.com>
Source record: 166924

On Sat, 31 Mar 2001 09:11:24 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Tom`s declaration that the Faraday shield is just the plate of a
>capacitor is laughable.
>
>Best regards, Richard Harrison, KB5WZI

Your understanding of all this is sad.

73 Tom

6451. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 17:41:15 UTC
From: Ken Bessler <kg0wx@yahoo.com>
Message-ID: <3AC616BB.2849@yahoo.com>
Source record: 166925

Dennis P. Stahr wrote:
>
> How about throwing the Butternut HF9V into the equation?
>
> I have been considering a vertical also, and thought this would be a great
> choice, but now you guys have me almost converted to the Titan...
>
> Any comments on the Butternut??
>
> Dennis Stahr - W6NYC

IIRC, dosen't the HF9V require radials? I'm looking for a fixed
counterpoise (as opposed to stringing out wires).

--

Ken Bessler, Ham Callsign KGï¿½WX
Design Services Company
http://kg0wx.users.50megs.com/
Smoke free since 9/30/96!
ICQ# 63379650

6452. Re: QST-QST-QST--INVITATION TO THREE ANTENNA-RELATED REFLECTORS (LISTS)

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 18:05:38 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <395cct4i6202ljulivj91cl8nlr9k6n0jm@4ax.com>
Source record: 166926

On 31 Mar 2001 14:59:26 GMT, fractenna@aol.com (Fractenna) wrote:

>If you have a web-based question for him, kindly post it on
>the FAR assuming it is of general interest.

Hi All!

The secrets of the success of this popular method may be found in:
>
>These lists (with some recent subscriber sizes) are:
>ANTENNAS@YAHOOROUPS.COM 220 members
>CROSSFIELDANTENNA@YAHOOGROUPS.COM 70 members
>FRACTALANTENNA@YAHOOGROUPS.COM 310 members
>

herr doktor's re-habilitation requires that he be allowed unfettered ability to express himself and therapy suggests bumping the numbers on the hit counters shown above would really lift the spirits from the winter of depression. Due to possible legal actions, herr doktor is possibly restrained by possible court possible order to not interfere nor continue his history of disrupting/trolling (impossible! ;-).

Given herr doktor's mood in these many recent postings, the therapy (probablistic) appears to be effective. All should note that herr doktor in times past would have refused to appear at public functions where he perceived a slight.

In obvious contrast to that former somber personality, we find that herr doktor has shown considerable restraint where he has been allowed to share the podium for the presentation of one paper, and earlier that day one individual presents two on the same subject. The egregious snub of our favorite twist by the speaker selection committee has been responded to with grace and humility. We all applaud this remarkable transform. We all hope and wish that the good doktor not suffer any reversals in these remarkable gains when that earlier speaker takes apart some sacred notions. (Are you taking your aspirin?)

For those who desire to learn more about fractals instead, visit:
http://members.home.net/kb7qhc/antenna/fractal/index.htm
This, and many pages and postings to this group have eclipsed the content of the lists above several hundred fold.

73's
Richard Clark, KB7QHC

6453. GAP antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 18:28:59 UTC
From: Willaim Ellis <wb9cac@home.com>
Message-ID: <Llpx6.30965$DY.11262855@news1.mntp1.il.home.com>
Source record: 166927

Jut received some literature on the GAP brand antennae. They sound like they do well ..Anyone out there using them ? Would appreciate your comments.

Thanks,

Bill
b345s249@home.com

6454. Re: Aluminum Tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 18:53:26 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <gq7cctk80d7fptnjq970akdu29ep25pa9m@4ax.com>
Source record: 166928

On Fri, 30 Mar 2001 13:55:55 -0600, W6RCecilA <Cecil.A.Moore@IEEE.org>
wrote:

>
>I guess the question is: Does RF flow on the inside of aluminum
>tubing being used as a vertical element? Would the insulated
>grounded rod on the inside of the aluminum tubing have any
>effect?

Hi Cecil,

No.

BUT, as you describe grounded rod being INSIDE the radiator (not good at all) but elsewhere you specifically draw a gap between the radiator and the water pipe - you have muddied the waters.

You should be looking at the radials if you are worried about the water pipe. Add more radials if you get that worried about it. Or simply tie them to that same water pipe. ????

If you wish to pursue this logic of capacitance, your design best(worst) illustrates a split stator design. If your radials do not connect to the water pipe, but couple capacitively to it, that is one stator half. The water pipe INSIDE the radiator constitutes the other stator half. The metaphor of split stator design would have the water pipe as the rotator/plunger. Your design, as illustrated, shows the capacitor is fully meshed with one stator half and coupling to the radiator is accomplished only through stray capacitance (which is common to every design). It is instructive to note that this capacitance imbalance is beneficial - but a simple Ohmic connection would infinitely simpler and effective.

Your only problem:
Keep that water pipe from bridging your feedpoint.

73's
Richard Clark, KB7QHC

6455. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 18:54:37 UTC
From: atkes@imap1.asu.edu
Message-ID: <9a595d$7qr$1@news.asu.edu>
Source record: 166929

Richard Harrison (richardharrison@webtv.net) wrote:
: Bart, WB6HQK wrote:
: "The statement that time varying fields can NOT pass through a conductor
: several skin depths thick is CORRECT.

: Yes, if the conductor is extensive and unbroken.

: I will repeat Terman`s 1955 comments.

: Aluminum having low electrical resistivity is a practical shield for
: magnetic flux at radio frequencies.

: "Magnetic flux in attempting to pass through such a shield induces
: voltages in the shield which give rise to eddy currents. These eddy
: currents oppose the action of the flux, and in large measure prevent its
: penetration through the shield."

: "---Joints which interfere with eddy currents by adding resistance to
: the eddy current paths greatly reduce the effectiveness of a conducting
: shield". (Try insulators and see what happens.)

: "---However, fairly effective electrostatic shielding can be obtained by
: a metal mesh made of any good to fair electrical conductor, which would
: be a rather poor shield for magnetic flux."

: "It is possible to shield electrostatic flux without simultaneously
: affecting the magnetic field by surrounding the space to be shielded
: with a conducting cage that is made in such a way as to provide no low
: resistance path for flow of eddy currents, while at the same time
: offering a metallic terminal upon which electrostatic lines can
: terminate." (A Faraday shield)

: Tom, W8JI is dead wrong that the electric field and magnetic fields are
: "INSEPARABLE". The Faraday shield was devised for exactly the purpose of
: separating the magnetic field from the electrostatic field in a
: "time-varying" EM wave.

: Tom`s declaration that the Faraday shield is just the plate of a
: capacitor is laughable.
:
: Best regards, Richard Harrison, KB5WZI

Richard,

I will assume that the wires of the cage are many skin depths thick.
While that is not true at 60Hz, this thread is about shielded loop
antennas. A skin depth in copper is .05 millimeters at 160 meters
(about .002 inches) so 12 gauge wire is about 20 skin depths thick at

that frequency. Let's imagine that during manufacturing a little air bubble was formed in the center of one of those wires. A microbe living in that bubble would see itself surrounded by solid copper many skin depths thick. I think we all agree that if we make a container of solid copper many skin depths thick, it shields the interior from both external electric and external magnetic fields. Saying that there is a magnetic field many skin depths inside the wire is equivalent to saying that filling the air bubble with copper suddenly makes a magnetic field appear.

Any point in the interior of a copper shield is obviously surrounded by copper, and this copper can be thought of as shorted turns. There is no problem with a current circulating around any point in the interior of the copper. It is exactly these currents that make the magnetic field in the interior go to zero exponentially with the number of skin depths, and the magnetic field does not penetrate deep into the copper. It does not require the copper to be large and extensive, a sphere of copper 1 millimeter in diameter at 1.8 MHz will have fields at its center about 40 dB down from those on the surface.

73 Kevin w9cf

6456. Re: GAP antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 19:05:30 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <g4acctcu6rdc8t8am72ck3n4659lugfv7t@4ax.com>
Source record: 166930

On Sat, 31 Mar 2001 18:28:59 GMT, "Willaim Ellis" <wb9cac@home.com>
wrote:

>Jut received some literature on the GAP brand antennae. They sound like they
>do well ..Anyone out there using them ? Would appreciate your comments.
>
>Thanks,
>
>Bill
>b345s249@home.com
>

Hi Bill,

My own experience, and my reading of others here suggests that the
lowest band is not a very good performer (for any design). Each
succeedingly higher band did improve though. I can attest to it being
a very, physically, robust design. Mine elevated at a dozen feet or
so has withstood some gale force wind without resort to guying.
Tuning has remained dead-on for years.

When it comes to verticals, you can only hope you have the lowest loss
model (don't even think of gain) that matches to your rig easily.

73's
Richard Clark, KB7QHC

6457. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 19:27:01 UTC
From: Richard Clark <kb7qhc@home.com>
Message-ID: <fracct039cpeq19lmjc2635csciuj8nl9e@4ax.com>
Source record: 166931

On Sat, 31 Mar 2001 10:35:25 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>
>Richard Clark gave a nice description of how insertion of a shield
>affects pre-existing capacitance and produces new capacitances. Pages
>more could be added, but wouldn`t necessarily help zero-in on the
>function of a Faraday shield.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

In fact I said that the capacitance did not change and that a new
circuit had been added.

I was wrong, but not substantially. The addition of the physical
shield necessarily changes the geometry of the initial capacitance.
In some designs this could be substantial (like in a power
transformer) but in your specific example, it was unlikely to change
it markedly.

The new circuit places ground closer to the coils and must necessarily
change their characteristics - however, even here with the example
responded to, this is minimal.

As for:
>
>Yes, it upsets, in fact prevents, an induced current loop in the Faraday
>shield by slicing it up into little pieces.
>
sounds more like the operation of laminated core than Faraday shield.
Further, I presented only three current loops, one being the Common
Mode that you asked for. Within the context of the example responded
to, can you give the full path of this induced current you speak of
above?

73's
Richard Clark, KB7QHC

6458. Re: Misleading Statement in Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 19:37:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9a5bkv$7qs$1@slb7.atl.mindspring.net>
Source record: 166932

Steve:

[snip]
>
> I do not disagree with your discussion of how the circuit works, or the
fact
> that the circuit can be adjusted to work with any Zo section. You are
> however (IMO), seem to be missing what is happening in that section of
line.
>
> Take care,
> Steve
>
> > 73 Tom
[snip]

I agree with Tom.

I believe that you may be confusing the metrology of measuring waves with the characteristics of the transmission media itself. A reflected voltmeter or SWR "meter" needs no line section.

There are as many ways of measuring waves on transmission lines as there are engineers to invent them. Some SWR or reflected voltmeters do have line sections in their construction, but line sections are by no means necessary to the precise and accurate measurement of waves. Good traveling wave meters can be constructed without line sections.

A "sampling directional coupler", that is a device which can accurately and precisely measure reflected and incident wave voltages without disturbing the line, does not need a "section of line". In fact if well made, it can be completely transparent to and not perceptably disturb the line when inserted..

The only "circuitry" required to non-invasivly "tap" across and through a transmission line, or any kind of network for that matter, and accurately indicate incident and reflected voltages is a simple but high impedance bridge circuit to measure voltage and a simple low impedance current sampler.

A reflected voltmeter is nothing more nor less than a high impedance bridge combined with a low impedance current sampler. It has no need for an "intrinsic" characteristic impedance of its' own but needs to use a "facsimile" of Zol as a reference impedance with which to "compute" the reflected and incident voltages present on the line. In fact, although in practice it often does, the Zo of the metering device used to compute the

"waves" from the current and voltage, need have no relationship to the Zo of the line to be useful.

If V is the voltage across a line or network port at a certain point and I is the current in the line or network port at the same point, then one can sample V (with a very high impedance "across" probe) and sample I (with a very low impedance "through" probe) and then use one of several methods of calculating and displaying the "wave variables" A and B.

The desired wave variables A and B are nothing more nor less than a simple linear transformation of the line voltage V and current I. Where A is the incident wave and B is the reflected wave.

The computation required to transform V and I into A and B, be it performed in digital or analog circuitry is simply:

B = V - IZo "The reflected wave voltage with respect to Zo"
A = V + IZo "The incident wave voltage with respect to Zo"

The "metering" device itself, needs no "line section". In fact the so called line section in the meter can be "vanishingly small" and have no perceivable characteristic impedance itself.

All one has to do to measure the "waves" is to measure V and I and perform the above computation.

By simple algebra you can readily check that B = rho * A where rho is the reflection coefficient, [rho = (Z-Zo)/(Z+Zo)] calculated with respect to Zo if the line or network port beyond the meter has an impedance Z.

I see no need for a line section in such a metering device.

-Peter K1PO

6459. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 19:50:58 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <9a5cdgmdc1@slb7.atl.mindspring.net>
Source record: 166933

Rick:

So it seems that everyone on this thread is still ignoring the "elephant" in the corner of the thread. The one sitting over there in the imaginary corner. It is truly dissipationless. And no one has commented... why?

What about "imaginary resistance"?

Is Z = jR a valid concept? Indeed can Z = jR be physically constructed or at least approximated closely.

I maintain that devices whose voltage, current characterization is Z = jR = V/I can be approximated in reality as closely as desired.

I claim that one can build a device with impedance Z = jR where the voltage and current over any band of interest are 90 degrees out of phase but the impedance does not vary with frequency as with inductive and capacitive reactance. There will be a lot of parts in the black box used to build it, but... at least, unlike that other dissipationless resistance, it's real!

I assert that these somewhat arcane, but nevertheless real devices, the imaginary resistors jR, are in fact the ONLY real dissipationless resistances. This imaginary resistance is fully computable, measureable, and quantitative and requires no one to suspend beliefs and accept miraculous ideas.

And after all... it is a "resistance" without dissipation. That is no electrical energy or power is converted to heat within!

Comments, thoughts,

-Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20010331105001.27480.00001595@ng-mj1.aol.com...
> Hi Cecil--
>
> I'm with you. I have a dummy load on my bench with 50 Ohms of
dissipationless
> resistance captured inside. I suspect it will remain so until I connect
> something and turn on the juice.
>
> Dissipationless resistance strikes me as a philosophical dillemma--like
the
> sound of one hand clapping. Without an extra hand, how do you get the
clap?
>

> Rick K1BQT
>

6460. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 19:54:00 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3AC635D8.A3B31F3@wb6hqk.ampr.org>
Source record: 166934

Tom W8JI wrote:
>
> Clearly a time-varying magnetic field can not pass through a conductor
> several skin depths think, and clearly (you agree to this in a later
> stutter-post) the loop acts like a transformer between the secondary
> (the inside winding) and the primary (the outside shield). When you
> resonante the rpimary, mutual coupling resonates the seconday. If you
> resonate the secondy, mutual coupling will resonate the primary.

I think it might be more illustrative to think of the shield and pickup loop each as separate secondaries on the same transformer. In a conventional power transformer, current in the primary generates a magnetic field which is shared by all secondaries. The terminal voltage (per turn) measured across any winding is identical because it is the same magnetic flux which links them all, at least for the ideal transformer. In the case of the receiving loop, the excitation is provided by an incident electromagnetic wave which can be considered to be a 'virtual primary winding'. The shield and pickup loop both encircle the same magnetic flux and will therefore have identical terminal voltages.

Suppose both shield and pickup loop are open circuited. The current flowing is negligible and no energy is transferred into, or out of either 'winding'.

> That transformer action is how the "shielded" loop transfers energy
> from the shield to the center.

There really is not transfer of energy from one winding to another. Both shield and pickup loop are coupled magnetically to the same region of space. Any energy in the magnetic field available to the shield is also available to the pickup loop.

> The shield, resonanted through mutual
> coupling to the resonant secondary inside, becomes the antenna.

I don't see how resonance has anything to do with it. The pickup loop and shield form a coaxial transmission line. In order for the loop to act as a receive antenna, some current must be allowed to flow around the loop. This current is common mode to the shield / pickup loop system and will actually flow on the outer surface of the shield since only differential mode currents exist 'inside'. This phenomenon could be interpreted as the shield being the antenna but I don't think it is an important concept.

> The
> field impedance of that antenna is very little different than the
> secondary winding alone would be without the shield.

Since the net current on the shield is zero, it has no significant
effect on the magnetic field except in the very near vicinity of the
conductors themselves. Presumably the area enclosed by the loop is
large compared to the cross section of the shield and the effect of the
shield is insignificant other than to establish the diameter of the loop
conductor, and thereby it's inductance.

> The only major difference is the amount of reactance to resonante the
> loop can change, and the balance can change.

This depends on where the break in the shield is located compared to the
pickup loop terminals. The most common configuration locates the break
in the shield is on the other side of the loop from the pickup
terminals. This results in a differential mode voltage appearing between
the shield and pickup loop. The inner conductor to shield capacitance
shunts this voltage and reduces the external capacitance required to
resonate the loop. This effect is nullified if the break in the shield
is at the same location as the break in the pickup loop. The later
configuration allows the loop to operate at a higher frequency but the
grounding of the shield is more complex.

> If you do NOT ground the
> shield in the electrical center of the shield it can actually hurt the
> system balance, and increase response to undesired electric fields.

That's for sure. Any unbalance will result in coupling between the
common mode electrostatic field the shield is supposed to suppress and
the differential, or 'circulating' mode which is desired.

bart
wb6hqk

6461. Re: GAP antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:01:04 UTC
From: joseph howe <kb3cbn@earthlink.net>
Message-ID: <4Iqx6.18427$Uw.1366345@newsread1.prod.itd.earthlink.net>
Source record: 166935

I have a gap titan and love it. they claim that you have full coverage on all bands between 10m. and 40m. at 3:1 or less and 100k. on 80m. my own experience has shown tthat they under rated this antenna. My coverage is less than 3:1 on 40, less than 2.5:1 on 20,17 nad 15 and less than 2:1 on 12 and10 fullband coverage on each band. Also I get from 3.830 to 4.000 on 80, at 3:1 or less. I am useinfg a yeasu ft 847 with the gap and have made contacts into Europe, Africa, Asia, S.America and Australia. hope this helps you decide.
cul kb3cbn joe in central pa.

6462. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:14:50 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3AC639C7.AC07EA0F@earthlink.net>
Source record: 166936

I tried the experiment of using a capacitor on one of the radio's I've been using for the shield testing.
I used 6800 pF, which at 740 KHz actually is less than 50 ohms, from a ten-inch whip to the outside of the receiver coax antenna connector. The result is interesting.

Yes, it does attenuate the received signal, but not nearly as much as placing the radio and antenna inside
a conductive tube, or even close alongside a conducting object longer than the radio and its antenna.
This is probably due to the fact that the impedance of a small conductive object at RF is near ZERO
ohms, not the 50 ohms (or less ï¿½ I used a bigger cap than needed) of this experiment.

And there a couple of other things about this particular experiment that don't reproduce reality. One is, the receivers I use, and that most of us use, have low impedances themselves, which is one reason short probe antennas work so poorly when we use them. The other is, placing a 50 ohm capacitive reactance across a loop feedpoint -- a much smaller impedance than a receiver's 50 ohms - makes even less difference in power delivered to the receiver, meter or load on the loop than it would across a 50 ohm point. I have not in fact tried putting a capacitor across a loop's output -- but because it IS a low impedance, I would expect no great difference if I did so.

Cortland

Roy Lewallen wrote:

> You could reproduce the results of your experiment by using a capacitor
> instead of an aluminum shield. Place a capacitor with reactance of, say,
> 50 ohms from the base of a short whip (feedpoint Z thousands of ohms) to
> circuit ground and see what happens to the signal. Then put the
> capacitor across the feedpoint of a resonated loop (feedpoint Z of a few
> ohms, depending on loss) and see what happens. You'll get the same
> result as you did with the shield, and the capacitor doesn't intercept
> any field at all.
>
> If I'm correct about what's happening, you'll also be able to kill the
> signal to the radio with short whip just by grounding the shield to the
> radio chassis and putting it close to the whip -- the whip can stay
> completely outside the shield. If the setup is still handy, it would be
> interesting to see the results of this experiment.
>
> Roy Lewallen, W7EL
>
> Cortland Richmond wrote:
> >
> > Point of view seems one of the issues we have been having (and avoiding) here.

> >
> > The electric field component of a signal incident on the loop is vertically
> > polarized. If I shunt that field (I used the example of a metal roofed porch) I
> > have effectively eliminated it; a short rod antenna sensitive to the electric
> > field will indeed indicate a reduction of signal under a grounded roof. But a loop
> > antenna will still show the same level of signal it did outside. This is
> > indicative of its responding to something other than the vertically polarized
> > electric filed I have shunted.
> >
> > The experiment of placing an entire (small) radio with electric probe antenna
> > inside a conducting tube shows that the electric field does not much enter the
> > tube; placing a loopstick-equipped radio inside shows that a signal can still be
> > received. This is indicative that the grounded roof example is carried over in the
> > example of conducting tube.
> >
> > I don't argue that electrons are accelerated by an electric field. But it isn't
> > impossible that they can be accelerated by a magnetic field, for permanent magnet
> > generators would not work unless they could be.
> >
> > Given that there are always orthogonal counterparts to the electric or a magnetic
> > component of the electromagnetic field, then there has to be an electric field
> > inside the shield, associated with electrons accelerated by the magnetic
> > component of an incident electromagnetic field. But it's a different electric
> > field than exists outside, as is demonstrated by the fact that electrons are still
> > made to flow in the loop conductor even when we shunt the external electric field.
> >
> > It seems likely to me that these differing viewpoints explain some of the
> > conflicts we have been having in this thread.
> >
> > Cortland
> >
> > atkes@imap1.asu.edu wrote:
> >
> > > Cortland Richmond (Cortland.Richmond@usa.alcatel.com) wrote:
> > > : You have been saying for some time now that one can't separate magnetic and
> > > : electric fields anyway. If true, one could never tel what their ratio was to
> > > : each other.
> > >
> > > : Cortland
> > >
> > > : Tom W8JI wrote:
> > >
> > > snip
> > >
> > > Cortland,
> > >
> > > I wanted to make a few comments and I couldn't quite figure out which
> > > message to follow up. I chose yours, but I think that you and Tom both
> > > agree that you can, in principle, separately measure the electric and
> > > magnetic fields.

> > >
> > > Generally what is a magnetic induction B and what is an electric field E is
> > > determined (and defined for that matter) by the force on an electric
> > > charge q, F = q (E + v x B), where E and B are evaluated at the position
> > > of the charge. You then in principle measure the fields separately by
> > > measuring the part of the force that is independent of velocity, and
> > > the part that is dependent on the velocity.
> > >
> > > Since the charges in copper have a relatively tiny magnetic moment
> > > compared to their charge, the force on them is well described by this
> > > equation. The average velocity of the charges in a small region of the
> > > copper is zero with no field applied. Therefore, if you somehow only
> > > applied a magnetic field, no current would flow, since the net force
> > > on the charges is zero. As many have been saying here, Maxwell's
> > > equations tell you that a changing magnetic field in a finite region
> > > gives some electric field in that region too. There just isn't any way
> > > around this if you accept Faraday's law, since it says that the average
> > > electric field along any closed loop is proportional to the changing
> > > magnetic induction averaged over the area through the loop. The only way to
> > > have the electric field zero everywhere is to have zero oscillating
> > > magnetic induction everywhere.
> > >
> > > Notice that Faraday's law does not contain any material properties, so
> > > this is equally true in copper and in vacuum.
> > >
> > > In a small loop antenna (or a transformer winding for that matter) the
> > > charges are being pushed primarily by that electric field. The fact that
> > > it is easier to calculate the electric field component that contributes by
> > > using the magnetic field is why this is called magnetic coupling. However
> > > the fact remains that it is the electric field that is doing the work.
> > > When you think about how the magnetic field is used in calculations, it
> > > is obvious that a loop antenna is not really responding to the magnetic
> > > field. When the loop response is calculated from the magnetic field, it
> > > is the magnetic field through the area surrounded by the loop that
> > > is used. There is no copper there and therefore no copper electrons.
> > > Instead, this changing magnetic field must be accompanied by an average
> > > electric field around the perimeter of the loop. It is this electric
> > > field that pushes the electrons around the loop. That is, charges are
> > > pushed by the fields at their position. They are not pushed by fields
> > > somewhere else. That we can calculate the field that is doing the work
> > > by calculating the fields somewhere else does not change this fact.
> > >
> > > 73 Kevin w9cf

6463. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:32:02 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3AC63DD0.415F98AC@earthlink.net>
Source record: 166937

Yes, I was also concerned that a radio having both a loopstick and a whip would confuse things. The AR8000 has an internal loopstick, and I took off the whip antenna. I could not use that receiver for electric-antenna (probe) comparisons because of the simultaneous presence of the loop. Other wideband handheld receivers have no internal loopsticks, however, and I do have some of those as well.

The signal decrease with a loop inside the conducting tube appears related to how close to the side of the tube the loop turns are; this is the shorted-turn effect I referred to. 7 inch diameter aluminum tube is what I could find. If I can find something larger, or use a smaller loop, I may be able to get a better feel for that effect.

Cortland

Tom W8JI wrote:

>
> We also don't know how *much* each field changed.
>
> I asked if the signal on the loopstick also decreased a large amount.
> I'll wager it did.
>
> Wth that in mind, what is the relative sensitivity? Does the radio
> disconnect the loopstick when using the rod, and vice versa? Virtually
> all don't. If so, how do you know what the response is.
>
> 73 Tom

6464. Re: Balun or not?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:35:38 UTC
From: dcollin@connix.com
Message-ID: <3ac63ef6.26936612@news.mybizz.net>
Source record: 166938

On Sat, 31 Mar 2001 08:11:27 -0600, "Eric Ruuska"
<eruuska@netnitco.net> wrote:

>Hey all, a really green newbie has a question.
>
>I'm putting up a wire antenna on my roof, anchored in the center by my
>former TV aerial mast. The question on the table is: Assuming I have
>equal lengths on either side of the center point, is there any need for
>a balun? Elmer gave me one, and for some odd reason I feel obligated
>to use it. Do I need it or no?

NEED it? No. The antenna will work fine. But using coax, you may get currents on the feed line, which can cause TV interference, and a balun would go a long way to reduce/eliminate such currents. You could also use ferrite beads with the same effect. Using open line, ladderline or twin lead feeder (all are balanced lines) there's no need for a balun at the antenna, but you would need one at the tuner or radio.

A balun (short for balanced-unbalanced) provides a match between the coax's center lead and the braid. The output of your radio is designed to be unbalanced (it is a coax connection).

>Also, is there any reason I can't have a couple-three different lengths
>of wire coming off the center point?

Not a problem. But there will be some coupling between the wires, so the resonant lengths might be a little hard to determine. This is a good situation for an antenna analyzer. You may get results almost as good by simply using a single wire dipole, cut for resonance on some frequency, that can be matched with a tuner on other bands.

All that having been said, I have four coax fed dipoles, two with baluns, and two without. All work well. None are giving me any TVI problems (at the moment).

6465. Re: Check Out: NX7U mobile multi-multi-mode station

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:45:38 UTC
From: nx7u@primenet.com
Message-ID: <3ac641ce.79491628@news.primenet.com>
Source record: 166940

I guess it's a STEALTH mobile station :-(

http://www.primenet.com/~nx7u/mobile/home_mobile.html

6466. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:45:48 UTC
From: Cortland Richmond <ka5s@earthlink.net>
Message-ID: <3AC6410B.7F91DA7B@earthlink.net>
Source record: 166941

The more general case does not require resonance. What about the non-resonant condition? For that matter, what if I resonate a shielded loop at the feedpoint, instead of at the shield gap?

Cortland

Tom W8JI wrote:

> ... When you resonante the rpimary, mutual coupling resonates the seconday.
> If you
> resonate the secondy, mutual coupling will resonate the primary....

6467. Re: Check Out: NX7U mobile multi-multi-mode station

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 20:46:50 UTC
From: nx7u@primenet.com
Message-ID: <3ac64225.79578987@news.primenet.com>
Source record: 166939
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Silly me
http://www.primenet.com/~nx7u/mobile/home_mobile.html

On Sat, 31 Mar 2001 15:35:39 GMT, nx7u@primenet.com (Scott Townley)
wrote:

>Continually updated with HF/VHF/Satellite etc.., mobile operating
>info/equipment/pix/etc.
>Plus, I just put a new counter on the page and I want to see it work
><g>
>

6468. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 21:26:38 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3ac64b94_1@news.cybertours.com>
Source record: 166942

Go With the Butternut.. It's a great vertical Antenna.
They have a web sight with all sorts of info At
http://www.bencher.com/ant_select.html

Just my opinion
73 Dave

"Dennis P. Stahr" <irfutures@earthlink.net> wrote in message
news:9anx6.12357$aP5.1178663@newsread2.prod.itd.earthlink.net...
> How about throwing the Butternut HF9V into the equation?
>
> I have been considering a vertical also, and thought this would be a great
> choice, but now you guys have me almost converted to the Titan...
>
> Any comments on the Butternut??
>
> Dennis Stahr - W6NYC
> ----------
> "Can't locate the California Governor, Gray "Duffus" Davis? Just look in
> the pocket of any power company executive and you'll find him!!!!
> ---
>
>
>
> "Ken Bessler" <kg0wx@yahoo.com> wrote in message
> news:3AC2829E.6F35@yahoo.com...
> > I'm thinking about getting one of the above listed antennas and would
> > like to hear opinions from users out there. Thanks!
> > --
> >
> >
> > Ken Bessler, Ham Callsign KG�WX
> > Design Services Company
> > http://kg0wx.users.50megs.com/
> > Smoke free since 9/30/96!
> > ICQ# 63379650
>
>

6469. Re: Push up Mast

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 21:26:47 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3AC64B97.1457@wt.net>
Source record: 166779

Mark Keith wrote:
>
> Mark wrote:
> >
> > MFJ has one that is fiberglass and pushes to 33' I think for about $80
>
> I think I'd rather have a metal radio shack one though myself. Mainly
> for the lightning aspect. If you take a hit on it, the mast will be the
> lightning rod to ground. A plastic rod will be a disaster looking to
> happen unless you have real thick wires running down it. Only if there
> were an rf reason to use a non conductive mast would I consider that, or
> maybe camping etc. At home , you will be better of with the metal mast
> if you are in a lightning area. I took a hit on mine once. Being as I
> had no damage to any antenna or feedline at all, that tells me the mast
> itself did 95% of the dirty work directing the strike to ground. "I have
> it grounded well at the base". if the coax had directed the strike it
> would have been punctured down near the base somewhere. it wasn't. The
> mast itself did it all nearly as it's about a foot higher than the
> feedpoint of the dipole antennas. MK
> --
> http://web.wt.net/~nm5k

UPDATE: Got hit again last week with a "branch" strike. The lightning
hit as nearby cell tower, but also I'm fairly sure it also branched off
to my mast. I could hear the arcing in my feedlines to ground at the
exact time of the strike. Again, the metal mast and being totally
grounded out saved my rear. No damage to anything whatesoever. You'll
never see a plastic mast at this house. MK
--
http://web.wt.net/~nm5k

6470. Re: Faraday shield antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 21:58:28 UTC
From: richardharrison@webtv.net
Message-ID: <13088-3AC65304-3@storefull-111.iap.bryant.webtv.net>
Source record: 166944

Kevin, W9CF wrote:
"Any point in the interior of a copper shield is obviously surrounded by copper, and this copper can be thought of as shorted turns."

Nice characterization!

Terman says:
Skin depth of copper in cm = 6.62 / sq.rt.F
Or, at 1 MHz = 0.0066 cm, or 0.0026 in.

So, skin depth is inversely proportional to the square root of the frequency.

Obviously sheets of copper a few thousandths of an inch thick don`t shield well at 50/60 Hz.

The power transformer`s electrostatic shield is not there to block the power frequency. It is there to block higher frequency trash. Transients are frequent on power mains and contain a broad spectrum of noise.

To block lower frequencies, permeable magnetic materials are added to the shield.

Best regards, Richard Harrison, KB5WZI

6471. Re: Homebrew Coax Colinear Tuning - Help Please

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 22:27:16 UTC
From: k7itm@aol.com
Message-ID: <20010331172716.07709.00001656@ng-mb1.aol.com>
Source record: 166945

Tom wrote:

>You can not sucessfully duplicate this antenna using regular RG style
>cables hanging in air. Even if you get the SWR right, you'd have more
>gain from a 1/4 wl groundplane.

I beg to differ. Both my modelling and my experimental results show it's quite possible to get considerable gain using solid-poly dielectric cable. (The gain is practically the same for solid dielectric and foam dielectric cable if the overall antenna length is the same.) The three elements needed to be successful: get the elements radiating in phase (1/2 wave sections, accounting for velocity factor), match the feedpoint to the feedline, and thoroughly decouple the antenna from the feedline.

(Sorry that it's become very inconvenient for me to track postings, so it's unlikely I'll see replies posted to this...)

Cheers,
Tom

6472. EH Antennas!! Comments Anyone

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 22:30:43 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3AC65A93.F07CC7C3@ix.netcom.com>
Source record: 166946

Sez 2% Lambda and 99% efficiency??
At Url:
http://www.qsl.net/w0kph/
Maybe April foist stuff??

--
73 From Rod AC6V In San Diego
700 Ham Topics & 6,000 Links
http://ac6v.com/
I Doubt, Therefore I Might Be!!!

6473. Re: Imaginary Resistance... Dissipationless Resistance... and all that....

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 22:41:44 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3AC65D27.F76@pacbell.net>
Source record: 166947

Hi Peter,
how do you know your imaginary resistance isn't just a
frequency-independant inductive reactance in disguise?

Tom Donaly

Peter O. Brackett wrote:
>
> Rick:
>
> So it seems that everyone on this thread is still ignoring the "elephant" in
> the corner of the thread. The one sitting over there in the imaginary
> corner. It is truly dissipationless. And no one has commented... why?
>
> What about "imaginary resistance"?
>
> Is Z = jR a valid concept? Indeed can Z = jR be physically constructed or
> at least approximated closely.
>
> I maintain that devices whose voltage, current characterization is Z = jR =
> V/I can be approximated in reality as closely as desired.
>
> I claim that one can build a device with impedance Z = jR where the voltage
> and current over any band of interest are 90 degrees out of phase but the
> impedance does not vary with frequency as with inductive and capacitive
> reactance. There will be a lot of parts in the black box used to build it,
> but... at least, unlike that other dissipationless resistance, it's real!
>
> I assert that these somewhat arcane, but nevertheless real devices, the
> imaginary resistors jR, are in fact the ONLY real dissipationless
> resistances. This imaginary resistance is fully computable, measureable,
> and quantitative and requires no one to suspend beliefs and accept
> miraculous ideas.
>
> And after all... it is a "resistance" without dissipation. That is no
> electrical energy or power is converted to heat within!
>
> Comments, thoughts,
>
> -Peter K1PO
>
> "Rick Littlefield" <k1bqt@aol.com> wrote in message
> news:20010331105001.27480.00001595@ng-mj1.aol.com...
> > Hi Cecil--
> >

> > I'm with you. I have a dummy load on my bench with 50 Ohms of
> dissipationless
> > resistance captured inside. I suspect it will remain so until I connect
> > something and turn on the juice.
> >
> > Dissipationless resistance strikes me as a philosophical dillemma--like
> the
> > sound of one hand clapping. Without an extra hand, how do you get the
> clap?
> >
> > Rick K1BQT
> >

6474. Re: R8, GAP Titon or MFJ 1798 - which is better?

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 23:51:03 UTC
From: Ken Bessler <kg0wx@yahoo.com>
Message-ID: <3AC66D67.3DB2@yahoo.com>
Source record: 166948

KC1DI wrote:
>
> Go With the Butternut.. It's a great vertical Antenna.
> They have a web sight with all sorts of info At
> http://www.bencher.com/ant_select.html
>
> Just my opinion
> 73 Dave
>

I actually like the design (technically speaking) of the Butternut
antennas but they require a radial set. I'm dealing with balcony
mounting here... :)
--

Ken Bessler, Ham Callsign KGï¿½WX
Design Services Company
http://kg0wx.users.50megs.com/
Smoke free since 9/30/96!
ICQ# 63379650

6475. Re: Visit - www.ab7sl.com -

Newsgroup: rec.radio.amateur.antenna
Date: 2001-03-31 23:54:53 UTC
From: Peter Lemken <plemken@gmx.de>
Message-ID: <9a5jip$3pl5c$1@ID-31.news.dfncis.de>
Source record: 166943
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.amateur.policy

Zoran Brlecic wrote:
>
> Charles Johnston wrote:
>
> > Lots of STUFF to do at www.ab7sl.com such as...
>
> Oh, no, I can feel Peter's fingers itching already...

Know what, Zoran; I give up.

There are people who are thoughtless drones, no matter how hard you hit them with a hammer. Charles is one of them. He doesn't care about usenet and he doesn't care about other people's interest in this fabulous medium. He sees it as the perfect place to run his adv^H^H^HSPAM and think that it's just great.

He behaves like the simplex idiot who is too stupid to grasp the concept of split operating. In that vein he is unable to grasp the concept of a text based, ad-free and multicultural environment that has been designed to discuss ideas, not to promote ridiculously bad designed and contentless webpages. He laughs at people who think that his fullquotes, referenceless drivels are a waste of conceptual bandwidth.

Let him have it his way. Let him be happy in his dysfunctional way of not understanding what 2-way communication at its best can be. Let's leave him alone and pray for www.usenet2.org where mindless people like him will never have a place.

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We have joy, we have fun, we have Linux on our SUN